

UC San Diego | EXTENSION

UCSD Extension

2019 Academic Catalog

Fall 2019 Update



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General Information

Disclaimer

The information in the catalog update is effective as of the beginning of the Fall 2018 quarter. Every effort has been made to ensure the accuracy of the information in the UC San Diego Extension Academic Catalog. All policies, procedures, requirements, deadlines, and fees described herein are subject to change or deletion without notice. Other university policies and regulations may be located in the UC San Diego Extension website and other materials published by Extension or UC San Diego.

Locations and Addresses

Phone: (858) 534-3400

Email: unex-reg@ucsd.edu

La Jolla Campus

9600 N. Torrey Pines Road

La Jolla, CA 92037

Fax: (858) 534-8527

University City Center

6256 Greenwich Drive

San Diego, CA 92122

Fax: (858) 246-1031

La Jolla Mailing Address:

Student Services

9500 Gilman Drive, MC 0176-H

La Jolla, CA 92093-0176

UCC Mailing Address:

Student Services

9500 Gilman Drive, MC 0172-S

La Jolla, CA 92093-0172

Academic Calendar

Fall 2018 (12 Weeks)

- Quarter begins Monday, September 24, 2018
- Veterans Day holiday Monday, November 12, 2018
- Thanksgiving holiday Thursday – Saturday
November 22 – 24, 2018
- Quarter ends Saturday, December 15, 2018, 2018

Winter 2019 (11 weeks)

- Quarter begins Monday, January 7, 2019
- Martin Luther King, Jr. holiday . Monday, January 21, 2019
- Presidents Day holiday Monday, February 18, 2019
- Quarter ends Saturday, March 23, 2019

About UC San Diego Extension

As the professional education and public service division of UC San Diego, Extension is focused on being a major catalyst for the continued economic, intellectual, and cultural growth of the San Diego and Baja California region. Core offerings include professional education and training, cultural enrichment, and regional economic solutions. Whether you're starting a new career, building a company, or developing a deeper appreciation of the world around you, Extension has the resources you need to get started.

Mission

The mission of UC San Diego Extended Studies and Public Programs is to serve the critical lifelong knowledge and skill development needs of individuals, organizations, and the community. We do this through continuing education and degree-related programs; community initiatives that support economic and social development; and through a wide array of public service lectures, forums, and special events delivered on campus, at off-campus sites, and through print, internet, radio, and television.

Accreditation

UC San Diego is accredited by the Western Association of Schools and Colleges (WASC) Senior College and University Commission (WSCUC). UC San Diego Extension is accredited by WSCUC through the University. All courses and certificate programs offered by UC San Diego Extension have been developed and are administered in accordance with Extension policy, the regulations of the Academic Senate of the University of California, and WSCUC standards.

Program Level Approvals and Accreditation

Career Advising Certificate

Students completing the Specialized Certificate in Career Advising program are eligible to receive the Certified Workforce Development Professional (CWDP) certification accredited by the National Association of Workforce Development Professionals (NAWDP- 1155 15th Street, NW, Suite 350 - Washington, DC 20005). The CWDP is a nationally recognized credential for individuals who have demonstrated they have what it takes to provide the highest quality services to our nation's job seekers and businesses.

CLAD Through CTEL and Reading & Literacy Certificate

This program is fully online and is approved by California's Commission on Teacher Credentialing (CTC).

Clinical Laboratory Scientist (CLS) Training Program

The San Diego Clinical Laboratory Scientist (CLS) Training Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS; 5600 N. River Rd., Suite 720, Rosemont, IL 60018-5119). The sponsoring institution, UC San Diego Health was approved by the CDPH-LFS as a training program for Clinical Laboratory Scientists in 2004. Each of the participating affiliate programs of Sharp HealthCare was approved in 2013, followed by Scripps Health in 2016.

Fundraising and Development Certificate

UCSD Extension Professional Certificate in Fundraising and Development is endorsed by the Association of Fundraising Professionals (AFP) and the Young Nonprofit Professionals Network (YNPN). Completion of this program fulfills the educational requirements for obtaining the Certified Fundraising Executive (CFRE) designation and re-certification. For more information on CFRE, contact them directly via their website at www.cfre.org.

Lactation Consultant Program

The Lactation Consultant Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Lactation Education Accreditation and Approval Review Committee (LEAARC).

Commission on Accreditation of Allied Health Education Programs

25400 US Highway 19 North, Suite 158

Clearwater, FL 33763

727-210-2350

www.caahep.org

Accreditation expires on November 30, 2022.

Translation and Interpretation Certificate

The Translation and Interpretation certificate is an approved training program by the Certification Commission for Healthcare Interpreters (CCHI) and the National Board for Certification of Medical Interpreters (NBCMI). Select courses in the Translation and Interpretation certificate can be completed for American Translators Association (ATA) and California Court Interpreters (CIMCE) continuing education credits.

Academic Integrity

UC San Diego Extension (Extension) values life-long learning and the opportunity to serve individuals, organizations and the community by providing continuing education and degree-related programs that support academic, professional, economic and social development. To support our efforts, it is essential to create an environment where academics are achieved through one's own effort. Extension expects that academic study will be applied with honesty, responsibility to scholarship and with original thought. This is a shared responsibility between the Instructors, the Students and the administration.

The University and Extension expect both Instructors and Students to honor this principle and in so doing protect the validity of University intellectual work. For Students, this means that all academic work will be done by the individual to whom it is assigned, without unauthorized aid of any kind whether the course, or any part of the course, is held in a traditional classroom setting or in an online environment. Instructors, for their part will exercise the planning and supervising of academic work so that academic integrity will be upheld.

The policy applies to allegations of academic misconduct as listed below. Allegations of acts including, but not limited to, falsifying documents, and/or furnishing false information, etc. which may be discovered as part of an academic misconduct allegation will be processed under the UC San Diego Student Conduct Code.

Conduct in Violation of the Academic Integrity Policy

Conduct, including but not limited to, the following acts are considered violations of the Academic Integrity Policy and may be subject to action under the processes outlined in this Policy:

- A. To knowingly obtain, provide, or accept any unauthorized material that contains questions or answers to any examination or assignment to be given at a subsequent time.
- B. To complete, in part or in total, any examination or assignment for another person.
- C. To knowingly allow any examination or assignment to be completed, in part or in total, for himself or herself by another person or with the assistance of another person.
- D. To knowingly provide passwords, log-in information or to otherwise facilitate access to online learning management systems to another person to assist in the completion, in part or in total, of an assignment or examination.
- E. To plagiarize or copy the work of another person and submit it as his/her own work.
- F. To employ aids not allowed by the Instructor in undertaking course work or in completing any exam or assignment.
- G. To alter graded class assignments or examinations and then resubmit them for re-grading.
- H. To submit substantially the same material in more than one course without prior authorization from the Instructor(s).

For more information, view the full [Academic Integrity Policy](http://extension.ucsd.edu/) at <http://extension.ucsd.edu/>.

Student Conduct

All UC San Diego Extension students are part of the UC San Diego community and are expected to follow university and UC-wide policies, including the [Student Conduct Code](#). The UC San Diego Student Conduct Code represents the pride and values that define our community, and include the [UC San Diego Principles of Community](#), which further illustrate the expectations for all members of our community. The Code defines our community's applicable standards and authorizes the administration of student conduct at UC San Diego Extension. The Code applies to all UC San Diego undergraduate, graduate, professional school, and Extension students. The code also applies to:

- Applicants who become students for alleged violations committed as part of the application process.

- Applicants who become students for alleged violations committed on campus and/or while participating in university-supported activities that take place in the period following the student's application submittal up to his or her official enrollment.
- Former students for alleged violations committed while a student.

Reports of alleged violations involving sex offenses, including sexual assault and sexual misconduct, will be handled under the policies and procedures set forth in the University of California's [Sexual Violence and Sexual Harassment Policy](#).

Nondiscrimination and Sexual Harassment

The University of California, in accordance with applicable Federal and State law and University policy, does not discriminate on the basis of race, color, national origin, religion, sex, gender identity, pregnancy, physical or mental disability, medical condition (cancer related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services. The University also prohibits harassment on any of these bases, including sexual harassment, as well as sexual assault, domestic violence, dating violence, and stalking. This nondiscrimination policy covers admission, access, and treatment in University programs and activities.

If students have questions about student-related nondiscrimination policies or concerns about possible discrimination or harassment, they should contact the Office for the Prevention of Harassment and Discrimination (OPHD) at (858) 534-8298, ophd@ucsd.edu, or reportbias.ucsd.edu. Students are encouraged to seek assistance as soon as possible, as time limits may apply to complaint resolution processes.

Americans with Disabilities Act (ADA)

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 prohibit discrimination against individuals with disabilities. According to these laws, no otherwise qualified individual with a disability shall, solely by reason of his/her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity of a public entity.

UC San Diego Extension strives to provide equal access and an exceptional learning environment for all students. In accordance with Section 504 of the Rehabilitation Act of 1973 and Americans with Disabilities Act of 1990, we provide support services and reasonable accommodations based on the student's disability-related needs.

Students who believe they have experienced discrimination because of their disability should [contact the Office for the Prevention of Harassment and Discrimination \(OPHD\)](#).

The Family Educational Rights and Privacy Act (FERPA)

UC San Diego Extension is committed to complying with the Family Educational Rights and Privacy Act of 1974.

Certain student information has been determined as public information under the terms of the act. This may include release of name, local and permanent address, email address, phone number, enrollment status, dates of attendance, certificate field or area of study, and certificates and awards received.

A more complete description of the Family Educational Rights and Privacy Act may be found at <http://extension.ucsd.edu/>.

Academic Information

Admission to the University of California

Participating in a UC San Diego Extension educational program does not in itself provide preference in admission to any University of California degree program. Students who are interested in applying to these programs should refer to the UC Admissions website or to the admissions office of the UC campus they wish to attend for details about the admissions process.

Transferring UC San Diego Extension Credit

Many UC San Diego Extension courses can be transferred to UC San Diego or other colleges or universities. The transferability of credit is determined solely by the receiving institution. Students should discuss how individual courses will transfer with the Registrar's office at the receiving institution prior to enrollment at UC San Diego Extension.

Credit Hours

UC San Diego operates on the quarter system; therefore all course credits are awarded in quarter units. The credit value of each course in quarter units is listed in the course description.

Courses are assigned a number of credit hours based on the amount of work required as represented in the course's learning outcomes and student achievements. Each credit hour is equal to about one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class work each week over a ten week quarter; the equivalent amount of instruction and work over a different amount of time; or at least an equivalent amount of work for other academic activities such as research, internships, practica, or other academic work leading to the award of credit hours.

Continuing Education Units (CEUs)

The Continuing Education Unit (CEU) is a uniform measure of non-credit postsecondary-level study. Employers, licensing agencies, and others who require a specific number of hours of instruction for career placement or advancement generally accept this unit of measure. One CEU is awarded per ten contact hours of instruction in a continuing education course.

Course Numbers

Undergraduate Level Courses (1 – 199):

Courses numbered 1 – 199 are undergraduate level courses. These courses may be offered by UC San Diego Extension with an X before the course number or by the appropriate UC San Diego department as part of the Concurrent Enrollment Program.

Courses numbered 1-99 are lower-division undergraduate-level courses.

Courses numbered 100-199 are upper-division undergraduate-level courses.

Graduate Level Courses (200 – 299)

Courses numbered 200 – 299 are graduate level courses. These courses may be offered by the appropriate UC San Diego department as part of the Concurrent Enrollment Program.

Professional Level Education Courses (300 – 399/30000 – 39999)

Courses numbered 300 – 399 or 30000 – 39999 are credit-bearing professional courses in the field of education, specifically designed for teachers and prospective teachers seeking credentials, authorizations, or other types of certification in the State of California through the California Commission on Teacher Credentialing (CCTC). Major emphasis is on pedagogy, teaching methods and materials, and curriculum design. Credit in these courses is designed for professional upgrading, in-service education requirements, and basic and specialized credentials in the State of California; it may also lead to the award of a formal certificate by UC San Diego Extension. Credit may be applied toward an academic degree, preliminary teacher credentialing program in California, or requirements for licensure in other states, subject to the approval of the receiving institution(s).

Post-Baccalaureate Professional Crses (400 – 499/40000 – 49999)

Courses numbered 400 – 499 or 40000 – 49999 are credit-bearing post-baccalaureate, professional-level courses designed to provide opportunities for professional advancement and enable the general public to gain knowledge in various academic fields. Credit earned in these courses may lead to the award of a formal certificate by UC San Diego Extension or be applied toward an academic degree or professional credential, subject to the approval of the receiving institution.

Non-Credit Bearing Courses (800 – 999/80000 – 99999)

Courses numbered 800 – 899 or 80000 – 89999 are non-credit-bearing Continuing Education Units (CEUs) designed for students seeking hours of instruction for career placement or advancement (see CEU definition), or the opportunity to develop cultural, intellectual, and civic interests.

Courses numbered 900 – 999 or 90000 – 99999 are non-credit-bearing, precollege-level courses designed to provide an opportunity for students to explore academic interests or prepare for college admission. Courses may be transferable for secondary school credit at the discretion of the receiving institution; students should discuss the transferability of individual courses with the Registrar of their secondary school prior to enrolling.

Grades

Grading Scale

Grade	Meaning	Grade Points per Credit Hour
A+	Excellent	4.0
A		4.0
A-		3.7
B+	Good	3.3
B		3.0
B-		2.7
C+	Fair	2.3
C		2.0
C-		1.7
D	Poor	1.0
F	Fail	0.0
I	Incomplete	
P	Passing (C- or better)	
NP	Not Passing (below C-)	
NR	No Record	
NFC	Not for Credit	
Blank	The grade has not been reported	

* Courses numbered 800 – 999/80000 – 99999 are not included in the GPA calculation and are not counted toward earned credit hours.

* This grading scale may not reflect all grades assigned for Concurrent Enrollment courses. Refer to the appropriate UC San Diego Department or School for individual grade definitions.

Grading Options

Students have the option to choose how they want their course(s) graded. Not all grading options are available for all courses. If a grading option is not selected, the default grading option will be assigned.

- **Letter Grade** – A grade between “A+” and “F” reflects the student’s performance in the course and is included in the grade point average (GPA) calculation. A passing grade counts toward earned credit hours or the required number of units for the student’s certificate.

- **Pass/No Pass** – A grade of “P” or “NP” reflects whether the student has passed the course, but does not otherwise indicate their performance. These grades are not included in the GPA calculation; however a “P” (passing) grade counts toward earned credit hours or the required number of units for the student’s certificate.
- **Not for Credit** – A grade of “NFC” reflects the fact that the student was enrolled in the course but does not indicate performance. This grade appears on the student’s transcript, but is not included in the GPA calculation and is not counted toward earned credit hours or the required number of units for the student’s certificate.

For most courses, the student may change their grading option at any time before the final class meeting (by 11:59p.m. on the day before the scheduled end date for online courses) or before final grades are posted, whichever comes first. Concurrent enrollment courses are held to UC San Diego’s deadlines.

Incomplete Grades

An Incomplete “I” is a temporary grade which may be granted when sudden serious medical situations, compulsory military service, or other extenuating circumstances beyond the student’s control such as family emergencies prevent the on-time completion of course requirements.

An Incomplete may not be used to allow more time for a student who has simply fallen behind. Examples of unacceptable reasons for approving an Incomplete include the need to rewrite a paper, the demands of a time-consuming job, the desire to leave town for vacation, etc.

An Incomplete also may not be used to retake a course. A student who has fallen substantially behind and needs to repeat a course should drop the course prior to the drop deadline and re-enroll for the next term in which the course is offered. Otherwise, the instructor should assign the appropriate final grade (D, F, NP, or U, for example).

A student who has received an Incomplete should not re-enroll in the course to make up the missing work. If the student were to re-enroll, the course would be considered a repeat and would not remove the prior quarter’s Incomplete, which would lapse to a permanent F, NP, or U grade.

Requirements for an incomplete grade:

1. The student must submit a written Petition for an Incomplete Grade to their instructor before the final class meeting (by 11:59p.m. on the day before the scheduled end date for online courses) or before final grades are posted, whichever comes first. Petitions submitted to the instructor after that time will not be considered.
2. The coursework the student has completed to date must be of passing quality.
3. The student must be able to show that an illness or other extenuating circumstance is preventing them from completing their required work on time.
4. The petition must be signed by the student; signed and approved by the instructor, program manager, and registrar; and include:
 - a. The reason the student was unable to complete the remaining coursework on time, including evidentiary documents when appropriate (e.g. doctor’s note).
 - b. A detailed description of all work required to complete the course.
5. If the petition is approved, all missing coursework must be completed before the last day of the following quarter according to the academic calendar. If a final grade is not assigned by the tenth business day after that date, the Incomplete grade will revert to the previously assigned grade, or lapse into a failing grade if no grade was assigned.
6. The student’s grading option cannot be changed after an incomplete grade is assigned.
7. The instructor cannot initiate or require a student to request an incomplete grade. The instructor must submit a final grade, based on the work the student has completed to that point, even if they expect the student to request an incomplete grade. If an incomplete grade is approved, it will replace the grade previously assigned by the instructor.
8. The instructor may neither agree nor require that the student wait until the next time the course is offered in order to make up incomplete work, but must make individual arrangements for the timely completion of the work.

For more information, contact Student Services at (858) 534-3420 or unex-grades@ucsd.edu.

Grade Changes and Appeals

All grades are determined by the instructor and (with the exception of “I” grades) are considered final at that time. An instructor may request a change to a final grade if there has been an error in calculation or transcription of the grade.

Grade Appeal Procedure

Students who believe their grade was improperly assigned or that they received a grade based on non-academic criteria have the right to question and appeal the final grade. Grounds for an appeal are limited to administrative error, work turned in to the instructor that was not included in the total score, and/or improper grading procedures. No grade may be changed more than one calendar year from the time it was recorded.

Grade appeal process:

- The student must first notify their instructor in writing, explaining the reasons they believe the grade is incorrect and what they think the grade should be. The student must attempt to resolve their grievance with their instructor within the first thirty (30) days of the following regular academic quarter.
- If the student cannot resolve the issue with the instructor, they must submit a written complaint to the appropriate program representative within ten (10) days of the instructor’s decision. The complaint must explain why the instructor’s decision was not satisfactory.
- If the student cannot resolve the issue with the program representative, and believes they have grounds for a second appeal based on the criteria below, they may submit a written grievance to be reviewed by the academic director. This grievance must be submitted in writing within ten (10) days of the program representative’s decision.

Grounds for a second appeal include:

- The outcome of the grievances with the instructor and program representative is not supported by the findings.
- There was unfairness in the previous grievance proceedings which may have prejudiced the result

- There is newly discovered important evidence not known by the student at the time of the grievance

The decision of the academic director is final.

Course Repeat & Grade Forgiveness

Course Repeat Policy

Students may complete and earn credit for the same course through UC San Diego Extension as many times as they wish. When a course is repeated, both completions are counted toward the student's earned hours and grade point average. However, for most courses, only one completion can be counted toward the student's certificate requirements.

Grade Forgiveness:

Occasionally students repeat courses to improve their cumulative Extension GPA. In such circumstances, students may petition to have an original grade "forgiven". When a grade is forgiven, all courses and grades remain on the student's transcript, but the original grade (forgiven grade) is no longer calculated into the student's cumulative Extension GPA.

To request grade forgiveness, students who meet the following requirements should submit a [Petition for Exception to Policy form](#) after the final grade is posted for the repeated course. Petitions must include information about why the student is making the request.

Requirements for Grade Forgiveness:

- Grade forgiveness will not be approved for courses in which a student admitted to or was found responsible for violating the [UC San Diego Extension Academic Integrity Policy](#) or the [UC San Diego Policy on Integrity of Scholarship](#). A student's academic record (conduct/integrity) may be taken into consideration in determining whether an original course grade will be forgiven.
- The student petitioning for grade forgiveness must have completed the course both times for a letter grade (other grading options do not qualify for grade forgiveness).
- The student must earn a passing letter grade (C- or higher) when repeating the course.
- In the repeated course, the student must earn:
 - A grade that is at least one full letter grade higher than the original grade,

Or

- A grade that is at least high enough to fulfil the GPA requirements outlined in the student's petition (e.g. the GPA requirement for the program in which the student is seeking admission).

Note: Although the UC San Diego Extension grade point average will not include these repeated courses, other institutions may recalculate the grade point average based on their admission or transfer policies.

Registration Policies and Procedures

Dropping Courses

All drop requests must be submitted to Student Services in writing. Not attending or notifying the instructor of the intent to drop does not constitute dropping a course. Drops are effective as of the date on which Student Services receives the written request, regardless of when the student ceased attendance.

Students should drop courses before the official drop deadline to avoid a negative impact on their academic record. Students who enroll in a course but do not attend should drop the course prior to the final class meeting. Instructors do not have the authority to drop students who do not attend their courses.

Drop Deadline

Most courses can be dropped at any time before the final class meeting (by 11:59 p.m. on the day before the scheduled end date for online courses) or before final grades are posted, whichever comes first. Concurrent enrollment courses are held to UC San Diego's deadlines.

Deadline to Drop for a Refund

Refund deadlines are unique to each course and can be found in the course information at <http://extension.ucsd.edu/>. Students who drop after the refund deadline, even if they enrolled after that date, will not receive a refund. See the Refund Policy (page 1 – 11) for more information.

Drop and Refund Petitions

Students may file a petition for a retroactive drop, refund, or grade forgiveness after the refund deadline if they are unable to continue enrollment for one of the following reasons:

- Sudden serious personal illness, injury, or hospitalization.
- The sudden serious illness, injury, hospitalization, or death of a close family member.
- Compulsory military service.
- A documented administrative error that affected enrollment.
- Extreme and unusual circumstances which were beyond the student's control, occurred after the refund deadline, and could not have been addressed during the term in which the student took the course.

Generally, petitions should be submitted within one year from the last day of the quarter in which the course was held. UC San Diego Extension has the right to approve or deny a petition if the reason for the request would not significantly affect the student's potential for academic success or if the student does not supply adequate documentation to support their claim.

For more information, visit <http://extension.ucsd.edu/>

Transferring Courses

Students who wish to transfer from one course to another must submit a request in writing. Because a transfer is considered a drop/add, the request must be submitted to Student Services before the published refund deadline of the course the student wishes to drop.

If the transfer results in a balance due, the student will be responsible for payment before their request can be processed. If the transfer results in a credit, the student will be refunded that amount per the Refund Policy.

Waitlists

When a course that allows waitlisting reaches its maximum enrollment capacity, a waitlist may become available. Any eligible student wishing to enroll in a course that has reached its authorized capacity may add themselves to one section of that course's waitlist.

Being on a wait list does not guarantee registration in the course or that a new section will be made available.

A student on the wait list is not officially enrolled in the course and is not eligible to attend or receive a grade in the course.

Students are not eligible to be enrolled in the waitlisted course if they have a hold on their account which blocks enrollment (such as a financial hold) or if they do not meet the course prerequisites.

Waitlist Procedure

Student Services tracks and manages all waitlists. As seats become available, Student Services will email eligible students in the order in which they were waitlisted to proceed with enrollment. It is the student's responsibility to check their email every day and respond by the same time on the next business day (e.g. if the email was sent at 3p.m. on Monday, the student must respond by 3p.m. on Tuesday). Students who do not respond will be skipped.

As a courtesy to others, students who decide that they do not want to enroll in a waitlisted course should drop themselves from the waitlist.

Sampling and Auditing Courses

UC San Diego Extension does not allow visitors to audit courses. However, for in-class courses with 5 or more meetings, students can sample the first class meeting for free, unless the course is already filled. If the course description states "no visitors permitted" or "pre-enrollment required," students must be officially enrolled prior to attending a class.

Sampling the first meeting of a course does not guarantee space will be available should the student decide to enroll.

Enrollment for Middle and High School Students

Students interested in taking courses at UC San Diego Extension must obtain written approval from their school principal or counselor. The approval must state that the student has the academic readiness and maturity to do well in a college-level course, must be signed and printed on school letterhead, and must be included with the student's registration. Approvals for homeschooled students must be signed by the student's local school district contact. We are unable to accept letters signed by parents or guardian, even if the parent/guardian is the student's teacher and/or school administrator.

An official transcript from that college verifying completed coursework can be accepted in lieu of a letter from the student's high school or district, but must reflect a cumulative GPA of 2.0 or higher.

Reporting Enrollment Status Changes

All VA and WIOA funded students are responsible for notifying our VA/WIOA Representatives immediately of any action affecting their enrollment status—whether a course has been added or dropped. Failure to do so may result in termination of benefits.

Satisfactory Academic Progress (SAP)

As a non-degree granting professional education institution, UC San Diego Extension does not have a Satisfactory Academic Progress (SAP) or Academic Good Standing policy to place students on academic probation or dismissal. However, some programs may have specific requirements to continue enrollment within that program. Those requirements are listed with the published certificate information.

Additionally, the law requires that all students receiving Veterans Education Benefits make satisfactory progress toward the completion of their stated training objective. The following policy applies to all students receiving Veterans Education Benefits and to students receiving any other type of financial assistance requiring Satisfactory Academic Progress.

- **Minimum Standard:** To meet UC San Diego Extension SAP standards students must maintain a cumulative and term grade point average (GPA) of at least 2.0 on a 4.0 scale.
- **Financial Assistance Probation:** Students are placed on financial assistance probation if their cumulative or term GPA falls below 2.0.
- **Termination of Benefits:** A student's financial assistance will be terminated if their cumulative or term GPA remains under 2.0 for a second consecutive term.

- **Reinstatement of Benefits:** The student's benefits may be resumed after the end of a term in which they successfully raise both their cumulative and term GPAs to 2.0 or higher. Students are required to pay for tuition & fees for each term until they have raised both GPAs to a 2.0 or higher.

Certificate Requirements

Certificate Registration

Students are officially registered in a certificate program after they have been accepted into the program and paid their certificate fee.

Minimum Certificate Requirements

Students are held to the certificate requirements in place at the time they register for the program. When certificate requirements change, the student may choose to complete the certificate under the new requirements. Because program requirements are usually updated to accommodate for changing demands in the career field, students generally cannot elect to complete the certificate under requirements that were discontinued prior to their registration in the program.

Unless otherwise stated, students must:

1. Complete all certificate requirements within 21 consecutive quarters (approximately 5 years) from the time they register in a program.
2. Complete all required courses and the minimum number of required elective courses or units as listed in the certificate description and matrix. Pre-requisite courses are not considered part of the minimum credit unit requirements of a certificate.
3. Choose a grading option of either Letter Grade or Pass/No Pass. Only courses taken for credit can be applied toward certificate requirements.
4. Earn a grade of "C-" or higher in order for the course to be applied toward the certificate. "Pass" is awarded for "C-" work or better.
 - If a student receives below the minimum acceptable grade in a required course, they must repeat the course for a higher/passing grade.
 - If a student receives below the minimum acceptable grade in an elective course, they may request to substitute a different suitable elective course with a passing grade or repeat the course for a higher/passing grade.

Certificate-Specific Requirements

Grade Requirements

Some certificates may require a higher minimum grade or require that all or some courses be taken for a letter grade. The Extension academic department responsible for the certificate has the discretion to decide when these stricter requirements are appropriate.

When these requirements change, program management must clearly outline a process to grandfather registered students and a procedure to allow students to petition for grades that met the published standards when the course was completed to be accepted toward meeting certificate requirements.

Time to completion

Certificate program managers have the discretion to shorten the time students are eligible to complete all coursework to preserve curricular relevance.

In extenuating circumstances a student who has exceeded this period of time may be eligible to petition, in writing, for an extension to the time they are eligible to complete all coursework.

- The petition should be submitted to the academic director responsible for the certificate program and explain why an extension is merited and how much additional time is needed to complete the program.
- The academic director will review the petition and course requirements to determine if any changes to the certificate or field of study made after the time the student initially registered in the program are significant enough to adversely affect the student's chances of success.
- If a petition is denied, the student will be required to re-register in the certificate program, meet all requirements in place at the time they re-register, and repeat older or outdated courses.

All requirements, including grade requirements and the length of time a student has to complete certificate coursework, must be clearly outlined in all informational, promotional, and curricular materials.

Third-Party Certificate Requirements

A third party (*e.g.*, employer, Workforce Partnership, credentialing authority) may require a higher minimum acceptable grade and/or allow less time to complete the certificate program. In those cases, the student can earn the certificate by meeting UC San Diego Extension's requirements, however must also meet the stricter requirements specified by the third party. Failure to meet the third party's additional standards may result discontinued benefits provided for that program, and/or lack of certificate completion recognition by the third party.

Request for Certificate Completion Audit

Once all certificate requirements have been successfully completed, students should request a certificate audit through My Extension or by submitting an *Intent to Complete* form available [online](#).

Financial Resources and Policies

Tuition and Fees

All fees, including course fees, are subject to change without notice. UC San Diego Extension courses are priced individually, not per unit. For current course fees, see the individual course web pages.

Certain programs, including, but not limited to, Post Baccalaureate Premedical, Accelerated Paralegal, and Concurrent Enrollment have different pricing structures. Visit each program's web page for more information.

Refunds

To be eligible for a refund, students must submit a written drop request for the course prior to the published refund deadline. Refund deadlines are published on each individual course page and are also available in My Extension. Concurrent Enrollment courses have separate refund policies and deadlines.

Some fees, including late fees, certificate fees, and some materials, technology and lab fees are non-refundable.

Refund Petitions

See *Drop and Refund Petitions* on page 7.

Private Education Loans

Private loans can help cover the costs of enrollment fees and required textbooks and materials for certificate requirements and required prerequisite courses. Private loans cannot be used to cover housing or living expenses for part-time programs, however they can be used to cover housing or living expenses for full-time programs.

Eligibility is usually based on the student's creditworthiness. Students should compare lenders by reviewing current interest rates, repayment options, service fees, and other details before applying for a loan.

To be approved to use a private loan at Extension, students must be accepted and registered in an approved program, and have paid their applicable certificate registration fee and/or the program deposit. Students must also provide a quarter-by-quarter plan to complete their program.

- Exception: If the program does not require a certificate registration fee, the student must instead forward their acceptance letter to the Financial Assistance Coordinator.
- Concurrent Enrollment – Loans for concurrent enrollment courses will only be certified for students enrolling through the UC San Diego College Readmission Concurrent Enrollment Program.

Loan disbursement

Student loans are released in several payments, or "disbursements", throughout the academic year. This disbursement schedule is based on the program and based on the student's individual plans of enrollment.

[Click here](#) for more information about education loans at UC San Diego Extension.

UC San Diego Student Grant Program

UC San Diego Extension offers a limited number of student grants to full-time UC San Diego students each quarter. Student grant vouchers are good for up to \$500 off of one course. Early enrollment and 10% discounts do not apply.

Discounts

UC San Diego Extension offers a 10% discount, up to \$50 per quarter on eligible courses. Discounts do not apply to travel/study programs, food and beverage courses, executive programs, concurrent enrollment, career counseling and assessment testing, scholarships or courses with fees of \$75 or less. Retroactive discounts or refunds will not be provided. The following UC San Diego affiliated persons are eligible to receive the discount:

- UC San Diego full-time matriculated students
- UC San Diego faculty and their spouse or domestic partner. This includes post-doctoral appointments.
- UC San Diego career status staff and their spouse or domestic partner, (casual or contract employees are not eligible).
- UC Alumni
- Osher Lifelong Learning Institute Members
- Chancellor's Associate members
- UC San Diego Alumni Association members

To receive the discount, proper identification and proof of group member status must be presented in person at the time of enrollment. Refunds will not be given for the 10% discount if the identification is presented after the initial enrollment.

Other Financial Resources

Visit <http://extension.ucsd.edu/> for information about financial resources available to students attending UC San Diego Extension, such as:

- San Diego Workforce Partnership (WIOA)
- Scholarships
- Segal AmeriCorps Education Awards
- Tax Credits
- Veteran's Education Benefits
- Military Spouse Career Advancement Account (MyCAA) Scholarship Program

Student Responsibilities

Students receiving some types of financial assistance such as Veteran's Educational Benefits and Workforce (WIOA) funds are held to specific academic standards to be eligible to use the benefits provided by that program. These requirements include, but are not limited to, reporting enrollment status changes (page 1 – 8) and Satisfactory Academic Progress (page 1 – 8).

ADMET Process Certificate

Overview

The ADMET processes – Absorption, Distribution, Metabolism, Excretion, and Toxicology – form one of the foundations of all modern drug discovery and development. It has been reported that 50% of drug failures in development and clinical trials are due to poor ADMET properties. In order to minimize these costly failures, drug discovery and development has shifted to examining and optimizing these properties as early as possible. Virtually every organization that develops pharmaceutical solutions to health or agricultural concerns require scientific and regulatory professionals who possess a complete understanding of the elements of ADMET.

The specialized certificate in ADMET Processes trains scientific professionals how to incorporate ADMET concepts into their research and development projects by teaching practical application of ADMET principles and present case studies that provide successful solutions to the R&D challenge

Format
Online

Est. Cost
\$2,710*

*not including textbooks

Duration
9-12 Months*

*Varies by student and courses taken
per quarter.

Program Benefits

- All courses can be taken online
- Practical hands-on training
- Taught by leading industry practitioners
- Immediately applicable skills

Key Program Topics

- Study design concepts for the determination of pharmacokinetic parameters
- Predict human pharmacokinetics using animal pharmacokinetics and *in vitro* data. Strengths and risks associated with a molecule based on its pharmacokinetic profile
- Enzymes and mechanisms of drug metabolism
- Use *in vitro* assays to predict drug-drug interactions
- Principles of toxicology in drug discovery and clinical testing
- The role of drug metabolites in drug discovery

Courses

Required Courses <small>All 4 courses are required.</small>	
TITLE & COURSE NUMBER	UNITS
Drug Metabolism BIOL-40170	3.0
Pharmacokinetics BIOL-40176	3.0
Toxicology BIOL-40189	3.0
Predicting & Selecting Promising Drug Compounds BIOL-40219	2.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9353 or Email: unexbio@ucsd.edu

Conditions for Admission

The primary audience for the program is practicing professionals with a science degree, currently working in the pharmaceutical field. Professionals with legal, business or clinical backgrounds, or science professionals considering entering the pharmaceutical field, may also be attracted to the program.

Complete the application and pay application fee.

Accounting Certificate

Overview

UC San Diego Extension's professional certificate in accounting provides students the opportunity to gain a solid foundation in accounting skills and an understanding of the environment in which accountants work. This program is designed for individuals who want to pursue a career in accounting.

Format 100% Online

In class options might be available for some courses.

Est. Cost

\$6500*

*Cost may vary by format selection and curriculum updates.

Duration 12-36 Months*

*Varies by student and courses taken per quarter.

Certification and Licensure Requirements

For students who hold a bachelor's degree, the specific educational requirements to sit for the exams needed for certification or licensure may be met by completing the Certificate and the required courses established by the particular governing organization.

For information regarding other credential requirements, contact the organizations directly:

- California State Board of Accountancy (CBA), www.dca.ca.gov/cba,
- (916) 263-3680; Institute of Management Accountants (IMA)
- www.imanet.org, (800) 638-4427; Institute of Internal Auditors (IIA), www.theiia.org.

Certificate Benefits

- Taught by well-qualified practitioners who will cover applications as well as underlying rationales. Courses are offered year-round in various formats: In class, Hybrid or Online.
- The certificate may be completed entirely online.
- Provides academic units which may be used to meet the California State Board of Accountancy's educational requirements. Students will earn 36 quarter units (24 Semester) by completing the 9 Accounting certificate courses applicable towards the Accounting Subjects requirement to qualify for the Uniform CPA Examination.

Pathway for eligibility to take the Uniform CPA Exam in California

- Complete a Bachelor's degree or higher from an accredited university
- Complete 36 quarter/24 semester units in Accounting Subjects by completing the Accounting Certificate
- Complete 36 quarter/24 semester units in Business-Related Subjects

Requirements for CPA Licensure in California (See the "CBA Tip Sheet" for more information)

- Pass the Uniform CPA Exam
- Meet the educational requirements (complete a minimum of 225 quarter/150 semester units)
- Obtain the required accounting experience

Courses

Required Courses <small>Complete all nine courses to receive the certificate.</small>	
TITLE & COURSE NUMBER	UNITS
Elementary Accounting I BUSA-40036	4.0
Elementary Accounting II BUSA-40037	4.0
Intermediate Accounting Theory and Practice I BUSA-40094	4.0
Intermediate Accounting Theory and Practice II BUSA-40035	4.0
Cost Accounting BUSA-40049	4.0
Federal Individual Income Taxation BUSA-40047	4.0
Taxation of the Business Entity BUSA-40529	4.0
Advanced Accounting Theory and Practice BUSA-40034	4.0
Auditing BUSA-40048	4.0
Recommended Courses for meeting CPA Exam or licensing requirements <small>Check your state's governing board for their guidelines and policies.</small>	
TITLE & COURSE NUMBER	UNITS
Uniform CPA Examination Review Course: Wiley CPAexcel BUSA-70007	0.0
Accounting Ethics BUSA-40909	4.0
Fraud and Forensic Accounting BUSA-40864	4.0
Taxation: Practice, Procedure and Ethics BUSA-40869	3.0
Real Estate Tax and Accounting BUSA-40822	2.5
Financial Statement Analysis BUSA-40130	4.0
Business Law LAW-40001	3.0
Organizational Behavior BUSA-40922	3.0
Accounting for Governmental and Nonprofit Entities BUSA-40759	4.0
Lean Six Sigma Green Belt MAE-40013	4.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8189 or Email: AcctgTaxProgram@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Advanced Studies in Regulatory Science Certificate

Overview

A career in regulatory affairs can take many paths, such as clinical trials, drug development, food safety, medical device advancement, pharmaceutical research, or manufacturing controls. Just knowing the fundamentals of regulatory affairs is not enough to advance a career or secure a job of some seniority in this industry.

As in most regulated industries experience alone is not sufficient, because professionals are only exposed in their jobs to a small fraction of all the cases that are being decided by the regulatory agency. To make progress in the field, a regulatory affairs professional needs periodic training and education.

This program, which grew from demands by local biotech professionals, offers a curriculum that compliments the rapidly expanding pace in the pharmaceutical and biotechnology industries, and is designed for regulatory and quality professionals who need to keep up-to-date with the latest developments and have a deeper understanding of the more complex regulatory challenges.

Our knowledgeable team of instructors includes executive level regulatory professionals and consultants with more than 20 years' experience in quality and compliance with U.S. FDA and ICH requirements. With this breadth and depth of experience, instructors expose students to many real workplace examples.

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Advanced Topics in Regulatory Affairs BIOL-40110	3.0
International Regulatory Affairs BIOL-40303	3.0
Electives <small>6 units required</small>	
TITLE & COURSE NUMBER	UNITS
CT: Good Clinical Practices FPM-40204	3.0
FDA Audits and Inspections BIOL-40304	2.0
Introduction to Bioethics BIOL-40071	2.0
In Vitro Diagnostics Product Development BIOL-40244	2.0
Analytical Chemistry BIOL-40195	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9353 or Email: unexbio@ucsd.edu

Conditions for Admission

Applicants to this program must have completed either the Regulatory Affairs Essentials certificate, a master's degree from reputable institution or have at least three years' experience working in the field.

Alcohol and Drug Abuse Counseling Certificate

Overview

Professionals working in the field of chemical dependency have one of the most demanding and challenging jobs in all of healthcare. The combination and variety of skills called upon each day in professional practice necessitates a diverse educational background.

The UC San Diego Extension certificate program is designed for counselors working in a variety of settings with chemically dependent Individuals and is approved to meet the educational requirement to become a Certified Alcohol Drug Counselor I (CADC-I) through the California Consortium of Addiction Programs and Professionals (CCAPP).

Students cover topics such as

- Psychopharmacology
- Recovery
- Treatment team coordination
- Counseling
- Community services
- Group leadership

Certificate Benefits:

Through the course of the certificate program, students will

- learn to operate in real-world situations, culminating with field-based practical experience
- obtain focused career-oriented training in a field with increasing demand for trained professionals
- receive the educational background to enter into or advance within the addiction counseling discipline meet CCAPP CADC-I certification educational requirements

Target Audience:

The program is designed for individuals interested in entering into or advancing within the field of alcohol and drug abuse counseling. This includes those looking to complete an educational program that meets CCAPP minimum requirements to become a Certified Alcohol Drug Counselor I (CADC-I).

Note: Individuals entering the program should have at least one year of sobriety, if applicable. Having less than that will make it very difficult to secure a practicum site, which could significantly delay or prevent completion of the program.

Demand and Job Prospects:

According to recent U.S. Department of Labor projections, employment of substance abuse counselors is projected to grow 22 percent from 2014 to 2024, much faster than the average for all occupations. Growth is expected as addiction and mental health counseling services are increasingly covered by insurance policies.

Program At-A-Glance

- # of courses: 13
- Total units: 33
- Estimated cost: \$4,700
- Time to Complete: 1.5 years
- **Delivery:** in-person with some courses available online

Courses

Required Courses <small>All courses are required.</small>	
TITLE & COURSE NUMBER	UNITS
Cultural, Social, and Historical Overview of Alcohol and Drug Related Problems FPM-40552	3.0
Introduction to Counseling Models PSY-40346	3.0

Chemical Dependency I: Disease, Symptoms, Diagnosis, Pharmacology, Recovery PSY-40214	3.0
Chemical Dependency II: Intervention, Treatment, Management, Patient Health Promotion, and Recovery PSY-40215	3.0
Case Management: Assessment, Orientation, and Treatment PSY-40377	3.0
Applied Skills for Group Dynamics and Facilitation PSY-40070	3.0
Dual Diagnosis: The Synergism of Chemical Dependency and Psychiatric Illness PSY-40221	2.0
Prevention and Public Consequences of Substance Abuse FPM-40054	2.0
Advanced Intervention PSY-40213	2.0
Law and Ethics for Addiction Professionals FPM-40536	1.0
Crisis Intervention: Theory and Practical Skills FPM-40345	2.0
Basic and Advanced Counseling Skills and Characteristics PSY-40374	1.0
Practicum for the Alcohol and Drug Abuse Counselor PSY-40321	5.0
Electives <small>The following courses are electives and are not required for certificate completion.</small>	
TITLE & COURSE NUMBER	UNITS
Fundamentals of Opiate Addiction FPM-40646	3.0

Admission

To earn the certificate you must complete 33 (quarter) units of study consisting of 13 required courses including a practicum. For the certificate, a grade of C- or better is required in all courses.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-534-9262 or Email: unexhealthcare@ucsd.edu

Conditions for Admission

Extension doesn't have academic prerequisites related to the certificate, with the exception of a high school diploma or equivalent. Complete the application and pay application fee.

Android Programming Certificate

Overview

Mobile programming is part of a segmented portion of technology that is filled with innovation constantly evolving at unprecedented rates. This certificate was designed to help prepare learners to enter into this demanding career field of app development with a deeper understanding of what is required to be an Android programmer. In addition will gain a competitive edge within the industry and learn new skills necessary to program apps that run natively on mobile devices specific to Android based technology, which built its foundation in the Java object oriented programming language. Android programming app development can be applied to the professional, scientific, technical services, information, finance, insurance, manufacturing, healthcare, entertainment and education industries.

The Android Programming Specialized Certificate was developed with the goal to offer students familiar with programming languages or just starting out, the opportunity to specialize in Android mobile app development, including Android Wear, Android TV and Android Auto.

Format

Online

*Check course list below for specifics.

Est. Cost

\$3,490

*Estimated cost with certificate fee included.

Duration

12-15 months

*Varies by student due to number courses taken per quarter.

The program is designed for:

The most common types of students in the program are:

- Existing Java Professionals who want to expand their skill set.
- Non-programmers and Career Changers learning programming to enhance their career opportunities.
- Recent Graduates building off of existing programming knowledge in computer engineering or computer science disciplines

What you will learn:

Android Java and Android Studio will be used throughout each course with the initial course providing insight as to the differences in Java programming for mobile. Advanced core coursework will expand Android skill set to ensure that upon certificate completion, students are able to design, code, debug and troubleshoot Android apps. Elective options will allow for various professionals to acquire new skills, including freelancers hoping to learn concepts on how to publish apps as they develop them. Additional opportunities will address the needs of those working in corporate environments, more commonly dealing with architectural and integration issues. No matter the level, each student will gain working knowledge and skills to generate portfolio pieces that includes published applications. Students will be able to apply Android programming to develop various types of apps in many categories.

Courses

Prerequisite	
TITLE & COURSE NUMBER	UNITS
Java Programming I: Fundamental Java Concepts CSE-40479	3.0
Required Courses	
TITLE & COURSE NUMBER	UNITS
Android Java Fundamentals CSE-41246	3.0
Android Programming I CSE-41145	3.0
Android Programming II CSE-41146	3.0
Elective Courses <small>Choose one</small>	
TITLE & COURSE NUMBER	UNITS
Android App Production CSE-41248	3.0
Android Architecture CSE-41247	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9152 or Email: infotech@ucsd.edu

Conditions for Admission

This certificate is geared towards existing software developers familiar with object-oriented programming languages such as Java, C++, C#, Python, or related, and would like to apply such knowledge to further specialize in Android application development.

Applied Bioinformatics Certificate

Overview

The Human Genome Project kicked off a process of accrual of massive amounts of genomics data. The genomics data on diverse organisms that is now routinely generated and it is being leveraged in multiple industries with an impact on broad sectors of our economy, including the delivery of medicine, the design of pharmacological agents and even the manufacturing of industrial products such as materials and foodstuff.

Because genomic data is now found in so many different industries and scientific endeavors, a basic understanding on how to exploit it has become indispensable for scientists as well as other technical professionals. A familiarity with genomic data how to gather, analyze, and interpret it, is needed to succeed in most sectors of the life sciences and biomedical industry. Such understanding is at the core of bioinformatics.

The specialized certificate in Applied Bioinformatics is aimed at scientists in the life sciences, engineers, technical professionals working in industrial biotechnology and ancillary industries who need to utilize tools developed for bioinformatics. You will learn how to effectively utilize the data generated by the genomics revolution by giving you a solid understanding of the tools and methods of bioinformatics, including:

- Understanding of the importance of bioinformatics as a tool in life sciences research
- Knowledge of the multiple public data repositories and how to exploit them
- Familiarity with the software tools used for genome analysis and comparison
- Appreciation for the multiple uses of genomic information
- Awareness of the current genomics sequencing methods
- Insight into the challenges faced when confronted with big data
- Programming skills sufficient to manipulate genomic data

Courses

Recommended Prerequisites	
TITLE & COURSE NUMBER	UNITS
Introduction to Genetics and Human Disease BIOL-40280	3.0
Python for Informatics CSE-41225	3.0
Core Courses <small>All three (3) courses required.</small>	
TITLE & COURSE NUMBER	UNITS
Bioinformatics BIOL-40236	3.0
Genomic Sequencing Technologies BIOL-40237	3.0
Processing Actionable Data in Genomics BIOL-40327	3.0
Electives <small>Complete three (3) units.</small>	
TITLE & COURSE NUMBER	UNITS
Biological Database Design CSE-41317	3.0
Introduction to Statistics using R CSE-41198	3.0
Systems Biology BIOL-40215	2.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-6648 or Email: appliedscience@ucsd.edu

Art and the Creative Process Certificate

Overview

The Professional Certificate in Art and the Creative Process documents concentrated study in studio art and the creative process. Regardless of profession or lifestyle, students benefit from the essential practice and preparation needed to harness their creativity and express themselves artistically. The program is designed for students with little or no art background and brings them step-by-step through a systematic program of courses to develop basic artistic skills and an understanding of the creative process.

Format 100% In-Person

Online options might be available for some courses.

Est. Cost \$4,620*

*Cost may vary by format selection and curriculum updates.

Duration 15-24 Months*

*Varies by student and courses taken per quarter.

Students will choose from a variety of art courses to develop basic artistic techniques, while improving their abilities to observe, to find innovative solutions, and to express individual creativity. The certificate program focuses on both the creative process and the artistic product (a portfolio of finished artwork). Students also develop confidence with experimentation and self-expression.

Courses

Information Session <small>Find out more about the program in a free, online information session.</small>	
TITLE & COURSE NUMBER	UNITS
Art Programs Information Session INFO-70157	0.0
Required Courses	
TITLE & COURSE NUMBER	UNITS
Drawing I: Focus on Perception ART-40166	3.0
Drawing II: Refining Technique ART-40253	3.0
Introduction to Painting ART-40180	3.0
Creative Process I ART-40191	3.0
Creative Process II ART-40181	3.0
Art History <small>Minimum of 2 units required. Topics vary.</small>	
TITLE & COURSE NUMBER	UNITS
Architectural History of San Diego ART-40436	2.0

Art through the Ages: Prehistory to Ancient Egypt ART-40420	1.0
Art through the Ages: Ancient Greece and Rome ART-40426	1.0
Art of the Medieval World ART-40434	1.0
Art of the Late Gothic and Early Renaissance ART-40444	1.0
Art of the High Renaissance & the Baroque Age ART-40450	1.0
Art through the Ages: Rococo to Impressionism ART-40461	1.0
Introduction to Modern Art: Impressionism to World War II ART-40472	1.0
Contemporary Art 101 ART-40480	1.0
Art Now ART-40695	1.0

Electives Minimum of 9 units required, 3 of which must be painting elective units. Enrolled certificate students MUST follow matrix of courses as listed in their MyExtension account.

Drawing Electives Please note, Drawing I: Focus on Perception is a pre-requisite for most courses.

TITLE & COURSE NUMBER	UNITS
Figure Drawing I ART-40006	3.0
Figure Drawing II ART-40167	3.0
Playing with Pen & Ink ART-40661	3.0
Drawing Ideas: Developing Your Sketchbook ART-40447	3.0
Introduction to Illustration ART-40428	3.0
Animal Illustration ART-40162	3.0
Editorial Illustration ART-40666	3.0
Illustration: Everything but Editorial ART-40703	3.0
Animation I: Introduction to Disney's 12 Principles of Animation ART-40557	3.0

Painting Electives Please note, Introduction to Painting is a pre-requisite for most courses.

TITLE & COURSE NUMBER	UNITS
Abstract Painting ART-40194	3.0
Abstract Painting II (Advanced) ART-40304	3.0
Watercolor I: Basic Techniques and Materials ART-40625	3.0
Watercolor for Illustration ART-40670	3.0
Intermediate Watercolor ART-40239	3.0
California Impressionism: Plein Air Painting ART-40556	2.0
Plein Air Painting: A Working Method ART-40483	2.0
Oil Painting I ART-40002	3.0

Color Fields: An Exploration in Painting ART-40451	2.0
Painting alla Prima ART-40656	2.0
Plein Air: Fundamentals of Landscape Painting ART-40414	3.0
Acrylic Painting I ART-40242	3.0
Mixed Media Electives <small>Check back regularly for new course listings.</small>	
TITLE & COURSE NUMBER	UNITS
Creative Process III ART-40183	3.0
Color Theory for Fine Artists ART-40697	3.0
Introduction to Mosaic Art ART-40354	3.0
Introduction to Mosaic Sculpture ART-40385	3.0
Introduction to Curvilinear Mosaic Sculpture ART-40676	3.0
Introduction to Book Arts ART-40245	3.0

Admission

The program consists of earning at least 26 quarter units (9-11 courses) including 15 required course units (5 courses), minimum of 2 art history units (1-2 courses), and a minimum of 9 elective units, 3 of which must be a painting course (3-4 courses). Students should be able to complete the entire certificate program in 2.5 years.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Conditions for Admission

Please see the application for specific admission requirements for this program.

Although a college degree or professional experience in the field are not required, applicants with such experience may receive preference for admission when program capacity is limited.

Current UCSD students may be considered for admission depending on their academic and career focus and educational performance.

Biostatistics Certificate

Overview

Biostatistics is an indispensable tool for improving our understanding of biological processes and has a direct impact in ensuring the safety and efficacy of pharmacological and biotechnological products. Biostatisticians can be found beyond pharmacological and medical research in various fields and industries, and often work closely with economists, insurance analysts, marketing specialists, and other professionals to analyze data, assure quality control, develop policy, conduct market research, and implement cost controls. In addition, the application of biostatistics has recently expanded to include a wide-range of fields, such as medical imaging, ecological forecasting, and statistical genetics.

Recently updated with more in-depth learning on the most commonly used biostatistical methods, this online certificate in biostatistics emphasizes the application of statistical techniques to the analysis of clinical data. The course sequence begins with basic statistical concepts in biostatistics and then moves to more advanced topics, including the use of SAS, the dominant software for statistical analysis in the field.

In this program, you will develop a clear, solid understanding of statistical methods and their applications, as well as the available software tools needed to carry out biostatistical work. In the final two courses of the program, you will master the types of analysis most commonly used in the healthcare and pharmaceutical industries, including simple and multiple linear regression, ANOVA and ANCOVA, simple and multiple logistic regression, and survival analysis.

Program Benefits

- Hands-on comprehensive training designed to immerse you in the skills needed to successfully get started in or advance your career
- Program is designed to be taken online in the convenience of your own home or office
- Developed and taught by seasoned biostatisticians and other industry professionals

Key Program Topics

- Descriptive and inferential statistics
- SAS programming
- Simple and multiple linear regression
- Simple and multiple logistic regression
- Analysis of variance and covariance (ANOVA and ANCOVA)
- Survival analysis
- Proportional and nonproportional hazards models
- Power and sample size analyses

For more information about this program, please contact the program manager at unexbio@ucsd.edu or 858-534-9353.

Courses

Required Courses <small>All four courses are required. The courses should be taken in the order suggested.</small>	
TITLE & COURSE NUMBER	UNITS
Biostatistics BIOL-40049	3.0
SAS Programming I: DATA Step and PROC Fundamentals BIOL-40190	3.0
Biostatistical Methods I: Linear Regression and ANOVA BIOL-40315	3.0
Biostatistical Methods II: Logistic Regression and Survival Analysis BIOL-40316	3.0
Other Courses of Interest <small>Not required for certificate.</small>	
TITLE & COURSE NUMBER	UNITS
CDISC Standards for Clinical Data BIOL-40317	3.0

Admission

You may enroll in the certificate program at any time. However, it is recommended that you enroll as soon as possible. The program curriculum may be updated at any time; if certificate requirements change, you must adhere to the curriculum *at the time of your enrollment into the certificate*.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-6648 or Email: appliedscience@ucsd.edu

Conditions for Admission

Although programs are open to all adult learners, UC San Diego Extension programs are designed to best serve college-prepared working professionals. Where program capacity is limited, applicants with this profile will receive preference for admission.

Biotechnology Project Management Certificate

Overview

The biotech industry has a distinct set of requirements for the project manager. Managing various discovery, development, testing and manufacturing processes within a highly-regulated and creative environment poses unique project management challenges, not usually covered in foundation curriculum or traditional industry experience. Developing new biotechnology and pharmaceutical products is an extremely complex and highly regulated process. Specialized, highly trained project managers play an essential role in shepherding these valuable products through the pipeline and bringing them successfully to market.

Seattle and San Diego are two west coast centers of the biotechnology industry with the ability to address this professional challenge. The joint online Biotech Project Management Specialized Certificate Program through UC San Diego Extension and [University of Washington Professional and Continuing Education](#) is intended for product managers, manufacturing managers, quality managers and scientific, clinical research or regulatory specialists engaged in biotech product design, development and control. The program is ideal for individuals who are trying to move into the biotech industry by learning project management processes for completing and delivering a biotech product within budget and on schedule.

In this four-course online certificate program, we'll cover the product development process from start to finish. You'll explore the key skills needed for project management within the biotech environment from a clinical, technical and regulatory perspective. Then you'll practice applying this knowledge to the biotech and drug development life cycle. Get prepared to make an impact in this exciting, rapidly changing field.

Courses

Required Courses - University of Washington	
TITLE & COURSE NUMBER	UNITS
Project Management Standards & Processes PTNR-UW901	0.0
Biotechnology Project Capstone PTNR-UW902	0.0
Required Courses - UC San Diego Extension	
TITLE & COURSE NUMBER	UNITS
Project Management within a Scientific/Research Environment BUSA-40693	2.0
Applying Project Management Principles to Biomedical and Pharmaceutical Product Development BUSA-40694	4.0

Admission

Participants will take two online courses developed and offered by UW Professional and Continuing Education and two biotech courses offered from UC San Diego Extension. When students complete all 4 courses, they will receive a UW-UCSD joint certificate.

There will be a \$95 fee upon acceptance into the program.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9353 or Email: unexbio@ucsd.edu

Conditions for Admission

Participants must have a BS or BA and a minimum of 2 years of project-related work experience. The Autumn 2019 program begins in September 2019. Applications will be accepted for admission beginning on May 16, 2019. To apply, please visit the University of Washington's [Biotechnology Project Management](#) certificate website.

Blockchain Applications for Healthcare Certificate

Overview

UC San Diego Extension and the UC San Diego School of Medicine in collaboration with Lipscomb University have developed the Blockchain Applications in Healthcare certificate program for learners on the cutting-edge of the rapidly evolving technology curve. Course content is ideal for those who desire the exploration and evaluation of new and emerging Blockchain technologies in the healthcare ecosystem. Courses will examine the many immediate benefits for improving business processes, data provenance, lowering costs, mitigating risks, enhancing regulatory compliance, and ultimately improving patient and population health outcomes.

Expert faculty and industry practitioners explain the intricacies of the Health Blockchain landscape and identify meaningful opportunities to generate new value for both consumers and organizations. By focusing on the specific use and application of blockchain for different healthcare challenges, course content provides a critically needed educational offering for professionals in healthcare, business management, entrepreneurs, and those with technical backgrounds that want to break into the fast growing digital healthcare industry. Students will have the opportunity to develop and focus on a project management format to kickstart an actual blockchain healthcare solution.

Format:

On-Line

Est. Cost: \$3,200

(Excludes textbooks and materials)

Duration:

12 - 16 months

Courses

Blockchain Applications for Healthcare	
TITLE & COURSE NUMBER	UNITS
Introduction to Health Blockchain GLBH-40015	2.0
Applied Health Blockchain Design GLBH-40016	2.0
Case Studies in the Health Blockchain GLBH-40017	2.0
Business for Health Blockchain GLBH-40018	2.0
Blockchain Applications for Healthcare Electives	
TITLE & COURSE NUMBER	UNITS
Python Programming Fundamentals CSE-41273	3.0
Project Management Essentials in Science and Technology BUSA-40862	3.0
Optional Capstone	
TITLE & COURSE NUMBER	UNITS
Blockchain Applications for Healthcare Capstone GLBH-40019	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-534-4041 or Email: rhoughtaling@ucsd.edu

Brewing Certificate

Overview

From just eight craft breweries in the U.S. in 1980 to over 6,000 nationwide today, craft and microbrewing has developed into a multi-billion dollar industry. San Diego is contributing to the growth of the brewing trade with over one hundred fifty local breweries in operation and more in the planning stages. The key to a career in this thriving business is to gain the training and knowledge necessary to excel in this specialized field.

Brewers bring expertise from a diverse array of fields including engineering, chemistry, microbiology, physics and business, and must be able to apply that knowledge on a daily basis. The UC San Diego Extension Brewing certificate curriculum provides students with the technical skill and knowledge to select raw materials, produce wort, manage yeast and fermentation processes, and finish and package the product, all to the highest industry standards. The elective coursework is customizable for students based on career goals and/or personal interests.

Taught by leading professional brewers and other industry experts, the UC San Diego Extension Brewing Certificate is a part-time, evening and weekend program that offers academic and practical training for entry-level brewing professionals. The certificate can be completed in 12-18 months and students may take as many classes as fit their schedule. Tuition is paid per course at the time they are taken.

All elective courses, with the exception of the Brewing Internship, are open to the public. An application and prerequisite coursework are not required to enroll in any elective course.

[Like us on Facebook](#) to learn more about the program and the local and national brewing community.

Courses

Information Session <small>Find out more about the program in a free, online information session.</small>	
TITLE & COURSE NUMBER	UNITS
Brewing Certificate Information Session INFO-70051	0.0
Required Courses <small>Application required to enroll</small>	
The Science and Technology of Brewing	
TITLE & COURSE NUMBER	UNITS
Overview of Brewing Science and Technology BREW-40000	1.0
Raw Materials and Malting BREW-40001	3.0
Wort Production & Recipe Formulation BREW-40002	2.0
Yeast & Fermentation Processes BREW-40003	3.0
Finishing Practices BREW-40004	3.0
Sensory Evaluation and Beer Styles BREW-40005	3.0
Technology of Brewing BREW-40006	3.0
Elective Courses - 8 units required for certificate <small>Courses open to the public</small>	
TITLE & COURSE NUMBER	UNITS
Food Pairings and Beer Dinners BREW-40013	1.0
Brewing Recipe Formulation BREW-40018	2.0
Marketing and Distribution for Breweries BREW-40009	2.0

Barrel Aging BREW-40014	1.0
Introduction to Mead Making BREW-40022	0.0
Draught Beer Systems Operation and Maintenance BREW-40019	2.0
Brewery Safety BREW-40017	2.0
Brewery Operations and Financial Management BREW-40016	3.0
Flavor Attributes of Beer and Food BREW-40020	2.0
Brewing Internship BREW-40021	3.0

Admission

The Professional Certificate in Brewing is issued upon completion of the total number of required credit units (26 quarter units). The approximate cost of the program is \$5,495 - \$5,785 (includes course fees, application fee, certificate enrollment fee, and textbooks; and is dependent on which elective courses are chosen). Fees are paid incrementally as students enroll in courses rather than up front. Course fees and schedules are subject to change.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-6648 or Email: brewing@ucsd.edu

Conditions for Admission

Prerequisites

All students must be at least 21 years of age.

For acceptance to the UC San Diego Extension Professional Certificate in Brewing, and to any of the required science and technology courses for the Certificate, students must have adequate preparation in the following areas, as evidenced by official high school and/or college transcripts:

- **Pre-calculus:** the most advanced mathematics course before a calculus course may be taken. And relevant preparation in **at least two of the following four areas:**
 - **Biological sciences:** general biology, microbiology, cell physiology or biochemistry
 - **Chemistry:** general chemistry, organic, inorganic or analytical
 - **Physics:** heat and mechanics or process control
 - **Engineering:** topics in mechanical or chemical engineering only.

Practical brewing experience is a plus, but is not required for acceptance to the program.

Important Note Regarding Prerequisites

All prerequisite courses must have passing grades (C- or better). The prerequisites for the Brewing program will not be waived, regardless of circumstance. There are no exceptions.

Electronic official transcripts can be emailed from the educational institution to brewing@ucsd.edu. Hard copy official transcripts should be mailed (USPS) to:

UC San Diego Extension Brewing
Program c/o Teresa Grosch
9500 Gilman Dr. MC
0170T La Jolla, CA
92093-0170

For the delivery services only address (i.e. UPS, FedEx), please email brewing@ucsd.edu.

Applications for Fall 2019 Cohort

Applications are now being accepted for admission in September 2019. To be considered for this cohort, submit your **application, \$25 fee, and official transcripts listing prerequisite coursework with passing grades using the instructions above** . There is no deadline to apply as space is filled on a first-come, first-served basis. Applicants will receive a notification when their application is complete and will be notified of acceptance within three weeks of submission.

To view the status of your application: please refer to the My Applications section of your [My Extension account](#).

All prerequisite and elective courses are open to the public. No application is required to enroll. Students must be 21 years old before the first class meeting.

Business Analysis Tools and Strategies Certificate

Overview

Professionals with skills in analyzing information and incorporating findings into strategic planning and decision making are highly demanded. The Specialized Certificate in Business Analysis Tools and Strategies will offer opportunities for students to develop the tools and strategies of business analysis. Students completing this certificate will obtain comprehensive training in the foundational skills needed to be effective when assigned projects associated with organizational change and acquire the background necessary to apply their expertise to solving real-world business problems.

Format

100% Online*

*In-class options available for some courses; varies by quarter.

Est. Cost

\$2535*

*Cost varies by format selection and curriculum updates.

Duration

9-36 Months*

*Varies by student and courses taken per quarter.

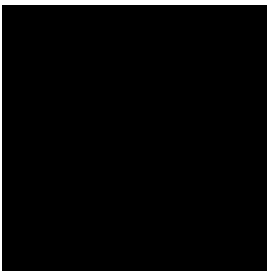
Learning Objectives

- Understand the uses of business analysis in an organizational setting.
- Relate to sophisticated problem solving, decision making, elicitation and process modeling.
- Learn about the five domains of business analysis as developed by the [Project Management Institute](#) (PMI). Understand various types of elicitation techniques.
- Assess stakeholder problems through needs-assessment tools.

Further Reading

- [Defining roles between business analysis and data analytics](#)
- (blog) [Difference between a career in Business Intelligence and Business Analysis Instructor Spotlight: George Haloulakos](#)

Careers in Business Analysis



Courses

Prerequisite (required) complete one course	
TITLE & COURSE NUMBER	UNITS
Elementary Accounting I BUSA-40036	4.0
Financial Accounting for Non-Accountants BUSA-40009	4.0
Required Courses	
TITLE & COURSE NUMBER	UNITS
Essentials of Business Analysis BUSA-40882	3.0
Elicitation Techniques for Business Analysis BUSA-40891	2.0
Business Process Modeling BUSA-40892	3.0
Solution Assessment BUSA-40893	2.0
Courses of Interest	
TITLE & COURSE NUMBER	UNITS
Careers in Business Analysis INFO-70140	0.0
Lean Six Sigma Green Belt MAE-40013	4.0
Careers in Project Management and Business Analysis INFO-70169	0.0

Admission

A prerequisite course in Elementary Accounting (BUSA-40036), Financial Accounting for Non-Accountants (BUSA-40009), or equivalent is required before enrolling in Business Process Modeling. **Essentials of Business Analysis does not have any prerequisites and may be taken in the Fall or Spring quarters.** The Essentials of Business Analysis, Elicitation Techniques for Business Analysis and Solution Assessment courses are designed to be taken sequentially. You must earn a Pass (C-) or better grade in each course.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8189 or Email: BizAnalysisProgram@ucsd.edu

Conditions for Admission

Although programs are open to all adult learners, UC San Diego Extension programs are designed to best serve college-prepared working professionals. Where program capacity is limited, applicants with this profile will receive preference for admission.

Business Intelligence Analysis Certificate

Overview

Our Specialized Certificate in Business Intelligence Analysis provides you with the skills to begin a career in business intelligence, transition from your current position into a BI analyst position, or add data analysis skills to your existing skill set.

Format

Accelerated: In-class

Online: 100% Online*

Est. Cost

Accelerated : \$4,500

Online: \$3,660

*Cost varies by format and curriculum updates.

Duration

Accelerated: One Quarter

Online: 6-12 months*

*Varies by student and courses taken per quarter

As the amount of data companies collect continues to grow at a rapid rate, the ability to effectively transform that data into actionable information has become paramount for business growth and success. The expanding field of business intelligence (BI) is now fundamental to all facets of business across all industries. Business intelligence analysts support data-driven organizational decision-making and maximize the utility of accumulated data. Businesses also use BI analysts to determine how to improve processes, discover efficiencies, support customers, and reduce costs.

In this hands-on certificate, you will gain a comprehensive, working knowledge of the complete analytics cycle, from determining requirements to extracting and disseminating information through various visualization techniques. Advanced topics such as predictive analytics, SAS programming, R programming, Python, or SQL can be taken as electives for further specialization.

Program Benefits

- All courses can be taken online, some also offer in-class options for added flexibility
- Practical hands-on training
- Taught by leading industry practitioners
- Immediately applicable skills
- Industry-neutral curriculum allows you to apply knowledge to your field of interest

Key Program Topics

- Survey of popular BI tools
- Using SQL to create, manipulate, and build reports from database tables
- Using Excel for data analysis and reporting
- Database design and data warehousing
- Powerful data analysis techniques
- Using Tableau to create dashboards and data visualizations
- Introduction to predictive analytics & big data

Demand and Job Prospects

- According to the U.S. Department of Labor, the median wages for a Business Intelligence Analyst are \$86,510 per year nationwide and \$91,680 per year in California.
- Business Intelligence Analyst is an O*NET “Bright Outlook” job: a new and emerging role in a high growth industry
- According to Burning Glass, top companies hiring Business Intelligence Analysts nationwide in the past year include Accenture, Wells Fargo, Anthem Blue Cross, UnitedHealth Group, Oracle, JP Morgan Chase, American Express, General Dynamics, and Booz Allen Hamilton

Who Will Benefit

- Individuals looking to learn basic data analysis and descriptive analytics skills using easily accessible tools
- Individuals seeking to transition into a business intelligence analyst position
- Individuals desiring to begin a career in business intelligence or data analysis
- Anyone interested in learning high-demand data analysis skills

At a Glance

- **Number of courses (online option):** Five courses - four required and one elective
- **Total units: 15**
- **Estimated cost for online option:** \$3,660
- **Cost for accelerated option: \$4,500**
- **Time to complete (online option):** Flexible; most students complete the program in six months to one year
- **Delivery for online certificate:** All courses offered online, some elective courses also offered in-class
- **Delivery for accelerated certificate:** Students will meet in-class for 11 weeks - curriculum is pre-determined and includes a capstone project. [Learn more.](#)

For more information about the online and accelerated BI program, please contact: unex-techdata@ucsd.edu.

Courses

Required Courses <small>Can be completed in any order</small>	
TITLE & COURSE NUMBER	UNITS
Overview of BI and Data Analysis CSE-41221	3.0
Introduction to SQL Programming CSE-40933	3.0
Advanced Excel for Analysis and Business Intelligence CSE-41161	3.0
Dashboards and Data Visualization for Data Analysis CSE-41222	3.0
Elective Courses <small>Choose one</small>	
TITLE & COURSE NUMBER	UNITS
Intermediate SQL Programming CSE-40948	3.0
Advanced Business Intelligence: Introduction to Predictive Analytics CSE-41288	3.0
Python for Informatics CSE-41225	3.0
Introduction to R Programming CSE-41097	3.0
LEAN Thinking for Big Data Analytics CSE-41296	3.0
Other Courses of Interest <small>Not required for certificate</small>	
TITLE & COURSE NUMBER	UNITS
Data Science with R CSE-41308	3.0
Data Analytics Using Python CSE-41204	3.0
Data Science using SAS CSE-41320	3.0
Introduction to SPSS CSE-41254	3.0
SAS Programming I: DATA Step and PROC Fundamentals BIOL-40190	3.0

Admission

You may enroll in the online certificate program at any time. However, it is recommended that you enroll as soon as possible. The program curriculum may be updated at any time; if certificate requirements change, you must adhere to the curriculum at the time of your enrollment into the certificate.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9351 or Email: unex-techdata@ucsd.edu

Conditions for Admission

Although programs are open to all adult learners, UC San Diego Extension programs are designed to best serve college-prepared working professionals. Where program capacity is limited, applicants with this profile will receive preference for admission.

Business Management Certificate

Overview

Take Your Business Acumen to the Next Level

The Professional Certificate in Business Management provides strategic, up-to-date knowledge and highly sought after skills that you need to maintain a competitive edge. You will learn elements of finance, marketing, decision making, organizational management and have the ability to delve deeper into one of seven distinct specializations that allows you to customize your career track. Whether you want to enhance your leadership skills, learn important project management techniques, or gain a better understanding of data analytics, the Business Management certificate has options to address your educational needs.

Format

In-Class & Online

*Online options vary by quarter and specialization.

Est. Cost

\$3,670-\$5,600

*Varies by course selection.

Duration

6 - 18 months

*Varies by student due to number courses taken per quarter.

Certificate Benefits

- Gain valuable management and leadership skills to apply to your career immediately
- Customize your business studies and choose specializations to match your career goals
- Expand your network and meet other professionals, peers, and business leaders
- Schedule classes to fit your lifestyle with online and evening course formats

Certificate Specializations

Each Business Management certificate student will select at least one specialization as part of the

- program. Specializations include: Process Improvement
- Project Management
- Leadership and Management Business
- Analytics
- Digital
- Marketing
- Accounting
- Finance

Who Will Benefit

This certificate is especially suited for individuals who desire an understanding of business and management topics and would also like to gain a more in-depth knowledge in a particular area of business. Professionals in supervisory or general roles who desire formal documentation of management study and experienced mid-level managers who need to update their skills or obtain tools for dealing with new management challenges are ideal candidates for this certificate program.

International Students

International students who need a student visa to study full-time in the United States may apply to our [Full-Time Business Management Program](#). For more information about UC San Diego Extension's international programs, please visit ip.extension.ucsd.edu.

At a Glance

Number of courses: 6
courses Total units: 19-21
Units

Estimated cost: \$3,670-\$5,600 (tuition only; textbooks not included) Time to Complete: Can be completed in as few as six months*

Delivery: In-class and Online (online available for all required courses and specializations except for the Finance specialization, which can only be completed in-class)

*Please note that while the program can be completed in as little as six months to a year, enrolled certificate students have five years from the start of their first course to complete the program.

Courses

Required Courses <small>Complete all four courses.</small>	
TITLE & COURSE NUMBER	UNITS
Organizational Behavior BUSA-40922	3.0
Business Decision Making BUSA-40441	3.0
Elements of Marketing BUSA-40940	3.0
Financial Accounting for Non-Accountants BUSA-40009	4.0
Specialization Areas: <small>Choose a specialization. Students must select an area of specialization and complete all required elective courses (min. 6 units) in that area to complete the certificate.</small>	
Process Improvement <small>7 units</small>	
TITLE & COURSE NUMBER	UNITS
Leading from the Middle BUSA-40859	3.0
Lean Six Sigma Green Belt MAE-40013	4.0
Project Management <small>6 units</small>	
TITLE & COURSE NUMBER	UNITS
Agile Power Practices BUSA-40860	3.0
Project Management Essentials BUSA-40064	3.0

Leadership and Management 6 units	
TITLE & COURSE NUMBER	UNITS
Business Communication: Online BUSA-40945	3.0
Managing for Maximum Performance BUSA-40673	3.0
Business Analytics 6 units	
TITLE & COURSE NUMBER	UNITS
Overview of BI and Data Analysis CSE-41221	3.0
Dashboards and Data Visualization for Data Analysis CSE-41222	3.0
Digital Marketing 6 units	
TITLE & COURSE NUMBER	UNITS
Digital Marketing BUSA-40879	3.0
Search Engine Optimization (SEO) and Marketing CSE-41157	3.0
Accounting 8 units; Must be taken in order listed.	
TITLE & COURSE NUMBER	UNITS
Elementary Accounting I BUSA-40036	4.0
Elementary Accounting II BUSA-40037	4.0
Finance 8 units; Must be taken in order listed.	
TITLE & COURSE NUMBER	UNITS
Finance Management BUSA-40439	4.0
Financial Statement Analysis BUSA-40130	4.0
Free Workshops and Sessions Not required.	
TITLE & COURSE NUMBER	UNITS
Lean Six Sigma Information Session (Black/Green Belt) INFO-70032	0.0
Business Certificate Programs for International Students - Information Session INFO-70065	0.0
Careers in Project Management and Business Analysis INFO-70169	0.0
Courses of Interest (DOES NOT COUNT TOWARD CERTIFICATE) <small>Related courses that may be of interest.</small>	
TITLE & COURSE NUMBER	UNITS
Presentation Skills for Business BUSA-40923	3.0

Admission

There are four required courses within the Business Management Certificate program. Students can elect to take the courses in any order; however, UC San Diego Extension suggests the following order for completing the required coursework.

1. Organizational Behavior (BUSA-40922)
2. Business Decision Making (BUSA-40441)
3. Elements of Marketing (BUSA-40940)
4. Financial Accounting for Non-Accountants (BUSA-40009)

Electives: To specialize in an area, complete all courses listed within a specialization area. Courses within the a specialization for the Business Management program may be taken concurrently with required program courses. You may select up to two specializations.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8136 or Email: bizmanagement@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

C# Programming Certificate

Overview

Windows, the dominant operating system for personal computers, is a user-friendly platform that not only hosts but also provides developers with an environment to build different types of applications. The .NET Framework is the primary technology used by Windows to develop software solutions targeting desktops, servers, web browsers, tablets, gaming, cloud services, IoT and mobile devices.

Developers building applications for Windows platform use the modern and popular C# programming language that runs on the .NET Framework. Commonly used in large enterprise applications C# has been proved to accelerate the development process at all stages of the software lifecycle. C# is used in all facets of commercial software, from stand-alone, rich applications to responsive web-based software. Unlike Microsoft languages of the past, C# is truly a multi-platform programming language running on all major operating systems and mobile devices.

This certificate provides the core C# classes designed to teach the fundamentals of programming with C# and the .NET Framework while the electives are tailored to meet specific technology goals. Students will be introduced to the C# programming language and exposed to real-world scenarios that will help them build the confidence needed to succeed as a programmer in this rapidly changing industry.

Program Benefits

- Hands-on experience with an elegant and object-oriented programming language that enables developers to build secure and robust applications that can run on the .NET Framework
- Direct experience with the Microsoft stack of technologies
- Electives tailored to fit your preferred field of study in database, web, or network programming, all using C#. Developed and taught by industry professionals

Key Program Topics

- Introduction to basic programming concepts
- Object-oriented concepts and design principles
- File System I/O, serialization and reflection
- Memory management and Functional programming techniques
- Multi-threaded and parallel programming
- Language Independent Query (LINQ)

Demand and Job Prospects

- In 2018, there was a 24% increase in jobs openings requiring skills in C# and .NET frameworks.
- According to Burning Glass, top companies hiring individuals for Software Development jobs with C# and .Net framework in the past year include Illumina Incorporated, General Atomics, BAE Systems, Cubic Corporation, Northrop Grumman, Amazon and Microsoft.

Who Will Benefit

Individuals interested in career paths including software development, gaming, IoT, cloud services, and mobile applications.

- Developers looking to expand into new technologies
- Non-programmers new to software development
- Career Changers planning to join the workforce as programmers hoping to learn development skills

At a Glance

- **Number of courses:** Four courses (prerequisites not included)
- **Total units:** 12
- **Estimated cost:** \$2,995.00 (includes certificate fee, required courses and one elective)

- **Time to complete:** as short as one year
- **Delivery:** Online

Courses

Prerequisite courses	
TITLE & COURSE NUMBER	UNITS
Visual Studio CSE-41189	2.0
C# Programming for Beginners CSE-40666	2.5
Fundamentals of the .NET Framework CSE-40605	2.5
Required Courses	
TITLE & COURSE NUMBER	UNITS
C# Programming I: Fundamentals of C# CSE-40534	3.0
C# Programming II: Object-Oriented Programming CSE-40603	3.0
C# Programming III: Memory Management and Multi-threading CSE-40706	3.0
Electives <small>choose one</small>	
TITLE & COURSE NUMBER	UNITS
ASP.NET MVC CSE-41162	3.0
Database Programming in .NET CSE-41197	3.0
Distributed Programming Using WCF, REST and the Web API CSE-41196	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-1566 or Email: infotech@ucsd.edu

Conditions for Admission

It is required for enrollment of this certificate program to complete the application and pay the non-refundable application fee.

C/C++ Programming Certificate

Overview

C and C++ are two of the most popular languages for applications where speed, efficiency, and compact executable code size are major considerations. Usages range from the simplest embedded microcontrollers, to games, multimedia applications, compilers, and well known complex operating systems. Many of today's popular programming languages, including Java, Perl, and Python, have borrowed directly or indirectly from C or C++. Students who know C and C++ have an advantage learning these and other programming languages.

This certificate program starts by treating C++ as an extension of C, then progresses to the C++ object-oriented model and other advanced features. Students are exposed to a diverse range of programming situations and techniques that will be of value to novice and seasoned programmers alike. The C and C++ certificate is designed to provide the tools necessary to stay current with rapidly changing technologies, progress to other programming languages, or simply complement a formal degree. Upon completion of this specialized certificate, students will be prepared to design, develop, implement, and maintain C and C++ applications. This program equips participants to be productive in many related fields including software analysis, test and integration, and embedded systems engineering.

Program Highlights:

- Can be completed entirely online Designed for current industry standards
- Covers all major C and C++ concepts as well as numerous standard library items Teaches procedural and object-oriented programming techniques
- Focuses on efficiency, portability, and implementation independence Explores concepts applied to real world situations
- Addresses standard programming style and documentation
- Utilizes instructor-written custom course readers focused on course content Provides structured curriculum taught by experienced industry practitioners

Program Benefits:

- Gain proficiency in C and C++ language syntax and application development Apply object-oriented design principles to several major C++ projects
- Gain experience using an Integrated Development Environment (IDE) for program development and testing Learn various techniques for debugging programs
- Earn a UC San Diego Extension certificate recognized by many employers for career development and advancement

Demand and Job Prospects:

- Industries employing people with C and C++ programming skills include: Professional, Scientific, Technical Services, Finance, and Insurance Job titles include: Embedded Systems Engineer, Software Developer, C++ Programmer, C++ Developer, Programmer/Analyst, Firmware Engineer
- The U.S. Bureau of Labor Statistics reports the median salary range for Software Developers in 2017 as 103K - 104K annually The U.S. Bureau of Labor Statistics reported job growth rate for Software Developers in 2017 at 24%

Who Will Benefit:

- Developers looking to refresh their C and C++ competencies
- Non-programmers learning programming to enhance their careers
- Managers and QA who work with programmers and desire a better understanding of C and C++ Career changers seeking to join the workforce as programmers
- Computer Science undergraduates seeking an MS degree

At a Glance:

- **Number of courses:** Four required courses
- **Total units:** 12
- **Estimated cost:** \$2,875.00 (excluding textbooks/materials)
- **Time to complete:** Students can complete the program within 1 year

- **Delivery:** All courses offered online
- **Background:** Previous experience in programming is beneficial

For more information about this program, please email infotech@ucsd.edu.

Courses

Prerequisites	
TITLE & COURSE NUMBER	UNITS
Introduction to Programming CSE-40028	3.0
Required Courses	
TITLE & COURSE NUMBER	UNITS
C/C++ Programming I : Fundamental Programming Concepts CSE-40475	3.0
C/C++ Programming II : Dynamic Memory and File I/O Concepts CSE-40476	3.0
C/C++ Programming III : Intermediate Programming with Objects CSE-40477	3.0
C/C++ Programming IV: Advanced Programming with Objects CSE-40478	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9152 or Email: infotech@ucsd.edu

Conditions for Admission

Complete the application and pay application fee. UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

CAD/BIM Certificate

Overview

Autodesk's AutoCAD and Revit software programs are used throughout the Architecture/Engineering/Construction (AEC) industry by trade professionals, facilities managers, engineers, architects, designers, and numerous others.

UC San Diego Extension's Specialized Certificate in Computer-Aided Design (CAD) and Building Information Modeling (BIM) provides architects, designers, and illustrators with a comprehensive knowledge of the software used for architectural drafting, modeling, and visualization projects.

In this certificate program, all classroom examples directly translate to the production skill sets used for project documentation in the construction industry. These skills apply to other disciplines as well, including engineering, interior design, architecture, landscaping, and product design.

Students in this certificate program will gain an advanced understanding of the AutoCAD and Revit user interface, tools for assembling and integrating drawings into project document sets, and experience in the development and assembly of construction documents.

Students will also work on simulated real-world projects with industry professionals and learn the process professionals go through to create and assemble the components required for the creation of working documents.

Upon successful completion of this certificate, students will have gained a foundation in CAD and BIM software that can be applied immediately to their current jobs or future employment.

For detailed information, please enroll in the online on-demand [CAD/BIM Certificate Information Session](#).

Courses

Information Session <small>(Find out more about the program in a free, online Information Session)</small>	
TITLE & COURSE NUMBER	UNITS
CAD/BIM Specialized Certificate - Information Session INFO-70121	0.0
Required Courses <small>12 units</small>	
TITLE & COURSE NUMBER	UNITS
AutoCAD I: Introduction ARCH-40001	2.5
AutoCAD II: Intermediate ARCH-40004	2.5
AutoCAD III: Working Drawings ARCH-40000	2.5
Revit I: Introduction ARCH-40009	1.5
Revit II: Intermediate ARCH-40010	1.5
Revit III: Advanced ARCH-40011	1.5
Courses of Interest <small>(Not required/Not eligible for elective credit in certificate)</small>	
TITLE & COURSE NUMBER	UNITS
3ds Max I ART-40324	2.5

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: unex-digital@ucsd.edu

CEQA Practice Certificate

Overview

The California Environmental Quality Act (CEQA) is one of California's most significant environmental laws. The law requires state and local agencies to analyze environmental impacts of a proposed project and adopt feasible alternatives and mitigation measures to avoid or substantially reduce significant impacts.

The CEQA Practice certificate is designed to offer professionals a unique opportunity to gain the knowledge and practical skills vital to their practice. Coursework will offer project-based work as a central focus of training in order for students to develop a portfolio of work that can be shared with potential employers or clients.

Format In-Class & Online

*Options may vary by quarter.

Est. Cost

\$1,895*

*Cost may vary due to elective course selection.

Duration 12 Months*

*Varies by student and courses taken per quarter.

Program Benefits:

- Learn to effectively navigate CEQA law and process Research, analyze, and draft EIRs and other key documents
- Learn about updates on CEQA Guidelines
- Manage CEQA projects and teams
- Learn how to engage effectively with stakeholders
- Apply tools to minimize time and expense related to the environmental review process

Industry Certification:

AICP members can earn Certification Maintenance (CM) credits for select courses. For a list of additional UC San Diego Extension AICP CM Events go to [American Planning Association](#)

For more information: Contact Fiona O'Donnell-Lawson at 858-534-8139 or unex-environmental@ucsd.edu

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
California Environmental Quality Act (CEQA) BUSA-40739	2.0
Advanced CEQA ENVR-40009	3.0
Elective Courses (Choose Two)	

TITLE & COURSE NUMBER	UNITS
CEQA in Practice ENVR-40010	2.0
Writing Effective CEQA Documents ENVR-40008	2.0
CEQA Project Management ENVR-40011	3.0
Introduction to NEPA ENVR-40017	3.0
Other Courses of Interest	
TITLE & COURSE NUMBER	UNITS
Introduction to Sustainability BUSA-40729	3.0
Industrial Stormwater Compliance Workshop BIOL-80002	0.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-8139 or Email: unex-environmental@ucsd.edu

Conditions for Admission

CEQA Practice is designed for consultants, developers, planners, local officials, lawyers and other environmental professionals who seek a clear understanding of CEQA law as they work on land use development and planning projects throughout California.

Career Advising Certificate

Overview

Career Development is an interdisciplinary field which takes into account workplace dynamics and individual growth and change. Career Advisors help focus clients' skills, interests and values while teaching them how to gather information about workplace options and helping them develop strategies to reach their career goals.

UC San Diego Extension's Career Advising Specialized Certificate Program is designed for Career Advisors (including WIB/Workforce Partnership Career Advisors) and professionals in career advising roles to bring them the latest information on current economic trends, coaching techniques, career-building strategies, and interpersonal communications.

Career Advisors work with individuals in all stages of work or life, including those transitioning fields, students looking for their first job, veterans re-entering the job market, or individuals facing retirement. The diversity of clients reflects the dynamic and evolving workforce in the U.S. This program provides an organized and comprehensive approach to information, theories and best practices in career development.

The Program

- # of courses required: 3 Total
- units: 12 Estimated cost: \$2,685
- Time to Complete: Candidates can complete in 9 months
- Delivery: Online

(Knowledge of powerpoint recommended but not required.)

Foundation Principles BUSA 40801 9/23/19 – 12/14/19 Skill Development BUSA 40806 1/6/20 – 3/21/20 Specialty Areas BUSA 40810 3/30/19 – 6/12/20

Benefit to Participants

- Education to impact day-to-day and long term productivity and professional growth
- Share and learn from peers, gaining best practices, new perspectives, strengthened relationships and new contacts Develop skills to serve an increasing diverse customer base with widely varying needs
- Learn the competencies of the Certified Workforce Development Professional (CWDP) national credential

Earn the CWDP certification!

Students completing the program are eligible to receive the [Certified Workforce Development Professional](#) (CWDP) certification through the [National Association of Workforce Development Professionals](#) (NAWDP). The CWDP is a nationally recognized credential for individuals who have demonstrated they have what it takes to provide the highest quality services to our nation's job seekers and businesses.

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Foundation Principles for Career Advisors BUSA-40801	4.0
Skill Development for Career Advisors BUSA-40806	4.0
Specialty Areas for Career Advisors BUSA-40810	4.0

Admission

Career Advisors will participate in 3 courses approximately 100 hours of instruction and coursework over 3 quarters and will earn 12 academic credits from UC San Diego Extension. Courses have been created using Blackboard a learning management system software application that enables educational course content to be delivered over the internet (online).

Together, students and instructors will be creating a learning community where ideas and concepts are shared using various online learning approaches, including structured activities, varied readings, group discussions and lectures.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Executive Programs and Corporate Education. Call 858-534-9151 or Email: corped@ucsd.edu

Conditions for Admission

Admittance by application only. For questions, please contact Darlene Hammon at drhammon@ucsd.edu or (858) 534-9151.

Case Management Certificate

Overview

Case management is one of the fastest growing segments in the healthcare industry, with today's professional case managers working in a range of healthcare settings including hospitals, private practice, mental health, insurance, workers compensation, and managed care organizations. Whether you are a nurse transitioning to case management, already working in the field, or exploring a new career path, UCSD Extension's Specialized Certificate in Case Management provides a comprehensive learning experience designed to develop planning, critical thinking, and decision-making skills necessary for the day-to-day challenges in your role as a case manager.

During the program, Instructors share expert, evidence-based direction and insights into the practice of case management that support critical skill development and increase knowledge through relevant and action-oriented content and activities that all Case Managers should know in a complex managed care system. The Specialized Certificate is ideal preparation for the Certified Case Manager (CCM) and Certified Case Manager (ACM) designations, as the curriculum is aligned to the content of CCMC and ACMA exams.

Certificate Benefits

Students can complete the certificate within one university quarter. This face-to-face course is designed as 9 full day class sessions, plus a case study project presented over one full day; an 11th day is scheduled for presentations when class exceeds 15 students.

Students will learn to:

- Work collaboratively with the patient, physician, family/significant other, and healthcare provider
- Encourage clients to self-direct care, self-advocate, and make decisions when appropriate and to the degree possible
- Promote the optimum allocation of healthcare dollars and maximize efficiency in the use of available resources
- Maintain cost containment in the provision of services and ensure that services are rendered timely and cost-effectively
- Designate the expenditure of claims dollars and timely claim determinations

Who should take the certificate?

- Anyone interested in working in the field of case management can benefit from this certificate program. A nursing degree is not required. Optimized for healthcare professionals: social workers, physical therapists, rehabilitation counselors, utilization review, and physicians.
- Those looking to move into a new career especially for an RN who has worked on the floor for many years and is seeking a less physically-demanding environment.

Demand and Job Prospects

Hospitals, clinics, home health agencies, rehabilitation facilities, insurance companies, HMOs, long term care facilities, and more, all need case managers. We do not provide job placement services, but because the goal of professional education is to prepare students for employment or advancement, our instructors make a point of discussing placement options in every class.

Industry Certification

The program helps prepare qualified candidates for the Certified Case Manager (CCM) designation through the Commission for Case Manager Certification (ccmcertification.org).

The Program:

- Number of courses: 1 Total
- units: 9 Estimated
- cost: \$1,295
- Time to Complete: 1 academic quarter
- Delivery: In class

Courses

TITLE & COURSE NUMBER	UNITS
Case Management Intensive FPM-40226	9.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-534-9261 or Email: unexhealthcare@ucsd.edu

Conditions for Admission

Please see the application for specific admission requirements for this program. Although a college degree or professional experience in the field are not required, applicants with such experience may receive preference for admission when program capacity is limited.

Children's Book Illustration Certificate

Overview

Children's book illustrators capture the imagination, delight the senses, and engage the minds of millions of kids daily. They translate text into imagery that children can process and enjoy while also sharing accurate information. There are three keys to being a successful illustrator:

- Know the techniques and skills that captivate children's minds, sustain their attention, and enrich the reading experience. Understand storyboarding, basic book structure and format, character development, style, and self-promotional strategies. Work effectively with designers, editors and, sometimes, directly with authors to create the best possible manuscript.

Get a solid foundation in the specialized skill sets that improve your chances of getting published. The program introduces students to a wide variety of media and advanced topics required for a thriving career. During this program, students will need to build an illustration portfolio in preparation for their capstone *Getting Published* course.

The program can be completed in 9-12 months, and all required courses are available both on-site and online. Online courses are asynchronous but not self-paced; students are required to keep up with weekly assignments. The average student spends three hours online and six hours offline each week. Please preview our e-learning system at ucsdextension.blackboard.com.

Courses

Information Session <small>(Learn more about the program in a free, online Information Session)</small>	
TITLE & COURSE NUMBER	UNITS
Children's Book Illustration & Writing Programs - Information Session INFO-70117	0.0
Required Courses <small>12 units</small>	
TITLE & COURSE NUMBER	UNITS
Children's Book Illustration I: Thinking in Pictures ART-40634	3.0
Children's Book Illustration II: Focus on Style ART-40635	3.0
History of Children's Literature LIT-40093	3.0
Final Required Course <small>(All other Required Courses and Electives must be completed first)</small>	
TITLE & COURSE NUMBER	UNITS
Getting Published: Navigating the Children's Book Market ART-40636	3.0
Electives <small>Min 6 units required (Offerings subject to change. Certificate students must follow Matrix as listed in their MyExtension account.)</small>	
TITLE & COURSE NUMBER	UNITS
Illustrating Children's Books: Portfolio Development ART-40388	2.0
Writing Children's Picture Books WCWP-40261	3.0
Adobe Photoshop I: Introduction ART-40311	3.0
Digital Illustration Using The Wacom Intuos Pen Tablet ART-40651	3.0
Introduction to Illustration ART-40428	3.0
Animal Illustration ART-40162	3.0
Figure Drawing I ART-40006	3.0

Courses of Interest <small>(Not required/Does not count toward certificate)</small>	
TITLE & COURSE NUMBER	UNITS
Adobe Illustrator ART-40527	3.0
Playing with Pen & Ink ART-40661	3.0
Drawing Ideas: Developing Your Sketchbook ART-40447	3.0
Creative Process I ART-40191	3.0
Introduction to Painting ART-40180	3.0

Admission

The Specialized Certificate in Children's Book Illustration consists of 18 total units that can be completed in 3-6 quarters (taking 1-2 courses per quarter). Tuition is \$395-595 per course.

About online courses:

- Online courses in this certificate are led by live instructors, but students may view lectures according to their own schedules. There are no set lecture dates or times; however, students will be required to meet weekly assignment deadlines, participate in critiques, and contribute to discussion topics.
- Online students should expect to spend four to six hours per week per course. Online students must provide their own software.
- To preview our e-learning system, visit ucsdextension.blackboard.com. For system requirements, [click here](#).

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Conditions for Admission

Please see the application for specific admission requirements for this program.

Although a college degree or professional experience in the field are not required, applicants with such experience may receive preference for admission when program capacity is limited.

Current UCSD students may be considered for admission depending on their academic and career focus and educational performance.

Children's Book Writing Certificate

Overview

Children's books impart a wide range of knowledge by capturing the imagination, delighting the senses, and engaging the mind.

Writers have the challenging task of creating stories that both entertain and inform children. The key to being a successful children's book writer is to learn the techniques and skills that engage a child's imagination, sustain attention, and push a child toward a greater understanding of the world.

Successful writers must also understand how to flesh out ideas, revise and critique, write query letters to get published, and know the history of the medium.

This certificate provides a solid foundation in the skills and tools that improve one's chances of being published as a writer. It also introduces aspiring professionals to a wide variety of media and advanced topics required for a thriving career.

For detailed information, please enroll in the online on-demand Children's Book Illustration and Writing Programs Information Session below.

Courses

Information Session <small>(Learn more about the program in a free, online Information Session)</small>	
TITLE & COURSE NUMBER	UNITS
Children's Book Illustration & Writing Programs - Information Session INFO-70117	0.0
Required Courses <small>12 units</small>	
TITLE & COURSE NUMBER	UNITS
Writing for Children I: Introduction WCWP-40186	3.0
Writing for Children II: Intermediate WCWP-40315	3.0
History of Children's Literature LIT-40093	3.0
Final Required Course <small>(All other Required Courses and Electives must be completed first)</small>	
TITLE & COURSE NUMBER	UNITS
Getting Published: Navigating the Children's Book Market ART-40636	3.0
Electives <small>Min 6 units required (Offerings subject to change. Certificate students must follow Matrix as listed in their MyExtension account.)</small>	
TITLE & COURSE NUMBER	UNITS
Writing Children's Picture Books WCWP-40261	3.0
Writing for the Middle Grade/YA Reader WCWP-40274	3.0
Writing Non-Fiction and Informational Books for Children WCWP-40327	3.0
Children's Book Illustration I: Thinking in Pictures ART-40634	3.0
Courses of Interest <small>(Not required/Does not count toward certificate)</small>	
TITLE & COURSE NUMBER	UNITS
Adobe Photoshop I: Introduction ART-40311	3.0
Adobe Illustrator ART-40527	3.0
Adobe InDesign ART-40533	3.0

Admission

The Specialized Certificate in Children's Book Writing can be completed in 3-6 quarters (taking 1-2 courses per quarter). Tuition is \$395-595 per course.

About online courses:

- Online courses in this certificate are led by live instructors, but students may view lectures according to their own schedules. There are no set lecture dates or times; however, students will be required to meet weekly assignment deadlines, participate in critiques, and contribute to discussion topics.
- Online students should expect to spend four to six hours per week per course. Online students must provide their own software.
- To preview our e-learning system, visit ucsdextension.blackboard.com. For system requirements, [click here](#).

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Conditions for Admission

Students should have a basic knowledge of English grammar and be comfortable using computers (PC or Mac).

Please see the application for specific admission requirements for this program.

Although a college degree or professional experience in the field are not required, applicants with such experience may receive preference for admission when program capacity is limited.

Current UCSD students may be considered for admission depending on their academic and career focus and educational performance.

Clinical Laboratory Scientist Training Certificate

Overview

Important Program Updates for the San Diego CLS Program - Effective January 15, 2019

- The U.S. postmarked deadline for submitting the program's Application Form in consideration for acceptance for the July 2019 cohort was **January 30, 2019**.
- The deadline for completion of coursework, grade posting and/or conferring of a degree on an official transcript has been extended from May 1, until June 30, 2019. If you currently have coursework and/or a degree pending, please send a current official transcript (and/or proof of enrollment for single pending courses) by the January 30, 2019 deadline.
 - If you are accepted in the program, you will be asked to forward a final official transcript that documents posting of a final grade and/or conferring of a degree as soon as it is available.
- Notification to candidates selected and offered a program interview will be made by the end of February. Interviews will be held in March.

Deadline dates listed here/above supersede deadlines and dates previously listed on the program website and

Application documents.

Please note the following changes to our program for 2019:

- The program will commence in July 2019.
- A program fee will be assessed. Please refer to the Admission tab and linked documents for more information.

The San Diego Clinical Laboratory Scientist Training Consortium Program (San Diego CLS Training Program) is a comprehensive 12 month full-time program of instruction in the field of clinical laboratory medicine and technology. In 2019, the program will commence in July. Trainees who successfully complete this training internship will be eligible to take the Medical Laboratory Scientist (MLS) certification exam offered by the American Society of Clinical Pathologists (ASCP) Board of Certification and the California law exam offered by the California Department of Public Health, Laboratory Field Services (CDPH-LFS).

The mission of the San Diego CLS Training Program is to provide both theoretical and practical applications of current, relevant clinical laboratory technologies. Offered as a Certificate Program under the umbrella of UC San Diego Extension, the program provides the professional component of training that prepares qualified laboratory practitioners for service to our profession and community. The goal of the program is to provide trainees with high quality professional training and academic instruction in the field of laboratory medicine to pass a nationally recognized certification examination, obtain state licensure, and meet employment needs of the California healthcare industry. At the conclusion of the program, the trainee will be expected to have achieved entry-level competence in all core disciplines of the clinical lab, as listed in the required courses matrix located in the "courses" menu below. In California, licensed CLS professionals are permitted to report clinical results of high complexity laboratory testing in addition to waived and moderate complexity testing.

Didactic lectures (approximately one day/week) are hosted by UC San Diego Health's Center for Advanced Laboratory Medicine facility. Practical training (4 days/week) is gained through hands-on experiences in one of the consortium's participating clinical laboratory systems of:

- UC San Diego Health
- Sharp Grossmont
Hospital Sharp
Memorial Hospital
- Sharp Chula Vista Medical
Center Scripps Health
North
- Scripps Health South

The San Diego CLS Training Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS; 5600 N. River Rd., Suite 720, Rosemont, IL 60018-5119). The sponsoring institution, UC San Diego Health was approved by the CDPH-LFS as a training program for Clinical Laboratory Scientists in 2004. Each of the participating affiliate programs of Sharp HealthCare was approved in 2013, followed by Scripps Health in 2016.

Graduation Rates of Students:

2005 – 2018: 100%

Success Rates of Students

ASCP Exam Pass Rate	Passed 1st time		Pass rate
2005 - 2018	105	104	99%
2010-2018	82	82	100%

Job Placement

The program does not place students, but all students trained since 2005 have achieved a 100% success rate in finding CLS entry level positions, all within California, most within San Diego County.

Note: For more information regarding the program and admission requirements please refer to the PDFs located at the right side of the page under "Related Documents".

Courses

Required Courses <small>All Seven Courses are Required</small>	
TITLE & COURSE NUMBER	UNITS
Advanced Topics PATH-40009	2.0
Chemistry/Urinalysis PATH-40010	10.0
Hematology/Coagulation PATH-40011	6.0
Immunology/Serology PATH-40012	2.0
Laboratory Operations PATH-40013	1.0
Microbiology/Parasitology PATH-40014	8.0
Transfusion Medicine PATH-40015	4.0

Admission

Program Fee for all courses: \$10,000 + \$95

certificate fee. A structured quarterly payment

plan may be available.

Note for Veterans: Click [here](#) to learn about veteran's education benefits. To clarify how your benefits will work at UC San Diego Extension, contact us at unex-veterans@ucsd.edu.

Candidates are encouraged to apply to the certificate program as early as possible.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-657-5714 or Email: clsprogram@ucsd.edu

Conditions for Admission

The period for submission of application documents is from November – mid-January for the annual class commencing in July 2019. Submission deadlines are strictly enforced. Final admission to the San Diego CLS Training Program is by application and interview only.

Academic Requirements: Baccalaureate degree preferably in a biological science or related field. Required prerequisite courses include: Organic Chemistry, Biochemistry, Analytical Chemistry or Clinical Chemistry, Hematology, Immunology, Medical/Clinical Microbiology, Physics (including principles in light and electricity), college level mathematics (calculus and/or statistics/biostatistics). These requirements are inclusive of standards set by the California Department of Health, Laboratory Field Services division.

Health and Other Requirements, and Essential Function Requirements: For a complete list of specific academic, health/other, U.S. citizenship or permanent residency, and essential function requirements, please review [Admission Requirements](#) (pdf) for more information.

Clinical Trials Administration Certificate

Overview

UC San Diego Extension Clinical Trials Administration Five- Day Intensive course is the premier training program in its field. Curriculum is developed around the latest regulations that are updated daily and will expose you to today's key issues in clinical trials administration. The program is built on responsiveness to the changing demands of the new clinical trials economy, personal attention, and sound principles.

In this intensive program, students will gain the fundamental knowledge of the industry and learn how to best take advantage of employment opportunities based on their background and experience. Upon completion, participants will have the necessary skill set to advance within their career and take on more responsible roles within this thriving global industry.

Certificate Benefits

The Specialized Certificate in Clinical Trials Administration

- Offers a foundation in professional principles upon which clinical trials are based Provides opportunity to develop, practice, and apply skills most beneficial on-the-job Builds skills to assume more responsible roles within the industry
- Offers an opportunity to demonstrate working industry knowledge Provides networking opportunities with instructors and peers

Target Audience

The curriculum is intended for

- managers in training and others who want to refine or update skills
- research associates and coordinators
- biomedical and research scientists
- nurses and allied health professionals
- statisticians and database administrators
- international clinical trials professionals
- individuals with degrees in science, psychology or related areas who are entering the field
- anyone interested in the dynamic clinical trials field.

Demand and Job Prospects

Certificate graduates fulfill educational minimums for different entry level positions (Clinical Trial Assistant, Clinical Research Coordinator, Data Entry Associate) in pharmaceutical and medical device companies (sponsors), Clinical Research Organizations (CROs), or clinical sites such as large hospitals and clinics.

U.S. Department of Labor projections show that these types of occupations are forecast to grow “much faster than average” through 2024. Depending on individual’s experience and highest level of education completed salaries can range between \$16-33 per hour.

Industry Certification The

Program:

- **# of courses:** A five-day intensive workshop, followed by three online classes, and concluding with a two-day workshop
- **Total units: 11**
- **Estimated cost:** Total cost is \$2,485
- **Time to Complete:** Can be completed in less than one year
- **Delivery:** Blended (both in class and online)

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Clinical Trials Administration Intensive FPM-40273	4.0
(FPM 40272 FOLLOWS FPM 40273)	
TITLE & COURSE NUMBER	UNITS
Clinical Trials Administration Program FPM-40272	7.0

Admission

Part 1: Clinical Trials Administration Intensive, FPM 40273, offered Spring, Summer, and Fall quarters. This is followed by: Part 2: Follow-On Program, FPM 40272; package includes 3 online classes and the Capstone workshop (also available via distance learning for students residing out of region) for one fee of \$1095. Must Take FPM 40273 before FPM 40272.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-534-9261 or Email: unexhealthcare@ucsd.edu

Conditions for Admission

Please see the application for specific admission requirements for this program. Although a college degree or professional experience in the field are not required, applicants with such experience may receive preference for admission when program capacity is limited.

Clinical Trials Design and Management Certificate

Overview

Clinical trials require careful planning and cooperation among a variety of professionals within the pharmaceutical/biotechnology industry, clinical practice, and government or industry agencies. Professionals need both specialized expertise and universal familiarity with a variety of procedures.

The Clinical Trials Design and Management Certificate is intended to help professionals become acquainted with the entire clinical trials process in an accelerated approach.

Certificate Benefits

With a certificate in Clinical Trials Design & Management the student will

- Gain an overview of the entire clinical trials process helping to illustrate the varying career paths within the industry. Develop substantive knowledge about coordinating and managing the clinical trial.
- Be a part of a top-rated training program developed by leaders in the biotechnology/biomedical research industry.

Target Audience

The curriculum is intended for

- managers in training and others who want to refine or update skills research associates and coordinators
- biomedical and research scientists nurses and allied health professionals
- statisticians and database administrators international clinical trials professionals
- individuals with degrees in science, psychology or related areas who are entering the field those interested in the dynamic clinical trials field.

Demand and Job Prospects

Certificate graduates fulfill educational minimums for different entry level positions (Clinical Trial Assistant, Clinical Research Coordinator, Data Entry Associate) in pharmaceutical and medical device companies (sponsors), Clinical Research Organizations (CROs), or clinical sites such as large hospitals and clinics.

U.S. Department of Labor projections show that these types of occupations are forecast to grow “much faster than average” through 2024. Depending on individual’s experience and highest level of education completed salaries can range between \$16-33 per hour.

Industry Certification

All courses offered have been approved to fulfill educational requirements for the Clinical Research Coordinator (CRC) and Clinical Research Associate (CRA) credentials through the Association of Clinical Research Professionals (ACRP). Visit ACRP at www.acrpn.org.

Program At-A-Glance

- # of courses: a minimum of 10 to meet unit requirements
- Total units: 23.5

- **Estimated cost:** Total cost is usually between \$3,900 and \$4,700, including textbooks, depending on
- the choice of courses. **Time to Complete:** Can be completed in as little as six months, although most
- students prefer to take one year, or even two. **Delivery:** Online

Courses

Prerequisites	
TITLE & COURSE NUMBER	UNITS
Medical Terminology: An Anatomy and Physiology Approach FPM-40632	1.5
Required Courses	
TITLE & COURSE NUMBER	UNITS
CT: Drug Development Process FPM-40173	3.0
CT: Human Subjects Protection and IRBs FPM-40388	2.0
CT: Good Clinical Practices FPM-40204	3.0
Electives <small>14 units are required</small>	
Clinical / Scientific Topics	
TITLE & COURSE NUMBER	UNITS
CT: Science of Clinical Trials Design FPM-40205	3.0
CT: Drug Safety: Surveillance and Reporting FPM-40206	2.0
CT: Nuts and Bolts of Monitoring Clinical Trials FPM-40187	2.0
CT: Advanced Monitoring and Management of Clinical Trials and Next Steps FPM-40240	2.0
CT: Medical Writing: Protocols, Reports, Summaries, and Submissions FPM-40188	2.0
CT: Practical Clinical Statistics for the Non-Statistician FPM-40233	2.0
CT: Understanding Oncology FPM-40493	3.0
CT: Monitoring Oncology Trials FPM-40494	3.0
Regulatory Topics	
TITLE & COURSE NUMBER	UNITS
CT: Regulation of Drugs, Biologics, Devices, and Diagnostics FPM-40189	3.0
CT: Prospective Preparation for Internal and External Audits FPM-40207	1.0
Good Laboratory Practices BIOL-40085	2.0
Good Manufacturing Practices BIOL-40000	3.0

Project Management topics for sponsors of clinical trials	
TITLE & COURSE NUMBER	UNITS
CT: Project Management in Clinical Trials FPM-40634	2.0
CT: Clinical Study Implementation and Management FPM-40229	2.0
CT: Data Management Systems for Sponsors of Clinical Trials FPM-40218	2.0
CT: Site and Investigator Recruitment FPM-40208	1.0
CT: Working with Clinical Research Organizations (CROs) FPM-40228	1.0
Project management topics for clinical trials sites	
TITLE & COURSE NUMBER	UNITS
CT: Patient Recruitment for Clinical Trials FPM-40191	1.0
CT: Setting Up a New Clinical Study FPM-40179	2.0
Topics related to the environment surrounding clinical trials	
TITLE & COURSE NUMBER	UNITS
CT: Financial Management of Clinical Trials FPM-40338	1.0
CT: Becoming a Clinical Trials Principal Investigator FPM-40527	1.0
CT: Pharmaco-Economics and Effectiveness Trials FPM-40209	2.0
CT: Preceptorship in Clinical Trials FPM-40230	1.0

Admission

The three required courses have no substitutes, and cannot be waived. "The Drug Development Process" must be taken first, after any prerequisites and before any electives. The 14 elective units may be from any/all elective categories in the matrix.

Contact unexhealthcare@ucsd.edu or 858-534-9262 for guidance.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-534-9261 or Email: unexhealthcare@ucsd.edu

Conditions for Admission

Please see the application for specific admission requirements for this program. Although a college degree or professional experience in the field are not required, applicants with such experience may receive preference for admission when program capacity is limited.

College Counseling Certificate

Overview

The UC San Diego Extension Program in College Counseling is designed to bring participants the latest in college counseling techniques and to emphasize the personal dimension of working with families during one of their most crucial transitional experiences. Skilled and enthusiastic instructors make the program a professional valuable and personally meaningful learning experience.

This online program is designed to effectively address the most current and relevant issues of College Counseling. Participants will receive instruction in the fundamentals of building a college counseling operation that provides outstanding service to the college-bound. Courses feature timely comprehensive topics in an online environment related to helping students make the transition to college.

The Specialized Certificate in College Counseling is designed and taught by specialists currently working in the field. Our instructors are highly experienced in College Counseling and focus on the development of practical skills. Their skills and knowledge are what keeps our program up-to-date in the field.

Target Audience

The College Counseling program focuses primarily on the college application process and working with students through that process.

There are three courses in total required for the program. The required course order is: Principles of College Counseling; College Counseling Strategies, and College Counseling Practicum. The classes must be taken in the required order.

Professional Development

We do offer several electives if there is an area that you would like to study in deeper detail. They are not required in order to earn the certificate. There is no required order or prerequisites to enroll in the electives for this program.

If you wish to take one of the College Counseling Specialized Certificate online courses for professional development without registering for the program, you may do so.

The Program

- # of courses required: 3 Total
- units: 12 Estimated cost: \$1,505
- Time to Complete: Candidates can complete in 6-9 months
- Delivery: Online

Courses

Required Courses <small>both courses are required</small>	
TITLE & COURSE NUMBER	UNITS
Principles of College Counseling EDUC-40130	6.0
College Counseling Strategies EDUC-40131	3.0
Practicum <small>Required</small>	
TITLE & COURSE NUMBER	UNITS
College Counseling Practicum EDUC-40132	3.0
Elective <small>0 units required - for Professional Development</small>	
TITLE & COURSE NUMBER	UNITS
U.S. College/University Application Process and the International Student EDUC-41548	3.0
Implementing a Comprehensive School Counseling Program EDUC-41393	3.0
Navigating College Admission Testing EDUC-41671	6.0
Starting and Maintaining An Independent Educational Consulting Practice EDUC-41673	6.0

Counseling Students on College Application Essays EDUC-41672	4.5
The 21st Century Career Counselor: Preparing Students for College and Career Readiness and Success EDUC-41605	6.0
Understanding College Affordability and Financial Aid EDUC-41536	6.0
Counseling Students with Learning Differences and ADHD EDUC-40121	6.0
The Ethics of College Admission Counseling EDUC-40248	3.0

Admission

All candidates who wish to receive the College Counseling Certificate are required to:

1. Apply to the College Counseling certificate program.
2. Pay the certificate fee.
3. Complete all the required online courses with a grade of "C" or better.
4. Coursework must be completed within 5 years of beginning the program.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Education. Call 858-534-9286 or Email: unexeduc@ucsd.edu

Conditions for Admission

Please review the application for specific admission requirements for this program. Although employers in the field may not require a college degree or professional experience a degree is required for admission to the program.

All applicants will be required to submit a verification of bachelor's or higher degree from an accredited institution including degree awarded and date. This can be provided either as official letter from the school or an official, sealed transcript from the accredited institution which awarded your degree.

Content Marketing Certificate

Overview

Advance your career or broaden your skill set by developing strategic storytelling skills. Leveraging the concept that “education is the best marketing,” learn how to attract and retain your audience, and increase ROI through the planning, development and evaluation of valuable and accessible content. Designed for marketers and content creators such as writers or designers, explore a range of tools and tactics to develop the specialized skills needed to generate brand awareness and increase authentic audience engagement.

Program Format:

Online and In-Class

Online options vary by quarter and specialization.

Estimated Cost:

\$4,395

Length of Program:

9-18 months

Taking 1-2 courses per quarter.

Courses

Required Courses <small>All 12 units are required.</small>	
TITLE & COURSE NUMBER	UNITS
Content Marketing BUSA-40880	3.0
Strategic Content Planning ART-40713	3.0
Branding & Storytelling using Content Creation ART-40712	3.0
Search Engine Optimization (SEO) and Marketing CSE-41157	3.0
Elective Courses <small>Minimum of 5 units required. Enrolled certificate students MUST follow matrix as listed in their MyExtension account.</small>	
TITLE & COURSE NUMBER	UNITS
Fundamentals of Graphic Design ART-40667	3.0
Principles of User Experience (UX) ART-40638	4.0
DIY Video for Marketing ART-40709	3.0
Introduction to Photo Journalism ART-40693	2.0
Fundamentals of Podcasting ART-40710	2.0
Copywriting I: Writing for User Experience WCWP-40330	3.0
The Art and Business of Blogging WCWP-40305	2.0
The Writer's Art of Interviewing WCWP-40123	2.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Copyediting Certificate

Overview

Copyediting—especially nonfiction editing—is one of today's most marketable skills for freelance work. Copyeditors are the bridge between writers, publishers, and readers. They refine a variety of writing that appears in print or on-screen, such as newsletters, manuals, reports, feature articles, catalogs, and books. Copyeditors who have a specialized background (science, technical, medical) or proficiency with digital media are particularly in demand. Our program provides a solid grounding in the tools and techniques of copyediting and introduces several advanced topics required for a successful career. Every lesson offers practical skills and information you can use immediately.

Format
100% Online

Est. Cost
\$2566

Duration
4 Quarters

For detailed information, please enroll in the [Writing Program Online Information Session](#).

The program can be completed online in 12 months. The courses are asynchronous but not self-paced; you will be required to keep up with weekly assignments. The average student spends three hours online and six hours offline per course each week. Please preview our online learning system at <http://ucsdextension.blackboard.com>.

Courses

Information Session <small>Find out more about the program in a free, online information session.</small>	
TITLE & COURSE NUMBER	UNITS
Copyediting and Technical Communication Information Session INFO-70034	0.0
Required Courses	
TITLE & COURSE NUMBER	UNITS
Grammar Lab WCWP-40234	3.0
Copyediting I WCWP-40236	3.0
Copyediting II WCWP-40237	3.0
Copyediting III WCWP-40238	3.0
Recommended Courses <small>Please note: Does not apply to certificate.</small>	
TITLE & COURSE NUMBER	UNITS
Digital Skills for Editors WCWP-40282	2.0
Marketing for Copyeditors: How to Get the Word Out WCWP-80031	0.0

Admission

Grammar Lab, Copyediting I, II, and III must be taken in sequence. You must earn a Pass (C-) or better grade in each course.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Conditions for Admission

You must have native-level fluency with English and must write clear, logical, and grammatically correct sentences. You will need a computer, a high-speed internet connection, MS Word 2016 or later, and proficiency with all of the above.

Creative Writing Certificate

Overview

The Professional Certificate in Creative Writing is designed to provide individuals with the skills necessary to write in a variety of creative writing genres. Students will learn core creative writing skills and choose from a selection of electives in the areas of Fiction, Creative Non-Fiction, Stage & Screenwriting, Children's Writing, Poetry, and/or The Business of Writing in order to develop more specific skills. Students will benefit from a structured course of study and the opportunity to earn a certificate whether they rely on these courses as a means to explore personal interests or to pursue professional growth or career goals.

Format
Online and In-Class

Est. Cost
\$3510

Duration
9 Quarters*

*Duration if taking one class per quarter

This certificate is designed to fit the needs of hobbyists as well as those who have professional aspirations to become published. Continue reading below for certificate requirements.

Courses

Information Session <small>Find out more about the program in a free, online information session</small>	
TITLE & COURSE NUMBER	UNITS
Creative Writing Professional Certificate & Courses - Information Session INFO-70107	0.0
Required Courses	
TITLE & COURSE NUMBER	UNITS
Grammar Lab WCWP-40234	3.0
The Art and Craft of Creative Writing WCWP-40107	3.0
Developing Unforgettable Characters WCWP-40245	2.0
Finding Our Voices, Telling Our Stories WCWP-40142	3.0
Writers Workshop: Read and Critique WCWP-40252	3.0
Literature <small>Students must choose minimum 2 units of Literature from any of the classes below</small>	
TITLE & COURSE NUMBER	UNITS
Women and Madness LIT-40069	2.0
Gender Identity and Literature: Him, Her, Us LIT-40071	2.0

Ernest Hemingway: Titan of American Literature LIT-40064	2.0
American Literature: Stories of Immigration LIT-40022	2.0
Glittering Wit: Three Works by Oscar Wilde LIT-40099	2.0
History of Children's Literature LIT-40093	3.0
Electives Students must choose 12 units of electives from any of the classes below	
Fiction	
TITLE & COURSE NUMBER	UNITS
How to Start a Novel WCWP-40259	1.0
Novel Writing I WCWP-40187	3.0
Novel Writing II WCWP-40297	3.0
Novel Writing III WCWP-40254	3.0
Forms of Fiction WCWP-40189	3.0
Writing Short Fiction WCWP-40048	3.0
Creative Non-Fiction	
TITLE & COURSE NUMBER	UNITS
Memoir Writing WCWP-40200	3.0
Writing Narrative Non-Fiction WCWP-40269	3.0
News and Feature Writing WCWP-40276	3.0
Self-Editing and Publishing for the Web WCWP-40313	3.0
The Writer's Art of Interviewing WCWP-40123	2.0
Children's Writing	
TITLE & COURSE NUMBER	UNITS
Writing for Children I: Introduction WCWP-40186	3.0
Writing for Children II: Intermediate WCWP-40315	3.0
General Electives	
Writing for the Middle Grade/YA Reader TITLE & COURSE NUMBER WCWP-40274	UNITS
Forms of Poetry WCWP-40308	2.0
The Art and Business of Blogging WCWP-40305	2.0
General Electives	
TITLE & COURSE NUMBER	UNITS
Forms of Poetry WCWP-40308	2.0
The Art and Business of Blogging WCWP-40305	2.0

The Business of Writing	
TITLE & COURSE NUMBER	UNITS
Building a Business around Writing WCWP-40321	1.0
Copywriting I: Writing for User Experience WCWP-40330	3.0

Admission

The program consists of earning at least 28 quarter units in Creative Writing and related courses. Students should be able to complete the entire certificate program in 2.5 years or less depending on their work load.

Students must pass all 14 units of required classes, 2 units of Literature, and choose 12 units from our listed electives in order to receive the certificate. Grammar Lab and The Art and Craft of Creative Writing are prerequisites for Novel Writing and Memoir Writing.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Conditions for Admission

Students should have a native level of fluency in English and be able to write clear, logical and grammatically-correct sentences.

Data Mining for Advanced Analytics Certificate

Overview

Our Specialized Certificate in Data Mining for Advanced Analytics provides you with the skills to design, build, verify, and test predictive data models to make data-driven decisions in any industry.

Modern databases can contain massive amounts of data. Within this data lies important information that can only be effectively analyzed using data mining. Data mining tools and techniques can predict future trends and behaviors, allowing individuals and organizations to make proactive, knowledge-driven decisions.

Newly updated with additional data sets, a robust practicum course, a survey of popular data mining tools, and additional algorithms, in this program you will use real-life data sets from various industries to complete data mining projects. You will learn to plan and execute all the steps of data preparation, analysis, learning and modeling, and identifying the predictive/descriptive model that produces the best evaluation scores. Targeted elective courses allow you to learn further in-demand techniques, tools, and languages.

Program Benefits

- Comprehensive hands-on training in immediately applicable skills
- Industry-neutral curriculum allows you to apply knowledge to your field of interest All courses can be taken online
- Can be completed in only one year Taught by leading industry practitioners

Key Program Topics

- Model training, testing, and evaluation Decision tables and trees Classification rules
- Association rules Bayesian learning
- Numeric prediction Clustering Ensemble learning
- Artificial neural networks Hidden Markov models Support vector machines

Demand and Job Prospects

- According to Burning Glass, more than 70% of individuals in jobs requiring the skills taught in this program make more than \$75,000 per year nationwide
- Data Analyst or Statistical Modeler (Statistician) is an O*NET “Bright Outlook” job: a new and emerging role in a high growth industry, and expected to grow at a much faster than average rate
- According to Burning Glass, top companies nationwide hiring individuals possessing the skills taught in this program in the past year include Accenture, Amazon, JP Morgan Chase, Oracle, Anthem Blue Cross, Deloitte, UnitedHealth, Microsoft, Booz Allen Hamilton, Bank of America, Verizon, Intel, and Apple

Who Will Benefit

- Individuals wanting to grow their data analysis skills by learning predictive and prescriptive analytics skills Individuals seeking a position as a data analyst, statistical modeler, or machine learning engineer in any industry

- Software development engineers, systems engineers, financial analysts, software developers, solutions architects, marketing analysts, application engineers, or other roles which make use of large amounts of data
- Anyone interested in learning high-demand data analytics, predictive analytics, and machine learning skills

At a Glance

- **Number of courses:** Five or six courses (one prerequisite [can be waived], four required, and one elective)
- **Total units:** 13-17
- **Estimated cost:** \$4,544
- **Time to complete:** At least one year; most students complete the program in one year and three months
- **Delivery:** All courses offered online

For more information about this program, please contact unex-techdata@ucsd.edu.

Courses

Prerequisite <small>Recommended</small>	
TITLE & COURSE NUMBER	UNITS
Statistics for Data Analytics CSE-41264	3.0
Required Courses <small>Courses must be completed in the order listed</small>	
TITLE & COURSE NUMBER	UNITS
Fundamentals of Data Mining CSE-41258	3.0
Data Preparation for Analytics CSE-41261	2.0
Data Mining: Advanced Concepts and Algorithms CSE-41262	3.0
Data Mining Practicum CSE-41263	3.0
Elective Courses <small>Choose one</small>	
TITLE & COURSE NUMBER	UNITS
Python for Informatics CSE-41225	3.0
Text Mining CSE-41151	2.0
Introduction to R Programming CSE-41097	3.0
Other Courses of Interest <small>Not required for certificate</small>	
TITLE & COURSE NUMBER	UNITS
Data Science with R CSE-41308	3.0
Data Analytics Using Python CSE-41204	3.0
Data Science using SAS CSE-41320	3.0
Discrete Math: Problem Solving for Engineering, Programming, & Science CSE-41243	3.0

Admission

Knowledge of statistics and probability theory is required. A foundation in a programming language and advanced mathematics such as linear algebra is recommended.

You may enroll in the certificate program at any time. However, it is recommended that you enroll as soon as possible. The program curriculum may be updated at any time; if certificate requirements change, you must adhere to the curriculum at the time of your enrollment into the certificate.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9351 or Email: unex-techdata@ucsd.edu

Conditions for Admission

Although programs are open to all adult learners, UC San Diego Extension programs are designed to best serve college-prepared working professionals. Where program capacity is limited, applicants with this profile will receive preference for admission.

Digital Health Certificate

Overview

The 100% online program combines aspects of healthcare administration, public health, ethics and strategies for commercialization and business development. Courses encompass several distinct academic disciplines and technologies including data science, mobile health apps, biometric sensors, and AI. The specialized content represents a collaboration of several UC San Diego departments and incorporates expertise in data science, mHealth, regulatory, and ethical aspects related to the acceleration of Digital Health. Instructors will provide their expertise on advanced medical technologies, IoMT, disruptive innovations. The program will empower learners to understand the intricacies of the digital health landscape and to identify meaningful opportunities to generate new value for both consumers and organizations.

Digital Health's impact integrating disruptive medical innovations to can change healthcare outcomes, at both the patient and population health level, will be examined. Telemedicine, smart algorithms and wearable health trackers now make it possible to stream medical data from any location, allowing patients access to care nearly instantly. Studies have shown that medical outcomes can improve and costs can be reduced when technology like artificial intelligence is combined with the human touch of physicians. The certificate offers a unique educational experience for those working in healthcare technology roles, research, entrepreneurial, and regulatory entities in the healthcare space.

Format:
On-Line

Est. Cost: \$3,900

(Excludes textbooks and materials).

Duration

12 - 16 months

Program Highlights:

- 100% on-line specialization for those with both technical and non-technical backgrounds; Exploration of Digital Health through several distinct academic disciplines & technologies;
- Gain expertise in data science, mHealth, regulatory issues, ethics and product commercialization;
- Incorporation of public health informatics, behavior change theories, information architecture, and user experience design; Critically compare Digital Health innovations and reflect on cross-cutting case studies;
- Entrepreneurial focus to explore ideas and accelerate technological innovations;

Who Will Benefit: Intended for those with a background or interest in healthcare transformation, data science, eHealth, IT administration, engineering and regulatory affairs.

Courses

Digital Health Required Courses	
TITLE & COURSE NUMBER	UNITS
Introduction to Digital Health GLBH-40020	3.0
Data Science for Digital Health GLBH-40021	3.0
Case Studies in Digital Health GLBH-40022	3.0
Regulatory and Ethics for Digital Health Innovation GLBH-40023	3.0
Digital Health Business and Commercialization Strategies GLBH-40024	2.0
Digital Health Electives	
TITLE & COURSE NUMBER	UNITS
Overview of Regulatory Affairs for Medical Devices BIOL-40322	3.0

Project Management Essentials in Science and Technology BUSA-40862	3.0
Digital Health Optional Capstone	
TITLE & COURSE NUMBER	UNITS
Digital Health Capstone Project GLBH-40025	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-534-4041 or Email: rhoughtaling@ucsd.edu

Digital Marketing Certificate

Overview

The Specialized Certificate in Digital Marketing gives students the advanced training needed for success in the digital world. This program is designed to provide practical knowledge in digital, content, social, mobile, and data-driven marketing, enabling participants to meet the digital marketing challenges of businesses and organizations. Gain a comprehensive understanding of the digital marketing ecosystem and the core channels within it. Explore a range of tools and resources needed to create relevant content for a variety of industries and platforms. Students will also learn how to interpret and measure web analytics data to shape future digital plans.

Format

In-Class & Online

*Online options vary by quarter.

Est. Cost

\$3,289*

*Cost may vary due to elective course selection.

Duration

12 Months*

*Varies by student and courses taken per quarter

Program Benefits:

- Understand the digital marketing ecosystem and the various channels within it
- Learn how to create an effective digital marketing strategy
- Know how to create and sustain digital marketing campaigns
- Be able to create engaging and effective content for various online marketing channels
- Know how to use SEM tools to drive more traffic to your website
- Understand how to use social media platforms, blogging, video, email marketing, and other digital tools
- Gain insight on how to use tools and approaches to measure and evaluate the effectiveness of digital marketing campaigns

Who Should Attend:

- Individuals looking for an entry-level job in marketing
- Marketing professionals seeking new skills or advancement
- Mid-level marketing professionals seeking to modernize their skill set
- Business professionals or non-profit employees handling the marketing function for their organization

The Program:

- Number of courses: Three required courses and 2 elective courses
- Total units: 15
- Estimated cost: Total cost is \$3,289.00
- Time to Complete: Can be completed in one year or less
- Delivery: All required coursework is offered both online and in-class

For more information: Fiona O'Donnell-Lawson at 858-534-8139 or MktgProgram@ucsd.edu

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Digital Marketing BUS A-40879	3.0
Content Marketing BUS A-40880	3.0
Digital Marketing Analytics BUS A-40924	3.0
Elective Courses (Choose Two)	
TITLE & COURSE NUMBER	UNITS
Social Media Marketing BUS A-40700	3.0
Search Engine Optimization (SEO) and Marketing CSE-41157	3.0
Influencer Marketing BUS A-40935	2.0
Paid Search (PPC) BUS A-40947	3.0
Behavioral Economics ENVR-40012	2.0
Copywriting I: Writing for User Experience WCWP-40330	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8139 or Email: fodonnell@ucsd.edu

Digital Signal Processing Certificate

Overview

Digital Signal Processing (DSP) techniques and methodology have been widely employed in many applications including video/audio/data communications and networking, medical imaging and computer vision, speech synthesis and coding, digital audio and video, and control of complex systems and industrial processes. With advances in microelectronics and high-speed microprocessors, microcontrollers and DSP processors, many complex DSP algorithms for solving real-world application problems can be implemented in real-time and a cost-effective manner.

This Digital Signal Processing certificate program is designed to provide an understanding of DSP fundamentals, principles, applications, current practices and standards, and emerging trends and developments. This program is intended for software, hardware and system engineers and technical managers who are involved in evaluation, design and development of DSP-based applications.

Program Benefits:

- Learn to write programs to implement algorithms in C
- Employ software defined radios using DSP methods
- Apply DSP techniques to practical systems
- Grasp DSP processors and architectures
- Complete the program in as little as nine months (12-15 months if prerequisites are needed)
- Program can be completed entirely online

Program Highlights:

- Explore the need for DSP in wireless systems
- Appreciate the advantages of processing signals digitally to achieve high speed and accuracy
- Curriculum aligned with industry standards

Demand and Job Prospects:

- According to the Bureau of Labor Statistics, the median wages for Electrical Engineers is \$97,970.00 per year nation wide and \$113,140.00 in California
- For a four year period (2014-2017), Burning Glass Technologies reported a national growth rate of 40% in Engineering and Technology jobs requiring skills in DSP. Projections for 2018 are showing a growth rate of 14% compared to 2017. (source: Burning Glass Technologies)
- Top companies hiring individuals with DSP skills in the past year nationwide include Boeing, Intel, Apple, Qualcomm, Lockheed Martin, Google, Aerospace, and Northrop Grumman (source: Burning Glass Technologies)

Who Will Benefit:

- RF Engineers and Technicians
- Computer Programmers
- Anyone working with Robotics, Autonomous Vehicles, Cloud Computing, 3D Sensing
- Signal Processing Engineers
- Machine Learning Analysts, Developers and Researches
- Software Developers and Engineers

At a Glance:

- **Number of Courses:** Three courses (5 if both prerequisites are included)
- **Total Units:** 9
- **Estimated Cost:** \$2,420 (excludes textbooks and materials)
- **Time to Complete:** Nine months (12-15 months if prerequisites are needed)
- **Delivery:** All courses are offered online

For more information about this program, please email unexengr@ucsd.edu.

Courses

Prerequisite Course	
TITLE & COURSE NUMBER	UNITS
Signals and Systems ECE-40051	3.0
Required Core Courses	
TITLE & COURSE NUMBER	UNITS
Digital Signal Processing (DSP) ECE-40016	3.0
DSP in Wireless Communications ECE-40283	3.0
Applied DSP ECE-40164	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9351 or Email: unexengr@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission

Drug Discovery and Development Certificate

Overview

Modern drug discovery utilizes multidisciplinary project teams and attempts to simultaneously move forward with as many aspects of the overall drug discovery and development process as possible. This environment requires that scientists not only be deeply trained in their area of specialty, but also possess a broad background, vocabulary, and appreciation of the possibilities and limitations of related disciplines. UC San Diego Extension's professional certificate is designed to help meet that need.

Key Program Topics

- A general overview of the drug discovery and development process
- Key background material in biology or chemistry
- Gain a basic understanding of the introductory concepts and use of toxicology
- Get an overview of the application of pharmacokinetic concepts to all stages of drug development
- Comprehensive understanding of the biochemical aspects of drug metabolism in the drug discovery process
- Learn both the conceptual and current methodology being utilized in the discovery of new targets for drug intervention

Program Audience

This certificate is intended for individuals with educational backgrounds in chemical and biological sciences at the bachelor, masters, or Ph.D. level interested in entering or becoming more effective at working in the pharmaceutical or biotechnology industry.

Certificate Benefits

- Comprehensive training designed to immerse you in the skills needed to successfully get started or advance your career
- Immediately applicable skills to your research
- Developed and taught by industry professionals
- The addition of electives allows the student to round out their certificate education with courses that are most appropriate to their current or future career needs

Courses

REQUIRED COURSES	
TITLE & COURSE NUMBER	UNITS
Overview of the Drug Development Process BIOL-40015	3.0
Preclinical Drug Discovery & Development BIOL-40125	3.0
Introductory Pharmacology BIOL-40329	3.0
Target Selection and Screening Technologies BIOL-40331	2.0
Overview of ADME and Toxicology BIOL-40330	3.0
ELECTIVE COURSES <small>A total of 5 units required.</small>	
TITLE & COURSE NUMBER	UNITS
Medicinal Chemistry of Leading Drugs BIOL-40161	1.0
Biomarkers BIOL-40258	3.0
Analytical Chemistry CHEM-40004	4.0
Stem Cell Biology BIOL-40186	3.0
Bioinformatics BIOL-40236	3.0

Admission

This certificate is intended for individuals with educational backgrounds in chemical and biological sciences at the bachelor, masters, or Ph.D. level interested in entering or becoming more effective at working in the pharmaceutical or biotechnology industry.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9353 or Email: unexbio@ucsd.edu

Conditions for Admission

Complete the application and pay application fee. UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

E-Discovery and Litigation Technology Certificate

Overview

In response to the increased automation of legal processes, huge volumes of electronic data, and growth of large-scale, complex litigation, a new occupation on the legal field has emerged: the **Litigation Technology Professional**. This cutting-edge profession combines the legal knowledge of attorneys and paralegals with the technical skills of information technology professionals. Litigation technology professionals help identify, preserve, collect, produce, and manage electronically stored information (ESI) in litigation. With lightning-fast changes in regards to how data and electronically stored information is kept, maintained, and destroyed, the evolution of the practice of law has been forced to adapt to technology resulting in a specific need for tech-savvy legal professionals currently missing but in high demand.

Format

100% Online

Courses offered in alternating quarters.

Est. Cost

\$3,095*

*Cost includes course and certificate fees and materials.

Duration

6-12 Months*

*Varies by student.

UC San Diego Extension's e-Discovery and Litigation Technology certificate is an **online, interactive program** designed to help legal professionals meet the evolving technical demands in the legal field. In as little as six months, you will learn all phases of electronic discovery, from working with clients to gather relevant records, to using advanced analytics to identify hot documents. You will also explore the principles of litigation readiness, legal project management, current legal software used in managing databases, and the use of technology to create streamlined and persuasive presentations at trial.

Certificate Benefits

- Program can be completed in as short as six months All courses are taught online for flexibility
- Courses are taught by working legal professionals who are experts in the legal support and technology arena
- Gain a practical hands-on approach to managing technology in the representation of the client on both litigation and transactional platforms Specifically designed for legal professionals who are interested in learning cutting-edge legal technology and expanding their career opportunities.
- Earn 40 hours of MCLE credit.

Who Should Attend?

The certificate is designed for legal professionals with litigation or equivalent experience who are interested in learning cutting-edge legal technology and expanding career opportunities.

Please Note: The e-Discovery and Litigation Technology Certificate is NOT approved by the American Bar Association (ABA) because it is not a type of program that the ABA oversees, approves, or certifies. The Paralegal Certificate Program is the only UC San Diego Extension program currently approved by the ABA.

Courses

REQUIRED COURSES	
TITLE & COURSE NUMBER	UNITS
Understanding E-Discovery and Litigation Technology LAW-40068	5.0
Applying E-Discovery and Litigation Technology LAW-40069	6.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8164 or Email: unexlaw@ucsd.edu

Embedded Systems Engineering Certificate

Overview

The Embedded Systems Engineering Professional Certificate provides technical professionals with the skills to design embedded systems. With increasing levels of hardware integration, faster processing capability and decreasing cost of embedded processors, new and more innovative applications are appearing regularly.

The core curriculum of the Embedded Systems Engineering program covers embedded systems hardware design, fundamental Embedded C controller programming, embedded controller programming for real-time systems, and embedded real-time operating system (RTOS). The hands-on courses combine lectures and discussions based upon student's assignments and class projects. The program electives are designed to complement the core course of study with subjects most appropriate to the individuals personal job requirements and career advancement.

Taught by working professional Embedded Systems Engineers who bring practical real-world applications and experience to this program.

Program Benefits

- Program can be completed entirely online
- Online courses provide flexibility for busy schedules
- Curriculum taught in accordance with industry standards
- Practicing instructors who bring industry relevance to students
- New curriculum featuring current case studies

Demand and Job Prospects

- According to Burning Glass Technologies, job postings for Software Development Engineers with embedded engineering skills have averaged 14,477 job postings between 2016 - 2018
- Top companies hiring individuals with Embedded skills in the past year nationwide include Amazon, Harris Corp., Northrop Grumman, Lockheed Martin, Raytheon, Google, Cisco, BAE Systems, General Electric, Boeing, United Technologies and Qualcomm (source: Burning Glass Technologies)
- According to the Bureau of Labor Statistics, the median wages for Software Developers/Engineers is \$106,710.00 per year nationwide and \$126,470.00 in California

At a Glance

- **Number of courses:** Six courses (four required and two electives)
- **Total units:** 18
- **Estimated Cost:** \$4,770.00 (excludes textbooks/materials)
- **Time to complete:** Flexible; most students complete the program in 18 months
- **Delivery:** All courses offered online, except for FPGA II and Embedded Systems for Robotics which are offered in-class only

Transferring Credits

- Upon completion of this professional certificate in Embedded Systems Engineering, twelve (12) units can be transferred to the University of Wisconsin, Platteville, M.S. in Engineering program (degree offered fully online)



UNIVERSITY OF WISCONSIN
PLATTEVILLE

For more information about this program, please email unexengr@ucsd.edu.

Courses

PREREQUISITES <small>If you have prerequisite knowledge you may enroll in required courses, no waiver is needed.</small>	
TITLE & COURSE NUMBER	UNITS
Introduction to Embedded Systems ECE-40153	3.0
C/C++ Programming II : Dynamic Memory and File I/O Concepts CSE-40476	3.0
REQUIRED COURSES <small>Courses must be taken in the order listed</small>	
TITLE & COURSE NUMBER	UNITS
Embedded Systems Hardware Design ECE-40292	3.0
Embedded Controller Programming with Embedded C ECE-40291	3.0
Embedded Controller Programming for Real-Time Systems ECE-40097	3.0
Embedded Real-Time Operating System (RTOS) ECE-40290	3.0
ELECTIVE COURSES <small>Select any combination of elective courses - 6 units required</small>	
TITLE & COURSE NUMBER	UNITS
Embedded Systems Hardware Interfacing ECE-40293	3.0
Embedded Linux ECE-40105	3.0
Data Acquisition Systems ECE-40275	3.0
FPGA Design Fundamentals ECE-40170	3.0
FPGA II ECE-40260	3.0
Embedded Systems for Robotics ECE-40285	3.0
Introduction to Autonomous Vehicles ECE-40295	4.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9152 or Email: unexengr@ucsd.edu

Emergency Department Nursing Certificate

Overview

The Specialized Certificate in Emergency Department Nursing gives participants the essential knowledge base required for assessment and initial management of the emergency patient. By gaining certification, participants not only validate competency, but also demonstrate a greater commitment to specialty and quality health care. Courses in the program are ideal for continuing education or relicensure credit independently of the certificate.

This program is now offered online every quarter. The certificate is also available to be tailored for groups from international healthcare organizations. Connect your classroom education with real-world experiences through the Emergency Department Nursing Basic Preceptorship. These specially designed classes allow students to gain hands-on experience by working closely with instructors and/or peers on real-world projects.

Certificate Benefits

In the [Emergency Department Nursing Basic Preceptorship](#), each student will demonstrate their familiarity with the equipment and monitoring devices used in an Emergency Department under the guidance of a mentor. Students conveniently complete this course in their own workplace or in another facility. Participants learn splinting, using auto-transfusing equipment and experience being an integral part of an emergency team.

The goal of this course is that the students apply the academic knowledge learned in the two theory components of the Emergency Nursing Program in a clinical setting. To obtain a certificate in emergency nursing the student will need to complete 60 clinical hours in an emergency department (or ER compatible site.) Each online student will liaise directly with the instructor regarding the clinical placement that will occur at the student's location. The clinical component is not done at UCSD or arranged by UCSD. It is up to the online student to arrange his or her own clinical experience with the instructor in a facilitating role.

Who should take the certificate?

- Current CA or RN license, current CPR card, negative TB test, insurance coverage and general computer experience (Word/Windows and/or email) is required
- Program designed for registered nurses who desire to learn more about the specialty of emergency

Demand and Job Prospects

Current nurses interested in providing better care to patients and becoming a better patient advocate. Nurses interested in transitioning to the ED nursing specialization.

The Program:

- Number of courses: 3 Total
- units: 9 Estimated cost: \$1,035
- Time to Complete: 3 quarters
- Delivery: Parts I & II offered online, Preceptorship in-person

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Emergency Department Nursing, Part I NURS-40005	3.5
Emergency Department Nursing, Part II NURS-40002	3.5
Emergency Department Nursing Basic Preceptorship NURS-40003	2.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-534-9262 or Email: unexhealthcare@ucsd.edu

Facilities Management Certificate

Overview

UC San Diego Extension's Professional Certificate in Facilities Management offers a comprehensive curriculum designed to equip you with the knowledge, training and tools necessary to make effective and sustainable facilities management decisions that reduce costs while enhancing your organization's facility and services. Learn strategies and techniques in all areas of competency recognized by the International Facilities Management Association (IFMA), including management, finance, communications, software and technology. Explore hot topics and current issues in the industry, including sustainability, productivity, and economics and life cycle cost analysis. Gain insights and tips from experts in the field that you can immediately apply at work.

Format In-Class & Online

*Online options vary by quarter.

Est. Cost
\$5,105*

*Cost may vary due to elective course selection.

Duration
12 -24 Months*

*Varies by student and courses taken per quarter.

UC San Diego Extension's electives in sustainability help facility managers identify ways to use resources more efficiently and create healthy work spaces that increase productivity. You will learn practical energy management solutions, current approaches to recycling and waste management, and life cycle costing strategies that improve sustainability.

Certificate Benefits:

- Gain knowledge of all areas relating to facilities management
- Gain the core knowledge needed to prepare for credential exams offered through the International Association of Facilities Management Courses feature practical applications which can be immediately utilized in and applied to work environments
- Build skills needed for career advancement Networking opportunities with peers and instructors

Industry Certification:

Upon completion of this certificate students will be prepared to pursue professional credentials offered through the International Facilities Management Association (IFMA). Visit IFMA at www.IFMA.org

The Program:

- Number of courses: Four required courses (12 units) and 8 units of elective courses Total units: 20
- Estimated cost: Total cost is \$5,105.00
- Time to Complete: Can be completed in approximately two years or less Delivery: All required coursework is offered both online and in-class

For more information: FacilMgtProgram@ucsd.edu Further reading:

- [Military Transition: Building a Career in Facilities Management](#) (blog)

Courses

Required Courses <small>Complete all four courses.</small>	
TITLE & COURSE NUMBER	UNITS
Principles of Facilities Management BUSA-40063	3.0
Planning & Project Management for Facilities Managers BUSA-40091	3.0
Facilities Operations & Maintenance BUSA-40681	3.0
Building Systems & Technology BUSA-40676	3.0
Elective Courses <small>Complete at least 8 units.</small>	
Facilities Management Electives	
TITLE & COURSE NUMBER	UNITS
Real Estate Property Management RELE-40006	5.0
Emergency Preparedness and Business Continuity BUSA-40679	3.0
HVAC Systems Design AMES-40021	3.0
Sustainability Electives	
TITLE & COURSE NUMBER	UNITS
Resource Management BUSA-40677	3.0
Economics and Life Cycle Cost Analysis ENVR-40013	3.0
Introduction to Sustainability BUSA-40729	3.0
Lean Six Sigma Green Belt MAE-40013	4.0
Business Electives	
TITLE & COURSE NUMBER	UNITS
Interest-Based Negotiation BUSA-40128	3.0
Financial Accounting for Non-Accountants BUSA-40009	4.0
Managing for Maximum Performance BUSA-40673	3.0
Business Communication Skills BUSA-40368	3.0

Admission

The Facilities Management program includes 12 required units and your choice of 8 elective units. Principles of Facilities Management (BUSA-40063) is strongly recommended as a prerequisite to other facilities and sustainability courses. The program can be completed in two years, taking one course per quarter.

For more information please visit: extension.ucsd.edu/facilities

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-6702 or Email: FacilMgtProgram@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Finance Certificate

Overview

Regardless of the economic or social climate, management of financial affairs remains the foremost priority in any business. Consequently, an understanding of the principles for building and sustaining the financial health of a firm will strengthen the value of any professional involved in business.

UC San Diego Extension Professional Certificate in Finance will benefit entry and mid-level finance or accounting professionals; practicing Certified Public Accountants (CPAs); securities brokers; personal finance professionals; general business managers, and technical or scientific personnel who wish to broaden and solidify their knowledge of finance.

The curriculum is patterned after the educational requirements for these highly regarded professional credentials:

- The [Certified Management Accountant](#) (CMA) as administered by the [Institute of Management Accountants](#) (IMA) The [Chartered Financial Analyst](#) (CFA) as administered by [CFA Institute](#)
- The acclaimed Investor Relations Body of Knowledge developed by the [National Investor Relations Institute](#) (NIRI).

For information on credentials, testing sites and dates, and test preparation materials or services, contact either the IMA at (800) 638-4427, the CFA Institute at (800) 247-8132, or the NIRI at (703) 506-3570.

Certificate Benefits

- Designed to augment an individual's current professional knowledge with a stronger foundation in business finance.
- Taught by qualified practitioners who teach applications as well as underlying rationale. [Instructor Spotlight: George Haloulakos](#) Offered in the evening and online formats so participants can gain additional knowledge and skills while continuing their full-time employment.
- Gain career-oriented education to complement a college degree.
- Follow a pre-planned and approved sequence of courses to guide individual study. Facilitate promotions or career changes.
- Network with other professionals in the program.

Courses

Prerequisite <small>These courses are strongly recommended for those who need a refresher in accounting concepts.</small>	
TITLE & COURSE NUMBER	UNITS
Financial Accounting for Non-Accountants BUS-40009	4.0
Required Courses <small>Required Courses (Must take all six courses)</small>	
TITLE & COURSE NUMBER	UNITS
Finance Management BUS-40439	4.0
Financial Statement Analysis BUS-40130	4.0
Financial Modeling with Excel BUS-40910	2.0
International Finance and Capital Markets BUS-40162	3.0
Business Valuation BUS-40477	3.0
Financial Decision Making BUS-40435	3.0
Elective Courses <small>Electives (Choose and complete one course)</small>	
TITLE & COURSE NUMBER	UNITS
Behavioral Finance BUS-40907	3.0
Financing Strategy: Sources of Capital and Business Plans BUS-40026	3.0
Financial Markets and Investment Strategies BUS-40933	3.0

Healthcare Finance and Accounting BUSA-40937	3.0
Other Courses of Interest	
TITLE & COURSE NUMBER	UNITS
Money Essentials Series PRGF-70019	0.0
Lean Six Sigma Green Belt MAE-40013	4.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8148 or Email: FinanceProgram@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Front End Development Certificate

Overview

Web Development has evolved significantly over time from tools to publish information, to highly complex sites with various service functions and where more and more functionality can be found. Because of the complexity of most websites the development work has been divided between two types of functions which have generated two types of professionals: front-end and back-end web developers.

The Front-End developer is the bridge connecting the designer and back-end developer. The developer's work is to take the final designs of an application from the designer, and code it into the front-end code so the back-end developer can understand it and build functionality around it.

The Front-End Development program teaches students how to implement websites and applications. Students will learn how to develop sites using HTML5, CSS3, JavaScript and jQuery. At the end of the program, students will create a portfolio website utilizing the techniques taught throughout the certificate program. This program will be also beneficial to web developers who are building applications that interact with the client-side and require input from the end user as well as to web designers who need to understand HTML, CSS and JavaScript to implement their graphical designs.

Format

Online

*Check course list below for specifics.

Est. Cost

\$3,590

*Cost may vary due to elective course selection.

Duration

15 months

*Varies by student due to number courses taken per quarter.

Learning Objectives

- Learn how to develop responsive sites and applications using HTML5, CSS3, JavaScript and jQuery. Understand the basic concepts of project management as they apply to web development
- Develop a portfolio of high quality to present to potential employers
- Gain understanding of best coding practices and how to code for performance using sprites, caching and modern tools of the trade

Program Benefits

- Hands-on comprehensive training designed to immerse you in the skills needed to successfully get started or advance your career
- Developed and taught by industry professionals
- Immediately applicable skills

Program At-A-Glance

- **Number of courses:** 4 Required Courses, 1 Elective
- **Total Units:** 15 (not including prerequisites)
- **Estimated program fees** (includes certificate fee): \$3,590 **Time to Complete:** 1 Year and a Half or 15 months
- **Delivery:** Online

Note:

Starting Spring Quarter 2019, we will be offering a newly realigned Specialized Certificate in Front End Development. The new course offerings are current and relevant. The updated format now includes two elective tracks for Front End Engineers and Front End Designers. Building on the information from the core courses, these new elective options will provide for a robust and effective program.

The modifications made reflect feedback from our Advisory Board which includes industry experts, as well as market research, and input from instructors and students.

If you are a current student in the Specialized Certificate in Web Design, the previous required courses will also continue to be offered for a few quarters. Please contact unex-digital@ucsd.edu with any questions or to request to use up to two courses in your current course history as a substitute for up to two required courses or electives towards the realigned certificate requirements.

Courses

Required Courses <small>All 12 units are required.</small>	
TITLE & COURSE NUMBER	UNITS
Introduction to Front End Technologies CSE-41318	3.0
Introduction to HTML and CSS CSE-41207	3.0
Introduction to JavaScript CSE-41208	3.0
Front End Web Development Portfolio CSE-41210	3.0
Electives <small>3 Units required</small>	
Front End Engineer	
TITLE & COURSE NUMBER	UNITS
Advanced HTML and CSS CSE-41319	3.0
Applied JavaScript I CSE-40591	3.0
Front End Designer	
TITLE & COURSE NUMBER	UNITS
Responsive Design and User Experience (UX) ART-40640	4.0
User Interface Design ART-40535	3.0
Other courses of interest <small>Not required for certificate</small>	
TITLE & COURSE NUMBER	UNITS
Web Analytics CSE-41132	3.0
User Experience (UX) Metrics CSE-41260	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-1566 or Email: infotech@ucsd.edu

Fundraising and Development Certificate

Overview

UC San Diego Extension's Professional Certificate in Fundraising and Development is designed to expose you to a wide range of fundraising methods—from planned giving and capital campaigns to grant writing and donor stewardship. Explore marketing and business management tools, and learn about the latest web and media technology available. Discover best practices in how to efficiently apply varied fundraising methods, marketing tools and technology. Experts help you to discern which methods best fit your needs, how to focus your resources, and then practically apply the appropriate tools.

Format In-Class & Online

*Online options might be available for some courses.

Est. Cost
\$3,460*

*Cost may vary due to elective course selection.

Duration
12-24 Months*

*Varies by student and courses taken per quarter.

Network with accomplished San Diego fundraising executives and build relationships that will positively impact your career and organization. Gain exposure to model programs and professionals through frequent guest speakers. With the ability to tailor your learning by selecting from a broad range of electives, you can ensure you master skills to meet the specific needs of your organization.

Certificate Benefits:

- Gain a working knowledge of fundraising methods
- Learn practical strategies and emerging trends for developing an annual giving program
- Discover how to develop relationships with your donors and increase support for your organization
- Develop practical skills which can be immediately utilized and applied to work environments
- Build a new career in Fundraising and Development or advance in your current role
- Networking opportunities with peers and instructors

The Program:

- Number of courses: five required courses and four units
- elective courses Total units: 18
- Estimated cost: Total cost is \$3,460
- Time to Complete: Can be completed in approximately 1.5 years
- Delivery: All required coursework is offered both online and in-class

For more information: Andrea Laserna at FRDevProgram@ucsd.edu or 858-822-5947

Courses

Required Courses <small>Complete all five courses</small>	
TITLE & COURSE NUMBER	UNITS
Introduction to Fundraising and Development BUS-40341	3.0
Major Gifts BUS-40929	3.0
Planned Giving BUS-40928	3.0
Annual Giving BUS-40829	3.0
Fundraising and Development Project BUS-40410	2.0
Elective Courses <small>Complete at least 4 units</small>	
TITLE & COURSE NUMBER	UNITS
Special and Capital Campaigns BUS-40931	2.0
Grant Writing for Nonprofits BUS-40463	2.0
Donor Relations and Stewardship BUS-40930	2.0
Financial Management for Nonprofit Organizations BUS-40791	2.0

Admission

Students should enroll in classes at least 2 weeks prior to course start date.

Introduction to Fundraising & Development (BUS-40341) is a required prerequisite for other core fundraising courses. The program can be completed in approximately two years.

After completion of all prior coursework, students enroll in the Fundraising and Development Project. The project consists of a guided capstone project that gives the student a chance to apply the knowledge and practical skills they have learned throughout the certificate.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-822-5947 or Email: FRDevProgram@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Geographic Information Systems Certificate

Overview

Our Specialized Certificate in Geographic Information Systems provides you with the skills to store, analyze, and visualize geographic and spatial data.

Geographic Information Systems (GIS) allow businesses and organizations to leverage spatial and geographic data in logistics, communications, management, planning, decision-making, record-keeping, and engineering across many industries; including business, defense, urban planning, education, government, health and human services, public safety, and transportation. While map-making is the task most often associated with geographic information systems, their large range of applications means GIS professionals can have other responsibilities, including data analysis, predictive modelling, programming, and project management.

You will learn a full range of GIS capabilities in this online certificate program. Program courses begin with basic skills, such as displaying and querying data, and progress to more advanced skills, such as designing and managing databases and analyzing data for specific applications. In the program's capstone course, you will apply the skills you have learned throughout the program to create and present an in-depth research project.

Program Benefits

- Practical, comprehensive hands-on training Immediately applicable skills
- All courses taught online
- Program can be completed in just over a year
- Industry-neutral curriculum allows you to apply knowledge to your field of interest
- Capstone guided research project and report

Key Program Topics

- Fundamental GIS skills
- Coordinate systems
- Editing geographic and tabular data
- Spatial data analysis
- Geodatabase creation and design
- Geospatial information design and cartography
- 3D data display and analysis
- Basic project management techniques

Demand and Job Prospects

- According to the U.S. Department of Labor, the median wages for a Geographic Information Systems Technicians, Scientists, or Technologists are \$86,510 per year nationwide and \$91,680 per year in California.
- Geographic Information Systems Technicians, Scientists, and Technologists are O*NET "Bright Outlook" jobs: new and emerging roles in a high growth industry
- According to Burning Glass, top companies hiring individuals with GIS skills nationwide in the past year include AECOM Technology Corporation, Booz Allen Hamilton, ESRI, BAE Systems, Leidos, General Dynamics, the American Planning Association, CACI, and the National Park Service.

Who Will Benefit

- Individuals seeking a career in defense, planning, government, transportation, environmental, or related industries
- Data analysts looking to add spatial data analysis to their skillset
- Individuals desiring to start a career as a geospatial or GIS analyst, scientist, or technician
- Anyone interested in learning high-demand spatial analysis skills

At a Glance

- **Number of courses:** Five courses
- **Total units:** 15
- **Estimated cost:** \$4,150
- **Time to complete:** One year and three months
- **Delivery:** All courses offered online

For more information about this program, please contact unex-techdata@ucsd.edu.

Courses

Required Courses <small>Courses must be completed in the order listed</small>	
TITLE & COURSE NUMBER	UNITS
GIS I: Introduction to GIS CSE-40991	3.0
GIS II: Spatial Analysis ECE-40246	3.0
GIS III: Geodatabase Design ECE-40247	3.0
GIS IV: 3-D Display and Analysis of Spatial Data ECE-40248	3.0
GIS Capstone Project ECE-40272	3.0
Other Courses of Interest <small>Not required for certificate</small>	
TITLE & COURSE NUMBER	UNITS
Data Analytics Using Python CSE-41204	3.0
Introduction to R Programming CSE-41097	3.0
Advanced Excel for Analysis and Business Intelligence CSE-41161	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9351 or Email: unex-techdata@ucsd.edu

Conditions for Admission

Although programs are open to all adult learners, UC San Diego Extension programs are designed to best serve college-prepared working professionals. Where program capacity is limited, applicants with this profile will receive preference for admission.

Gifted and Talented Education Certificate

Overview

UCSD Extension's Specialized Certificate in Gifted and Talented Education offers training for educators who want to teach and develop programs for gifted and talented students. The program meets training requirements for educators, counselors, psychologists, administrators, and others responsible for GATE (Gifted and Talented Education) program services.

The online program is designed for those new to gifted education and for experienced educators. The required coursework offers a comprehensive examination of characteristics and identification, curriculum differentiation, teaching strategies, and program development for gifted and talented students in an online setting. Several courses also feature investigation and study in such specialized areas as technology, serving the second-language gifted student, and underachievement.

Target Audience

The Specialized Certificate in Gifted and Talented Education (GATE) program is offered to help educators meet educational training requirements for teaching gifted and talented students and to keep educators informed about recent research and curriculum development in the field.

Industry Certification

In the State of California, certification in gifted and talented education is the exclusive purview of school districts and Universities. At the time of this writing, the California Commission on Teacher Credentialing does not approve programs in this area, nor does it issue authorizations or endorsements. The GATE certificate program at the University of California, San Diego Extension carefully adheres to established standards and best practices in gifted and talented education, including those supported by the California Association for the Gifted (CAG); Supporting the Emotional Needs of the Gifted (SENG); and the National Association for Gifted Children (NAGC).

The Program

- # of courses required: 4 Total
- units: 12 Estimated cost: \$1,600
- Time to Complete: Candidates can complete in 3-6 months
- Delivery: Online

Courses

Required Courses <small>All four courses are required</small>	
TITLE & COURSE NUMBER	UNITS
Teaching the Gifted and Talented: Differentiating the Curriculum EDUC-40099	3.0
Teaching the Gifted and Talented: Recognizing Individual Differences EDUC-40090	3.0
Strategies for Teaching the Gifted and Talented EDUC-40101	3.0
Program Development for the Gifted EDUC-40100	3.0
Electives <small>0 units required - for professional development</small>	
TITLE & COURSE NUMBER	UNITS
Differentiation System Design: District Initiatives EDUC-41382	3.0
Differentiation System Design: School Practices EDUC-41391	3.0
Differentiation System Design: Classroom Level EDUC-41429	3.0
Practicum in Gifted and Talented Education EDUC-41518	4.5

Admission

All teachers who wish to receive the Specialized Certificate in Gifted and Talented Education

- (GATE) are required to: (1) Enroll in the GATE certificate program.
- (2) Pay the certificate fee.
- (3) Complete all required online courses with a grade of "C" or better. (4) Coursework must be completed within 5 years of beginning the program.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Education. Call 858-534-9286 or Email: unexeduc@ucsd.edu

Conditions for Admission

The required coursework offers a comprehensive examination of characteristics and identification, curriculum differentiation, teaching strategies, and program development for gifted and talented students in an online setting. Several courses also feature investigation and study in such specialized areas as technology, serving the second-language gifted student, and underachievement.

Complete the application and pay application fee.

Global Health and Policy Certificate

Overview

The Global Health and Policy online certificate program is under development. We will make an announcement on this page when it is ready to accept applications.

Medical and public health professionals who are seeking the policy development skills, global understanding, and practical socio-political tools to meet the rapidly increasing demands that globalization in health represents should consider earning this certificate.

This certificate program will focus on the development and implementation of public health policy around the globe. At the core will be curriculum examining current global public health challenges in a variety of settings, and the spectrum of potential and actual responses to those challenges. The roles of national and international health organizations, the military and national security agencies, academia, advocacy groups, and similar audiences will be examined as vehicles for policy and change and implementation.

This program is taught entirely

online. [Target Audience](#)

This education is beneficial for health administrators, physicians, nurses, pharmacists as well as non-clinical executives from business and law. The program crosses all legal and healthcare fields, and healthcare-related industries.

Demand and Job Prospects

Students can use the knowledge gained in the certificate program for career change or career advancement. Occupations in healthcare, community health, legal professions, and regulatory and compliance can all benefit from this program. According to the Bureau of Labor Statistics, the industry and occupation outlook for the healthcare and legal industries are projected to experience an average growth rate of 9.1 percent from 2014 to 2024. Legal occupations have the greatest median salary of \$89,826, followed by \$71,861 for healthcare and \$56,980 for other industries.

COURSES:

Required: (all 3 are required):

- 1) *Fundamentals of Global Health* (3 units)
- 2) *Global Health Policy* (3 units)
- 3) *Applied Global Health Policy* (2 units)

Electives (5 units minimum):

- 1) *Strategies in Academic Publishing and Dissemination for Global Health Policy* (2 units)
- 2) *Research Virtual Mentoring Independent Study* (1 unit) (may be taken up to three times for credit)
- 3) *Zombie Pandemic Case Study in Global Health* (2 units)

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Applied Global Health Policy GLBH-40011	2.0
Global Health Policy GLBH-40012	3.0
Elective Courses	
TITLE & COURSE NUMBER	UNITS
Strategies in Academic Publishing and Dissemination for Global Health Policy GLBH-40010	2.0
Research Virtual Mentoring and Independent Study GLBH-40013	1.0
Zombie Pandemic Case Study in Global Health GLBH-40014	2.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Office of Adv Prof Education & Development. Call 858-534-9159 or Email: certghp@ucsd.edu

Graphic Design Certificate

Overview

Graphic design skills are highly valued in today's workplaces, and the demand is always growing for employees who possess design-based abilities.

UC San Diego Extension's Specialized Certificate in Graphic Design focuses on building essential design skills, such as branding, web design, and page layout. Students will gain a strong foundation in typography and practice solution-based design thinking.

Format In-Class or Online

Options vary per course.

Est. Cost
\$3,300*

*Cost includes certificate fee, but not prerequisites. May vary by format selection and curriculum updates.

Duration
1-2 Years*

*Varies by number of courses taken per quarter.

Upon successful completion of this certificate, students will have completed a portfolio and a gained a foundation in graphic design that can be applied immediately to their current jobs, as junior graphic designers, or as freelance designers.

The Specialized Certificate in Graphic Design is geared toward students who already have a good understanding of design and are looking to sharpen or update their skill sets. For an accelerated professional program, please review the [Graphic and Web Design Professional Certificate](#).

Courses

Prerequisites <small>Recommended</small>	
TITLE & COURSE NUMBER	UNITS
Introduction to Adobe Creative Cloud ART-40665	3.0
Adobe Photoshop I: Introduction ART-40311	3.0
Adobe Illustrator ART-40527	3.0
Adobe InDesign ART-40533	3.0
Required Courses <small>All 10 units are required.</small>	
TITLE & COURSE NUMBER	UNITS
Fundamentals of Graphic Design ART-40667	3.0
History of Communication Design ART-40671	1.0
Typography I ART-40668	3.0

Web Design I: Principles & Techniques ART-40677	3.0
Final required course All required courses and two electives must be completed before taking this course.	
TITLE & COURSE NUMBER	UNITS
Portfolio Development - Graphic Design ART-80012	0.0
Electives Minimum of 6 units required. Subject to change. Enrolled certificate students MUST follow matrix as listed in their MyExtension account.	
TITLE & COURSE NUMBER	UNITS
Branding I ART-40678	3.0
Branding II ART-40682	3.0
Print Design I ART-40673	3.0
Print Design II ART-40684	3.0
Packaging Design I ART-40679	3.0
Packaging Design II ART-40683	3.0
Typography II ART-40672	3.0
Typography III ART-40681	3.0
Adobe After Effects I: Introduction to Motion Graphics ART-40587	3.0
User Interface Design ART-40535	3.0
Principles of User Experience (UX) ART-40638	4.0

Admission

This program can be completed in 1-2 years (4-7 quarters at the rate of taking 1-2 courses per quarter). Tuition ranges from \$595-695 per course. All courses are offered online, with a selection of courses held onsite each quarter for local students.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-6731 or Email: unex-digital@ucsd.edu

Conditions for Admission

Students who wish to apply to the specialized certificate in Graphic Design should have a basic to intermediate knowledge of Adobe Creative Cloud, especially in Illustrator, Photoshop, and InDesign. This can be demonstrated, for example, by completion of the recommended prerequisites or by submitting a portfolio for approval.

Graphic and Web Design Certificate

Overview

The UC San Diego Extension Professional Certificate in Graphic & Web Design is an accelerated, full time program that provides comprehensive training in graphic and web design, as well as industry-standard software technologies in a project-based learning environment.

Format In-Class, Hands-On Training

Est. Cost
\$14,500*

*Textbooks/materials separate.

Duration
4 Quarters**

**3 nights a week, Tuesdays, Wednesdays, Thursdays, 5:30-9:30pm.

Courses in this one-year program focus on applying graphic and web design methodologies to a variety of mediums, from branding and corporate identity to advertising campaign development, digital illustration and photography, Adobe software training, web design, HTML and CSS coding, to user interface design and content management systems such as WordPress.

In this program, students collaborate with industry professionals and real world clients to gain an advanced understanding of essential Graphic & Web Design software and hardware. The program also focuses on professional development, branding, and business aspects of graphic and web design. As part of the program, students complete a comprehensive portfolio.

For more information, enroll in our online on-demand [Information Session](#), or attend one of our regular [in-person meet-and-greets](#).

Courses

Information Session <small>Learn more about this one-year full-time program in a free information session.</small>	
TITLE & COURSE NUMBER	UNITS
Graphic & Web Design Professional Certificate - Information Session INFO-70030	0.0
Graphic & Web Design Workshop INFO-70016	0.0
FIRST QUARTER	
TITLE & COURSE NUMBER	UNITS
Visual Communications: Fundamentals of Design ART-40455	4.5
Visual Communications: Digital Illustration ART-40456	4.5
Visual Communications: Digital Imaging ART-40360	4.5

SECOND QUARTER	
TITLE & COURSE NUMBER	UNITS
Introduction to Digital Design ART-40362	4.5
Digital Photography ART-40429	4.5
Digital Publication ART-40359	4.5
THIRD QUARTER	
TITLE & COURSE NUMBER	UNITS
Intermediate Digital Design ART-40363	4.5
Introduction to Web Design ART-40333	4.5
Introduction to Web Programming ART-40334	4.5
FOURTH QUARTER	
TITLE & COURSE NUMBER	UNITS
Introduction to Content Management Systems ART-40335	4.5
Intermediate Web Programming ART-40336	4.5
Portfolio Development for Graphic & Web Design Professional Certificate ART-40347	4.5

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-6704 or Email: dac@ucsd.edu

Conditions for Admission

Applicants for this program are assessed as follows:

1. Experience in graphic design or web design or a related field.
2. Strength of a statement of purpose, including a description of individual preparation, interests, and goals consistent with the program.
3. Although a college degree is not required, applicants with this profile will receive preference for admission when program capacity is limited.
4. For non-native English language speakers, proof of language proficiency is required.

Also, current UCSD students may be considered for admission depending on their academic and career focus and educational performance. To complete the application process please follow the steps below:

1. Attend an [online information session](#) or [in-person workshop](#)
2. Complete an online application above by clicking Apply Now!
3. Interview for acceptance

Please note: We advise that students complete the above steps as soon as possible as the programs fill up quickly.

HVAC Systems Design and Control Certificate

Overview

This program provides a focused, concentrated study of the latest available technology in the design, calculation, and practical applications of Heating, Ventilating, and Air Conditioning (HVAC) and Direct Digital Control (DDC) systems. Classes focus on various HVAC systems and components, their advantages and disadvantages, and their relative energy consumption. The coursework also emphasizes the merit of energy analysis and methods of savings through innovation in HVAC design for today's smart, green buildings.

Each course starts with the fundamentals followed by practical application, real life examples, and the most common design solutions. The curriculum emphasizes on the latest critical do's and don'ts and accepted rules-of-thumb checks in the field of HVAC and DDC systems.

Program Benefits:

- The program is designed to provide an outstanding means of professional advancement for those who are directly or indirectly involved with HVAC systems, facility engineering and building automation challenges.
- Students who complete this certificate will understand the fundamentals of HVAC and DDC system design and can apply such principals in real-world scenarios.
- Students will understand Net-Zero Energy and Smart Building Automation after completing this curriculum

Program Highlights:

- [HVAC DDC Basics](#)
- [HVAC DDC System](#)
- [Design HVAC Design Calculation HVAC System Design](#)
- [HVAC DDC Networking Design](#)

Instructor Highlights:

Frank Shadpour is a Registered Mechanical Professional Engineer with over 30 years of extensive experience in energy efficiency and sustainable mechanical design. He received a Bachelor of Science degree in Mechanical Engineering from the University of Southern California (USC) and has a Master's degree from the University of Redlands, California. Mr. Shadpour is also an ACG Certified Commissioning Authority; an USGBC LEED Accredited Professional; an ASPE Certified Plumbing Designer; a CSI Certified Construction Specifier; and an ASHRAE Healthcare Facility Design Professional.

An active member in both the professional and academic communities, Mr. Shadpour is an ASHRAE Fellow and a past President of the ASHRAE San Diego Chapter. He currently serves as the Program Chair of ASHRAE Technical Committee, TC1.4, "Control Theory and Application". He has also served as an Instructor of "HVAC Design & Control" courses at the University of California, San Diego since 1987.

Beginning his career as a HVAC technician at an early age, Mr. Shadpour has a great deal of experience in the start-up, troubleshooting, and servicing of HVAC and control systems. He currently serves as the President of SC Engineers, a leading engineering and planning firm in Southern California, providing environmentally responsive and technologically advanced solutions for a variety of facility types. To learn more, please visit the firm website at www.scengineers.net.

Who Will Benefit:

- Those seeking professional advancement as an HVAC designer or engineering, recent engineering graduates, facility engineers, or anyone involved with HVAC systems. This program is highly recommended for those taking the Mechanical Professional Engineering exam.

At a Glance:

- **Number of Courses:** Five required courses
- **Total Units:** 12
- **Estimated Cost:** \$3,370.00 (excludes textbooks)
- **Time to Complete:** Students typically complete the program in 18 months
- **Delivery:** Three courses are taught in-class (only), Two courses are taught online (only)
- **Sequence:** Courses may be taken in any sequence

For more information about this program, please email unexengr@ucsd.edu.

Courses

Required Courses <small>HVAC courses may be taken in any order. If you do not have any HVAC experience, it is recommended that you start with HVAC DDC Basics.</small>	
TITLE & COURSE NUMBER	UNITS
HVAC DDC Networking Design AMES-40139	1.0
HVAC Design Calculations AMES-40019	3.0
HVAC DDC Basics AMES-40170	2.0
HVAC DDC System Design AMES-40000	3.0
HVAC Systems Design AMES-40021	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9152 or Email: unexengr@ucsd.edu

Conditions for Admission

Students should have a desire to learn concepts in Heating, Ventilating, and Air Conditioning (HVAC) and have familiarity with computers.

Human Resource Management Certificate

Overview

Human resource management is a dynamic field that has been rapidly evolving. Today's professionals are moving into more proactive roles as human resource planners and organizational consultants, earning recognition at the highest levels of the organization.

Format Online or In-class*

*Course formats can be mixed to complete certificate.

Est. Cost \$3,900*

*Cost varies by format selection and curriculum updates.

Duration 12-36 Months*

*Varies by student and courses taken per quarter.

UC San Diego Extension's Professional Certificate in Human Resource Management has helped hundreds of individuals expand their knowledge of HR management to enter or progress in the field. The certificate program is designed to provide participants with the latest information and practical insights in order to become responsible and effective professionals.

[Managing Human Resources: An Overview](#) is a mandatory prerequisite for several courses in the program. Many students take more than one course per quarter, and complete the program sooner than the usual 24 months.

Certificate Benefits

- Learn practical applications and underlying rationale of today's HR practices from qualified practitioners and subject-matter-experts. [Instructor Spotlight: Kurt Gering](#)
- Network with other professionals in the program
- Complement your college degree with career-oriented education Facilitate promotions or career changes
- Build and enhance your HR toolkit through evening and online courses

Courses

Required Prerequisite <small>Complete the following course prior to taking other required courses.</small>	
TITLE & COURSE NUMBER	UNITS
Managing Human Resources: An Overview BUS-40010	4.0
Required Courses <small>Complete all 7 courses.</small>	
TITLE & COURSE NUMBER	UNITS
Employee and Labor Relations BUS-40017	3.0
Strategic Talent Acquisition BUS-40874	3.0
Components of Workplace Compensation BUS-40872	3.0

Fundamentals of Employee Benefits BUS-40875	3.0
Training and Development BUS-40020	3.0
Performance Management BUS-40877	3.0
Capstone Required; Choose one to complete last	
TITLE & COURSE NUMBER	UNITS
Workplace Ethics BUS-40531	2.0
Directed Studies in Human Resources BUS-40837	2.0
Other Courses of Interest Not required for the certificate.	
TITLE & COURSE NUMBER	UNITS
Human Resource Management Information Session INFO-70031	0.0
Talent & Sourcing Strategies BUS-40828	2.0
Employee Selection Tactics BUS-40902	2.0
Effective Onboarding Practices BUS-40903	2.0
HR Analytics Workshop BUS-80020	0.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8148 or Email: HRPrograms@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission. Complete the application and pay application fee.

In Vitro Diagnostics Certificate

Overview

Molecular diagnostics, or in vitro diagnostics, are rapidly becoming critical to the delivery of healthcare. In vitro diagnostic products are intended for use in diagnosis of disease or other conditions and play a significant role in prevention, monitoring, diagnosis, and treatment. DNA expression patterns, or biomarkers, can now provide information for the design of new treatments, monitor a treatment's effectiveness as it is studied in a clinical trial, and predict a patient's response to a new treatment. Molecular diagnostics provide a reliable way to determine the course of action for many diseases. It focuses on patterns and uncovers changes, improving a clinician's ability to find irregularities. Some common products that are in-vitro diagnostics include drug tests and blood tests for glucose, liver enzymes, and levels of electrolytes.

This certificate provides an overview of the field from discovery to commercialization of different diagnostic products. You will learn how to use genomic information to discover biomarkers and how to move through stages of validation and into the studies that are needed to obtain regulatory approval.

Key Program Topics

- Biomarker research and theoretical concepts
- Practical issues involved in conducting drug discovery related biomarker research and disease related biomarker identification
- Learn the requirements for moving an IVD product from concept to regulatory approval and market launch
- Get a comprehensive picture of the medical device regulatory process

Certificate Benefits

- Program designed to be completed in only one year
- Hands-on comprehensive training designed to immerse you in the skills needed to successfully get started or advance your career
- Courses taught by leading industry practitioners

Program Audience

This certificate is designed to be applicable to a range of professionals in the

- diagnostics field, including: Engineers
- Sales
- Regulatory affairs and quality assurance
- professionals
- Bench scientists in different branches of biology
- Bioinformatics professionals

Courses

Required Courses <small>All 3 courses required.</small>	
TITLE & COURSE NUMBER	UNITS
In Vitro Diagnostics Product Development BIOL-40244	2.0
Biomarkers BIOL-40258	3.0
Overview of Regulatory Affairs for Medical Device Professionals BIOL-40080	2.0
Elective Courses <small>Six (6) units required.</small>	
TITLE & COURSE NUMBER	UNITS
Genomic Sequencing Technologies BIOL-40237	3.0
Introduction to QA/QC for Drugs & Biologics BIOL-40038	3.0
Good Documentation Practices BIOL-40201	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9353 or Email: unexbio@ucsd.edu

Conditions for Admission

Complete the application and pay application fee. UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Institutional Research Certificate

Overview

Data is becoming increasingly critical at a community college and university level. Leaders of academic institutions want to see greater data from enrollment numbers, student retention, graduation rates, and program details.

UC San Diego Extension's online specialized certificate in **Institutional Research** trains professionals and individuals to learn the fundamental skills to analyze data, conduct routine monitoring, and ultimately conduct institutional research. The certificate offers an overview of the field of institutional research, teaching students to utilize quantitative and qualitative methodologies to create research instruments and evaluate university outcomes.

Instructors and students will link scholarship to practice through case studies, problem-solving exercises, and research projects. Students will have the opportunity to participate in internships and gain real-world experience in each course. This program is ideal for post-baccalaureate students and career professionals new to the discipline of institutional research.

Note: Students must go through the program as a cohort. New cohorts will begin in Fall and Winter. Candidates take one course per quarter for three quarters. Each cohort will have a maximum of 15 students. Tuition is \$975 per course.

Program Highlights

- Can be completed in one year
- Small cohort size with no more than 15 students
- Real-world internships incorporated into each class
- Courses delivered asynchronously online

Required Prerequisite

Institutional researchers come from a variety of fields, and to accommodate the diversity of educational backgrounds we require students take the following two courses in any field:

- Research Methods
- Statistics

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Introduction to Institutional Research BUSA-40942	6.0
Applied Research in Higher Education BUSA-40943	6.0
Diversity Research in Institutional Research BUSA-40944	6.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Institutional Research. Call 858-534-9286 or Email: unexeduc@ucsd.edu

Integrative Nutrition Certificate

Overview

The Integrative Nutrition specialized certificate is a career-focused training program designed for those who want to learn about food as medicine and to coach their patients and clients, families and friends, and members of their communities in understanding the value of food and nutrition as a means to promote health and wellness and prevent and combat disease. This program is designed for existing health professionals, those who aspire to careers in healthcare, and interested laypersons in San Diego, Southern California and beyond who seek to develop or deepen a focus in diet and nutrition with a holistic orientation.

It is composed of online and live sessions taught by UC San Diego health professionals, acclaimed researchers and authors, and expert plant-based chefs. It provides the skills and knowledge required for a basic foundation in the rapidly growing field of Integrative Nutrition.

Certificate Benefits

Upon completion of the program, students are eligible to apply for a complimentary license to teach the UCSD Natural Healing & Cooking program. The program meets continuing education requirements for all holders of a [CNS credential](#).

Foundations in Nutrition I and II offered through the UCSD Extension Integrative Nutrition certificate program provide 60 CE units to fulfill the Foundational Nutrition coursework eligibility requirements for the MD/DO pathway to the Certified Nutrition Specialist (CNS). BCNS requires MD/DOs to complete other specific coursework, obtain a passing exam score, and document 1,000 hours of clinical nutrition practice experience. BCNS reviews each candidate individually, including current course descriptions, transcripts, and experience to determine eligibility. To learn more about becoming a CNS, visit www.NutritionSpecialists.org.

Courses offered by the UCSD Extension Integrative Nutrition certificate program are eligible for 10 CE units per course unit for current Certified Nutrition Specialists.

Who should take the certificate?

This program is designed for:

- Existing health professionals
- Those who aspire to careers in healthcare
- Those who seek to develop or deepen a focus in diet and nutrition with a holistic orientation
- College-level coursework in relevant areas of at least one of these subjects is preferred: culinary arts, non-dietary healing arts, dietetics, nutrition, biology (biochemistry, cell/plant biology or microbiology), or chemistry (inorganic, organic, or analytical). However, individuals are welcome to apply and will be considered on a case-by-case basis.
- Cooking experience is not required, but will be helpful

Demand and Job Prospects

Healthcare in the U.S. has been dramatically shifting in recent years toward greater focus on prevention and wellness, as evidenced by the passing of the Affordable Care Act (ACA) in 2010. In 2011, the National Prevention Strategy (NPS) of the ACA was released with a stated goal of increasing the number of healthy Americans at every stage of life. Nutrition and healthy eating were listed as one of its seven primary priority areas.

Healthcare professionals will be able to utilize the certificate to expand their existing scope of practice by incorporating the use of food as medicine. Program graduates will be able to provide services such as counseling and coaching in the following areas:

- Use of food as medicine
- Diet-centered home health assistance
- Healthy and natural food production for individuals, groups, schools, and businesses
- Personal and group cooking instruction

These types of services will help meet the needs of additional target audiences including new parents and younger people with a growing awareness of the importance of wellness, disease prevention, and self-care, as well as the rapidly increasing population of baby boomers with age-related health concerns.

Industry Certification

Foundations in Nutrition I and II offered through the UCSD Extension Integrative Nutrition certificate program provide 60 CE units to fulfill the Foundational Nutrition coursework eligibility requirements for the MD/DO pathway to the Certified Nutrition Specialist (CNS). BCNS requires MD/DOs to complete other specific coursework, obtain a passing

exam score, and document 1,000 hours of clinical nutrition practice experience. BCNS reviews each candidate individually, including current course descriptions, transcripts, and experience to determine eligibility. To learn more about becoming a CNS, visit www.NutritionSpecialists.org.

Courses offered by the UC San Diego Extension Integrative Nutrition certificate program are eligible for 10 CE units per course unit for current Certified Nutrition Specialists.

The Program:

- **Number of courses:** 8
- **Total units:** 14
- **Estimated cost:** \$2,335 (not including books - \$200 or certificate fee - \$95)
- **Time to Complete:** can be completed in 1 year
- **Delivery:** Part 1 Core Courses offered online every quarter, Part 2 Practical Portion offered in-person Winter and Summer quarters (date/location TBD)

Courses

Part I Core Courses <small>All courses required</small>	
TITLE & COURSE NUMBER	UNITS
Foundations of Nutrition I: Introduction to Nutrition Science BIOL-40320	3.0
Foundations of Nutrition II: Diet and Disease BIOL-40321	3.0
Food as Medicine: The Art and Science of Food, Nutrition and Self-Healing FPM-40618	1.0
Behavior Change and Lifestyle Coaching FPM-40587	1.0
The Business of Integrative Nutrition FPM-40619	1.0
Advanced Nutrition Topics FPM-40620	2.0
Part II Practical <small>All courses required</small>	
TITLE & COURSE NUMBER	UNITS
Natural Healing and Cooking FPM-40623	2.5
Nutrition Practicum FPM-40624	0.5

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-534-9262 or Email: unexhealthcare@ucsd.edu

Intellectual Property Certificate

Overview

As defined by the World Intellectual Property Organization: "Intellectual property refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce.

The Intellectual Property Professional Certificate is designed to serve the diverse needs of the community by providing a foundation in securing and maintaining patents, copyrights and trademarks.

Mirroring the local economy, the Intellectual Property Professional Certificate offers a rich diversity in the disciplines of biosciences, software development, medical devices and the arts. Students are carefully prepared to comprehend the unique complexities of their specific industry in advanced subject specific courses.

This Intellectual Property Professional Certificate is designed for the professional who wishes to change emphasis or earn continuing education credit; for the novice, wishing to begin a career in intellectual property; and those simply wishing to gain advice, perspective, develop basic skills, and/or network for personal gain. With the help of a highly-qualified and prestigious advisory board, we have developed a comprehensive program that focuses on essential intellectual property concepts and procedures, while allowing the student to customize his/her program by choosing an emphasis through electives.

Format

100% Online*

*In-class options available for some courses; varies by quarter.

Est. Cost

\$4,095*

*Cost varies by format selection and curriculum updates.

Duration

12-24 Months*

*Varies by student and courses taken per quarter.

The Intellectual Property Professional Certificate will focus on a variety of topics, from core subject patents, trademarks and copyrights, and electives that include current topics in Biosciences, Pharmaceutical, Telecommunications, Software Development, Literature and Art.

Please Note: The Intellectual Property Certificate is NOT approved by the American Bar Association (ABA) because it is not a type of program that the ABA oversees, approves, or certifies. The Paralegal Certificate Program is the only UC San Diego Extension program currently approved by the ABA.

Courses

Required Courses <small>All 7 are required</small>	
TITLE & COURSE NUMBER	UNITS
Principles of Copyrights BUSA-40539	3.0
Principles of Patents BUSA-40537	3.0
Principles of Trademarks BUSA-40538	3.0
Patent Prosecution BUSA-40540	3.0
Patent and IP Searching BUSA-40541	3.0

Advanced Issues in Intellectual Property BUSA-40542	3.0
Intellectual Property Law BUSA-40263	2.0
Elective Courses <small>Minimum of 2 units required</small>	
TITLE & COURSE NUMBER	UNITS
Biotech Patent Law BUSA-40716	2.0
Foreign Patent Prosecution BUSA-40624	2.0
Patent Drafting BUSA-40682	2.0
Computer and Software Law BUSA-40211	1.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8164 or Email: unexlaw@ucsd.edu

Conditions for Admission

Complete the application and pay application fee.

Java Programming Certificate

Overview

Java remains one of the most sought after skills in the field of Information Technology. Java continues to grow faster than any other computer language or development environment. Java is a simple, object-oriented, platform-independent language, that can be used to develop applets, servlets, and other applications.

The Java programming language lies at the core of many large-scale business applications that fuel the internet economy. Embedded devices, enterprise servers, network applications, web servers, and wireless applications are highest among these applications.

Java is widely used in business-to-business commercial systems. And, due to its inherent portability, it is utilized in a wide variety of consumer electronics including smart phones running Google's Android OS to embedded systems in a rapidly expanding number of consumer products. Programmers currently using other languages are likely to encounter projects in the near future that will require knowledge of Java.

The Java Programming certificate provides concentrated study and working knowledge of the Java programming language as well as object-oriented programming and design. The certificate curriculum begins with fundamentals in Java programming concepts, moves through core Java programming competencies, and culminates with advanced Java concepts and their real world application.

Program Highlights

Students will gain operational knowledge of many aspects of the Java

- programming language, including: Object-oriented programming and design techniques
- Files, Input/Output Streams, NIO.2, and XML
- Serialization Java Graphic User Interface development
- Exceptional handling, recursion, and multi-threading Evaluation of error handling approaches
- Integration of relational database technologies: JDBC, SQL, and MySQL
- The Java Virtual Machine (JVM) - Managing Object Creation, Execution and Garbage Collection Java Networking with Sockets, Distributed Java Applications, and Java Security
- Concurrent Programming - Thread handling and Synchronization Representational state transfer (REST) based web services

Program Benefits

- A structured curriculum of increasing complexity taught by experienced industry practitioners Become proficient in Java language syntax and Java application development
- Apply object-oriented design principles by writing programs in Java
- Learn to debug Java programs using a modern IDE and run unit tests to verify program behavior Develop a complex Graphic User Interface (GUI) application
- Incorporating Java-based data access technology to access information in relational databases Write, implement, and sustain functional Java code
- Certificate courses prepare students for an Oracle Java Certification exam through Oracle University

Demand and Job Prospects

- According to ZDNET.com, knowing this 20-year-old programming language can propel you into one of the highest paid entry-level careers. [Learn more.](#)
- Object-oriented development software, and specifically Java, is an O*NET "Hot Technology" (a technology requirement frequently included in employer job postings). Burning Glass projects a job growth rate for "Software Developers, Applications" between 2016-2026 to be 40% in California and 30.7% nationally.
- In 2017, there was a 10% increase in job openings requiring Java programming abilities; 2018 is on pace for an even greater increase (source: Burning Glass Technologies)
- Top companies hiring individuals nationally with Java skills nationwide in the past year include Amazon, Revature, IBM, Cynet Systems, JP Morgan Chase, U.S. Bancorp, Accenture, American Express, Booz Allen Hamilton Inc., Northrop Grumman, Raytheon and General Dynamics (source: Burning Glass Technologies)

Who Will Benefit

Students can apply Java proficiency to many career paths, including development in Android, Java web, J2ME, and embedded applications. The most common types of students in the program are:

- Developers refreshing their Java and/or object oriented programming language competencies
- Non-programmers learning programming to enhance their career
- Managers/QA that work closely with programmers and want to better understand Java
- Career Changers planning to join the workforce as programmers hoping to learn development skills

At a Glance

- **Number of courses:** 4 required courses (5 if the prerequisite course is included)
- **Total units:** 12 (15 if the prerequisite course is included) **Estimated cost:**
 - \$2,875 (excludes textbooks and materials) **Time to complete:** In as little as one year
- **Delivery:** Entirely online or in class in San Diego, CA

For more information about this program, please email Infotech@ucsd.edu

Courses

Prerequisites	
TITLE & COURSE NUMBER	UNITS
Introduction to Programming Using Java CSE-41242	3.0
Required Courses	
TITLE & COURSE NUMBER	UNITS
Java Programming I: Fundamental Java Concepts CSE-40479	3.0
Java Programming II: Core Java Programming CSE-40480	3.0
Java Programming III : Intermediate Java Programming CSE-40481	3.0
Java Programming IV : Advanced Java Programming Structures CSE-40482	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9152 or Email: infotech@ucsd.edu

Conditions for Admission

Complete the application and pay application fee. UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Lactation Consultant: Pathway 1 Certificate

Overview

This Lactation Consultant Pathway 1 professional certificate program expands the clinical knowledge of the breastfeeding professional who interfaces with the breastfeeding client by understanding problems of clinical management.

Certification as a lactation consultant is approved preparation for healthcare providers who interact and triage infant nutrition problems and concerns. The course of study is based on objectives, guidelines and competencies established by LEAARC.

Although UC San Diego does not issue the credential of Lactation Consultant, they support the [IBLCE](#).

Program Benefits

Students who complete this certificate will:

- Expand their clinical knowledge as a breastfeeding professional who interfaces with the breastfeeding clients by understanding problems of clinical management
- Receive a professional certificate of completion in lactation consultant education, which is approved preparation for healthcare providers who interact and triage infant nutrition problems and concerns
- Study objectives, guidelines and competencies established and approved by LEAARC

Pathway 1 Qualifications

Pathway 1 Candidates are defined as having both of these requirements:

- Have an IBLCE approved license, be a registered or recognized health professional or have completion of all 14 IBLCE Educational Requirements. (IBCLE Approved Health Professions: Dentist, Degreed Nutritionist, Dietician, Midwife, Nurse, Occupational Therapist, Pharmacist, Physical Therapist or Physiotherapist, Physician or Medical Doctor, Speech Pathologist or Therapist.)
- 1000 clinical hours directly with breastfeeding dyads within the past 5 years (Verifiable by employer)

Demand and Job Prospects

- Lactation Consultants typically interact with patients in a role similar to nurse practitioners, as advanced practice clinicians. They generally work independently to triage and manage a clinical lactation concern for mother, baby, and family unit. In most areas, they are paid an hourly rate that seems to parallel the RN salary range which is from \$20-\$45 per hour.
- Lactation consultants do not have to be RN's to function in their role, although some hospitals may have an additional requirement that the IBCLC be an RN.
- May be employed in hospitals and manage hospital breastfeeding centers and boutiques. In this role they may facilitate other lactation consultants, breastfeeding support groups, triage phone calls and warm lines, and manage breastfeeding stores that rent breast pumps and sell breastfeeding clothing and products.
- Frequently hired by WIC, the federally funded Women, Infant, and Children program. These lactation consultants are usually also dieticians, although that is not a requirement.
- Some UC San Diego Extension Lactation Consultant graduates have chosen to establish private practices. In this role they do lactation consultations with patients and their families either in a business setting or in the patient's home. The fees are set by the individual lactation consultant. The business may also include retail products, breast pump rentals, support groups and classes.
- Lactation Consultants are generally employed part time although more full time positions are becoming available. Currently, UC San Diego Extension does not offer job placement assistance, however most graduating students who have sought employment as Lactation Consultants have secured positions.

Industry Certification

UC San Diego Extension supports IBLCE as the credential and certification board for practicing Lactation Consultants. The IBLCE exam is given twice a year in October and April. The student must complete the IBLCE requirements as currently defined at www.IBLCE.org.

Students may meet the certification exam requirements by any pathway, however UC San Diego only supports Pathway 1 and Pathway 2. All UC San Diego Extension students who successfully complete the training program and its requirements are eligible to sit for the IBLCE exam.

The Program

- **Number of courses:** 1 class
- **Total units:** 12
- **Estimated cost:** \$995
- **Time to Complete:** 6 months
- **Delivery:** Online

Note: If you would like this Professional Certificate of Completion, there is a \$95 fee. However, this physical certificate is not required by the IBCLC to sit for the exam.

To learn about becoming a Lactation Consultant in more detail, please visit breastfeeding-education.com and watch a comprehensive [presentation](#) from our lead instructor, Gini Baker.

Applications are accepted quarterly.

Courses

Required Course <small>Only 1 of the courses below required depending on approved Pathway</small>	
TITLE & COURSE NUMBER	UNITS
Pathway 1: Lactation Consultant Education RMED-40019	12.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-246-2312 or Email: ucsdlactation@ucsd.edu

Lactation Consultant: Pathway 2 Certificate

Overview

****UPDATED as of 4/12/19**** To: All Students

Due to staffing changes, UCSD Extension will be Postponing our Pathway 2: Hybrid Lactation Consultant Program for the 2019 program year. We know you have dedicated your valuable time and energy to fulfilling the program prerequisites for this year so we genuinely apologize for the inconvenience of this postponement. Our Founder, Lead Faculty and Director of Lactation Education Gini Baker, has built an exceptional Lactation Education Program, and in keeping with the highest level of quality she created, UCSD Extension will be taking this year to recruit, train and transition a new Lead Faculty and staff for the program. We are dedicated to bringing you the highest quality program, to make you the most prepared Lactation Consultants in the profession. The Postponement of the Pathway 2: Hybrid Lactation Consultant Program is **only for the 2019 program year, and does not include all other Lactation Programs and Courses.**

As always, UCSD Global Lactation Alliance is dedicated to bringing students the highest quality program and the profession the best prepared Lactation professionals and consultants. We look forward to educating you in 2020.

*****This statement is only regarding the Pathway 2 Program. All other Lactation programs & courses are available*****

This Lactation Consultant Pathway 2 professional certificate program expands the clinical knowledge of the breastfeeding professional who interfaces with the breastfeeding client by understanding problems of clinical management.

Certification as a lactation consultant is approved preparation for healthcare providers who interact and triage infant nutrition problems and concerns. The course of study is based on objectives, guidelines and competencies established by LEAARC.

Although UC San Diego does not issue the credential of Lactation Consultant (IBCLC), this program complies with the [IBLCE](#) guidelines.

Program Benefits

Students who complete this certificate will:

- Expand their clinical knowledge as a breastfeeding professional who interfaces with the breastfeeding clients by understanding problems of clinical management
- Receive a professional certificate of completion in lactation consultant education, which is approved preparation for healthcare providers who interact and triage infant nutrition problems and concerns
- Study objectives, guidelines and competencies established and approved by LEAARC

Pathway 2 Qualifications

Pathway 2 Candidates are defined as having completed all of the requirements below, prior to application:

- Completion of all 14 “General Education Courses” as defined by the IBLCE –or– be an approved Health Professional (IBCLE Approved Health Professions: Dentist, Dietician, Degreed Nutritionist, Midwife, Nurse, Occupational Therapist, Pharmacist, Physical Therapist or Physiotherapist, Physician or Medical Doctor, Speech Pathologist or Therapist.)
- These course requirements can be reviewed at [IBLCE.org](#) or see FAQs at [breastfeeding-education.org](#)
- Completion of the [UC San Diego Extension Lactation Educator Counselor Training Program, Course Number: RMED-40006](#)

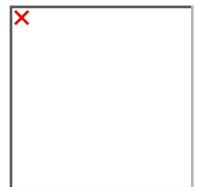
Demand and Job Prospects

- Lactation Consultants typically interact with patients in a role similar to nurse practitioners, as advanced practice clinicians. They generally work independently to triage and manage a clinical lactation concern for mother, baby, and family unit. In most areas, they are paid an hourly rate that seems to parallel the RN salary range which is from \$20-\$45 per hour.

- Lactation consultants do not have to be RN's to function in their role, although some hospitals may have an additional requirement that the IBCLC be an RN.
- May be employed in hospitals and manage hospital breastfeeding centers and boutiques. In this role they may facilitate other lactation consultants, breastfeeding support groups, triage phone calls and warm lines, and manage breastfeeding stores that rent breast pumps and sell breastfeeding clothing and products.
- Frequently hired by WIC, the federally funded Women, Infant, and Children program. These lactation consultants are usually also dieticians, although that is not a requirement.
- Some UC San Diego Extension Lactation Consultant graduates have chosen to establish private practices. In this role they do lactation consultations with patients and their families either in a business setting or in the patient's home. The fees are set by the individual lactation consultant. The business may also include retail products, breast pump rentals, support groups and classes.
- Lactation Consultants are generally employed part time although more full time positions are becoming available. Currently, UC San Diego Extension does not offer job placement assistance, however most graduating students who have sought employment as Lactation Consultants have secured positions.

Industry Certification

The Lactation Consultant Program provided by UC San Diego, Extension is accredited by the [Commission on Accreditation of Allied Health Education Programs](#) (CAAHEP) upon the recommendation of the Lactation Education Accreditation and Approval Review Committee. The program earned its initial accreditation on November 17, 2017 and is current until November 30, 2022.



Commission on Accreditation of Allied Health
Education Programs 25400 U.S. Highway 19 North,
Suite 158
Clearwater, FL 33763
727-210-2350
www.caahep.org

UC San Diego Extension supports IBLCE as the credential and certification board for practicing Lactation Consultants. The IBLCE exam is given twice a year in October and April. The student must complete the IBLCE requirements as currently defined at www.IBLCE.org.

Students may meet the certification exam requirements by any pathway, however UC San Diego only supports Pathway 1 and Pathway 2. All UC San Diego Extension students who successfully complete the training program and its requirements are eligible to sit for the IBLCE exam.

Courses

Prerequisite Course	
TITLE & COURSE NUMBER	UNITS
Lactation Educator Counselor Training Program RMED-40006	4.0
Required Course	
TITLE & COURSE NUMBER	UNITS
Pathway 2: Hybrid Lactation Consultant RMED-40027	22.0
IBLCE Exam CE Courses <small>Pathway 2 students additional CE subjects required for IBLCE exam</small>	
TITLE & COURSE NUMBER	UNITS
Medical Terminology: An Anatomy and Physiology Approach FPM-40632	1.5
Anatomy & Physiology for Allied Health FPM-40320	4.5
Ethics & Professionalism for the Lactation Intern RMED-80012	0.0

Lactation Medical Documentation RMED-80000	0.0
Occupational Safety & Security for Health Professionals FPM-40554	1.0
Fundamentals of Infection Prevention/Clinical Epidemiology FPM-40577	1.0
CT: Practical Clinical Statistics for the Non-Statistician FPM-40233	2.0
Foundations of Nutrition I: Introduction to Nutrition Science BIOL-40320	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-246-2312 or Email: ucsd lactation@ucsd.edu

Leadership and Teamwork Certificate

Overview

In today's job market, an increasing number of companies seek candidates with strong "soft skills" to complement their technical skills and expertise. Regardless of the field, qualities such as solid communication skills, self-awareness, time management, and the ability to function on diverse and collaborative teams are highly sought-after. This certificate in Leadership and Teamwork is designed to equip participants with those skills to help them excel in any working environment.

The courses in the certificate focus on leadership, teamwork, and project management. Throughout the program, students will implement these skills by working collaboratively on teams to manage hands-on campus projects. The culmination of the program will include a showcase of the students' projects to campus leaders, industry guests, and the general public. Upon completion of the program, students will be empowered to transition into their career pursuits.

Program Objectives

- Understand your strengths, preferences, styles, and areas for development to improve your leadership capacity Discover best approaches to make teams work together and how to improve their dynamics
- Enhance presentation skills by developing effective messaging and perfecting delivery according to the audience Develop an appreciation for individuals with different roles and responsibilities in interdisciplinary projects
- Learn to communicate effectively and efficiently with fellow team members, direct reports, and stakeholders, who may have different backgrounds and areas of expertise
- Gain an understanding of Project Management tools and techniques
- Practice your newly acquired skills and build your resume while making an impact through a real life project

Admissions

At this time, only current UC San Diego graduate students and postdocs are permitted to participate in the Leadership Teamwork Certificate. Applicants that do not match this profile will not be admitted.

Schedule

Students will complete the full program in two quarters, starting in Fall and finishing in the Spring. Courses will run on Tuesday evenings during each quarter from 6PM to 9PM.

Program Orientation: 9/24/2019

Effective Leadership and Teamwork in the Workplace: 10/1/2019-12/3/2019; no

mtg 11/26/2019 Leadership and Teamwork Practicum: 1/7/2020-2/11/2020

Presentations: 2/18/2020

Project Management for the Collaborative Workplace: 2/25/2020-4/28/2020; no mtg 3/24/20

Fees: \$395, paid over two quarters. Vouchers not accepted.

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Effective Leadership and Teamwork in the Workplace BUS-40886	3.0
Leadership and Teamwork Practicum BUS-40887	3.0
Project Management for the Collaborative Workplace BUS-40889	3.0

Admission

The applications for the 2019-2020 cohort are now open. Applications are due by **September 6, 2019**. Applicants will be notified of acceptance by September 13, 2019.

At this time, only current UC San Diego graduate students and postdocs are permitted to participate in the Leadership Teamwork Certificate. Applicants that do not match this profile will not be admitted.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Executive Programs and Corporate Education. Call 858-534-9151 or Email: corped@ucsd.edu

Conditions for Admission

The applications for the 2019-2020 cohort are now open. Applications are due by **September 6, 2019**. Applicants will be notified of acceptance by September 13, 2019.

Any UC San Diego graduate student or postdoctoral scholar in good standing is eligible to be considered for acceptance into the program. To ensure a diverse cohort, applicants will be evaluated based upon:

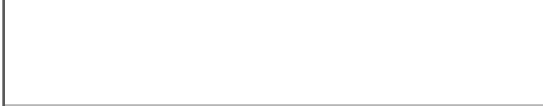
- Year in program and/or advancement to candidacy status
- Area of study or research interest
- Employment & volunteer history
- Statement of interest

Lean Six Sigma Black Belt Certificate

Overview

Want to know more about Lean Six Sigma Black Belt?

Join us for a free information session on **Friday, August 23rd** from 8:00am-9:00am. Meet our lead instructor, ~~learn about the Lean Six Sigma Black Belt program~~ and enjoy a light breakfast on us! After, step into the classroom to watch current students present their LSS projects.

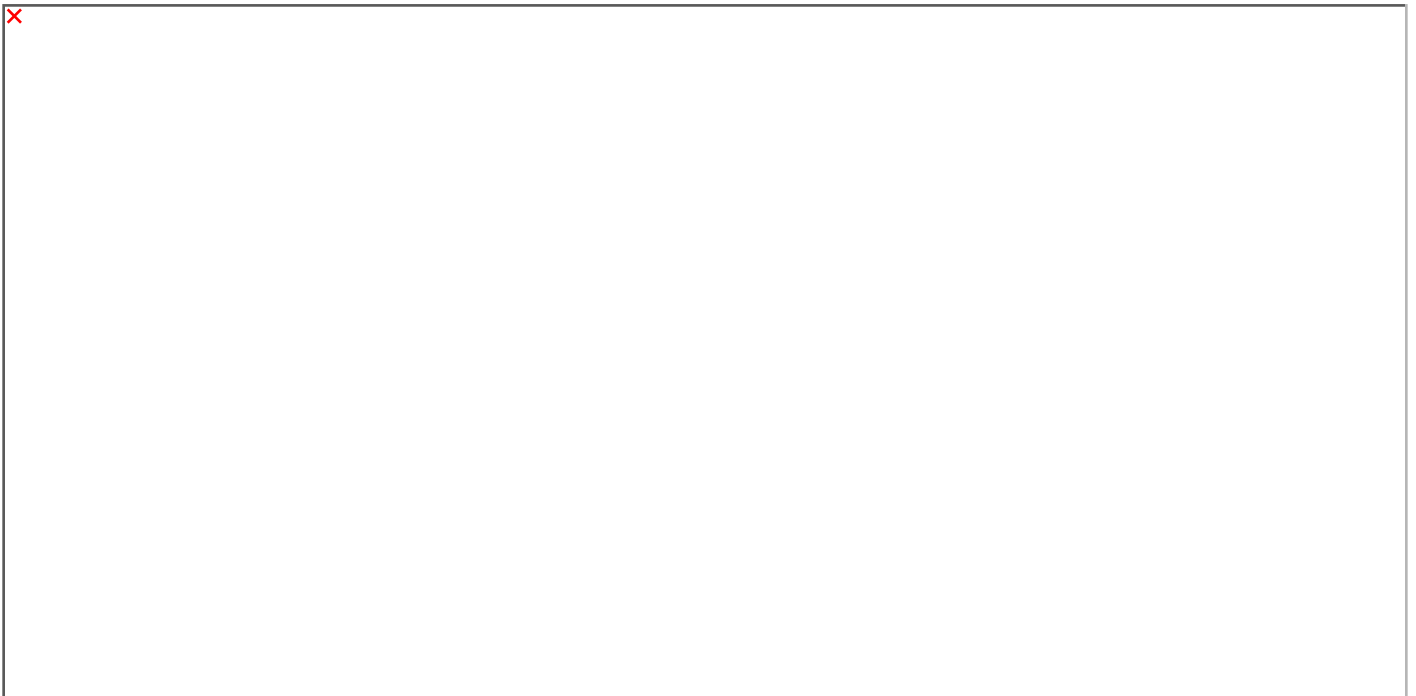


*Accepting Applications for the 2019 and 2020 Sessions--Space is limited. Program begins next on September 13, 2019.

Lean Six Sigma is a set of tools, techniques and operating principles that represents the best of practices in quality and process improvement resulting in improved performance and reduced costs.

Course Benefits

- The 12-session program will help you develop an understanding and learn the applications of proven approaches to maximize productivity through process requirements, constraints and flow.
- Learn the established Lean Six Sigma body of knowledge and understand how to implement it directly into your workplace through a project. Earn the credentials to be a Lean Six Sigma leader within your organization.
- Classroom instruction and practical hands-on projects, allow direct application of Lean Six Sigma, resulting in a projected ROI of \$100K. Program curriculum is based on the [American Society for Quality's \(ASQ's\) Body of Knowledge](#), providing the education needed to prepare for the [Six Sigma Black Belt Certification \(CSSBB\)](#) exam. Training will also cover areas of competency in portions of ASQ's [Manager of Quality \(CMQ\)](#), [Certified Quality Engineer \(CQE\)](#), and [Quality Auditor \(COA\)](#) certifications.
- Receive a Specialized Certificate in Lean Six Sigma (LSS) Black Belt, and complete the educational training necessary to add LSS Black Belt to your resume.
- Achieve one of the projects required to be eligible to sit for the certification exam.
- Project Management Professionals are eligible to earn 90 PDU's through the [Project Management Institute](#)



[\(PMI\)](#), in order to maintain your [PMP](#) certification.

Program Fee

The total cost of training is \$5,495, and this includes all course

- materials: Computer Software (SPC XL & DOE PRO)
- Course binder
- Textbooks
- Application and Certificate
- Processing Fee
- Catered lunches

Please reach out to ProcessPrograms@ucsd.edu if you would like to request a no-interest payment plan. There is NO fee to submit an application for this program.

Are you a Lean Six Sigma Green Belt? Check out our in-class and fully online [Accelerated Lean Six Sigma Black Belt](#) program. Contact ProcessPrograms@ucsd.edu to determine whether you are eligible to join.

Course Number: MAE-40004

Credit: 9.00 unit(s)

Related Certificate Programs: [Lean Six Sigma Black Belt](#)

Courses

Required	
TITLE & COURSE NUMBER	UNITS
Lean Six Sigma Black Belt MAE-40004	9.0
Information Session	
TITLE & COURSE NUMBER	UNITS
Lean Six Sigma Information Session (Black/Green Belt) INFO-70032	0.0
Other Courses of Interest	
TITLE & COURSE NUMBER	UNITS
Lean Six Sigma Green Belt MAE-40013	4.0
Accelerated Lean Six Sigma Black Belt ENG-40021	5.5
Lean Six Sigma LearnAbout Tour MAE-80002	0.0
Project Management Boot Camp BUSA-40714	3.0
Lean and Six Sigma Alumni Event BUSA-70003	0.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8133 or Email: ProcessPrograms@ucsd.edu

Conditions for Admission

Note: Admission is limited. Interested students must complete application prior to enrolling in the program. [Please apply here.](#)

Machine Learning Methods Certificate

Overview

Our Specialized Certificate in Machine Learning Methods will introduce students to the subject matter using a variety of tools including: Linear Algebra, Deep Learning, TensorFlow, and Deep Neural Networks (DNN).

Machine Learning is an application of artificial intelligence that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. According to a report by BCC Research, the ability of computers to "learn" without having to be programmed will continue to impact global markets in coming years. This growth is being driven by increased computing power, the expanding need for learning and prediction applications, and rising usage of the cloud for data storage.

A student completing this certificate will accumulate an important set of skills needed in current machine learning careers. Courses consist of both theoretical and practical skills complementing each other and hence enhancing the machine learning scientist abilities. Furthermore, courses are designed and classified to train students further in the field of machine learning, as well as coordinating with other engineering disciplines and industrial practices.

Program Benefits

- All courses can be taken online, many offered each academic quarter
- Practical, comprehensive hands-on training
- Taught by leading industry practitioners
- Immediately applicable skills
- Industry-neutral curriculum allows you to apply knowledge to your field of interest

Key Program Topics

- Learn linear algebra skills necessary for machine learning and neural network modelling
- Tools and underlying mathematical concepts of data interpretation that work with specific models of neural networks (NN)
- Review tools available to build Deep Learning including: Tensor Flow, Keras, and Theano
- Perform detailed analysis of leading machine learning approaches and popular NN like CNN, FCNN, ImageNet, ResNet, and RNN
- Apply NN in image classification, image segmentation and natural language processing (NLP)
- Algorithms and modelling used in supervised learning of neural networks

Demand and Job Prospects

- According to the U.S. Bureau of Labor Statistics (BLS), the median wages for a Computer and Information Research Scientist are \$86,510 per year nationwide
- Computer and Information Research Scientists is an O*NET "Bright Outlook" job: a new and emerging role in a high growth industry
- According to Burning Glass, top companies hiring Machine Learning Scientists nationwide in the past year include IBM, Apple, Booz Allen Hamilton, Facebook, Conduent, Google, Microsoft, Twitter, and many others in the tech industry.

Who Will Benefit

- Individuals looking to learn machine learning skills using easily accessible tools
- Those seeking to transition into a career in Artificial Intelligence and/or Machine Learning
- Students desiring skills to enhance their prospects for a career in the hot AI market
- Individuals with mathematical and computer sci backgrounds looking to add to their existing skillset.

At a Glance

- **Number of courses:** One required class and three electives (*complete two elective courses*)
- **Total units:** Nine
- **Estimated cost:** \$2,045 - not including any required textbook or software
- **Time to complete:** Flexible; most students complete the program in six to nine months
- **Delivery:** All courses offered online

For more information about this program, please contact: unex-techdata@ucsd.edu.

Courses

Required Course	
TITLE & COURSE NUMBER	UNITS
Linear Algebra for Machine Learning CSE-41287	3.0
Elective Courses <small>Choose two</small>	
TITLE & COURSE NUMBER	UNITS
Probability and Statistics for Deep Learning CSE-41305	3.0
Practicum for Deep Neural Networks CSE-41311	3.0
Deep Learning Using TensorFlow CSE-41312	3.0
Other Courses of Interest <small>Not required for certificate</small>	
TITLE & COURSE NUMBER	UNITS
Data Science with R CSE-41308	3.0
Data Analytics Using Python CSE-41204	3.0
Data Science using SAS CSE-41320	3.0
Discrete Math: Problem Solving for Engineering, Programming, & Science CSE-41243	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9351 or Email: unex-techdata@ucsd.edu

Marketing Certificate

Overview

The Professional Certificate in Marketing is designed for individuals looking to develop the skills needed to enter the field or advance their career and knowledge base. This comprehensive program covers a range of integrated marketing channels and provides core competencies needed to create, implement, manage, and analyze effective campaigns.

Format In-Class & Online

*Online options vary by quarter.

Est. Cost
\$4,475*

*Cost may vary due to elective course selection.

Duration
12 - 24 Months*

*Varies by student and courses taken
per quarter.

Program Benefits:

- Explore the building blocks of effective marketing programs
- Gain tools to appropriately measure and evaluate the effectiveness of digital-marketing campaigns Learn how to use market research results to drive successful product and service design
- Learn how to create compelling communication with current and prospective customers Focus on topics that apply specifically to your goals in your elective coursework Networking opportunities with other professionals

Who Should Attend:

The certificate program is designed for individuals looking to start their career in marketing as well as those looking to advance their careers in digital marketing, consumer insights, market research and analytics, branding, and social media analytics. Students may pursue the full program or select individual courses based on their needs.

The Program:

- Number of courses: 4 required courses and 5 units (approx. 2 courses) of elective courses Total units: 18 units
- Estimated cost: Total cost is \$4,475.
- Time to Complete: Can be completed in approximately 1.5 years Delivery: All required coursework is offered both online and in-class

For more information: Fiona O'Donnell-Lawson at 858-534-8139 or MktgProgram@ucsd.edu

Courses

Prerequisite <small>Complete the following course prior to taking other required courses.</small>	
TITLE & COURSE NUMBER	UNITS
Elements of Marketing BUSA-40940	3.0
Required Courses <small>Complete all courses.</small>	
TITLE & COURSE NUMBER	UNITS
Digital Marketing BUSA-40879	3.0
Market Research and Analytics BUSA-40442	4.0
Brand Strategy and Positioning BUSA-40451	3.0
Elective Courses <small>Choose five (5) units.</small>	
TITLE & COURSE NUMBER	UNITS
Social Media Marketing BUSA-40700	3.0
Customer Experience (CX) BUSA-40878	3.0
Search Engine Optimization (SEO) and Marketing CSE-41157	3.0
Consumer Insights BUSA-40936	3.0

Admission

[Elements of Marketing](#) is a prerequisite for other required marketing courses.

Professional Organizations

Connect with marketing professionals by attending local professional association events, including:

- [American Marketing Association San Diego Chapter \(AMA\)](#)
UC San Diego Extension students receive discounted student rate
- [San Diego Direct Marketing Association \(SDDMA\)](#)
UC San Diego Extension students receive discounted student rate

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8139 or Email: MktgProgram@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Mechanical Analysis and Design Certificate

Overview

Today's sophisticated products require ever advancing mechanical systems and components. High-tech companies, such as Apple, Google and Amazon, are looking for mechanical engineers with an understanding of new materials and their application.

The Mechanical Analysis and Design certificate will provide the latest tools and proficiencies necessary for the engineer to develop a wide range of mechanical systems and components. Students with a relevant degree (typically related to mechanical engineering) that complete the certificate will accumulate a set of competencies highly sought after in today's job market.

The curriculum consists of both hard and soft skills complementing the mechanical engineer's abilities in component and system analysis and design development tools. The courses are designed and classified to train the mechanical engineer further in the field, as well as coordinating with other engineering jobs and industrial practices.

This highly practical, hands-on program will allow the student to apply the knowledge they learn immediately to their current assignments with proficiency.

Program Benefits

- Developed and taught by industry professionals
- Become familiar with SolidWorks, MATLAB, 3D modeling, reverse engineering and injection molding methodologies
- Hands-on comprehensive training in ANSYS, FEMAP & GD&T
- Practical experience building off of existing skills and/or education

Key Program Topics

- **SolidWorks** computer-aided design and analysis software
- **3D modeling** fundamentals and applications
- **Reverse engineering** techniques including calipers, hard probe, and 3D scanning
- **Plastic injection molding**, including material selection and part design
- **MATLAB** for design and analysis processes
- **Reliability Centered Maintenance** and Consequence of Failure Analysis (COFA)
- **Geometric Dimensioning & Tolerancing (GD&T)** practical applications
- **Finite Element Method (FEM)** using FEMAP and ANSYS modeling programs

Demand and Job Prospects

- According to the U.S. Department of Labor, the mean annual wages for a Mechanical Engineer is \$91,500 per year nationwide and \$104,030 per year in California.
- Mechanical Engineering jobs are O*NET "Green" jobs (an occupation with increasing demand as a result of "green" economy activities and technologies) with a 5% to 9% projected growth rate through 2026
- According to Burning Glass, top companies hiring individuals for Mechanical Engineering jobs nationwide in the past year include General Electric, Raytheon, General Motors, Amazon, Apple, BAE Systems, Microsoft, Intel and Google.

Who Will Benefit

Individuals interested in being competitive for modern mechanical engineering jobs, specifically

- **Professionals** with engineering backgrounds, typically in mechanical engineering
- **Students** that have recently completed bachelors of science requirements, usually in mechanical engineering or related areas

At a Glance

- **Number of courses:** Five courses
- **Total units:** 15

- **Estimated cost:** \$4,020 (includes certificate fee and courses)
- **Time to complete:** as short as one year
- **Delivery:** In-person in San Diego, CA

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
SolidWorks MAE-40028	3.0
Introduction to Reverse Engineering with SolidWorks MAE-40034	3.0
Plastic Part Design for Injection Molding MAE-40033	3.0
Tracks <small>One required</small>	
TITLE & COURSE NUMBER	UNITS
Reliability Centered Maintenance & FMEA MAE-40025	3.0
Intro to FEMAP and ANSYS Finite Element Modeling MAE-40032	3.0
Elective Courses <small>One required</small>	
TITLE & COURSE NUMBER	UNITS
Mechanical Design with MATLAB MAE-40030	3.0
Geometric Dimensioning & Tolerancing (GD&T) MAE-40031	3.0
Courses of Interest <small>Not required for Certificate</small>	
TITLE & COURSE NUMBER	UNITS
LabVIEW Programming CSE-40834	3.0
LabVIEW Application Development CSE-41141	3.0
MATLAB Programming for Science and Engineering CSE-40848	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-1566 or Email: unexengr@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Medical Coding Certificate

Overview

Despite advances in medical coding software, trained coders are more in demand than ever. In fact, the profession is expected to grow much faster than the national average of all professions over the next eight years, according to the Bureau of Labor Statistics.

This intensive, fully online program will expose participants seasoned to experts in the field, new requirements and emerging tools and technologies for capturing patient information, and prospective careers in the field.

Coders are the critical link between clinicians (physicians and other clinical professionals) and the billers, capturing/coding each procedure and aspect of treatment to enable billing staff to bill completely and accurately for services provided. Appropriate reimbursement for services helps ensure the solvency of the medical enterprise. Coding review patients' records and assign numeric codes for each diagnosis and procedure. To perform this task, they must possess expertise in the ICD-10-CM and ICD-10-PCS coding system and the surgery section within the CPT coding system. In addition, the Coding Specialist is knowledgeable of medical terminology, disease processes, and pharmacology, and is invaluable as a liaison among physicians, case managers, compliance professionals, financial services, and hospital departments.

The Medical Coding Specialist Certificate program provides comprehensive education to prepare qualified individuals to become an outpatient and/or an inpatient coding professional. It will also enhance the skills of individuals who are currently coding in a healthcare setting. Upon completion of the 27-credit hour program, students earn a professional certificate from UC San Diego Extension.

Certificate Benefits

At the conclusion of the program students will be able to:

- **Relate the applicable clinical descriptions** (Medical Terminology, Anatomy & Physiology, Pathophysiology and Pharmacology) found in the clinical review material to the proper coding categories in CPT, ICD-10-CM, ICD-10-PCS and HCPCS Level II
- **Accurately construct and assign** diagnosis codes and procedure codes in both the Outpatient (CM) and Inpatient (PCS) setting **Associate procedure and diagnosis codes** to the nature of the presenting problem(s) or chief complaint of the patient **Understand the relationship** between the Procedural Service and the Diagnostic Description (the procedure outlines **what** the Physician did, and the Diagnosis explains **why** he/she did it) and additionally **proves the medical necessity for the encounter**
- **Explain and identify** various compliance strategies and the payment methodology systems and be able to describe the billing process and reporting
- **Accurately translate** the Physician Narrative(s) into the coding nomenclatures that accurately reflect the services rendered by the physician in a billable format for reimbursement
- **Abstract all of the billable services** from a medical record to assure reimbursement is commensurate with the work performed **Perform self or internal audits** to assure all coding and compliance theories and rules are being followed and appropriately applied in the workplace
- **Understand the Legal & Ethical issues** in coding and how they are applied in the Health Information environment.

Who should take this certificate?

- Individuals who want to work as an inpatient and/or outpatient coding professional
 - Individuals who are currently in the healthcare setting wishing to enhance their skills
- The certificate is intended for individuals who have met the following requirements:
- High-School graduation/GED
 - Introduction to Medical Coding (MEDC-40024)
 - Medical Terminology: An Anatomy and Physiology Approach (FPM-40632) Anatomy & Physiology for Allied Health (MEDC-40008)

Demands and Job Prospects

- Skilled coding professionals are highly sought-after by hospitals, community health centers, physician practices, long-term care facilities, and other health-related organizations across the nation.
- According to the federal Bureau of Labor Statistics, both experienced and entry-level coding professionals are expected to be in high demand and jobs for certified medical coders are projected to increase 15 percent through the year 2024. This is much faster than the average for all occupations. The demand for health services is expected to increase as the population ages.

Industry Certification

*This program meets the educational requirements for the following national certification exams:

- CCS (Certified Coding Specialist) AHIMA Hospital Inpatient Exam
- CCA (Certified Coding Associate) AHIMA Hospital & Physician Practice Exam CPC (Certified Professional Coder) AAPC Physician Practice Exam
- COC (Certified Outpatient Coding) AAPC Hospital Outpatient/Surgical Center Exam

*Students are responsible for meeting all other related exam qualification, which may include a set amount of experience.

The Program

- **Number of courses:** 11
- **Total units:** 34.5
- **Estimated cost:** \$4,465 including certificate fee (not including pre-requisites or textbooks)
- **Textbooks:** Roughly \$900 for core courses *subject to change*
- **Pre-Requisites:** \$1,050
- **Time to Complete:** 12 months not including prerequisites
- **Delivery:** Online

Courses

Required Prerequisites	
TITLE & COURSE NUMBER	UNITS
Medical Terminology: An Anatomy and Physiology Approach FPM-40632	1.5
Anatomy & Physiology for Allied Health FPM-40320	4.5
Introduction to Medical Coding MEDC-40024	2.0
Required Courses <small>Must be completed in order listed below</small>	
TITLE & COURSE NUMBER	UNITS
ICD-10-CM MEDC-40018	4.0
Pathophysiology of Human Disease FPM-40617	5.0
Reimbursement Methodologies & Compliance MEDC-40021	2.0
ICD-10-PCS MEDC-40019	4.0
Pharmacology FPM-40382	3.0
Legal & Ethical Issues in Coding MEDC-40022	2.0
CPT/HCPCS Coding MEDC-40020	4.0
Coding Practicum MEDC-40023	3.0

Admission

This Certificate (prerequisites not included) is intended to be completed within a 12-month time frame. Courses need to be taken in the order which they appear in the course matrix. Two starting points (Fall or Spring) are offered each year. Questions regarding course trajectory, please contact Ndasaro@ucsd.edu

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-534-9262 or Email: unexhealthcare@ucsd.edu

Conditions for Admission

- The certificate is intended for individuals who have met the
 - following requirements: High-School graduation/GED
 - Introduction to Medical Coding (MEDC-40024)
 - Medical Terminology: An Anatomy and Physiology Approach (FPM-40632)
 - Anatomy & Physiology for Allied Health (MEDC-40008)

Medical Writing Certificate

Overview

The demand for medical writing professionals is growing significantly. So, too is the supply of individuals with advanced biomedical and life science degrees looking for careers outside academia. Given these facts, an Advisory Board of seasoned medical writing professionals has guided the development of a Medical Writing Certificate program at the University of California, San Diego. The program is designed to provide graduates with the foundational knowledge and skills needed to work as a medical writer in the commercial sector, government agencies and/or academia. The certificate will equip scientists and others with a strong biomedical and/or life sciences background to write specifically for scientific audiences.

Certificate Benefits

- The certificate prepares students to secure well-paying positions as medical writers in four distinct specialty areas:
 - Continuing Medical Education materials
 - Scientific Grants
 - Regulatory Documentation
 - Journal Article and Publication Development
- Medical writing offers a rewarding and intellectually stimulating career, with six-figure salaries for senior writers
- Many medical writers manage their own freelance businesses

Scientific Medical Writing vs. Non-Scientific Medical Writing

The program is not designed for those intending to communicate scientific information to lay audiences, e.g., science journalism, marketing communications or patient communications. This program is designed to equip scientists and others with a strong biomedical and/or life sciences background to write for scientific audiences in peer-reviewed journals, regulatory documents, medical education materials and/or research grant proposals.

Who should take the certificate?

Accepted applicants will have graduate degrees in biomedical or life sciences, such as biology, chemistry, pharmacy, nursing, nutrition, medicine or public health. PhDs are particularly competitive for medical writing positions in the commercial sector and academic settings.

Demand and Job Prospects

- Per the Bureau of Labor Statistics, demand for Technical Writers in Healthcare is projected to grow nearly 27% from 2012 to 2022.
- According to the most recent American Medical Writers Association (AMWA) data, increases in medical writers' salaries were more than double the rate of inflation and increased with certification.
- Medical writing offers a rewarding and intellectually stimulating career, with six-figure salaries for senior writers. Many medical writers manage their own freelance businesses.
- Few Biology PhDs on university campuses will secure a faculty position or campus laboratory; medical writing provides an alternative well-paying career.

Industry Certification

The Medical Writing Certificate program helps prepare students for the Medical Writing Certification Examination developed by Medical Writing Certification Commission (MWCC) in collaboration with the American Medical Writers Association (AMWA). For more information about the certification exam, see <https://www.amwa.org/page/MWC>.

Program Details:

- Number of courses: 5 core courses and 8 units of electives Total units: 22
- Estimated cost: \$4,000 +/-
- Time to Complete: 18 months for most Delivery:
 - fully online

Before You Enroll

Upon acceptance into the Medical Writing Certificate Program, you must complete the prerequisite courses listed below before enrolling in the first course *Introduction to Medical Writing*. If you would like to request a waiver of completion for these prerequisite courses, please send your transcripts, CV, and/or resume to Robert Houghtaling at rhoughtaling@ucsd.edu to be considered.

Non-Native English speakers must provide proof of English language competency via either a score of 90 on the iBT (TOEFL) test or a 7.5 on the IELTS test.

Course Expectations

In order to receive your certificate, you must complete **all** of the required coursework with a **B-/80% or higher**.

Courses

Prerequisites (all offered every quarter online)	
TITLE & COURSE NUMBER	UNITS
Medical Terminology: An Anatomy and Physiology Approach FPM-40632	1.5
CT: Practical Clinical Statistics for the Non-Statistician FPM-40233	2.0
Grammar Lab WCWP-40234	3.0
Required Courses (All 15 units required)	
TITLE & COURSE NUMBER	UNITS
Introduction to Medical Writing and Editing FPM-40654	1.0
The Spectrum of Medical Writing and Editing FPM-40653	3.0
Applied Medical Writing and Editing FPM-40652	3.0
Ethics for Medical Writers FPM-40609	2.0
Designing Figures, Tables, & Graphs FPM-40608	2.0
Electives (8 units required)	
TITLE & COURSE NUMBER	UNITS
CT: Medical Writing: Protocols, Reports, Summaries, and Submissions FPM-40188	2.0
Good Documentation Practices BIOL-40201	3.0
Overview of the Drug Development Process BIOL-40015	3.0
CT: Drug Development Process FPM-40173	3.0
CT: Understanding Oncology FPM-40493	3.0
CT: Regulation of Drugs, Biologics, Devices, and Diagnostics FPM-40189	3.0
CT: Science of Clinical Trials Design FPM-40205	3.0
Expert Strategies and Skills for Medical and Scientific Communication FPM-40655	1.0
Required Capstone Project (Pick One)	
TITLE & COURSE NUMBER	UNITS
Capstone: Journal Article and Publication Development FPM-40630	4.0
Capstone: Medical Education Materials FPM-40627	4.0
Capstone: Regulatory Writing FPM-40628	4.0
Capstone: Scientific Grants FPM-40629	4.0

Admission

All students must either take the following two courses or have taken appropriate equivalents within the past five years, earning a grade of B- or better:

- Medical Terminology FPM-40172, 1 unit online
- Practical Clinical Statistics for the Non-Statistician FPM-40233, 2 units online Grammar Lab WCWP-40234, 3 units online
- Prerequisites can be waived for individuals whose work experience demonstrates foundational knowledge of these subjects.

Applicants seeking this waiver must email their CV to Robert Houghtaling at rhoughtaling@ucsd.edu for determination in advance of their application.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-534-4041 or Email: rhoughtaling@ucsd.edu

Conditions for Admission

Successful applicants must have relevant educational background, and native-level fluency in English with the demonstrated ability to write clear, logical, and grammatically correct sentences as evidenced by the application, official transcripts and writing samples. Accepted applicants will have degrees in biomedical or life sciences, such as biology, chemistry, pharmacy, nursing, nutrition, or public health. It is anticipated that many will have advanced degrees, including PhDs. Candidates with PhDs are particularly competitive for medical writing positions in the commercial sector and academic settings.

Upon acceptance into the Medical Writing Certificate Program, you must complete the prerequisite courses listed below before enrolling in the first course *Introduction to Medical Writing*. If you would like to request a waiver of completion for these prerequisite courses, please send your transcripts, CV, and/or resume to Robert Houghtaling at rhoughtaling@ucsd.edu.

Non-Native English speakers must provide proof of English language competency via either a score of 90 on the iBT (TOEFL) test or a 7.5 on the IELTS test.

Paralegal Studies (ABA Approved) Certificate

Overview

Today, paralegals are in demand not only in law offices but also in a wide variety of organizations, including consumer groups, corporations, courts, government agencies, health care facilities, insurance companies, and real estate brokerages. UCSD Extension's ABA-Approved Paralegal Program combines practical skills with legal theory and analysis, providing students with a balanced perspective and insight into the tasks paralegals perform.

Format

In-class*

*Online options available for some courses (*part-time only*); varies by quarter.

Est. Cost

Accelerated: \$7,095 Part-time: \$5,195*

*Cost varies by format and curriculum updates.

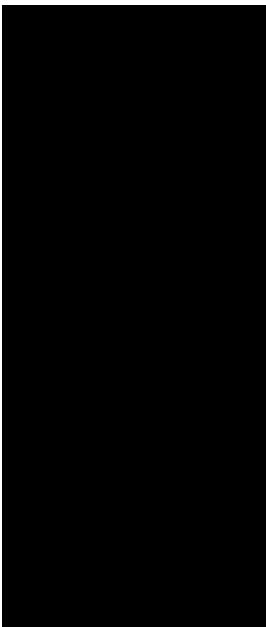
Duration

Accelerated: 12 wks

Part-time: 12-24 mos*

*Varies by student and courses taken per quarter

To learn more about the Accelerated and Part-time Paralegal Certificate Programs, [visit the program website](#)



The American Bar Association defines a "Paralegal" as a person, qualified by education, training, or work experience who is employed or retained by an attorney, law firm, corporation, governmental agency or other entity who performs specifically delegated substantive legal work under the direction and supervision of a practicing licensed attorney.

Courses

Required Courses <small>All 10 courses are required</small>	
TITLE & COURSE NUMBER	UNITS
Introduction to the Legal System LAW-40000	1.0
Legal Communications LAW-40015	2.0
Ethics for the Legal Professional LAW-40028	1.0
Computer Essentials for the Legal Professional LAW-40070	3.0
Civil Litigation I LAW-40018	3.0
Civil Litigation II LAW-40021	3.0
Legal Research and Analysis LAW-40003	3.0
Business Law LAW-40001	3.0
Evidence Law LAW-40035	2.0
Paralegal Career Success LAW-40071	1.0
Electives <small>6 units required</small>	
TITLE & COURSE NUMBER	UNITS
Administrative Law and Procedure LAW-40047	3.0
Alternative Dispute Resolution LAW-40384	3.0
Bankruptcy Law LAW-40016	3.0
Environmental Law LAW-40058	3.0
Contract Law LAW-40019	2.0
Corporate Law LAW-40044	3.0
Criminal Law and Procedure LAW-40049	3.0
Discovery Principles LAW-40061	2.0
Domestic Relations Law LAW-40006	3.0
Employment Law for the Paralegal LAW-40030	3.0
Estate Planning and Administration LAW-40017	3.0
Immigration Law LAW-40038	2.0
Intellectual Property Law BUSA-40263	2.0
Real Property Law LAW-40022	3.0
Tort Law LAW-40037	2.0
Recommended	
TITLE & COURSE NUMBER	UNITS
CLA/CP (Certified Paralegal) Exam Preparation and Review LAW-40042	3.0

Admission

Accelerated Program

This intensive, one-quarter (12-week) accelerated program is offered Summer, Fall and Spring quarters; classes are from 9 a.m. - 4 p.m. Monday through Thursday. A Bachelor's Degree is required or significant legal experience.

Part-time Program

The part-time program allows participants to study for a new career without disrupting their current work schedules. Quarterly courses meet once a week for up to ten weeks. Students pay for each course individually as taken. Day classes are now available to accelerate completion of the certificate. Minimum of Associates Degree or significant legal experience is required.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8152 or Email: unexlaw@ucsd.edu

Conditions for Admission

Applicants are officially admitted to the program upon completion of the application process, which includes: three letters of recommendation, official transcripts and the application for candidacy accompanied by a \$95 fee. For more information, please visit the program website at extension.ucsd.edu/paralegal.

Photographic Portraiture Certificate

Overview

The Specialized Certificate in Photographic Portraiture provides a comprehensive series of courses taught by successful portrait photographers and other industry experts to build students' effectiveness and creativity in taking photographic portraits of different subjects in a variety of styles and settings.

Format
In-Class

Est. Cost
\$2,570*

*Early enrollment discounts can reduce cost. Textbooks/materials separate.

Duration
6 Quarters**

**Duration if taking one class per quarter.

Along with technical photographic instruction, there is focused study on the history of photographic portraiture as well as creating a portraiture business.

Elective courses enable students to focus on a primary style or subject and build skills which relate to that specific genre. All courses are open to students not enrolled in the certificate, but enrollment in the certificate will require an application.

Courses

REQUIRED COURSES <small>All four are required</small>	
TITLE & COURSE NUMBER	UNITS
History of Photographic Portraiture ART-40692	2.0
Photographic Portraiture I ART-40689	3.0
Photographic Portraiture II ART-40690	3.0
Business of Photographic Portraiture ART-40691	2.0
ELECTIVES <small>4 units total</small>	
TITLE & COURSE NUMBER	UNITS
Color Management for Photographers ART-40402	2.0
Environmental Portraiture ART-40494	3.0
Understanding Photographic Light: Studio & Location ART-40398	2.0
Strobe Workshop: Lighting with Speed Lights ART-40511	2.0
Variations on Photographic Portraiture ART-40659	3.0
Portraiture Retouching ART-40711	3.0

Family Pictures ART-40229	3.0
Adobe Photoshop I: Introduction ART-40311	3.0

Admission

To fulfill the certificate program, students must complete the four required courses (totaling ten units), and additional elective courses (totaling four units).

Students may enroll in the certificate program during any quarter of the year.

Most students should be able to complete the program within three to four quarters (or nine months to one year), but have up to five years to complete the program.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Conditions for Admission

Please see the application for specific admission requirements for this program.

Although a college degree or professional experience in the field are not required, applicants with such experience may receive preference for admission when program capacity is limited.

Current UCSD students may be considered for admission depending on their academic and career focus and educational performance.

Photography: Images and Techniques Certificate

Overview

The Professional Certificate in Photography offers concentrated study in the photographic arts. Our program is designed for adults with little or no photography background. The curriculum helps students successively develop solid skills including an understanding of the aesthetic and technical processes essential to the field of photography. This certificate program focuses on creativity and technical abilities, as well as the final product--a portfolio of finished photographs.

Format Online and In-Class

Est. Cost
\$3,290

*Early enrollment discounts can reduce cost. Textbooks/materials separate.

Duration
9 Quarters**

**Varies by courses taken per quarter.

Students choose from a variety of photography courses with an emphasis on digital processes, while improving their abilities to observe, find innovative solutions and express individual creativity.

The program is purposefully flexible; students may choose an area of concentration and enroll in electives that fulfill their personal interests.

Courses

Information Session	
TITLE & COURSE NUMBER	UNITS
Photography Program Information Session INFO-70162	0.0
REQUIRED COURSES <small>All five are required</small>	
TITLE & COURSE NUMBER	UNITS
Photo I: Aperture, Shutter Speed & ISO ART-40629	3.0
Digital Photography Workflow ART-40705	3.0
Photo II: Technique & Style ART-40631	3.0
Photo III: Portfolio ART-40632	3.0
A Short History of Photography ART-40412	2.0
PHOTOGRAPHIC ELECTIVES <small>14 units total (including 2 courses in digital printing)</small>	
Artistic <small>Courses focus on aesthetic development.</small>	
TITLE & COURSE NUMBER	UNITS
Architectural Photography ART-40607	2.0

Beyond Image: Using Photography with Other Media ART-40422	3.0
Environmental Portraiture ART-40494	3.0
Family Pictures ART-40229	3.0
Nature Photography: From Vision to Print ART-40081	3.0
Postcards from the City: Exploration with Artistic Photography ART-40165	3.0
Reading Photographs: The Art of Seeing ART-40413	3.0
Variations on Photographic Portraiture ART-40659	3.0
Visual Poetry: Ways of Seeing ART-40416	3.0
Adobe Photoshop I: Introduction ART-40311	3.0
Technical <small>Courses focus on technical skill sets.</small>	
Digital Printing & Workflow	
<small>TITLE & COURSE NUMBER</small>	<small>UNITS</small>
Color Management for Photographers ART-40402	2.0
Intermediate Digital Printing ART-40565	2.0
Introduction to Digital Printing ART-40445	2.0
Photo Silkscreen I ART-40464	2.0
Lighting	
<small>TITLE & COURSE NUMBER</small>	<small>UNITS</small>
Introduction to Concert and Low-Light Photography ART-40655	2.0
Strobe Workshop: Lighting with Speed Lights ART-40511	2.0
Understanding Photographic Light: Studio & Location ART-40398	2.0
Special Topics	
<small>TITLE & COURSE NUMBER</small>	<small>UNITS</small>
Color Theory for Photographers ART-40687	2.0
Crash Course: the Art of Skateboard Photography ART-40657	1.0
Destination Photography ART-40575	2.0
Documentary Photography ART-40507	3.0
Introduction to Photo Journalism ART-40693	2.0
Portraiture Retouching ART-40711	3.0

Admission

To fulfill the certificate program, students must complete at least 28 quarter units in Photography. Student may enroll in the certificate program during any quarter of the year. Most students should be able to complete the program within 2 to 2.5 years but have up to five years to complete the program. The series of courses with both artistic and technical emphasis are organized into levels of increasing difficulty ensures that students develop and refine their skills over time. Students work at their own pace and choose from a wide variety of electives.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Conditions for Admission

Please see the application for specific admission requirements for this program.

Although a college degree or professional experience in the field are not required, applicants with such experience may receive preference for admission when program capacity is limited.

Current UCSD students may be considered for admission depending on their academic and career focus and educational performance.

Play Therapy Certificate

Overview

In play therapy, toys are the child's words, and play is the child's language. Therapists strategically use play to help children express what is troubling them when they do not have the verbal language to express their thoughts and feelings.

Formally, the Association for Play Therapy (APT) defines play therapy as "the systematic use of a theoretical model to establish an interpersonal process wherein trained play therapists use the therapeutic powers of play to help clients prevent or resolve psychosocial difficulties and achieve optimal growth and development."

Play therapy is a structured, theoretically based approach to expressive therapy that builds on the normal communicative and learning processes of children and has been shown to help them

- Become more responsible for behaviors and develop more successful strategies. Develop new and creative solutions to problems.
- Develop respect and acceptance of self and others. Learn to experience and express emotion.
- Learn new social skills and relational skills with family.

Play therapy can also be used effectively with some teenagers and adults to optimize learning, enhance relationships, improve health, and enhance social well-being.

Certificate Benefits

Mental health professionals can add a set of skills to their repertoire that improves care for children and adults without the ability to verbally express their thoughts and feelings.

UC San Diego Extension meets the "Play Therapy Training" requirement of the Association for Play Therapy's *Registered Play Therapist (RPT)* and

Registered Play Therapist-Supervisor (RPT-S) credentials. See "Industry Certification" below for more detail.

Target Audience

Licensed therapists, therapist interns, and allied health professionals who work with children, adolescents, and their families.

Industry Certification

The certificate program satisfies the instructional requirement of the Association for Play Therapy (APT) to become a Registered Play Therapist (RPT), as well as a Registered Play Therapist Supervisor (RPT-S). UC San Diego Extension is approved by the APT to offer continuing education specific to play therapy (APT Approved Provider 98-046). Details about requirements and applications for the designations may be obtained from the Association for Play Therapy www.a4pt.org.

Program At-A-Glance

- # of courses: 22
- Total units: 11
- Estimated cost: \$3,000
- Time to Complete: Minimum of six quarters (20 months)
- Delivery: In-class

Courses

Treatment Planning Series	
TITLE & COURSE NUMBER	UNITS
Toys and Their Uses PSY-40156	0.5
Play Diagnosis and Assessment: Play Assessment of Ego Functions and Object Relations PSY-40218	0.5
Legal and Ethical Issues in Child Treatment with Emphasis on Play Therapy and Assessment PSY-40158	0.5
History of Play Therapy PSY-40391	0.5

The Therapeutic Powers of Play PSY-40219	0.5
Clinicians Toolbox Series	
TITLE & COURSE NUMBER	UNITS
Child-Centered Play Therapy PSY-40235	0.5
Child-Parent Relationship Therapy-CPRT (Filial Therapy) PSY-40337	0.5
Introduction to Parent-Child Interaction Therapy PSY-40328	0.5
Developmental Play Therapy PSY-40336	0.5
Structured Play Therapy: Cognitive-Behavioral Play Therapy, Pre-Set Play, Introduction of Resolutions PSY-40238	0.5
Gestalt Play Therapy, Role-play, and Psychodrama PSY-40239	0.5
Sandplay: A Therapeutic Process PSY-40240	0.5
Experiential Play Therapy PSY-40303	0.5
Psychoanalytic Play Therapy PSY-40237	0.5
Integrative Play therapy PSY-40401	0.5
Supervision and Instruction of Play Therapy PSY-40388	0.5
Introduction to Theraplay PSY-40399	0.5
Play Therapy with Special Populations	
TITLE & COURSE NUMBER	UNITS
Uses of Play for Learning Disabilities and Developmental Delay PSY-40168	0.5
Play Therapy, Art Therapy, and Assessment of Abused Children and Adolescents PSY-40234	1.0
Play Therapy with Attention Deficit and Disruptive Behavior Disorders PSY-40167	0.5
Play Therapy and Art Therapy Supervision to Transform Compassion Fatigue and Vicarious Trauma PSY-40402	0.0
Families Fighting and Changing: Play Therapy with Children of Divorce and Remarriage PSY-40226	0.5
Play Therapy for Children Affected by Illness and Injury PSY-40386	0.5
Play Therapy for Attachment Disorders PSY-40322	0.5
Play Therapy to Help Children Cope with Grief and Loss PSY-40382	0.5
Play Therapy and Art Therapy with Adolescents PSY-40397	0.5
Play Therapy in Schools PSY-40398	0.5
Play Therapy Across Cultural and Ethnic Groups PSY-40171	0.5
Victims of Ritual Abuse and Child Trafficking: Recognition, Play Therapy, and Symbolic Communication FPM-40647	0.5
The Children's Apperception Test for Assessment and Treatment Planning FPM-40648	1.0
Play Therapy for Anxiety Disorders and Affect Regulation FPM-40649	0.5
Evidence-based Play Therapy Interventions in Treating Children with Autism Spectrum FPM-40650	0.5

Admission

To earn the certificate you must complete 11 quarter units (min. 150 hours of coursework). More than 13 units and 171 instructional hours are offered during a complete program cycle from which you select courses that fit your schedule. All coursework meet the Association for Play Therapy's instructional-hours requirement toward becoming a Registered Play Therapist (RPT) or Registered Play Therapist Supervisor (RPT-S).

Please note that each course is offered twice, every other year. For example, a course offered in July and August of 2019, won't be available again until July and August of 2021. There will be additional courses offered in between.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-534-9262 or Email: unexhealthcare@ucsd.edu

Conditions for Admission

Please see the application for specific admission requirements for this program. Although a college degree or professional experience in the field are not required, applicants with such experience may receive preference for admission when program capacity is limited.

Power Systems Engineering Certificate

Overview

Power systems engineering, is the study in engineering that deals with the generation, transmission, distribution and utilization of electric power and the electrical equipment connected to such systems including generators, motors and transformers. Traditionally, power engineers are responsible for maintaining a network of components which convert different forms of energy into electricity and for managing any of the three main subsystems of power engineering: generation, transmission and distribution. Power engineers' duties also include assuring all components are functioning properly and that they meet safety regulations in addition to communication and data gathering functions.

In recent times, the use of renewable sources of energy has provided new impetus to the field with the design and development of renewable, energy efficient power grids and utility systems. Engineers must research and implement ways to integrate renewable power technology and are often involved in public works projects, and employed on federal projects that involve the integration of large powergrids.

This certificate will teach the building blocks of the power system, its control and management. Designed for those with minimal experience with electric power, participants will be able to speak the language and perform substantial tasks within the electric grid and power system network. Any engineering degree, preferably BSEE, is required for entrance. Other relevant coursework will be evaluated separately at the application point.

Additional Reading:

- [Energy Concepts: Can Renewable Energy Catch Up With Traditional Methods of Power Generation?](#)

Courses

Core Courses	
TITLE & COURSE NUMBER	UNITS
Fundamentals of Electric Power EE-40174	3.0
Power System Analysis and Control EE-40173	3.0
Electrical Energy Storage EE-40171	3.0
Power Electronics EE-40172	3.0
Elective Courses 3 units required	
TITLE & COURSE NUMBER	UNITS
Microgrid Design, Economic Optimization and Simulation CSE-41291	3.0
Distributed Renewable Energy Resources ECE-40284	3.0
Secure Communication Networking for Distributed Energy Resources EE-40179	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9152 or Email: unexengr@ucsd.edu

Conditions for Admission

A BSEE or an equivalent engineering degree and experience will be required to enter this program of specialization. UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Professional Safety and Health Officer Certificate

Overview Courses

REQUIRED FOR CERTIFICATE COMPLETION <small>One Prerequisite Course, one Trainer Course, all remaining Other Required Courses and a minimum of one Specialty Courses track.</small>	
Prerequisite Courses <small>Students must choose either the OSHA 510 or OSHA 511 - not both. Contact oshatraining@ucsd.edu for advising.</small>	
TITLE & COURSE NUMBER	UNITS
OSHA 510 - Occupational Safety and Health Standards for the Construction Industry FPM-40299	3.0
OSHA 511 - Occupational Safety and Health Standards for General Industry FPM-40366	3.0
Required Trainer Courses <small>Students must choose either the OSHA 500 or OSHA 501 - not both.</small>	
TITLE & COURSE NUMBER	UNITS
OSHA 500 - Trainer Course in Occupational Safety and Health Standards for the Construction Industry FPM-40280	3.0
OSHA 501 - Trainer Course in Occupational Safety and Health Standards for General Industry FPM-40281	3.0
Other Required Courses <small>Students must complete all of the following courses.</small>	
TITLE & COURSE NUMBER	UNITS
OSHA 3095 - Electrical Standards (Low Voltage - Federal) FPM-40300	3.0
OSHA 7505 - Introduction to Incident (Accident) Investigation FPM-40637	0.5
OSHA 521 - OSHA Guide to Industrial Hygiene FPM-40296	3.0
OSHA 2255 - Principles of Ergonomics FPM-40297	3.0
Safety Leadership I FPM-40641	2.0
Workers Compensation for Safety Professionals FPM-40640	0.5
Specialty Courses <small>Must complete one track for certificate completion. Students may complete multiple tracks.</small>	
Construction <small>Must complete a minimum of 8 units.</small>	
TITLE & COURSE NUMBER	UNITS
OSHA 2055 - Cranes in Construction FPM-40413	3.0
OSHA 2264 - Permit-Required Confined Space Entry FPM-40289	2.5
OSHA 3015 - Excavation, Trenching and Soil Mechanics FPM-40301	2.5
OSHA 3115 - Fall Protection FPM-40489	3.0
Trainer Course - Fall Protection FPM-40566	0.5
OSHA 3085 - Principles of Scaffolding FPM-40638	2.5
Trainer Course - Trenching FPM-40308	1.5
Trainer Course - Rigging Safety FPM-40349	3.5
EM385-1-1 40 Hour Safety FPM-40507	4.0
Safety Leadership II FPM-40642	2.0

General Industry Must complete a minimum of 8 units.

TITLE & COURSE NUMBER	UNITS
OSHA 2015 - Hazardous Materials FPM-40302	3.0
OSHA 2045 - Machinery and Machine Guarding Standards FPM-40298	3.0
OSHA 2225 - Respiratory Protection FPM-40303	3.0
OSHA 2264 - Permit-Required Confined Space Entry FPM-40289	2.5
OSHA 7105 - Introduction to Evacuation and Emergency Planning FPM-40410	0.5
OSHA 7115 - Lockout/Tagout FPM-40497	0.5
OSHA 7200 - Bloodborne Pathogens Exposure Control for Healthcare Facilities FPM-40378	0.5
Trainer Course - Confined Space FPM-40291	1.5
Trainer Course - Forklift Safety FPM-40307	1.5
Safety Leadership II FPM-40642	2.0

Cal/OSHA Must complete a minimum of 8 units.

TITLE & COURSE NUMBER	UNITS
OSHA 5109 - Cal/OSHA Standards for the Construction Industry FPM-40511	3.0
OSHA 5119 - Cal/OSHA Standards for General Industry FPM-40512	3.0
Electrical Low Voltage Standards - State FPM-40446	1.5
Electrical High Voltage Standards - State FPM-40454	1.5
Laws and Regulations FPM-40060	3.0
Safety Leadership II FPM-40642	2.0

Project Management Certificate

Overview

Become a Leader in Project Management

UC San Diego Extension's Professional Certificate in Project Management provides professionals with a practical, hands-on approach. You will learn the knowledge and tools necessary to plan, execute and complete complex projects within various types of organizations and industries - enabling you to get started or advance your career. The Project Management program incorporates key leadership and teamwork skills that project managers need to be effective.

Format

In-Class & Online

Estimated Cost

\$4,400*

*Selection of Lean Six Sigma as elective incurs additional fee.

Minimum Duration

6 months*

*Must be completed within 5 years.

Certificate Benefits

- Curriculum aligns with the [Project Management Body of Knowledge](#) (PMBOK) developed by the [Project Management Institute](#) (PMI) Courses taught by actively practicing industry leaders and subject matter experts
- Project-based coursework enables you to apply tools and concepts first hand
- Industry-neutral curriculum allows you to customize the program to suit your career goals
- Technical project management, leadership, and business management topics provide a balanced learning approach for project professionals Earn Professional Development Units (PDUs) needed to apply for PMI's Project Management Professional (PMP) certification exam or Certified Associate in Project Management (CAPM) exam

Careers in Project Management

Instructor Mark Rushton brings together over 20 years of experience in a number of industries with a keen sense of the role of a project manager. Mark shares his story in this instructor spotlight: [Mark Rushton on Becoming Agile](#)

Career opportunities in project management are expected to continue to see increased demand over the foreseeable future. [PMI's 2017-2027 Job Growth and Talent Gap Report](#) outlines what may be on the horizon for wages and

career opportunities in the project management field. Learn more about earning potential for project managers in [PMI's Earning Power and Salary Survey Report](#).

Project Management Institute

UC San Diego Extension's Project Management program curriculum is based on the Project Management Body of Knowledge (PMBOK) developed by the Project Management Institute (PMI) and fulfills the necessary education hours required to apply for [PMI's Project Management Professional](#) (PMP) certification exam or [PMI's Certified Associate in Project Management](#) (CAPM) exam. Courses can also be used to maintain the PMP credential. For more on the requirements to sit for the PMP/CAPM exam, review the Project Management Institute's [PMP Handbook](#).

UC San Diego Extension is a proud community partner of the San Diego Chapter of the Project Management Institute, which provides valuable resources, volunteer networking, and test prep opportunities. To learn more, please visit: pmi-sd.org.

International Students

For international students interested in joining our full-time program, which gives students the opportunity to study in the United States on a student visa, please check out the full-time [Project Management Program for International Students](#) (two quarters). International students who need an F-1 student visa will need to apply at ip.extension.ucsd.edu. International students are also welcome to participate in the program online from any location.

Transfer to Online Master's Degree

Upon completion of UCSD's Certificate in Project Management, 12 units can be transferred to the University of Wisconsin at Platteville's M.S. in Project Management degree program, which is offered fully online.



UNIVERSITY OF WISCONSIN
PLATTEVILLE

[Learn more about the M.S. Project Management View Transfer Course Requirements](#)

Certificate at a Glance

Number of courses: Approximately

7 courses Total units: 21 units

Estimated cost: \$4,400 (Students that elect to take Lean Six Sigma Green or Black Belt will incur additional fees; please see course page for exact tuition fee.)

Minimum time to complete: 6 months*

Delivery: In-class and online delivery. Intensive boot camp and weekend classes also available for some courses.

*Students have up to five years from the start of program to complete it although it can be completed in as little as six months.

Courses

One Foundational Course - Choose one	
TITLE & COURSE NUMBER	UNITS
Project Management Boot Camp BUSA-40950	3.5
Project Management Essentials BUSA-40064	3.0
Project Management Essentials in Science and Technology BUSA-40862	3.0
Four Required Courses <small>Completion of foundational course prior to participation in BUSA-40715 and BUSA-40926 recommended.</small>	
TITLE & COURSE NUMBER	UNITS
Work Team Concepts and Skills BUSA-40109	3.0
Project Planning and Scheduling BUSA-40715	3.0
Project Cost and Risk Management BUSA-40926	3.0
Leading from the Middle BUSA-40859	3.0
Choose Your Electives - 6 elective units needed	
TITLE & COURSE NUMBER	UNITS
Agile Power Practices BUSA-40860	3.0
Business Communication: Online BUSA-40945	3.0
Business Communication Skills BUSA-40368	3.0
Earned Value Project Management BUSA-40494	3.0
Interest-Based Negotiation BUSA-40128	3.0
Transformational Leadership BUSA-40803	3.0
Microsoft Project BUSA-40927	2.0
Project Procurement Management BUSA-40348	3.0
Lean Six Sigma Green Belt MAE-40013	4.0
Lean Six Sigma Black Belt MAE-40004	9.0

Free Workshops and Sessions	
TITLE & COURSE NUMBER	UNITS
Careers in Project Management INFO-70061	0.0
Lean Six Sigma Information Session (Black/Green Belt) INFO-70032	0.0
Business Certificate Programs for International Students - Information Session INFO-70065	0.0

Admission

The Project Management Program consists of five required courses (15 units) and at least six elective units. Courses are available in both in-class and online formats, and the entire certificate can be completed online. The program can be completed in six months or longer, depending on whether one or multiple classes are taken each quarter.

[Project Management Essentials](#) or [Project Management Boot Camp](#) is required to advance to other project management courses. A student who has met the necessary pre-requisite, or who already has the PMP credential, is welcome to enroll in any individual class of interest. In order to request to bypass a pre-requisite, please email ProjectManagement@ucsd.edu.

Any student working toward the Project Management Professional Certificate should elect to take every course for a letter grade. This is necessary if you intend to transfer credit to the online M.S. in Project Management program at the University of Wisconsin, Platteville. If you have registered for a course and selected a Pass/No Pass grade option, you can submit a grade change request in writing to the Student Services office by sending an email message to unex-reg@ucsd.edu. Students can to change their credit status for a particular course at any time, up to and including the final course meeting.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8136 or Email: ProjectManagement@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Python Programming Certificate

Overview

Python has emerged as one of the most widespread programming languages in the world, often cited as one of the top 5 most used across many industries. Python code and concepts are straightforward making it uncomplicated to learn, use, and understand. It is a top choice of both novice and experienced programmers. It is a powerful, easy and intuitive language that is suitable for automation, integration and big data analytics.

Python is an open-source language with rich features allowing for rapid application development. It comes with a large standard library that supports many common programming tasks such as connecting to web servers, searching text with regular expressions, reading and modifying files. Application of Python has extend from its original use as a scripting language for post-processing data to extremely complicated tasks such as simulations of large communications systems, data mining and machine learning analysis.

Format

Online

*Check course list below for specifics.

Est. Cost

\$2,875

*Cost may vary due to elective course selection.

Duration

12 months

*Varies by student due to number courses taken per quarter.

The Python Programming Certificate provides students with a set of skills necessary to successfully perform python related programming projects. The courses consist of both practical knowledge and hands-on experience with the Python language and the programming techniques used in the industry. Through the elective courses, students will be able to apply the knowledge obtained to other areas other than technology and experience the benefits of Python.

Program Benefits

- Practical knowledge of the Python language and understanding of Pythonic strengths and capabilities
- Hands-on experience designing, writing and debugging computer programs using the Python development environment
- Obtain skills also applicable to other areas including Data Sciences, Finance, Accounting, Web development and Machine Learning

Key Program Topics

- General programming concepts including variables, expressions, functions, branching, looping statements and data storage Object-oriented programming, testing and test-driven development concepts
- Best practices for working project environments, coding style and documentation Working with the Python standard libraries and third-party packages
- Selecting and working with Python web frameworks, including Flask,
- Django and Pyramid Data Analytics using the popular and highly

practical Python data analysis ecosystem Python Unit Testing using both Python's built in unit test module and the Pytest module

Who Will Benefit

Students can apply Python proficiency to many career paths. The most common types of students in the program are existing professionals that want to update their skill sets, non-programmers and career changers learning programming to enhance their career opportunities and recent graduates building off of existing knowledge in computer engineering or computer science disciplines.

NOTE: *Please read Special Notes here below for important information regarding the certificate.*

Program At-A-Glance

- **Number of courses:** 3 Required Courses, 1 Elective
- **Total Units: 12**
- **Estimated program cost** (including certificate fee): \$2,875.
- **Time to Complete:** 1 Year
- **Delivery:** Online

Courses

Core Courses <small>All three courses are required.</small>	
TITLE & COURSE NUMBER	UNITS
Introduction to Programming CSE-40028	3.0
Python Programming Fundamentals CSE-41273	3.0
Intermediate Python CSE-41310	3.0
Elective Courses <small>One Required</small>	
TITLE & COURSE NUMBER	UNITS
Data Analytics Using Python CSE-41204	3.0
Python Web Frameworks CSE-41315	3.0
Python Unit Testing CSE-41316	3.0
Course of Interest <small>Not required for Certificate</small>	
TITLE & COURSE NUMBER	UNITS
Data Science with R CSE-41308	3.0
Python for Informatics CSE-41225	3.0
Data Science using SAS CSE-41320	3.0
GIS I: Introduction to GIS CSE-40991	3.0
Introduction to R Programming CSE-41097	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-1566 or Email: infotech@ucsd.edu

Quality Assurance and Control Certificate

Overview

This program is designed for the chemist, bio-chemist or biologist in the pharmaceutical and biologic industry new to quality assurance and control, and is beneficial to senior year undergraduates and graduate students (using concurrent enrollment) interested in a career in QA/QC.

The program focuses on the quality requirements for the production and control of biologics and drugs, and the differences between quality control and quality assurance and their interaction with manufacturing. It highlights the importance of implementing and maintaining a quality system during the early stages of drug development, including the plethora of documents and controls necessary to make such a system effective.

Guidelines and regulations from the FDA and the California State food and drug branch regulate the production of drug products. Quality Assurance (QA) monitors the manufacturer's compliance to these guidelines and regulations.

Instruction covers how to write, issue and control SOPs; manufacturing directions; and how to review and archive a batch history and other relevant documents. Emphasis is placed on conducting inspections and vendor audits for compliance to cGMPs to include contract manufacturers, bulk pharmaceutical chemical manufacturers and contract test laboratories. The program covers cGLPs and their applications to audits of facilities that provide toxicological services. Details on compiling, writing and archiving audit reports is provided.

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Introduction to QA/QC for Drugs & Biologics BIOL-40038	3.0
Advanced QA/QC for Drugs & Biologics BIOL-40021	3.0
Good Manufacturing Practices BIOL-40000	3.0
Regulatory Compliance for Drugs & Biologics BIOL-40101	2.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9353 or Email: unexbio@ucsd.edu

Conditions for Admission

Complete the application and pay application fee. UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

RF Engineering Certificate

Overview

Communications is rapidly becoming a defining characteristic of the 21st century. Wireless devices include everything from video game controllers to Bluetooth headsets. Entertainment and news is delivered via satellites as well as RF-based cable systems. GPS navigation systems are ubiquitous, and WiFi connections increasingly available on commercial aircraft. Ever more exotic applications are being announced regularly.

All of these advancements are based on the ability of engineers to design sophisticated RF circuits that are energy efficient, high performing, small in size and economically practical.

The RF Engineering Specialized Certificate provides professionals with the positioning to take advantage of the technological advances in both the commercial and military arenas. You will learn the fundamental principles of RF systems and the design of practical, cost-effective RF subsystems and their translation into practical integrated circuits or full RF systems. Also reviewed are the key concepts of simulating, testing and validating RF systems.

Student Testimonial

"I am very pleased with the job opportunities I have received since completing the UCSD Extension RF Engineering program in June 2017. The course work was challenging and highly relevant to the RF industry. The online format made the instruction convenient. The instructors were also easily accessible and brought their years of practical experience to the learning environment. Don't be surprised if you make several valuable industry contacts through the online forum discussion groups. The following companies have reached out to me since completing my studies 3 weeks ago.

- Orbital
- ATK
ViaSat
- L3
- Communicatio
ns Cobham
- Crane Industries
- Jet Propulsion Laboratory
- General Dynamics Mission
Systems Raytheon"

Paul C., Chandler, AZ

Learning Objectives

- Differentiate the RF circuit, IC, System design requirements Identify the design constraints at RF frequencies
- Know RF circuit and system design
- Be able to design RF blocks and systems, calculate the RF systems and sub-systems characteristics

Program Benefits

- Introductory-level theory and practical knowledge to enter the field as a designer
- Advanced study in specific topic areas to help professionals stay current with new developments in their fields
- Practical training to complement a formal course of academic study

Key Program Topics

- RF Parameters
- RF Passive and Active Components
- RF Devices Theory and Applications
- RF Amplifiers, Coupling Structures, Filters, Mixers and Oscillators
- Design RF Systems Concepts and Designs

- RF System Architectures RF System Impairments
- RF Systems Chromatic and Performance RF Sub-Systems Requirements

Prerequisites

Students should have general knowledge about principles of electronics and electronic engineering, general knowledge about transistor operation, and circuits analysis; and/or have a background in electrical engineering, or computer engineering. If you do not have this foundation please take [Electronics and Telecommunications Review \(ECE-40289\)](#), [RF Principles and Applications \(EE-40137\)](#). If you have this background you may take the required courses, no waiver is needed.

Program At-A-Glance

- **Number of courses:** 2 Prerequisites, 3 Required Courses, 2 Electives
- **Total Units:** 15 (not including prerequisites)
- **Estimated program fees** (includes prerequisites, courses, books and certificate fee): \$6020.
- **Time to Complete:** 1 Year and a Half
- **Delivery:** Online

Courses

Prerequisites <small>If you have prerequisite knowledge you may enroll in required courses, no waiver is needed.</small>	
TITLE & COURSE NUMBER	UNITS
Electronics and Telecommunications Review: Math, Circuits and Signals ECE-40289	3.0
RF Principles and Applications EE-40137	3.0
Required courses <small>All three are required and can be taken in any order.</small>	
TITLE & COURSE NUMBER	UNITS
RFIC Design ECE-40171	3.0
RF System Design for Wireless Communications EE-40098	3.0
RF Circuit Design EE-40003	3.0
Electives <small>Choose two</small>	
TITLE & COURSE NUMBER	UNITS
Antenna Theory and Design EE-40129	3.0
Microwave Test & Measurement EE-40149	3.0
Microwave Transmission Engineering EE-40153	3.0
RF PLL Synthesizers ECE-40294	3.0
Mixed Signal Design ECE-40244	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9352 or Email: unexengr@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Reading Instruction Certificate

Overview

The Reading and Literacy Added Authorization prepares teachers in reading and literacy using a solid curriculum that expands their basic assumptions and knowledge of reading foundations, reading assessment, reading research, reading intervention, reading strategies and the design of effective literacy models.

Building literate classrooms across subject matters and preparing students to become fluent, independent readers has become a major emphasis in all school districts. This program is designed to help credential teachers meet local, state, and federal requirements. The Commission on Teacher Credentialing serves as the approving agency in the State of California.

The Reading and Literacy Added Authorization program is geared towards educators with the potential to become leaders and mentors in the area of reading. It will provide educators with the right tools to improve student achievement.

Target Audience

Individuals and Educators who desire training and reading and literacy to build a solid curriculum.

Teachers with a valid California teaching credential and at least 3 years of teaching experience and a California English Learner Authorization are eligible for a Reading and Literacy Added Authorization.

If you do not meet the requirements for the California Commission on Teacher Credentialing (CCTC) Added Authorization you may still earn a Reading Instruction Professional Certificate from UCSD Extension.

Reading and Literacy Added Authorization

The California Teaching Credential Added Authorization, when held in conjunction with a prerequisite credential authorizes the holder to provide the following services to students at one or more school sites, at the grade levels authorized by the prerequisite credential:

- (1) provide student assessment in reading, and student instruction that is responsive to the assessments;
- (2) develop, implement and adapt reading instruction, and assist teachers with respect to the prevention and intervention of reading difficulties; and
- (3) may perform those services at one or more school sites at the grade levels authorized by their prerequisite teaching credential.

Industry Certification

This program is aligned with the Reading and Literacy Added Authorization requirements and standards established by the California Commission on Teacher Credentialing (CCTC). All required courses are CCTC approved; therefore once admitted candidates complete the program, they will be eligible to earn an official Reading and Literacy Added Authorization from the Commission on Teacher Credentialing.

The Program

- # of courses required: 6 Total
- units: 21 Estimated cost: \$2,500
- Time to Complete: Candidates can complete in 9-12 months
- Delivery: Online

Courses

Required Courses <small>all six courses are required</small>	
TITLE & COURSE NUMBER	UNITS
Reading & Literacy Program Orientation EDUC-80012	0.0
R & L: Culture of Literacy EDUC-31415	4.5
R & L: Assessment, Intervention, & Instruction EDUC-31416	4.5
R & L: Research, Instruction, and Intervention EDUC-31417	4.5
R & L: Planning, Organizing, and Providing Instruction EDUC-31418	6.0
Reading and Literacy Portfolio EDUC-31419	1.5

Admission

All candidates who wish to receive the Reading Instruction Certificate are required to:

- (1) Apply to the Reading Instruction certificate program.
- (2) Pay the certificate fee.
- (3) Complete all the required online courses with a grade of "C" or better.
- (4) Coursework must be completed within 5 years of beginning the program.

There will be a \$95 fee upon acceptance into the program.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Education. Call 858-534-9286 or Email: uneduc@ucsd.edu

Conditions for Admission

A completed application must be on file before enrolling in the courses. To request a program application, please contact the Education Department directly by phone at (858)534-9286 or email uneduc@ucsd.edu Although most students finish the program within one-to-two years, in order to be eligible for a certificate from UC San Diego Extension and a CCTC Reading and Literacy Added Authorization, all required coursework must be completed within five years of being admitted to the current program.

Regulatory Affairs Essentials Certificate

Overview

Regulatory Affairs is an excellent career for professionals who wish to work in a challenging and dynamic field that is at the center of science, business, government and most importantly, saving people's lives.

The program provides professionals with a comprehensive and balanced education focusing on the key areas of regulatory affairs and the FDA imposed regulations pertinent to the pharmaceutical and biologics industry. This certificate covers a broad range of necessary technical and business skills, including GMP, GLP and data integrity. It is designed for professionals who want to participate in the process of drug development as regulatory professionals as well as provide a basic understanding to other experts involved directly in drug development process, including chemists, pharmacologists, and biologists.

Format
Online

Est. Cost
\$3,345*

*not including textbooks

Duration
9 -15 Months*

*Varies by student and courses taken per quarter.

Key Program Topics

- Regulatory requirements and guidelines for the industry by FDA Document Management Systems
- Current trends in drug safety in the USA and the importance of Good Laboratory Practices regulations Application of guidance documents (ICH and FDA) to Good Manufacturing Practices
- Develop a basic Quality Management System to manage GMPs Implementation of data integrity standards
- Writing SOPs

Conditions for Admission

To enroll in the certificate program, complete the application and, upon acceptance into the program, pay the certificate fee.

Certificate Guidelines

There are five required courses in the Regulatory Affairs Essentials certificate. Students may take courses in any sequence, although taking "Regulatory Requirements for Drugs and Biologics" first is highly recommended.

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Regulatory Requirements for Drugs & Biologics BIOL-40102	2.5
Regulatory Compliance for Drugs & Biologics BIOL-40101	2.0
Good Manufacturing Practices BIOL-40000	3.0
Good Laboratory Practices BIOL-40085	2.0
Good Documentation Practices BIOL-40201	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9353 or Email: unexbio@ucsd.edu

Conditions for Admission

Complete the application and pay application fee. UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Regulatory Affairs for Medical Devices Certificate

Overview

Medical device development is a dynamic area for professionals considering a career in regulatory affairs and can be as simple as a Band-Aid or as highly complex as lifesaving robotic equipment. Medical devices are increasing in complexity and becoming ubiquitous in the medical field. More recently, the convergence of medical devices with other industries has propelled growth and required more professionals to learn regulations. New products built from a combination of information technology and software enabled medical devices have expanded the need for those involved to learn regulatory requirements, including engineers and other technical associates. Additionally, a convergence of medical devices and drugs brings new treatment opportunities to healthcare, including drug coated stents used for cardiovascular procedures. The advent of such combination products make it necessary for therapeutics professionals involved in regulatory affairs to also become knowledgeable of regulations that apply to such devices.

The Regulatory Affairs for Medical Devices certificate provides professionals with the essential knowledge to work in this highly regulated environment and the process needed to develop medical devices from concept to commercialization.

Format Online

*Options may vary by quarter.

Est. Cost \$3,465*

*not including textbooks

Duration 9 -15 Months*

*Varies by student and courses taken per quarter.

Certificate Benefits

- Program designed to be completed in only one year
- Complete all courses online in the convenience of your own home or office
- Hands-on comprehensive training designed to immerse you in the skills needed to successfully get started or advance your career Courses taught by leading industry practitioners

Learning Objectives

- Understand the overall product development life cycle Understand how to work proactively with the FDA
- Understand how a quality management system works within a medical device company Understand the overall design control process and risk analysis
- How to prepare a 501(k) submission to the FDA
- How to perform post market surveillance to insure safety

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Overview of Regulatory Affairs for Medical Devices BIOL-40322	3.0
Quality Management Systems for Medical Devices BIOL-40323	3.0
Design Control for Medical Devices BIOL-40324	3.0
Regulatory Submissions for Medical Devices BIOL-40325	3.0
Post Market Topics for Medical Devices BIOL-40326	3.0

Admission

There are five required courses in the Regulatory Affairs for Medical Device certificate. It is strongly encourages that students take the Overview of Regulatory Affairs for Medical Devices course first.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9353 or Email: unexbio@ucsd.edu

Conditions for Admission

To enroll in the certificate program, complete the application and, upon acceptance into the program, pay the \$60 certificate fee. Although programs are open to all adult learners, UC San Diego Extension programs are designed to best serve college-prepared working professionals. Where program capacity is limited, applicants with this profile will receive preference for admission.

SAS Programming Certificate

Overview

SAS is a software suite used in the statistical analysis of data, data preparation, reporting, data mining and analytics. As the leader in business analytics software and services, SAS helps organizations access and transform large amounts of data into insights and knowledge that can be used in the discovery of new and exciting opportunities. SAS can be used to manage and retrieve data from a variety of sources and perform a myriad of statistical analyses on it.

Having applications in a variety of industries, SAS is used for operations research, project management, quality improvement, forecasting and decision-making. The language's flexibility is what makes it suitable for a variety of vertical applications and programming.

Developed and taught by seasoned SAS practitioners with over 70 years of collective experience, this online SAS Programming certificate program includes over 120 hours of instruction. The mentor-lead, 9-week capstone allows you the opportunity to demonstrate your cumulative knowledge of SAS programming by authoring a technical paper to merit presentation at a national conference. Upon completion of this program, you will have gained thorough knowledge of the various aspects of SAS and how it can be applied to a variety of industries and professions.

Program Benefits

- Program designed to be completed in only one year
- Complete all courses online in the convenience of your own home or office
- Learn to write a paper to merit a presentation at a national conference, such as the SAS Global Forum, SAS Regional Forums or similar conferences
- Hands-on comprehensive training designed to immerse you in the skills needed to successfully get started or advance your career
- Learning outcomes aligned with SAS Global's Base and Advanced certifications
- Immediately applicable skills taught by leading industry practitioners

Key Program Topics

- Importing, exporting, manipulating, transforming, and combining data
- Create reports using SAS procedures
- Advanced DATA step programming techniques
- Using PROC SQL in SAS
- Creating and using SAS Macros
- Use ODS to create data visualizations and output in multiple formats

For more information about this program, please contact the program manager at unexbio@ucsd.edu or 858-534-9353.

Courses

Required Courses <small>All six (6) courses are required.</small>	
TITLE & COURSE NUMBER	UNITS
SAS Programming I: DATA Step and PROC Fundamentals BIOL-40190	3.0
SAS Programming II: Advanced DATA Step Programming CSE-41183	3.0
PROC SQL using SAS CSE-41190	2.0
SAS Macro Programming CSE-41191	2.0
Output Delivery System (ODS) and Data Visualization Essentials using SAS CSE-41192	2.0
SAS Programming Capstone Project CSE-41193	3.0
Other Courses of Interest (not required)	
TITLE & COURSE NUMBER	UNITS
CDISC Standards for Clinical Data BIOL-40317	3.0
Data Mining for Scientific Applications CSE-40770	3.0
Discrete Math: Problem Solving for Engineering, Programming, & Science CSE-41243	3.0

Admission

You may enroll in the certificate program at any time. However, it is recommended that you enroll as soon as possible. The program curriculum may be updated at any time; if certificate requirements change, you must adhere to the curriculum at the time of your enrollment into the certificate.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-6648 or Email: appliedscience@ucsd.edu

Conditions for Admission

Although programs are open to all adult learners, UC San Diego Extension programs are designed to best serve college-prepared working professionals. Where program capacity is limited, applicants with this profile will receive preference for admission.

Safety and Health Specialist Certificate

Overview Courses

Required Courses <small>You must complete all of the courses for a total of 11.5 units.</small>	
TITLE & COURSE NUMBER	UNITS
OSHA 510 - Occupational Safety and Health Standards for the Construction Industry FPM-40299	3.0
OSHA 511 - Occupational Safety and Health Standards for General Industry FPM-40366	3.0
OSHA 7205 - Health Hazard Awareness FPM-40403	0.5
OSHA 7500 - Introduction to Safety and Health Management FPM-40379	0.5
Introduction to Fire and Life Safety in the Workplace FPM-40636	1.5
Safety Inspection Techniques FPM-40490	2.5
Workers Compensation for Safety Professionals FPM-40640	0.5

Science Communication Certificate

Overview

The Specialized Certificate in Science Communication is designed to provide students with the necessary skills to write journalistic pieces about science to help an audience of general readers engage with and understand scientific and technical information. This program serves students who are interested in entering into careers in Science Writing including journalism, public relations, and other communications positions related to science. The estimated time to complete this certificate is five quarters/18 months.

Courses

Required Courses <small>9 units</small>	
TITLE & COURSE NUMBER	UNITS
Science Writing I WCWP-40105	3.0
News and Feature Writing WCWP-40276	3.0
Final Required Course <small>(All other Required Courses and Electives must be completed first)</small>	
TITLE & COURSE NUMBER	UNITS
Science Writing II WCWP-40230	3.0
Electives <small>Min 6 units required</small>	
TITLE & COURSE NUMBER	UNITS
Writing Non-Fiction and Informational Books for Children WCWP-40327	3.0
Building a Business around Writing WCWP-40321	1.0
Self-Editing and Publishing for the Web WCWP-40313	3.0
The Art and Business of Blogging WCWP-40305	2.0
The Writer's Art of Interviewing WCWP-40123	2.0
Science Communication Internship WCWP-40329	2.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Search Engine Optimization (SEO) Certificate

Overview

From Research to Results

LEARN SEO AND EMPOWER YOUR BUSINESS AND MARKETING STRATEGY.

An effective SEO strategy is critical for entrepreneurs, businesses, and organizations seeking to increase their online visibility, brand awareness, content consumption, and sales. The Specialized Certificate in Search Engine Optimization (SEO) provides thorough training in SEO strategy, keyword research, SEO tools, website metrics, and SEO best practices. Learn how to optimize a website's architecture, conduct search-focused website audits, and increase your website ranking on search engines including Google, Bing, and Yahoo. You will explore a range of tools and valuable resources from practicing industry experts.

Format

In-Class & Online

*Online options vary by quarter.

Est. Cost

\$2,895*

*Cost may vary due to elective course selection.

Duration

12 Months*

*Varies by student and courses taken per quarter.

What you will learn:

- How search engines work, what they are looking for, and what components lead to higher rankings. On-Page SEO skills: the importance of copywriting, content expansion, competitive analysis.
- Technical SEO skills: site audits, redirects and site migration, internal linking, and structured markup.
- Off-page and advanced SEO skills: how to optimize website architecture, content themes and diversity, backlink building, and local rankings. How to write SEO optimized copy and content focused on user intent.
- The tools and approaches used to measure and evaluate the effectiveness of SEO efforts.
- Hands-on experience resulting in a portfolio of project-based work that can be shared with a current or potential employer or client.

This program is designed for:

- Anyone interested in a rewarding career in the multidisciplinary field of digital marketing. Small business owners and entrepreneurs looking to increase website visibility and sales.
- Entrepreneurial marketers, web designers, and web developers interested in offering SEO services or providing improved performance. Entry-level Marketing professionals seeking new skills or advancement.

- Mid-level marketing professionals seeking to modernize their skill set or contribute to a successful SEO plan.
- High-level marketing professionals looking to strengthen their marketing strategy and organic search performance. Copywriters looking to include SEO best practices or advance their writing career.

Industry Certification:

In addition to our certificate, the elective: [Google Analytics Certification Preparation](#) covers the skills needed to successfully complete the [Google Analytics Individual Qualification \(GAIQ\)](#).

For more information: Contact Fiona O'Donnell-Lawson at 858-534-8139 or MktgProgram@ucsd.edu

Courses

Required Courses <small>Complete both courses.</small>	
TITLE & COURSE NUMBER	UNITS
Search Engine Optimization (SEO) and Marketing CSE-41157	3.0
SEO Tools and Analytics BUSA-40952	3.0
Elective Courses <small>Complete two</small>	
TITLE & COURSE NUMBER	UNITS
Behavioral Economics ENVR-40012	2.0
SEO Content Optimization BUSA-40955	3.0
Conversion Rate Optimization BUSA-40954	3.0
Google Analytics Certification Preparation BUSA-40953	2.0

Software Engineering Management Certificate

Overview

Advanced software engineering skills involving software design, testing, and implementation are vital to software development. However, effective management of the full software life cycle, from conception to deployment, remains the most critical factor influencing the success of software projects.

The Software Project Management Certificate program is designed to provide Senior Software Engineers and Technical Managers with a firm grounding in the business essential and project management skills necessary to lead and produce high quality software products that meet customer time and budget requirements. The program provides instruction in workflows associated with software requirements gathering, analysis and element design for delivering effective implementation of fully-tested software.

Students will obtain practical knowledge with methodology, processes and integration techniques used in the industry to ensure new systems can effectively work in the existing technology environment.

Program Benefits

- Experience with methodologies, processes and tools used in the industry Developed and taught by industry professionals
- Practical knowledge to complement professional experience Immediate applicable skills

Learning Objectives

- Business Practices for Software Projects Project Management tools and techniques
- Analysis of Software Development requirements and design Testing and delivering stages, metrics and cost estimates
- Application of architectural techniques to real world business and technology challenges

Program At-A-Glance

- **Number of courses:** 4 Required Courses.
- **Total Units:** 12
- **Estimated program fees** (including certificate fee): \$2875.
- **Time to Complete:** One year
- **Delivery:** In class and Online

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Business Practices for Software Project Managers CSE-40849	3.5
Successful Software Requirement Analysis and Design CSE-40850	3.5
Successful Software Implementation and Delivery CSE-40851	3.5
Technology Alignment, Integration, and Compliance CSE-41199	3.5
Other Courses of Interest <small>Not required for certificate</small>	
TITLE & COURSE NUMBER	UNITS
Technology Management In Organizations CSE-41307	3.0
Enterprise Software Selection CSE-41313	3.0

Project Management Essentials in Science and Technology BUSA-40862	3.0
Managing Software Quality Assurance and Testing CSE-41265	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-1566 or Email: infotech@ucsd.edu

Conditions for Admission

Complete the application and pay application fee. UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Software Quality Assurance Certificate

Overview

In recent years, Quality Assurance (QA) has developed a well-defined set of methodologies and techniques resulting in a field of its own. Though QA was considered a sub-discipline of test or product management, the growing need for companies to automate and streamline their testing processes evolved the importance of QA.

Companies in the medical (Illumina, B&D), financial (Citibank), insurance (American Specialized Health), and engineering industry are constantly recruiting Software Quality Assurance Engineers. Though job descriptions vary, all of them require familiarity with software processes and testing techniques, consequently enabling shorter and more reliable test turnaround times.

The Quality Assurance professional must be skilled not only in software testing, integration testing or other testing areas, but also in DevOps tools and methodology. These skills range from writing automation scripts using scripting languages, system and web administration, certain aspects of project management to unit testing.

The Software Quality Assurance certificate will provide effective tools and knowledge for those involved in all stages of Software Development and testing processes such as Unit testing, Feature testing, Integration testing and Regression testing. Students will learn the skills necessary to ensure well documented testing, establish processes, and correctly interpret and reproduce results.

Learning Objectives

- Understand and apply Software development processes and release management
- Learn testing types, methodologies, stages, and application to software life cycle
- Hands-on experience with planning, writing and running tests
- Interpret data and metrics obtained during testing process
- Exposure to DevOps tools and concepts

Program Benefits

- Online and in-class formats available
- Hands-on training with tools and methodologies relevant to the industry
- Immediately applicable skills that satisfies the requirements of current job openings
- Taught by leading industry practitioners

Key Program Topics

- Software Development Process (both traditional and Agile)
- Black box and white box testing
- Different stages of testing: Unit testing, Integration testing and Regression testing
- Fundamentals of Software Release Management
- Web architecture, web protocols and web performance testing
- Running web load tests
- Unit test details and applications in Software development process
- Data collection and interpretation of User Experience Metric
- Agile methodologies for Project Management

Who will benefit

- Testers to update their knowledge in testing procedures
- used in the industry
- Developers interested in understanding the methodologies used in QA
- Managers that work closely with QA department
- Career Changers planning to join the job force as a Quality Assurance Engineer.

Program At-A-Glance

- **Number of courses:** 3 Required Courses, 1 Elective
- **Total Units: 12**
- **Estimated program fees** (includes certificate fee, required courses and one elective): \$2855
- **Time to Complete:** 1 year
- **Delivery:** In-class and online

Courses

Required Courses <small>All three courses required and can be taken in any order</small>	
TITLE & COURSE NUMBER	UNITS
Managing Software Quality Assurance and Testing CSE-41265	3.0
Software Testing for Quality Assurance CSE-41266	3.0
Web Performance Testing and Test Automation CSE-41267	3.0
Elective Courses <small>One course required</small>	
TITLE & COURSE NUMBER	UNITS
Agile Power Practices BUSA-40860	3.0
Introduction to Programming CSE-40028	3.0
User Experience (UX) Metrics CSE-41260	3.0
Unit Testing - Supporting Modern Software Development Methods CSE-40691	3.0
Other Courses of Interest <small>Not required for certificate</small>	
TITLE & COURSE NUMBER	UNITS
Business Practices for Software Project Managers CSE-40849	3.5
Successful Software Requirement Analysis and Design CSE-40850	3.5
Successful Software Implementation and Delivery CSE-40851	3.5
Technology Alignment, Integration, and Compliance CSE-41199	3.5

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-1566 or Email: infotech@ucsd.edu

Spanish Language Certificate

Overview

The ability to speak Spanish is increasingly important in the San Diego area. Many employers view proficiency in Spanish and broad familiarity with social norms within bicultural settings as preferred--even required--job qualifications.

The Professional Certificate in Spanish is designed for individuals with little or no background in Spanish. The goal of the program is to bring novice language learners to at least an intermediate level of Spanish, as measured by the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI). Students begin with the Communication Series then advance to Refining Fluency and/or Conversations in Spanish. Upon completion of the program, participants should have developed both the language skills and cultural understanding to communicate within a Spanish-speaking environment. The program aims to provide diverse offerings to accommodate the variety of reasons people want to learn Spanish, whether they want to be able to communicate in another culture, to increase professional opportunities, to gain a new skill and expertise, or to better understand their own heritage.

Format

100% In-class

Online options not available.

Est. Cost

\$2750*

*Early enrollment discount can reduce cost. Cost does not include textbooks or parking.

Duration

24-27 Months*

*Varies by student and courses taken per quarter.

Participants have the opportunity to further reinforce their language and cultural learning experience through pre-approved language immersion programs in Mexico. The academic credit earned in these programs can be applied to the certificate as elective credit.

Ready to enroll? Enroll online or call Student Services at 858-534-3400.

Questions about our classes or certificates? Contact our department at 858-534-5760 or ahl@ucsd.edu. Connect with us on Facebook: [Foreign Languages](#)

Courses

REQUIRED COURSES <small>All six must be taken in sequence listed</small>	
TITLE & COURSE NUMBER	UNITS
Spanish for Communication I LASP-40001	3.0
Spanish for Communication II LASP-40002	3.0
Spanish for Communication III LASP-40003	3.0
Spanish for Communication IV LASP-40004	3.0
Spanish for Communication V LASP-40005	3.0

Spanish for Communication VI LASP-40006	3.0
ELECTIVES Choose a minimum of nine units	
General Electives It is recommended that electives be taken after completion of Spanish for Communication VI, unless otherwise indicated	
TITLE & COURSE NUMBER	UNITS
Spanish Refining Fluency: Spain & the Caribbean LASP-40060	3.0
Spanish Refining Fluency: Mexico & the Southern Cone LASP-40061	3.0
Spanish Refining Fluency: Andean region and Central America LASP-40062	3.0
Spanish Conversations: Practical Dialogues LASP-40012	3.0
Spanish Conversations: News and World Issues LASP-40056	3.0
Spanish Conversations: Literary Café LTSP-40004	3.0
Spanish Conversations: Film LASP-40151	3.0
Spanish for Healthcare Professionals I LASP-40150	3.0
Spanish for Healthcare Professionals II LASP-40011	3.0
Spanish for Healthcare Professionals III LASP-40152	3.0
Travel Study Electives Programs available in Ensenada, Mexico	
TITLE & COURSE NUMBER	UNITS
Weekend Spanish Immersion program in Ensenada, Mexico LASP-40081	1.0
Weeklong Spanish Immersion Program in Ensenada, Mexico - Elementary level LASP-40053	3.0
Weeklong Spanish Immersion Program in Ensenada, Mexico - Beginner level LASP-40147	3.0
Weeklong Spanish Immersion program in Ensenada, Mexico - Intermediate level LASP-40054	3.0
Weeklong Spanish Immersion Program in Ensenada, Mexico - Advanced level LASP-40055	3.0
Spanish for Medical Professionals in Ensenada, Mexico LASP-40145	3.0
PROFICIENCY EXAM Exam required upon completion of coursework to receive certificate	
TITLE & COURSE NUMBER	UNITS
Spanish Proficiency Exam EXAM-80004	0.0
RECOMMENDED COURSES Please note: These courses do not apply to certificate	
TITLE & COURSE NUMBER	UNITS
Spanish: Advanced-Beginner Conversations LASP-40153	3.0
Spanish Advanced Grammar Review and Conversations LASP-40057	3.0

Admission

In order to receive the Professional Certificate in Spanish, participants must successfully complete the total number of credit units (27 quarter units) and the Spanish Language Proficiency Exam. Exceptions must be approved by the academic department in advance. The approximate cost of the program is estimated at \$2,750 (includes course fees and certificate enrollment fee) and is paid incrementally as students enroll in courses, rather than up front. Early enrollment discounts can reduce the cost to \$2,525. Cost does not include textbooks, materials, or parking.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Conditions for Admission

This certificate does not require any prior Spanish language knowledge or experience.

Spanish for Healthcare Professionals Certificate

Overview

The ability to speak Spanish is increasingly important in the San Diego area. California is home to nearly 7 million people that are limited English proficient (LEP). Additionally over the past few years the US has experienced an increase in the number of individuals with access to healthcare as a result of the Affordable Care Act. As more individuals who are LEP use private and public healthcare systems, the need for healthcare professionals to learn Spanish in order to effectively communicate with clients increases.

Format

100% In-class

Online options not available.

Est. Cost

\$980*

*Early enrollment discount available. Cost does not include textbooks or parking.

Duration

9 Months

To the extent which healthcare professionals can learn to communicate directly with their clients in Spanish, the quality of care will improve including fewer errors, less misdiagnoses, and better compliance with treatment plans which translates into both cost savings and higher professional self-efficacy for the provider and less morbidity and mortality throughout the Spanish-speaking community.

The Specialized Certificate in Spanish for Healthcare professionals is designed for individuals with little or no formal training in Spanish. The goal of the program is to build student's effectiveness in communicating with Spanish speaking clients in various healthcare settings.

Students will learn both general Spanish and Spanish medical terminology in order to be able to understand their Spanish-speaking clients and increase their cultural competence which will help them connect and build rapport with clients and have more insight into client-interpreter conversations.

Ready to enroll? Call Student Services at 858-534-3400.

Questions about our classes or certificates? Contact our department at 858-534-5760 or ahl@ucsd.edu.

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Spanish for Healthcare Professionals I LASP-40150	3.0
Spanish for Healthcare Professionals II LASP-40011	3.0
Spanish for Healthcare Professionals III LASP-40152	3.0

Admission

The Specialized Certificate in Spanish for Healthcare Professionals is issued upon completion of the total number of required credit units (9 quarter units).

The approximate cost of the program is estimated at \$980 (includes course fees and certificate enrollment fee), and is paid incrementally as students enroll in courses, rather than up front. Early enrollment discounts can reduce the cost to \$905. Cost does not include textbooks, parking, or optional electives. Course fees and schedules are subject to change.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Conditions for Admission

Applicants are encouraged to have some previous general healthcare knowledge. No prior Spanish language knowledge is necessary.

Supply Management Certificate

Overview

Today's Purchasing and Supply Management professionals, as a member of the management team, will be expected to guide their company through the evaluation and deployment of contemporary best practices to solve supply issues that go well beyond the simple buying transaction.

Format

Online

*Check course list below for specifics.

Est. Cost

\$2,875 - \$4,910

*Cost vary due to elective course selection.

Duration

9 - 12 months

*Varies by student due to number courses taken per quarter.

The Specialized Certificate in Supply Management is intended to help individuals with responsibility for buying goods and services in research, healthcare, public service, retail and manufacturing environments to keep abreast of contemporary solutions in this dynamic field. The program is beneficial for participants who currently have supply responsibility and wish to advance their career, as well as those individuals who want to explore this profession as a new career.

Coursework stresses the practical information and techniques needed to solve real supply issues. Students will learn underlying theories, how to apply the latest research findings, then to develop solutions, just as they would in their workplaces, through vigorous discussion and consensus building. Students quickly learn the value of their own experiences and the power of consensus-based decisions through case studies.

Program curriculum is recognized by the [Institute of Supply Management \(ISM\)](#) as a basic primer for Supply Management professionals, and the principles reviewed can help you to prepare for ISM's professional certification.

Student Spotlight

- [Student Spotlight: Catalina Ciobanu](#)

Transfer to Online Master's Degree

Upon completion of the specialized Supply Management certificate from UC San Diego Extension, nine units can be transferred towards a Master of Science in Integrated Supply Chain Management through the University of Wisconsin-Platteville, which offers the master's degree program fully online.

[Learn more about the M.S. in Integrated Supply Chain Management](#)



Courses

Three Required Courses	
TITLE & COURSE NUMBER	UNITS
Supply Management I: Purchasing & Creating Requirements BUSA-40392	3.0
Supply Management II: Sourcing and Analyzing Cost BUSA-40393	3.0
Supply Management III: Regulations, Contracting, and Logistics BUSA-40394	3.0
Choose Your Electives - 6 elective units needed	
TITLE & COURSE NUMBER	UNITS
Interest-Based Negotiation BUSA-40128	3.0
Project Management Essentials BUSA-40064	3.0
Business Communication: Online BUSA-40945	3.0
Lean Six Sigma Green Belt MAE-40013	4.0
Lean Six Sigma Black Belt MAE-40004	9.0
Financial Accounting for Non-Accountants BUSA-40009	4.0
Alternative Project Management Course <small>Project Management Boot Camp may be taken in place of Project Management Essentials</small>	
TITLE & COURSE NUMBER	UNITS
Project Management Boot Camp BUSA-40950	3.5

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8133 or Email: PurchMgtProgram@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Sustainability & Behavior Change Certificate

Overview

Solving environmental problems will require behavior change. From issues as diverse as reducing energy and water consumption, to protecting wildlife and ecosystems, achieving a sustainable future will require that people change their behaviors.

The Specialized Certificate in Sustainability and Behavior Change provides unique and advanced educational training in conservation psychology, and behavior change strategies and community engagement tools that are designed to produce results. Explore the psychological factors that lead people to engage in sustainable behavior and gain a clear understanding of the strategies that work (and those that don't) to motivate people towards behavioral change. Learn how to develop programs and projects that activate behavior change and promote sustainable outcomes and how to develop community engagement projects or programs that foster both awareness and meaningful action. This certificate culminates in a capstone course where students apply the knowledge and skills developed in this certificate to a program or project of interest.

Format
Online

Est. Cost
\$2,395

Duration
12 Months

Program Benefits:

- Learn how to develop programs and projects that activate behavior change and promote sustainable outcomes Gain insight on psychological principles, theories and methods to understand and solve environmental problems. Identify and prioritize target behaviors related to a specific environmental problem
- Develop a behavior change program implementation plan and Identify appropriate metrics for evaluating performance Develop a communications strategy that activates behavior change at the community level
- Understand strategies relevant to community based social marketing and conservation education programs

Who Should Attend:

- Professionals who manage environmental programs and campaigns
- Government employees working on environmental protection projects or programs Employees and educators at informal education institutions, including zoos and aquaria
- Community volunteers and activists interested working to promote community engagement and sustainability Business professionals interested in understanding consumer behavior and promoting corporate behavior change

Industry Certification:

AICP members can earn Certification Maintenance (CM) credits for select courses. For a list of additional UC San Diego Extension AICP CM Events go to [American Planning Association](#)

For more information: unex-environmental@ucsd.edu

Additional Reading

- [Instructor Blog: Pathways to Connectedness](#)

Courses

Required Courses	
TITLE & COURSE NUMBER	UNITS
Behavior Change Strategies for Sustainability ENVR-40006	3.0
Community Engagement ENVR-40005	3.0
Conservation Psychology ENVR-40000	3.0
Behavior Change Capstone Project ENVR-40007	3.0
Other Courses of Interest	
TITLE & COURSE NUMBER	UNITS
Introduction to Sustainability BUS-40729	3.0
Behavioral Economics ENVR-40012	2.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-8139 or Email: unex-environmental@ucsd.edu

Sustainable Business Practices Certificate

Overview

Leading organizations are becoming more aware of compliance challenges, regulations in sustainability, and opportunities afforded by public interest in climate change, environmental issues, sustainability, and “green practices.” This creates a need for educated professionals to steer their organizations in the direction of sustainable practices that make sense for their business models and goals.

This certificate program provides an overview of environmental sustainability concepts and how to apply them in a business context. Learn the core principles behind environmental sustainability; explore the “business case” for sustainability; learn strategies for measuring sustainable practices.

Format

In-Class & Online

*Options may vary by quarter.

Est. Cost

\$3,200*

*Cost may vary due to elective course selection.

Duration

12 -18 Months*

*Varies by student and courses taken per quarter.

Certificate Benefits:

- Offers a foundation in sustainability principles
- Provides opportunity to develop, practice, and apply skills most beneficial on-the-job Builds skills to assume more responsible roles within the industry
- Create a portfolio of work demonstrating industry knowledge Networking opportunities with instructors and peers

Industry Certification:

Select courses are approved by Green Building Council International (GBCI) to fulfill Continuing Education (CE) requirements. For more information go to www.usgbc.org.

For more information:

unex-environmental@ucsd.edu

Further reading:

- [Environment, Economy, and Equity—Pillars for Sustainability](#) (blog) [Finding a Sustainable Career](#) (blog)
- [Spotlighting Sustainability at La Jolla Playhouse](#) (blog)

Courses

Required Courses <small>Courses may be taken in any order however we recommend that students begin with Introduction to Sustainability</small>	
TITLE & COURSE NUMBER	UNITS
Introduction to Sustainability BUSA-40729	3.0
Economics and Life Cycle Cost Analysis ENVR-40013	3.0
Strategic Planning and Innovation ENVR-40014	3.0
Measuring Sustainable Impact ENVR-40015	3.0
Elective Courses <small>Choose three (3) Units</small>	
TITLE & COURSE NUMBER	UNITS
Resource Management BUSA-40677	3.0
Sustainability Leadership ENVR-40016	3.0
Conservation Psychology ENVR-40000	3.0
The Sustainable Supply Chain BUSA-40742	3.0
Environmental Sustainability Assessment Practicum BUSA-40737	3.0
Other Courses of Interest	
TITLE & COURSE NUMBER	UNITS
Behavior Change Strategies for Sustainability ENVR-40006	3.0
California Environmental Quality Act (CEQA) BUSA-40739	2.0
Lean Six Sigma Green Belt MAE-40013	4.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8139 or Email: fodonnell@ucsd.edu

Systems Engineering Certificate

Overview

A system is a collection of different elements that together produce results not obtainable by the elements alone. The elements, or parts, can include people, hardware, software, facilities, policies, and documents as defined by INCOSE. Systems Engineering is a technique of combining knowledge from all associated engineering disciplines to solve complex engineering problems.

Format
100% Online

Est. Cost
\$6,455

Excludes textbooks and materials.

Duration
2 years*

*Varies by student and courses taken per quarter.

Customers are becoming much more demanding, competition is greater, and advances in technology are shortening the product life-cycle. Systems Engineering solves these problems by providing the best possible solutions within cost and performance constraints while meeting all customer objectives. The application of sound engineering principles provides each business entity with a clear and certain competitive advantage in their respective industry.

The courses in this program are based on the application of sound engineering principles and are structured to provide a clear competitive advantage in their respective engineering discipline. The culmination of the five required courses are what comprise the basic skill set necessary to earn the title of "Systems Engineer."

What You Will Learn:

- How to make effective teams out of multidisciplinary resources
- Skills for planning and executing the various phases of a project
- Systematic methodologies to obtain efficient design and production
- Techniques to minimize product defects and failures with solid verification and validation methods
- Methods to reduce design changes by producing a clear and concise "Statement of Work" (SOW)
- How to improve system reliability, maintainability, and availability
- The importance of applied logistics and support strategies

Demand and Job Prospects:

- Industries employing systems engineers include; Defense, Information Technology, Financial Services and Banking, Aerospace and Airlines, Communications, Health care, Manufacturing, Utilities, Automotive, Transportation and Warehousing, Pharmaceuticals, and Biomedical.
- According to statistics from Burning Glass - Labor Insight Jobs, within the last year (7/2016 - 8/2017) there were 14,635 job postings in the state of California and 100,086 nationwide
- U.S. Bureau of Labor Statistics reports the base salary range for a Systems Engineer as 87K – 95K annually

This program is designed for:

- Individuals seeking to transition from, but not limited to, the following disciplines are encouraged to apply:
 - Project Management
 - Software Development

Software
 Engineering
 Electrical
 Engineering System
 Integration System
 Design Configuration
 Management System
 Architecture System
 Administration

Industry Certification:

- The International Council on Systems Engineering (INCOSE) has established a multi-level Professional SEP Certification Program to provide a formal method for recognizing the knowledge and experience of systems engineers, regardless of where they may be in their career
- For more information on certification <http://www.incose.org/certification/>

At a Glance:

- **Number of courses:** Eight courses (five required and three electives)
- **Total units:** 24
- **Background:** A Bachelor’s Degree preferred but not required to complete this certificate

Upcoming Events:

System Engineering Relevance: Time for a Sea of Change

For more information about this program, please email unexengr@ucsd.edu.

Courses

REQUIRED COURSES <small>All 5 courses are required</small>	
TITLE & COURSE NUMBER	UNITS
Systems Engineering Management BUSA-40066	3.0
Systems Requirements Analysis BUSA-40125	3.0
Systems Verification and Validation BUSA-40414	3.0
Systems Engineering Software Overview CSE-41293	3.0
Systems Hardware/Software Integration EE-40060	3.0
ELECTIVE COURSES <small>Select any combination of elective courses. Minimum of 9 units required.</small>	
TITLE & COURSE NUMBER	UNITS
Introduction to Systems Thinking MAE-40017	3.0
Systems Engineering with OMG SysML™ CSE-40981	3.0
Logistics I: Logistics Overview BUSA-40932	3.0
HSI I: Introduction to Human System Integration CSE-40996	4.0
LEAN Thinking for Big Data Analytics CSE-41296	3.0
Introduction to System Safety MAE-40026	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9152 or Email: unexengr@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Talent Acquisition Certificate

Overview

Talent acquisition is a significant function of the HR discipline that involves a variety of strategies to help an organization meet its current and future staffing needs. As technology and social media platforms revolutionize the practice, it is increasingly important for HR and talent acquisition professionals to update their training and skills in order to deploy effective strategies that attract and acquire the best-performing candidates for employers.

The Specialized Certificate in Talent Acquisition will offer students opportunities to delve deeper into the strategic talent acquisition process. Coursework will provide practical and up-to-date information on identifying, sourcing, selecting, and onboarding new employees into the organizations. Additionally, students will be able to develop talent acquisition strategies that are compliant with equal employment as well as other employment laws and regulations. The program will benefit new and experienced individuals, including those who are involved in hiring activities and desire to gain specialized knowledge in talent acquisition.

Learning Objectives:

- Gain practical understanding of talent acquisition trends and best practices in today's environment
- Explain and implement the steps to develop effective talent acquisition strategies and compliant hiring practices Practice applying recruiting techniques for the different types of positions
- Obtain skills to accurately assess and select the qualified candidates against a prescribed set of criteria Understand and learn to effectively use various types of selection tools in the hiring process
- Conduct effective interviews using the various types of interview questions and interview methods
- Demonstrate knowledge of how the various federal and state laws and regulations relate to the employment process Learn how to effectively onboard and orient new employees to their new roles and new workplaces
- Measurement of and continuous improvement to the recruitment and selection processes

Courses

Required Prerequisite <small>Complete both courses prior to taking other required courses</small>	
TITLE & COURSE NUMBER	UNITS
Managing Human Resources: An Overview BUSA-40010	4.0
Strategic Talent Acquisition BUSA-40874	3.0
Required Courses <small>Complete all 3 courses</small>	
TITLE & COURSE NUMBER	UNITS
Talent & Sourcing Strategies BUSA-40828	2.0
Employee Selection Tactics BUSA-40902	2.0
Effective Onboarding Practices BUSA-40903	2.0
Other Courses of Interest	
TITLE & COURSE NUMBER	UNITS
Human Resource Management Information Session INFO-70031	0.0
HR Analytics Workshop BUSA-80020	0.0

Admission

The required courses are designed to be taken sequentially and should be taken in the order shown on the course matrix above. You must earn a Pass (C-) or better grade in each course.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8148 or Email: HRPrograms@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission. Complete the application and pay application fee.

Taxation Certificate

Overview

The Specialized Certificate in Taxation will enable students to gain comprehensive instruction regarding many facets of individual and corporate tax principles. Such knowledge will allow students to understand aspects of tax with regard to planning, compliance and decision making. This program is designed for individuals who are:

- CPA Candidates
- Accounting
- Managers Payroll
- Managers Financial
- Professionals Small Business
- Owners Lawyers
- Paralegals

This Certificate encompasses the application of the concepts learned from the courses in accounting, taxation and the legal system. A [Professional Certificate in Accounting](#) is recommended to gain a comprehensive understanding of accounting.

Learning Objectives

- Gain a practical understanding of the federal tax codes and regulations as applied to individuals and corporations. Develop skills in analyzing transactions and identifying the corresponding tax consequences.
- Learn about the legal environment as it relates to various tax authorities, such as the Internal Revenue Service (IRS), Department of Justice, and Assessor's office.
- Understand the legal practices and procedures involved with defending tax audits and appeals. Introduce an ethical framework as a basis for professional conduct when dealing with tax issues. Experiencing opportunities for hands-on skill building in accounting, taxation and law.

Courses

Required Prerequisite <small>Complete one course.</small>	
TITLE & COURSE NUMBER	UNITS
Elementary Accounting I BUSA-40036	4.0
Financial Accounting for Non-Accountants BUSA-40009	4.0
Required Courses <small>Complete all four courses.</small>	
TITLE & COURSE NUMBER	UNITS
Federal Individual Income Taxation BUSA-40047	4.0
Taxation of the Business Entity BUSA-40529	4.0
Introduction to the Legal System LAW-40000	1.0
Taxation: Practice, Procedure and Ethics BUSA-40869	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Business, Professional & Legal Programs. Call 858-534-8189 or Email: acctgtaxprogram@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

Teaching Adult Learners Certificate

Overview

The Teaching Adult Learners Professional Certificate is an online certificate program. The program is designed to prepare you to work with groups of adult learners in diverse and challenging environments. Whether you work in an educational or corporate setting, understanding how to teach and train adults can build effective management skills, make your classrooms much more effective and engaging, and ultimately advance your career to new levels of success.

The Professional Certificate in Teaching Adult Learners is designed and taught by specialists currently working in the field. Our instructors are highly experienced in andragogy, online instruction, and curriculum development and focus on the development of practical classroom skills and effective teaching techniques. Their skills and knowledge are what keeps our program up-to-date in the field. This certificate will certainly add to your expertise and knowledge of teaching adults and presenting material in the online environment.

Target Audience

This is an opportunity to enhance your existing area of expertise and become a skilled and engaging trainer in an educational or corporate setting. The program will develop your abilities to:

- Understand how to teach and train adults in diverse settings. Create effective curriculum and successful training sessions. Demonstrate your new skills and abilities to advance your career.

The Program

- # of courses required: 11
- Total units: 24
- Estimated cost: \$3,200
- Time to Complete: Candidates can complete in 9-12 months
- Delivery: Online

Courses

Required Courses <small>All 11 are required</small>	
TITLE & COURSE NUMBER	UNITS
Introduction to Online Learning EDUC-40989	2.0
Foundations of Curriculum Design and Evaluation EDUC-40990	2.0
Foundations of Adult Education EDUC-40096	3.0
Interpersonal Relations, Communication Skills, and Guidance EDUC-40098	2.0
Teaching and Training Adults in Diverse Settings EDUC-41266	3.0
Effective Strategies for Teaching and Training Adults EDUC-41267	3.0
Post-Secondary Instruction Emphasis <small>Complete all courses listed in area</small>	
TITLE & COURSE NUMBER	UNITS
Instructional Practices EDUC-40097	3.0
Current Issues in Adult Education EDUC-40091	2.0
Preparing for a Community College Career EDUC-40556	1.0
Instructional Technology Tools CSE-40798	2.0
Adult Learners Capstone Portfolio EDUC-41233	1.0

Admission

All candidates who wish to receive the Teaching Adult Learners Professional Certificate are required to:

1. Enroll in the Teaching Adult Learners certificate program.
2. Pay the certificate fee.
3. Complete all the required online courses with a grade of a "C" or better.
4. Coursework must be completed within 5 years of beginning the program.

Students must first complete an Introduction to Online Learning and a Foundations of Curriculum Design and Evaluation.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Education. Call 858-534-9286 or Email: unexeduc@ucsd.edu

Conditions for Admission

This is an opportunity to enhance your existing area of expertise and become a skilled and engaging trainer in an educational or corporate setting. The program will develop your abilities to:

1. Understand how to teach and train adults in diverse settings.
2. Create effective curriculum and successful training sessions.
3. Demonstrate our new skills and abilities to advance your career.

Teaching English as a Foreign Language Certificate

Overview

UC San Diego Extension's Teaching English as a Foreign Language (TEFL) Professional Certificate program provides aspiring ESL and EFL educators with the necessary knowledge and skills to become a resourceful and confident teacher of English as a second language or English as a foreign language. We offer a high-quality curriculum of in-class and online courses which provide specialized training and necessary skills to people interested in teaching English in the U.S. or overseas. A TEFL Professional Certificate, along with a bachelor's degree, will open doors to job opportunities around the globe as an English teacher.

UC San Diego Extension TEFL Professional Certificate courses provide a unique opportunity for international students and American students to study side-by-side, developing their knowledge of applied linguistics and their teaching techniques for the various English language skills and competencies. Students are given just enough theory to provide a good foundation while taking courses which focus on the successful application of information about the English language and pedagogical principles for student-centered language teaching. Students will take many courses to strengthen their ability to teach English grammar, listening skills, pronunciation and fluency, speaking, writing, reading, and vocabulary development. For the program electives, we recommend the TEFL Practicum course which provides the chance to observe classroom teaching in action, and to develop and deliver a portfolio of effective lessons plans which are extremely useful when searching for employment. A TEFL job resources guide is also available for graduates of the program.

If you are interested in a specialized TEFL program, our [Teaching English to the Young Learner \(TEYL\) program](#) offers courses focused on teaching English to kindergarten to middle school-aged children (K-8), and includes fieldtrips to local schools and teacher specialty stores to learn how to obtain the latest and most effective educational materials.

Whether you are looking to begin a new career, change careers, live and work abroad, travel overseas, or volunteer in the local community, our TEFL programs will help you to become a successful, resourceful, and confident English teacher in any educational setting. Let the adventure of a lifetime begin now!

Please click [here](#) for a Summer 2019 TEFL course catalog.

If you have any questions, please email tefl@ucsd.edu or call (858) 534-7418. Learn more about the TEFL certificate program at our free [information session](#).

Can't make it to our in-person information session? Please try our 10-minute [online information session!](#)

Stay connected with us on our [Facebook](#) page.

Courses

TEFL Information Session <small>Learn more about the TEFL certificate program at our free information session.</small>	
TITLE & COURSE NUMBER	UNITS
TEFL Certificate Information Session INFO-70007	0.0
Online TEFL Certificate Information Session INFO-70164	0.0
Required Courses <small>All courses listed are required for the certificate.</small>	
TITLE & COURSE NUMBER	UNITS
Advanced Analysis of English Sentence Structure I LING-40045	3.0
Best Methods in Teaching Listening Skills LING-40048	3.0
Best Methods in Teaching Pronunciation and Fluency LING-40047	3.0
Best Methods in Teaching Speaking Skills LING-40050	3.0
Teaching Writing for Academic and Professional Purposes LING-40044	3.0
Theories and Methods of Language Teaching and Learning LING-40110	3.0

Theory and Methods of Reading Instruction LING-40046	3.0
TEFL Electives Three units are required from the options below.	
TITLE & COURSE NUMBER	UNITS
Advanced Analysis of English Sentence Structure II LING-40075	3.0
Advanced Grammar Seminar LING-40065	3.0
Games for the EFL Classroom LING-40063	1.0
Grammar and Editing I LING-40041	3.0
Grammar and Editing II LING-40101	3.0
Introduction to Teaching English as a Foreign Language (TEFL) LING-40096	3.0
Introduction to Teaching Writing LING-40097	3.0
Music in the EFL Classroom LING-40067	1.0
Oral Presentations for Language Teachers LING-40099	3.0
TEFL Practicum: Best Methods in Developing and Delivering Lesson Plans LING-40111	3.0
TEYL Classroom Management LING-40100	3.0
Teaching English to the Intermediate Young Learner (Ages 8-11) LING-40125	3.0
Teaching Language through Art LING-40120	1.0
Teaching TOEFL Prep Classes: Paper and Internet LING-40068	1.0
Teaching Young English Learners in the Primary Grades (Ages 4-7) LING-40124	3.0
Visual Media in the EFL Classroom LING-40087	1.0
Workplace EFL: Teaching English in International Business and Industry LING-40069	1.0
ESL Electives optional; can satisfy certificate elective unit requirements	
TITLE & COURSE NUMBER	UNITS
Academic Competence in the U.S University I LING-40119	1.0
Academic Writing WCWP-40000	3.0
Advanced Pronunciation and Fluency LING-40083	3.0
Advanced Topics in Academic Writing LING-40116	1.0
American Idioms and Slang for Fluency I LING-40123	1.0
American Idioms and Slang for Fluency II LING-40127	1.0
Business Writing for Non-Native English Speakers WCWP-40219	3.0
Effective Oral Presentation LING-40081	3.0

Grammar and Vocabulary Building LING-40082	3.0
Pronunciation and Fluency LING-40076	3.0
Scientific and Technical Writing for Non-native English Speakers WCWP-40045	3.0
Topics in Advanced English Structure LING-40115	1.0
Topics in Writing Mechanics LING-40117	1.0

Admission

- Students may begin the TEFL Professional certificate program in any quarter of the year and it can be completed in two quarters. If students would like to complete the program in one quarter, this option is available during the summer and winter quarters.
- If a student needs to complete the program in a quicker period of time, please contact us for advising. Various specialized TEFL programs are also offered.

There will be a \$95 fee upon acceptance into the program.

As of 08/16/2019

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

International Programs - Bldg. A. Call 858-534-7418 or Email: tefl@ucsd.edu

Conditions for Admission

- Native speaker of English or one of the following language proficiency scores: 550 paper-based TOEFL; 80 Internet-based (iBT) TOEFL; 760 TOEIC; 6.5 IELTS; or "pass" on the FCE or Advanced Cambridge exams.
- Complete the application and pay the \$95 certificate fee. The certificate fee must be paid online and students are subject to program change requirements until paid.

Teaching English to Speakers of Other Languages Certificate

Overview

UCSD Extension's Professional Certificate in Teaching English to Speakers of Other Languages (TESOL) offers coursework online. This program allows participants to acquire the specialized training and skills needed for a successful career teaching English as a second language, either in the U.S. or in another country.

The program provides the major competencies and knowledge necessary to be a specialist in the TESOL field, with a focus on the development of practical classroom skills and effective teaching techniques, plus a foundation in second-language acquisition theory. Each class covers concepts, methods, techniques, materials, and resources directly applicable to the classroom. The courses will be as useful to the experienced second language educators as well as the novice.

Target Audience

The TESOL program is geared to meet the needs of educators or potential educators at all levels-elementary, secondary, college, or adult. It will also greatly benefit foreign language educators seeking professional development, including TESOL teachers who would like to know more about second-language acquisition, program administrators or coordinators responsible for the development of TESOL curriculum. In addition, the material covered will help educators currently teaching or training in school English immersion programs.

Professional Development

If you wish to take one of the TESOL Professional Certificate online courses for professional development without registering for the program, you may do so.

[EDUC 40093 Fundamentals of Teaching English as a Second Language](#) and [LING 40031 Theories of Second-Language Acquisition and Application to Teaching](#) are the first two recommended courses in the program.

The Program

- # of courses required: 8 Total
- units: 21 Estimated
- cost: \$3,200
- **Time to Complete:** Candidates can complete in 6-9 months
- **Delivery:** Online

Courses

Required Courses <small>All eight are required</small>	
TITLE & COURSE NUMBER	UNITS
Fundamentals of Teaching English as a Second Language EDUC-40093	3.0
Teaching and Testing ESL Reading and Writing Skills EDUC-40544	3.0
Teaching and Testing ESL Listening and Speaking Skills EDUC-40408	3.0
Linguistics for Language Teachers LING-40000	3.0
The Role of Grammar in Teaching a Second Language LING-40005	3.0
Culture in the Language Classroom EDUC-40756	3.0
Theories of Second-Language Acquisition and Application to Teaching LING-40031	3.0
TESOL Practicum <small>Required or documentation of one full year of ESL teaching experience</small>	
TITLE & COURSE NUMBER	UNITS

TESOL Practicum EDUC-80061	0.0
Elective Courses 0 units required, professional development only	
TITLE & COURSE NUMBER	UNITS
Culture and Inclusion EDUC-31217	4.0

Admission

All candidates who wish to receive the Professional Certificate in Teaching English to Speakers of Other Languages

- (TESOL)are required to: (1)Enroll in the TESOL certificate program.
- (2) Pay the certificate fee.
- (3) Complete all required online courses with a grade of "C" or better. (4)Coursework must be completed within 5 years of beginning the program.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Education. Call 858-534-9286 or Email: unexeduc@ucsd.edu

Conditions for Admission

Native speaker of English or one of the following language proficiency scores: 79 Internet-based (iBT) TOEFL; 760 TOEIC; 6.0 IELTS; or "pass" on the FCE or Advanced Cambridge exams.

Although most students finish this certificate program within one to two years, in order to be eligible for a certificate from UC San Diego Extension, all required and elective coursework must be completed within five years of beginning a certificate program.

Teaching Online Certificate

Overview

The Teaching Online program is designed for anyone who would like to teach online, whether they do this at a community college, K-12 school, or business professional development program. Online Learning is a growing field and will only continue to expand as enhanced technology makes it possible to provide effective instruction through distance learning. The professional demand extends from K-12, community college, University, adult education programs, and corporate training.

As today's learners become more receptive to online interactive learning, e-learning represents a paradigm shift in delivering and acquiring knowledge. Participants will learn how to design, implement, assess and evaluate curriculum content and appropriate teaching methodology for the online classroom. Candidates will explore leading instructional technology tools, software, and web-based applications.

Professional Development

All new applicants to the certificate program who are considering beginning the program with any of the other courses should note the required prerequisites must first be completed. EDUC 40989 Introduction to Teaching Online and EDUC 40990 Foundations of Curriculum Design and Evaluation are required prerequisites for all the other courses throughout the program.

If you wish to take one of the Teaching Online Specialized Certificate online courses for professional development without registering for the program, you may do so.

Target Audience

This is an opportunity to enhance your existing area of expertise and become a skilled and engaging online educator. The program will develop your abilities to:

- Attain a solid foundation for learning in an online environment which enables student-centered teaching methods.
- Learn the necessary skills, knowledge, and abilities required to transition successful from in-person to the online classroom. Gain first-hand knowledge and experience of learning in an online environment.

The Program

- # of courses required: 6 Total
- units: 13 Estimated cost: \$1,705
- Time to Complete: Candidates can complete in 6-9 months
- Delivery: Online

Courses

Required Courses <small>All six are required</small>	
TITLE & COURSE NUMBER	UNITS
Introduction to Online Learning EDUC-40989	2.0
Foundations of Curriculum Design and Evaluation EDUC-40990	2.0
Instructional Technology Tools CSE-40798	2.0
Enhancing Your Online Course with Multimedia CSE-40799	2.0
Advanced Curriculum Design for the Online Classroom EDUC-41231	3.0
Teaching Online Practicum EDUC-41232	2.0

Admission

Certificate Guidelines

All candidates who wish to receive the Teaching Online Certificate are required to:

- (1) Enroll in the Teaching Online certificate program.
- (2) Pay the certificate fee.
- (3) Complete all the required online courses with a grade of “C” or better.
- (4) Coursework must be completed within 5 years of beginning the program.

Students must first complete “Introduction to Online Learning” and “Foundations of Curriculum Design and Evaluation.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Education. Call 858-534-9286 or Email: unexeduc@ucsd.edu

Conditions for Admission

Please see the application for specific admission requirements for this program. Although a college degree or professional experience in the field are not required, applicants with such experience may receive preference for admission when program capacity is limited.

Technical Communication Certificate

Overview

Technical communication is an excellent career for good writers who love to help others understand complex information. They draw on their skills in writing and information design to translate complex scientific or technical information into content that a specific audience will easily understand. Technical communicators work in every field, from accounting to pharmaceuticals to telecommunications and create a wide variety of documents and scripts, including environmental impact statements, financial reports, training materials, user guides and more. Demand is greatest for communicators who have degrees in science or engineering, but there are opportunities for those with a background in communications, journalism, English, visual media, and other fields.

Format 100% Online

In class options might be available for some courses.

Est. Cost
\$5,250

Duration
9 Quarters*

*Duration if taking one class per quarter.

UC San Diego Extension's Professional Certificate in Technical Communication will provide you with the most up-to-date knowledge in the field of Technical Communication. The program is designed and taught by technical communication professionals working in the field and can be completed entirely online.

For detailed information, please enroll in the [Writing Program Online Information Session](#).

The program can be completed online in 18-24 months. Tuition is \$295-\$595 per course. The courses are asynchronous but not self-paced; you will be required to keep up with weekly assignments. The average student spends three hours online and six hours offline per course each week. Please preview our e-learning system [here](#).

Courses

Information Session <small>Learn more about the program in a free, online information session.</small>	
TITLE & COURSE NUMBER	UNITS
Technical Communication and Copyediting Information Session INFO-70166	0.0
Required Courses <small>All 17 units required</small>	
TITLE & COURSE NUMBER	UNITS
Technical Communication I WCWP-40151	3.0
Basics of Technical Editing WCWP-40307	3.0
Critical Thinking for Communicators WCWP-40265	3.0
Information Design for Technical Communicators WCWP-40150	2.0
Writing Online Documentation WCWP-40158	3.0
Technical Communication II WCWP-40154	3.0

Electives 7 units required

TITLE & COURSE NUMBER	UNITS
Applied Design for Technical Communicators WCWP-40264	2.0
Grammar Lab WCWP-40234	3.0
Project Management for Technical Communicators BUSA-40667	2.0
Tools for Technical Communicators WCWP-40266	3.0
Adobe Photoshop I: Introduction ART-40311	3.0
Adobe InDesign ART-40533	3.0
Adobe Illustrator ART-40527	3.0
Introduction to Adobe Creative Cloud ART-40665	3.0
User Interface Design ART-40535	3.0

Admission

The program consists of 24 quarter units in Writing and other disciplines related to technical communications. It can be completed in eight academic quarters. You must earn a Pass (C-) or better grade in each course. Extension courses in science, computing, and engineering may be applied toward electives with department approval.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Conditions for Admission

You must have native-level fluency with English and must write clear, logical, and grammatically correct sentences. You will need a computer, a high-speed internet connection, MS Word, PowerPoint, and proficiency with all of the above. Students should be prepared to send and receive email regularly, navigate the web, and manage files on a computer.

Please see the application for specific admission requirements for this program.

Although a college degree or professional experience in the field are not required, applicants with such experience may receive preference for admission when program capacity is limited.

Current UCSD students may be considered for admission depending on their academic and career focus and educational performance.

Translation (Spanish/English Certificate)

Overview

Designed for bilingual adults who may or may not already be working in the field of translation, the program offers high-level instruction and professional training from active professionals.

It can set you apart from the competition and certify to potential employers that you possess the bilingual proficiency, cultural understanding, theoretical knowledge, and skill set they are looking for. Graduates of our program go on to own and operate their own translation businesses, freelance, work for private companies or work within the public sector.

Format 100% Online

In-class options not available.

Est. Cost \$3270*

*Cost does not include textbooks or additional electives.

Duration 15-21 Months*

*Varies by student and courses taken per quarter.

Ready to enroll? Enroll online or call Student Services at 858-534-3400.

Questions about our classes or certificates? Contact our department at 858-534-5760 or email ahl@ucsd.edu.

[Looking for a broader translation and interpretation program?](#)

Get connected to the local and national translation and interpretation communities through UC San Diego Extension:

- [Facebook](#)
- [ok](#)
- [Twitter](#)
- [LinkedIn](#)
- [n](#)

Courses

Information Session <small>Find out more about the program in a free information session.</small>	
TITLE & COURSE NUMBER	UNITS
Translation & Interpretation Program Information Session INFO-70027	0.0
PREREQUISITE	
TITLE & COURSE NUMBER	UNITS
Entrance Exam EXAM-80002	0.0
Required Courses <small>All 7 courses are required.</small>	
TITLE & COURSE NUMBER	UNITS
Introduction to Translation LING-40106	1.5

English to Spanish Translation I LING-40039	3.0
Spanish to English Translation I LING-40040	3.0
Theory and Practice of Translation LING-40004	3.0
English to Spanish Translation II LING-40027	3.0
Spanish to English Translation II LING-40011	3.0
Tools and Technology in Translation LING-40107	3.0
Optional Additional Classes <small>Please note: Does not apply to certificate; prerequisite requirements apply to some courses.</small>	
TITLE & COURSE NUMBER	UNITS
Sight Translation: Theory & Practice LING-40086	3.0
Strategic Marketing & Branding for Translators & Interpreters LING-40113	3.0
Business Translation LING-40025	3.0
Legal Translation LING-40035	3.0
Medical Translation: Internal Medicine LING-40092	3.0
Medical Translation: Specialty Areas LING-40093	3.0
Introduction to Swordfish LING-40118	2.0

Admission

The Specialized Certificate in Translation (Spanish/English) is issued upon completion of the entrance exam and the total number of required credit units (19.5 quarter units). The approximate cost of the program is \$3,270 (includes course fees, entrance exam fee, and certificate enrollment fee) and is paid incrementally as students enroll in courses rather than up front. Cost does not include textbooks or class materials. Course fees and schedules are subject to change.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Conditions for Admission

Total fluency in both English and Spanish, including the ability to speak, read, and write at a second year university level, is required. Fluency is determined by a written online entrance exam. Select courses may be taken prior to passing the entrance exam.

Translation and Interpretation (Spanish/English Certificate)

Overview

The Professional Certificate in Translation and Interpretation (Spanish/English) is designed for bilingual adults who may or may not already be working in the field of translation and interpretation.

Our reputable and rigorous program offers high-level instruction and professional training from active professionals to set you apart from the competition and certify to potential employers that you possess the bilingual proficiency, cultural understanding, theoretical knowledge, and skill set they need. Graduates of our program go on to own and operate their own translation and interpretation service companies, freelance, work for private companies or work within the public sector.

Format 100% Online

In-class options not available.

Est. Cost \$4945*

*Cost does not include textbooks or class materials

Duration 15-30 Months*

*Varies by student and courses taken per quarter.

Ready to enroll? Enroll online or call Student Services at 858-534-3400.

Questions about our classes or certificates? Contact our department at 858-534-5760 or ahl@ucsd.edu.

[Looking specifically for translation?](#)

Get connected to the local and national translation and interpretation communities through UC San Diego Extension:

- [Facebook](#)
- [ok](#)
- [Twitter](#)
- [LinkedIn](#)

Courses

Information Session <small>Find out more about the program in a free information session.</small>	
TITLE & COURSE NUMBER	UNITS
Translation & Interpretation Program Information Session INFO-70027	0.0
PREREQUISITE	
TITLE & COURSE NUMBER	UNITS
Entrance Exam EXAM-80002	0.0
REQUIRED COURSES <small>All 21 units are required.</small>	
TITLE & COURSE NUMBER	UNITS

Introduction to Translation LING-40106	1.5
Introduction to Interpretation LING-40109	1.5
English to Spanish Translation I LING-40039	3.0
Spanish to English Translation I LING-40040	3.0
Theory and Practice of Translation LING-40004	3.0
Consecutive Interpretation: Theory & Practice LING-40037	3.0
Simultaneous Interpretation: Theory & Practice LING-40038	3.0
Sight Translation: Theory & Practice LING-40086	3.0
ELECTIVES A minimum of 9 units is required from any of the following categories.	
General Electives	
TITLE & COURSE NUMBER	UNITS
English to Spanish Translation II LING-40027	3.0
Spanish to English Translation II LING-40011	3.0
Business	
TITLE & COURSE NUMBER	UNITS
Business Translation LING-40025	3.0
Tools and Technology in Translation LING-40107	3.0
Strategic Marketing & Branding for Translators & Interpreters LING-40113	3.0
Introduction to Swordfish LING-40118	2.0
Legal	
TITLE & COURSE NUMBER	UNITS
Legal Translation LING-40035	3.0
Introduction to Court Interpretation LING-40071	3.0
Medical	
TITLE & COURSE NUMBER	UNITS
Medical Translation: Internal Medicine LING-40092	3.0
Medical Translation: Specialty Areas LING-40093	3.0
Medical Interpretation LING-40104	3.0

Admission

Tailor the curriculum to suit your professional needs. Areas of specialization in translation or interpretation, or professional industry (medical, legal, and business) are available.

The Professional Certificate in Translation and Interpretation (Spanish/English) is issued upon completion of the entrance exam and the total number of required credit units (30 quarter units). The approximate cost of the program is \$4,945 (includes course fees, entrance exam fee, and certificate enrollment fee) and is paid incrementally as students enroll in courses rather than up front. Cost does not include textbooks or class materials. Course fees and schedules are subject to change.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-5760 or Email: ahl@ucsd.edu

Conditions for Admission

Total fluency in both English and Spanish, including the ability to speak, read, and write at a second year university level, is required. Fluency is determined by a written online entrance exam. Select courses may be taken prior to passing the entrance exam.

Translational Science Certificate

Overview

Prepare for a career in translational science

The Specialized Certificate in Translational Science provides the opportunity for the public to enroll in Graduate-Level Translational Science courses. As new biomedical product companies continue to emerge and mature in San Diego's vibrant life science ecosystem, entrepreneurial R&D professionals are in high demand. The Specialized Certificate in Translational Science provides an integrated, comprehensive, and operational understanding of what it takes to innovate in biomedical R&D, from product idea to market, in a rapidly changing environment. The program aims to develop well-rounded aspiring biomedical leaders, innovators, and entrepreneurs and accelerate the translation of ideas into high-quality and highly differentiated biomedical products.

Format

In-Class

Est. Cost

\$5,300

Excludes textbooks and materials.

Duration

12 months

This program is designed for:

The certificate aims to engage developing professionals working in the San Diego life science ecosystem who want to boost their career in Translational Science or transition to a career in Translational Science, as well as UCSD graduate and post-graduate students who want to prepare themselves for a career in Translational Science while they are completing their full-time UCSD study program.

What you will learn:

The courses are taught by a faculty of seasoned industry professionals and academic experts in a hands-on learning environment. This Translational Science certificate Program was developed by the School of Medicine Altman Clinical and Translational Research Institute (ACTRI) and will be administered by UC San Diego Extension. The certificate is directed by Regent Laporte, DVM, MSc, PhD, Senior Director, Translational Pharmacology, Peptide Logic. Leveraging the extensive industry and academic network that he has been developing as an industrial scientist, Dr. Laporte has recruited a diverse multidisciplinary Faculty composed of seasoned biomedical industry professionals and leading academic subject matter experts. This Faculty, led by Drs. Laporte; Mark Fineman, MS, MAS, PhD, Senior Vice-President, Clinical Development, Samumed; and Sheldon Morris, MD, MPH, Associate Professor, Departments of Medicine and of Family and Preventive Medicine, UC San Diego School of Medicine, as Course Directors, will co-develop content and provide expertise on emerging knowledge and practices in their fields to ensure that the program remains up to date in the rapidly evolving discipline that is Translational Science in Medicine. Gain an integrative and operational understanding of translational science and apply your newly learned skills to make a difference in your workplace and distinguish yourself as an effective leader.

Applications are accepted and reviewed on an on-going basis.
 The final day to submit your application for the Winter 2020 quarter is **December 20, 2019 at 5:00pm.**

Courses

Required Courses <small>All 10 units required</small>	
TITLE & COURSE NUMBER	UNITS
Translational Research Fundamentals CLRE-236	2.0
Applied Translational Research CLRE-238	2.0
Electives <small>2 units required</small>	
TITLE & COURSE NUMBER	UNITS
Applied Translational Research II CLRE-239	2.0
Translational Regenerative Medicine CLRE-237	2.0
Required Capstone Project (Pick One) <small>Required Capstone Project</small>	
TITLE & COURSE NUMBER	UNITS
Certificate Project CLRE-40004	4.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Healthcare & Behavioral Sciences. Call 858-534-4041 or Email: rhoughtaling@ucsd.edu

UNIX & Linux System Administration Certificate

Overview

Program Highlights:

The UNIX/Linux operating systems have been predominant leaders in both academic and industrial computing environments. Enjoying a resurgence in popularity, UNIX/Linux are appearing everywhere from desktops to servers, and as the operating system for housing big data. The increase in installed systems, as well as an increasing sophistication of networks and users has created a growing demand for highly skilled UNIX/Linux System Administrators.

Format

Online

*Check course list below for specifics.

Est. Cost

\$3,590

*Estimated cost with certificate fee included.

Duration

12-15 months

*Varies by student due to number courses taken per quarter.

Unix and Linux System Administrator Skill Set :

UNIX/Linux skills can lead to a career in various Information Technology (IT) fields, such as DevOps and IT security. System Administrators implement and maintain complex UNIX/Linux environments on-premise and in the cloud. UNIX/Linux IT Services include network monitoring, domain name services, web services, database engines, high performance computing, electronic mail handling, printer services, network file service, virtual environments, and system backups. UNIX/Linux System Administrators must demonstrate a high level of knowledge of the aforementioned skills in order to manage complex network systems.

What you will learn:

The UNIX/Linux System Administration Specialized certificate is designed to provide students with a demonstrable, working knowledge of UNIX/Linux and the tools and capabilities to implement, maintain, and manage complex network systems. The certificate consists of four required courses as follows:

- [UNIX & Linux System Administration I](#) showcases the UNIX/Linux operating system's user interface and common commands
- [UNIX & Linux System Administration II](#) covers disk and file management, users and groups administration, and backing up and restoring a UNIX/Linux system
- [UNIX & Linux Security Fundamentals](#) provides students with fundamental security tools, hacker prevention techniques, and hardened systems methodologies
- [UNIX & Linux Shell Programming](#) teaches how to write and debug shell scripts, task automation while implementing a variety of tool sets, improving system security, and system monitoring and analysis

All four required courses in this program utilize extensive hands-on virtual lab exercises designed to reinforce the concepts, enabling students to apply their learning almost immediately.

Contact: For more information about this program, please email InfoTech@ucsd.edu.

Courses

Prerequisite	
TITLE & COURSE NUMBER	UNITS
Unix & Linux Operating Systems Fundamentals CSE-41268	3.0

Required Courses <small>All four (4) courses are required</small>	
TITLE & COURSE NUMBER	UNITS
UNIX & Linux System Administration I CSE-41269	3.0
UNIX & Linux System Administration II CSE-41270	2.0
UNIX & Linux Security Fundamentals CSE-41272	4.0
UNIX & Linux Shell Programming CSE-41271	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9152 or Email: infotech@ucsd.edu

User Experience (UX Design Certificate)

Overview

Following the advent of mobile devices, advanced web technologies, and user-centered design, demand for qualified User Experience (UX) designers has skyrocketed.

UX design isn't just the process of maximizing functionality or making your product look attractive, it is a science with a significant focus on research, data collection, and psychology of human-computer interaction.

The User Experience Design certificate provides students with a practical knowledge of UX principles, software, and techniques for analysis. Upon successful completion of the program, students will have portfolio-worthy projects and can immediately apply their new skills to their current design job or future professions as Junior UX designers.

Format

100% Online

In class options might be available for some courses.

Est. Cost

\$6,700*

*Cost may vary by format selection and curriculum updates.

Duration

15-21 Months*

*Varies by student and courses taken per quarter.

Courses

REQUIRED COURSES <small>All 16 units are required.</small>	
TITLE & COURSE NUMBER	UNITS
Principles of User Experience (UX) ART-40638	4.0
User Experience (UX) Design I ART-40639	4.0
User Experience (UX) Design II ART-40642	4.0
Responsive Design and User Experience (UX) ART-40640	4.0
Final required course <small>All required courses and 2 elective courses must be completed before taking this course.</small>	
TITLE & COURSE NUMBER	UNITS
User Experience (UX) Portfolio ART-40641	4.0
ELECTIVES <small>Minimum of 6 units required. Subject to change. Enrolled certificate students MUST follow matrix as listed in their MyExtension account.</small>	
TITLE & COURSE NUMBER	UNITS
User Interface Design ART-40535	3.0
User Experience (UX) Metrics CSE-41260	3.0

Search Engine Optimization (SEO) and Marketing CSE-41157	3.0
Web Analytics CSE-41132	3.0
Web Design I: Principles & Techniques ART-40677	3.0
Introduction to Programming CSE-40028	3.0
Introduction to HTML and CSS CSE-41207	3.0
HTML5 and jQuery CSE-41209	3.0
Introduction to JavaScript CSE-41208	3.0

Admission

This program can be completed in 5-8 quarters (taking 1-2 courses per quarter). Tuition is \$595-795 per course. All required courses are offered online, but some electives may not be available online. Please refer to the UX Design Program Course Listing Matrix for more information.

About Online Courses:

- Online courses in this certificate are led by live instructors, but students may view lectures according to their own schedules. There are no set lecture dates or times; however, students will be required to meet weekly assignment deadlines, participate in critiques, and contribute to discussion topics.
- Online students should expect to spend four to six hours per week per course. Software is not provided to online students.
- To preview our e-learning system, visit ucsdextension.blackboard.com.

Required Software, Hardware, and other Program Materials:

- **Mac or Windows OS laptop or desktop** - Our onsite courses are offered in a Windows computer lab at our University City Center campus. Students enrolled in online courses may work on either operating system, except where specified in the course description.
- **Adobe Creative Cloud subscription** - Students must setup their Adobe CC account once they are enrolled in the program. With proof of enrollment, [students are eligible for a discounted subscription rate](#).
- **Prototyping software** (OmniGraffle, Axure, Adobe XD)
- **HTML Editor software** (BBEdit, Sublime Text) **Web Hosting provider subscription** **LinkedIn Learning subscription**

Please note: Materials and software requirements vary by course. Before taking an online course, refer to the course description for exact software requirements. Student discounts may apply to certain subscriptions/software. Please visit their respective website for more details.

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Arts, Humanities, Languages & Digital Arts. Call 858-534-6731 or Email: unex-digital@ucsd.edu

Conditions for Admission

Students who wish to apply to this program should meet the following prerequisites:

1. Basic knowledge of Human-Computer Interaction (HCI)

Suggested option: Completion of the UC San Diego Coursera course [Human-Centered Design: an Introduction](#). Students may audit this course and view all videos and lectures for free on Coursera.

2. Basic knowledge of HTML and CSS

Suggested option: Completion of the UC San Diego Extension course [CSE-41207 Introduction to HTML and CSS](#).

No transcripts or other documentation proving these prerequisites have been completed is necessary when applying to the program. Once these prerequisites are met, students must then **complete the UX Design Certificate application** (if you don't already have a MyExtension account, you will need to make one) and **pay the application fee**. There will be a \$95 fee upon acceptance into the program.

Wireless Engineering Certificate

Overview

Wireless communications technology has developed without measure over the past twenty years. The worldwide success of cellular and Wi-Fi technologies resulted in an increased demand for engineers skilled in wireless engineering, and opened the doors to the new fields of study in LTE, 5G, and Wi-Fi. As a result of these rapid developments in the field, involved individuals need to build and sharpen their skills for present and future wireless industries.

The Wireless Engineering online certificate program is intended to provide practicing engineers, product managers and other technical personnel, with leading edge specialized knowledge in wireless systems and standards for advancement in career and productivity. The program also incorporates courses that cover key technologies, including multi-carrier, multi-antenna, and multi-user wireless communications, RF and microwave engineering, wireless signal processing and coding, as well as IoT (Internet of Things). Equipped with this foundational knowledge, participants will be able to address current and emerging challenges in the wireless field.

Program Highlights:

- Explore the latest wireless technologies including
- LTE, 5G and Wi-Fi Online courses provide convenient and flexible course schedule Program can be completed in as little as 15 months

Program Benefits:

- Remain up-to-date in a constantly evolving wireless industry Prepare for new opportunities in the wireless engineering industry

Demand and Job Prospects:

- Job titles for people with wireless engineering skills include: Computer Systems Engineers/Architects, Software Application Developers, Information Security Analysts, Network and Computer Systems Administrators, Computer User Support Specialists, Software Quality Assurance Engineers and Testers, Computer Network Support Specialists, and Information Technology Project Managers.
- Industries include: Professional, Scientific, Technical Services. Information Technology, Health Care, and Education
- Burning Glass Technologies report an average growth rate across these industries at 5.8% and projects a national change in employment (2016-2036) at an average of 15%
- Top employers include: Intel, Verizon, T-Mobile, AT&T, Sprint, Cisco, Qualcomm, Ericsson, Karma Automotive, Amazon, Samsung and World Wide Technologies
- Burning Glass technologies reported an average salary in 2018 to be \$94K

Who Will Benefit:

- Anyone who possess a BSEE
- Candidates who do not have a BSEE but have equivalent knowledge and experience in the field of communications engineering Product Managers
- Students without these qualifications should enroll in the course [Signals and Systems \(ECE-40051\)](#) prior to beginning this program

At a Glance:

- **Number of courses:** Five courses (3 required and 2 electives)
- **Total units: 15**
- **Estimated cost:** \$4,770.00 (excludes textbooks and materials)
- **Time to complete:** Students taking one course per quarter can complete the program in 15 months
- **Delivery:** All courses are offered in online format only

For more information about this program, please email unexengr@ucsd.edu.

Courses

Prerequisite Course	
TITLE & COURSE NUMBER	UNITS
Signals and Systems ECE-40051	3.0

Required Courses <small>All three courses required.</small>	
TITLE & COURSE NUMBER	UNITS
Fundamentals of Digital Communication for Wireless Systems EE-40034	3.0
Introduction to OFDM/OFDMA and 4G/5G Systems EE-40163	3.0
RF System Design for Wireless Communications EE-40098	3.0
Elective Courses <small>Six (6) units required.</small>	
TITLE & COURSE NUMBER	UNITS
Fundamentals of 5G NR EE-40177	3.0
DSP in Wireless Communications ECE-40283	3.0
Mixed Signal Design ECE-40244	3.0
Antenna Theory and Design EE-40129	3.0
Microwave Transmission Engineering EE-40153	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-9152 or Email: unexengr@ucsd.edu

Conditions for Admission

UC San Diego Extension programs are designed to best serve college-prepared working professionals. Although programs are open to all adult learners, where program capacity is limited, applicants with this profile will receive preference for admission.

iOS Programming Certificate

Overview

Program overview:

Mobile programming is part of a segmented portion of technology that's filled with innovations constantly evolving at unprecedented rates – even for technology. Such advancement requires precision-based specialty training in iOS programming languages. We currently using Apple Curriculum.

Format

In-class

*Check course list below for specifics.

Est. Cost

\$3,490

*Estimated cost with certificate fee included.

Duration

12-15 months

*Varies by student due to number of courses taken per quarter.

This program is designed for:

The iOS Programming Specialized Certificate was developed by an advisory board of successful industry leaders with the goal to offer students familiar with programming languages, such as Java, Python or C++, the opportunity to apply such knowledge to the area of mobile software application development. This certificate is geared towards beginners in the app development field as well as the professional software developers hoping to gain specialized skills in iOS programming.

What you will learn:

Students will gain new skills necessary to program applications that run natively on mobile devices specific to iOS for Apple based technology, including a step-by-step instruction that will detail processes required to program apps optimized for different screen sizes, the Apple Watch and Apple TV.

Coursework is designed to help professionals master the following tools and functions within iOS app development: SQLite Database Access, Core Data, iCloud and Advanced Networking. Advanced learning opportunities will demonstrate how the Swift programming language can call into existing Objective-C code, the original language used for writing iOS apps, as well as Xcode IDE, the center of Apple development, which will teach students how to build, design, code, debug and troubleshoot iOS applications.

Courses

Prerequisite <small>Choose one</small>	
TITLE & COURSE NUMBER	UNITS
Introduction to Programming Using Java CSE-41242	3.0

Introduction to Programming CSE-40028	3.0
Required Courses	
TITLE & COURSE NUMBER	UNITS
Introduction to Swift Programming CSE-41201	3.0
iOS Programming I CSE-41147	3.0
iOS Programming II CSE-41148	3.0
Elective Courses <small>Choose one</small>	
TITLE & COURSE NUMBER	UNITS
iOS App Production CSE-41249	3.0
Objective-C CSE-41109	3.0
Augmented Reality Programming with ARKit CSE-41322	3.0

Admission

There will be a \$95 fee upon acceptance into the program.

From the 'Apply Now' button, login to your student account, complete the online application, and pay the application fee if applicable. It is preferable that you create an account before proceeding if you have not already done so.

Candidates are encouraged to apply in the certificate program as early as possible to take advantage of program benefits. See Certificate FAQs for more information.

Contact

Science & Technology. Call 858-534-1566 or Email: infotech@ucsd.edu

Certificate Requirements

You are expected to complete the minimum certificate requirements, i.e., all approved required courses and the minimum number of required elective units, in effect at the time of registration regardless of any requirement changes at a later date. Prerequisite courses are not considered part of the minimum credit unit requirements of a certificate. All certificate courses must be enrolled in for credit (with a letter grade or pass/no pass grading option) and, unless the certificate program states otherwise, with a passing grade of at least a C- or better to earn the certificate.

While all courses must be successfully completed with a passing grade, the Extension academic department responsible for the certificate has the discretion to elevate the minimum grade you must earn and/or specify that courses (elective and/ or required) be taken for a letter grade. A third party, e.g., employer, Workforce Partnership, credentialing authority, also has the right to increase the minimum certificate requirements by increasing the minimum acceptable grade and time to complete the certificate program. In those cases, the minimum certificate requirements, as specified by the third party, supersede the above.

Transfer Credits

In order to receive a certificate at UC San Diego Extension, you must fulfill all minimum unit requirements of a certificate with transcribed, credit-bearing coursework from an accredited institution. The number of units that can be transferred, however, varies depending on where the academic credit was received. Non-transcribed continuing education courses or courses from a non-accredited institution are not accepted for transfer.

Units of courses completed at educational institutions operating on the semester system should be converted to a value consistent with the quarter system, i.e., one semester unit is equivalent to two-thirds of a quarter unit. The number of units of the course completed outside of Extension must be at least equal to the unit value of the certificate course you are petitioning to transfer. Similarly, the number of units that can be transferred is determined by the number of units associated with the Extension certificate course and not the unit value granted elsewhere.

If you have successfully completed comparable courses at another accredited college or university within five years certificate coursework began at UC San Diego Extension, and you earned at least a "C-" in each, you may petition to transfer up to a third of the certificate program units, not to exceed two courses for professional certificates and one course for specialized certificates. If you have successfully completed courses at a UC campus within five years certificate coursework began at UC San Diego Extension, you may petition to transfer up to half of the units required for a certificate program. To request transfer credit, please submit a written petition, including an official transcript and course descriptions (with syllabus) to the academic department listed in the certificate description for consideration.

Course Substitutions

Only approved courses count toward your certificate program. Due to the post-baccalaureate level of Extension coursework and the intent of many certificate program students to further specialize and develop their current careers, you may have acquired industry knowledge outside of the classroom. If you can demonstrate mastery of the knowledge imparted in a required certificate course through personal or professional experiences, you may petition to substitute a course. In that case, you may have the option to take another Extension course as determined by the academic department in lieu of the required course. You may waive the course requirement but not the unit requirement. Because of the curricular importance of required certificate coursework, you can only petition to substitute up to half the total required course units. To request a substitution, please submit a written petition, including evidence of your knowledge, to the academic department listed in the certificate description for consideration.

Certificate Completion

Once all certificate requirements have been successfully completed, please request a certificate audit through the student portal, My Extension, at <https://myextension.ucsd.edu>. Once you have logged in to My Extension, go to the "My Courses" tab and click on the program under "My Certificate Programs". From there, click on "Request Certificate Audit" and complete the form.

AMES40000: HVAC DDC System Design - 3.00 Units

This practical course covering HVAC and DDC system design provides a simple approach for the design of HVAC DDC systems and enables students to understand and design various types of control solutions. The course emphasizes the latest available technology, critical “Do’s and Don’ts”, and accepted rule-of-thumb checks in the design of HVAC controls.

Broken into the following major categories, this course provides a methodical approach to DDC system design: 1) Hybrid Control and DDC; 2) Electric Control and DDC; 3) Control Valves; 4) Control Dampers; 5) Electronic Sensors; 6) Practical Examples including Chilled Water System, Condenser Water, Hot Water System, and Air Handling Unit Control; and 7) HVAC DDC Specifications. An optional field trip is included.

Course Highlights:

- Controlling Sustainable and LEED Certified Buildings
- Proper Sequence of Operations
- “Do’s and Don’ts in HVAC Control Design
- Accepted Rule-of-Thumb Checks in HVAC Control
- Practical Examples and Real Projects

Course Benefits:

- Understand the basics of pneumatic control.
- Determine how electronic control is achieved.
- Examine the types of controls valves most commonly used in HVAC systems.
- Identify the characteristics of the five types of control dampers utilized in HVAC.
- Discern between the advantages and disadvantages of electronic temperature sensors.
- Review practical scenarios of chilled water system, condenser water, hot water system, and air handling unit control design
- Learn the seven components of a construction document.
- Discover the four methods of specifying products.

Required Textbooks: The Fundamentals of HVAC Direct Digital Controls, Third Edition (ISBN-13:978-0970447135) | Purchase at: <http://www.hvacddc.com/>
 Optional Textbooks:

- ASHRAE 2016 Handbook - HVAC Systems and Equipment (ISBN-13:978-1939200273)
- 2015 ASHRAE Handbook -- HVAC Applications (ISBN-13:978-1936504930)

Prerequisites: Students should have a desire to learn concepts in heating, ventilating, and air conditioning (HVAC).

Next Steps

Upon completion of this course, consider taking HVAC DDC Basics, HVAC Design Calculations, HVAC DDC Networking Design, HVAC Systems Design, or courses in the HVAC Systems Design and Control Certificate

For more information about this course, please contact the program manager at unexengr@ucsd.edu or (858) 534-9152

AMES40019: HVAC Design Calculations - 3.00 Units

Energy efficiency and sustainable design are critical components of today’s smart, green buildings. This practical course covers the fundamental calculations required for the design of building HVAC systems. Topics include cooling and heating load calculations, psychometric analysis, and HVAC energy usage.

This fast-paced course focuses on practical methods of HVAC calculations in accordance with governing codes and American Society of Heating, Refrigerating, and Air Conditioning (ASHRAE) guidelines. Emphasis is placed upon accepted rule-of-thumb checks in HVAC load calculations and energy

analysis, including a review of available computer programs. An optional field trip is included.

Course Highlights:

- HVAC Heating and Cooling Load Calculations
- Psychometric Analysis
- Energy Analysis
- Indoor Air Quality
- Natural Ventilation
- Hybrid Natural Ventilation
- Mechanical Ventilation
- Energy Saving Payback Analysis

Course Benefits:

- Learn the fundamentals of psychometrics and how to perform HVAC design calculations utilizing the psychometric chart.
- Discover the difference between dry bulb, wet bulb, relative humidity, and specific humidity.
- Calculate properly-sized air cooling units for a given space.
- Calculate the (CFM) required for air handling and fan coil units.
- Calculate the properly-sized equipment for mechanical ventilation.
- Explore natural ventilation and hybrid ventilation methods for smart, green buildings.

Prerequisites: Students should have a desire to learn concepts in heating, ventilating, and air conditioning (HVAC).

Next Steps

Upon completion of this course, consider taking HVAC DDC Basics, HVAC DDC System Design, HVAC DDC Networking Design, HVAC Systems Design, or courses in the HVAC Systems Design and Control Certificate

For more information about this course, please contact the program manager at unexengr@ucsd.edu or (858) 534-9152

AMES40021: HVAC Systems Design - 3.00 Units

This course reviews the advantages and disadvantages of the latest energy efficient HVAC systems including variable air volume, chilled beam, positive displacement, ventilation, variable refrigerant flow, natural ventilation, and hybrid natural ventilation.

Broken into the following major categories, this course is focused on reviewing the most advanced HVAC technologies and solutions that save installation, energy, and operational costs: 1) HVAC Systems; 2) Fans; 3) Air Distribution and Zoning; 4) Pumps; 5) HVAC Coils; and 6) Chiller and Boiler Selection. Each course starts with the fundamentals followed by practical application, real life examples, and the most common design solutions. An optional field trip is included.

Course Highlights:

- HVAC Systems
- Innovative HVAC Solutions for Smart Buildings
- Air Distribution Systems
- Fan Curves and Fan Selection
- Piping Design, Pump Curves and Pump Selection
- Coil Selection and Characteristics
- HVAC Zoning
- Indoor Air Quality
- Chiller and Boiler Selection

Course Benefits:

- Learn the advantages and disadvantages of various types of HVAC systems.
- Learn about chilled water and hot water piping and pumping design.
- Learn to design basic HVAC systems.
- Learn the advantages and disadvantages of HVAC chillers.
- Lead the process of HVAC system design.

Target Audience:

The course is recommended for anyone involved with HVAC systems, including HVAC designers and engineers, building and hospital engineers, and recent graduate engineers.

Prerequisites: Students should have a desire to learn concepts in heating, ventilating, and air conditioning (HVAC). Two years HVAC-related experience or associate degree in an engineering field preferred, but not required.

Next Steps

Upon completion of this course, consider taking HVAC DDC Basics, HVAC DDC System Design, HVAC Design Calculations, HVAC DDC Networking Design, or courses in the HVAC Systems Design and Control Certificate

For more information about this course, please contact the program manager at unexengr@ucsd.edu or (858) 534-9152

AMES40139: HVAC DDC Networking Design - 1.00 Units

This advanced course focuses on the latest available technology and practical scenarios of communication and networking between DDC controllers and DDC systems. The course also addresses common questions such as: How to upgrade existing Heating, Ventilating, and Air-Conditioning (HVAC) DDC systems? What are the advantages and disadvantages of open systems? How to integrate various building automation systems?

This short but powerful course for HVAC DDC Networking Design is structured to enable students to better design and understand HVAC DDC systems. The course focuses on practical scenarios of communication and networking between DDC controllers and DDC systems. The instruction also emphasizes critical “Do’s and Don’ts”, as well as accepted rule-of-thumb checks in HVAC DDC.

Course Highlights:

- HVAC DDC System Architecture
- Open System Interconnection Model
- HVAC DDC Topologies and Protocols
- ASHRAE BACnet
- Gateways to Closed Systems
- Open Systems and Tridium Solution
- Web Services and the Tridium Solution
- Four Levels of Energy Dashboards
- DDC Wireless Technology

Course Benefits:

- Learn the seven layers of Open System International (OSI) models.
- Identify the four most commonly used topologies in HVAC DDC.
- Discern between the two most commonly used network access methods.
- Discover how BACnet benefits Owners.
- Distinguish between LAN technologies for DDC.
- Review the concept behind web services.
- Describe the advantages and disadvantages of the Tridium Solution.
- Uncover the benefits of energy dashboards for large campuses.

Required Textbooks: The Fundamentals of HVAC Direct Digital Controls, Third Edition (ISBN-13:978-0970447135) | Purchase at: <http://www.hvacddc.com/>
Optional Textbooks:

- ASHRAE 2016 Handbook - HVAC Systems and Equipment (ISBN-13:978-1939200273)
- 2015 ASHRAE Handbook -- HVAC Applications (ISBN-13:978-1936504930)

Prerequisites: Students should have a desire to learn concepts in heating, ventilating, and air conditioning (HVAC).

Next Steps

Upon completion of this course, consider taking HVAC DDC Basics, HVAC DDC System Design, HVAC Design Calculations, HVAC Systems Design, or courses in the HVAC Systems Design and Control Certificate

For more information about this course, please contact the program manager at unexengr@ucsd.edu or (858) 534-9152

AMES40170: HVAC DDC Basics - 2.00 Units

Covering the basics of Heating, Ventilating and Air Conditioning (HVAC) Direct Digital Controls (DDC), this course enables students to understand the fundamentals of HVAC DDC systems design. The course emphasizes critical “Do’s and Don’ts”, and accepted rule-of-thumb checks in the design of HVAC controls.

Broken into the following four major categories, this course provides a sound foundation for understanding DDC system design: 1) The Six Steps of HVAC DDC System Design; 2) DDC Controller; 3) Basics of HVAC Controls; and 4) Building Automation, LEED, and Commissioning.

Course Highlights:

- The Six Steps of HVAC DDC System Design
- HVAC DDC Components such as Flow Meters, Temperature, Humidity, and Pressure Sensors
- DDC Controllers, Smart Sensors, and Actuators
- Application Specific Controllers
- The Most Commonly used HVAC Control Systems
- DDC Signals
- System Schematics
- Control Point Designations
- Point List
- DDC System Architecture

Course Benefits:

- Distinguish between a Digital Output, Digital Input, Analog Input, and Analog Output.
- Learn the systematic process of designing HVAC DDC systems.
- Discern between Supervisory Control and Data Acquisition (SCADA) and Programmable Logic Controller (PLC) systems.
- Discover the three most commonly used wireless technologies for building automation systems.
- Identify the basic characteristics of the five types of the most commonly used HVAC control systems.
- Examine the advantages of Proportional Plus Integral and Proportional Plus Integral Plus Derivative control actions.
- Review methods to use the building automation system as a tool for commissioning as well as LEED measurement and verification.

Required Textbooks: The Fundamentals of HVAC Direct Digital Controls, Third Edition (ISBN-13:978-0970447135) | Purchase at: <http://www.hvacddc.com/>
Optional Textbooks:

- ASHRAE 2016 Handbook - HVAC Systems and Equipment (ISBN-13:978-1939200273)
- 2015 ASHRAE Handbook -- HVAC Applications (ISBN-13:978-1936504930)

Prerequisites: Students should have a desire to learn concepts in heating, ventilating, and air conditioning (HVAC).

Next Steps

Upon completion of this course, consider taking HVAC DDC System Design, HVAC Design Calculations, HVAC DDC Networking Design, HVAC Systems Design, or courses in the HVAC Systems Design and Control Certificate

For more information about this course, please contact the program manager at unexengr@ucsd.edu or (858) 534-9152

AMES80004: PE Electrical Review - 0.00 Units

Receive a thorough review for the PE Electrical and Computer licensing exam for the State of California. The course will cover the Power Section only: circuit theory fundamentals; 3-phase analysis, transformers; time and frequency response; power generations, transmission lines, and rotating machines; measurements and instrumentation, NEC codes and standards. The course is updated per the specifications of NCEES to the extent applicable when they are available in time.

AMES80005: Structural Engineering Review: Seismic Section (PE Civil) - 0.00 Units

Review the IBC2006/CBC2007 provisions that apply to the structural/seismic analysis of buildings and structures. Instruction covers examples of structural engineering problems found on the PE exam and offers pertinent testing strategies. This review is open to all individuals, whether or not they plan to take the PE exam.

AMES80007: PE Civil Review - 0.00 Units

Review the subjects covered on the State of California's exam for licensed civil engineers. Topics covered include: environmental, geotechnical, and structural with construction engineering; transportation; and water resources. The course also covers examples of civil engineering problems found on the PE exam and offers pertinent testing strategies. Topic experts will participate as guest instructors.

AMES80009: PE Mechanical Review - 0.00 Units

Review the subjects covered on the State of California's exam for licensed mechanical engineers. Key topics from the exam will be covered, including: machine design and materials; hydraulics and fluids; dynamics and vibrations; energy and power systems; HVAC and refrigeration; business engineering and math review. The course is specifically designed from an exam viewpoint and will be supported with ample examples.

ANTH90002: Scripps Institution of Oceanography: Introduction to Paleontology and the History of Life - 6.00 Units

In this course, students will learn about the history of life on earth, from the origin of life to the present. We will discuss topics such as evolution, extinction, biologic interactions through time, biodiversity, and the role that environment plays in shaping life on earth. These topics will be explored through hands-on laboratory activities and demonstrations where students will be able to work with fossils and rocks, as well as through field trips to various fossil localities and museums in Southern California, including the San Diego Natural History Museum and the La Brea Tar Pits. Students in this course should have an interest in science and nature, but do not need to have a science background. As a result of the course, students will have an appreciation for the history and complexity of life on earth, and a better understanding of how the natural world works.

ANTH90004: The Dead Speak: Learning about the Past through Human Remains and Related Contexts - 6.00 Units

The purpose of this course is to provide an introduction to archaeology, both from the perspectives of methods and practice (from "in the dirt" to in the lab) and theory (the ways archaeologists approach interpreting what they find).

We start with an examination of what archaeology is, as well as a basic history of archaeology. We will then consider methods of locating and excavating sites, and managing archaeological material.

We will then cover an overview of what archaeologists hope to learn about past places, people, and cultures, and how they study this through the material

record. In this section we will consider cases and examples from many ancient cultures.

In the next section of the course, students will learn that archaeologists collaborate with other experts from a wide variety of scientific and humanities fields in order to learn more about the past.

In the final section of the course, we will discuss how learning about seemingly distant times, places, and peoples is important to us. We will also discuss archaeological ethics, and some of the controversies the discipline has faced.

ARCH40000: AutoCAD III: Working Drawings - 2.50 Units

Learn the process that professional offices go through to create and assemble the components of a set of working documents. The course will focus on the production aspects of assembling a set of construction documents. Participants are expected to have reasonably strong AutoCAD skills. In this advanced-level AutoCAD training course, technical aspects of AutoCAD will be addressed, including file referencing, paper/model space and the relational aspects of drawing files.

ARCH40001: AutoCAD I: Introduction - 2.50 Units

Gain valuable experience with AutoCAD commands and menu systems. Learn two-dimensional drawing commands, dimensioning, layering systems, and drafting techniques. By the end of this AutoCAD training course, students will have gained experience developing and assembling a construction document, including plotting, creating drafting symbols, fixtures and a floor plan.

ARCH40004: AutoCAD II: Intermediate - 2.50 Units

Develop a more advanced understanding of the AutoCAD applications. Create plan and elevation drawings and learn important manipulation and management tools for assembling and integrating drawings within the project document set. Topics in this intermediate-level AutoCAD training course include advanced commands and drafting conventions.

ARCH40009: Revit I: Introduction - 1.50 Units

Designed for architects, interior designers, engineers, and others involved in the construction industry seeking an overview of Building Information Modeling (BIM) using Revit Architecture, this course examines how to design 3D models that simultaneously document the project in schedules and 2D architectural drawings. Topics include starting a project, modifying elements, and presenting models. By the conclusion of this Revit training course, students will have built a BIM project from scratch and present multiple views of the model on an architectural sheet.

ARCH40010: Revit II: Intermediate - 1.50 Units

Explore the more advanced methods of documenting a building project in Revit Architecture. The classes will be taught from the architect's perspective, but interior designers and engineers will also gain valuable insight as the course unfolds. Topics include scheduling building components, using the family editor to create 2D and 3D components, refining graphics, and construction documentation. By the conclusion of this intermediate-level Revit training course, students will be able to develop a BIM model independently and understand how to organize it as an integrated, interoperable construction document set.

ARCH40011: Revit III: Advanced - 1.50 Units

Using "as-built" drawings, students will model an existing single story building on a site model and will then create the model for a significant two-story expansion to that building model. Included in this project will be creating demolition plans to accommodate the new construction and rendering the final model. This project scenario is typical of projects currently being handled by architectural, engineering and construction teams who are using Revit in their offices. After following along with the videos and/or class instruction, you will have a completed model, ready for presentation,

documentation, and visualization. By the conclusion of this course, students will be able to develop a BIM model independently and understand how to organize it for subsequent development into a set of integrated, interoperable construction documents. You will have access to the online course materials for one full month from when you begin.

ARCH90001: Designing Your Own Tiny House - 0.00 Units

In this design class students learn about architecture, social responsibility and community. Students will gain experience envisioning, designing and building a scale model of their own tiny home. Students will also be introduced to and be able to translate building design and concepts including sustainability, functionality and how to incorporate natural light in the house design. This class will teach students about translating programmatic requirements to a three-dimensional project (design), develop scale modeling skills (math), creativity (arts), ability to follow instructions (life lessons), ability to understand and work within constraints and time management (workforce skills). To refine the students' presentation and communication skills, all students will present their tiny houses to the class.

This course is designed for middle school students who have little to no experience with design or construction.

Description for promotional materials: A new movement is sweeping the US called 'tiny houses', where people are designing houses using ~15% of the space of a current day home. These tiny houses allow people to simplify their lives while still maintaining functionality. Join us to design and build your own tiny house out of clay and found materials as we learn about architecture, social responsibility and community!

ART40002: Oil Painting I - 3.00 Units

Develop your paint handling skills and enhance your perceptual abilities in this studio class. Each meeting focuses on the development of basic skills while encouraging individual expression. Instructor-led painting demonstrations and a series of in-class exercises will be followed by discussions of some of the intellectual factors involved in both traditional and non-traditional art making. Students in this class will acquire a solid foundation in oil painting technique...

ART40006: Figure Drawing I - 3.00 Units

Gain greater confidence in your ability to compose and render the human form. This course provides an in-depth study of how to draw the human figure using live nude models. Within a positive and supportive environment, you will focus on basic proportions and proper construction of the human form as well as light and shadow, contour, line, and composition. In-class drawing exercises will be enhanced by demonstrations of how to simplify and assemble the more complex areas of the body.

ART40068: Oil Painting II - 3.00 Units

Geared toward the intermediate painting student, Oil Painting II expands on the ideas and topics presented in the beginning oil painting course. A series of exercises encourages students to investigate materials, surface treatments, color mixing, composition, spatial concepts, and symbolic, expressive, and descriptive forms of representation. Students will have the opportunity to enhance their technical, analytical, and perceptual skills while focusing on exploration and personal development in order to discover a sense of artistic identity.

ART40081: Nature Photography: From Vision to Print - 3.00 Units

Learn how to take beautiful nature photographs, mount your prints, and exhibit them for sale. This practical, hands-on course covers the economics of fine art nature photography as well as the artistic and technical aspects. The class features a variety of photo-shoots: Quail Gardens, San Elijo Lagoon, Palomar Mountain, etc. You will learn to identify your creative point of view, sharpen your skills through participation in field trips, and prepare a selected

group of images for sale and/or exhibition in a show hosted by the class. Photographs will be presented either as greeting cards or as matted prints.

ART40148: Photographing People - 1.00 Units

Learn to create expressive portraits in this short, workshop-style course. Discussion of subject matter, composition and lighting (including flash) helps you experiment with a variety of portraiture methods. Instruction also covers practical issues such as photographing in public areas and posing. Additional class time will be spent exploring the history of portraiture through work of such photographers as Diane Arbus, Julia Margaret Cameron, Dorothea Lange, Sally Mann, Arnold Newman and others. Includes Saturday field trip to MoPA and an outdoor field session at Balboa Park. Some camera experience is recommended but course open to all levels.

ART40155: Travel Sketching - 2.00 Units

Add to your travel memories by adding creative and colorful illustrations to your journal. In this condensed-format course, students learn to train the eye and hand to record--quickly and with flair--the world enjoyed by the traveler. Sketching techniques practiced with various media help capture the character, movement and texture of the subject, in the light of the moment. Landscapes, everyday scenes, people, animals and details of life chosen by a selective eye will take form in the sketchbook to be enjoyed as a reminder of travels for years to come.

ART40162: Animal Illustration - 3.00 Units

Learn how to capture the spirit of animals in your artwork. This course introduces the basics of depicting animals, including preliminary composition, sketching, finding good reference materials, and realistic rendering. Basic concepts of animal anatomy including how to depict fur, feathers, features, motion and personality will be taught. Using pencil, colored pencil, watercolor and other media, students will work from museum specimens, photographs and real life. Students will learn methods and techniques for creating finished pieces of art for their portfolios or for display. A field trip to the San Diego Zoo will be scheduled.

ART40165: Postcards from the City: Exploration with Artistic Photography - 3.00 Units

Learn to take photographs of urban scenes and display your work in a form that is almost as old as photography itself--the photographic postcard. Our subject is the San Diego urban scene: streets, markets, buildings, parks, bridges and people in the landscape. This non-darkroom class is designed for beginning to advanced students. Instruction includes illustrated lectures, field trips, and critique sessions. Students will make, write, and mail their own postcards to communicate..."Wish you were here!"

ART40166: Drawing I: Focus on Perception - 3.00 Units

Learn basic drawing techniques through a variety of instructor demonstrations, guided in-class exercises and homework projects. Topics include contour drawing, positive and negative space, perspective, shading and composition. As this is a foundation course, work is based on drawing from observation. Explore the concept of light and shadow by experimenting with highlights, cast shadows and reflected light. An introduction to realistic portrait and figure drawing is included, focusing on proportion and "sighting"; techniques used by the masters. Most importantly, students experience a change in perception, learning to see like an artist in this fun but challenging class.

ART40167: Figure Drawing II - 3.00 Units

Enhance your drawing strengths through direct observation of a live model and classroom practice using a variety of materials, including charcoal, pencil, and pastels. In addition to helping students achieve accurate visual interpretation by drawing draped fabric on the figure, instruction covers light

and shadow, proportion, foreshortening, composition, and use of negative space. Students also learn to increase their perception, insight, and aesthetic vocabulary.

ART40180: Introduction to Painting - 3.00 Units

Develop a strong foundation in painting. In this course, students have the opportunity to explore basic painting techniques while developing visual awareness and artistic self-expression. Principles in two-dimensional art, choice and use of materials (tempera, gouache, acrylic), sound techniques in painting, mixing, and color combination will be studied through a variety of subject matter. Color perception, artistic skill, style, and originality will be enhanced through the creative process in a supportive and stimulating atmosphere.

ART40181: Creative Process II - 3.00 Units

Tap your creativity through a variety of art-making projects designed to spur your imagination and broaden your abilities. Projects include 2 & 3 dimensional forms, painting, found objects, collage, book art, collaborative work and more. By exploring new territories beyond preconceptions about art, you will immerse yourself in the process of creative expression and be surprised at the results.

ART40183: Creative Process III - 3.00 Units

Anchor the creative thought process and art in your life and work place. Continue the paths of learning and exploration begun in Creative Process I and II. In this personalized class, examine the roles of imagination, perception, humor, art in society and its impact, the nature of change, and the challenge of making a difference through your artwork in the community. Instruction includes projects, art videos and discussions, instruction and field trips, to enrich your experience and appreciation of art in our environment.

ART40183: Creative Process III - 3.00 Units

Anchor the creative thought process and art in your life and work place. Continue the paths of learning and exploration begun in Creative Process I and II. In this personalized class, examine the roles of imagination, perception, humor, art in society and its impact, the nature of change, and the challenge of making a difference through your artwork in the community. Instruction includes projects, art videos and discussions, instruction and field trips, to enrich your experience and appreciation of art in our environment.

ART40191: Creative Process I - 3.00 Units

In the supportive atmosphere of this studio class, you will explore a variety of art materials and techniques with stimulating projects that will spark your innate artistic abilities. Each week, students will experiment with a new medium: colored pencils, charcoal, markers, chalk pastels and colored paper, oil pastels, paints (watercolor, gouache or acrylic), mixed media, and non-art materials. Students will be guided through creative risk-taking exercises and assisted in developing a final project.

ART40194: Abstract Painting - 3.00 Units

Discover the beauty of abstract language. Using acrylic paint, we will explore formal elements of line, shape, value, form, color, texture and pattern. You will experience the joy of developing your own unique vision through this step-by-step introduction to abstraction. Individual and group critiques will encourage each student to improve their visual perception and to enhance their understanding of abstract language.

ART40213: Introduction to Black & White Photography - 3.00 Units

In this fast-paced course, the beginning photographer will learn basic camera functions, fundamental darkroom skills, and black-and-white film processing techniques. The emphasis is primarily technical, although aesthetics, composition, and contemporary issues in photography will be covered

through class critiques and discussions. You will shoot a minimum of five 36-exposure rolls of Tri-X film and participate in a final critique of student work.

ART40229: Family Pictures - 3.00 Units

Venture beyond the snapshot! Learn to use any camera to take artistic, descriptive photographs of family & friends. Photographers of all levels are welcome. Instruction includes: weekly critiques, visit to the MoPA Photography Library, Photoshop & Lightroom techniques and method demonstrations by the instructor. Students will exhibit their work for family and friends at the last class meeting. Students should bring a small selection of prints to the first class meeting.

ART40239: Intermediate Watercolor - 3.00 Units

Do you have paints, brushes and paper but don't know what to do next? In this class, students with some prior experience with watercolor will learn new techniques, improve and refresh existing skills and develop a personal direction in their work. Demonstrations and practical exercises focus on paint properties, shadows, composition, color and texture. Quick sketches and sustained paintings will be accomplished during this class. A variety of subject matter and styles will be explored. Class includes one outdoor field trip in San Diego area.

ART40242: Acrylic Painting I - 3.00 Units

Explore acrylic painting through exercises designed to help you gain confidence in your work. Students learn how to take advantage of the qualities of acrylics--a dense but quick-drying medium--rather than trying to emulate oil paint. Exercises in landscape, narrative, and portraiture encourage students to experiment with color and composition. Demonstrations of technique and class discussions will engage students in a dialog that focuses on the process and the potential of the painted image.

ART40245: Introduction to Book Arts - 3.00 Units

Tap your creative skills and learn how to make unique and personal artists' books. This course is perfect for new and repeat students interested in exploring the rich tradition of bookmaking from cover to cover. Instruction covers the history of bookmaking, creative sketching and writing exercises, and the fundamentals of bookmaking using a variety of techniques including folded and sewn structures, Japanese stab binding, handmade paper and marbling; collage, transfer and simple block printing techniques for creating images.

ART40253: Drawing II: Refining Technique - 3.00 Units

Build confidence and expand your drawing skills! Through use of different materials and techniques, students become comfortable with drawing as process. Topics include: proportion, foreshortening, perspective, nature of light, chiaroscuro and exploration of new forms of expression. Using wet and dry media, you will work on still lifes, self-portraits and other imagery, while strengthening your own voice. Experience the act of drawing as a way to reason through the creative process, learning how the simplest graphic marks can express complex concepts.

ART40301: Book Arts II - 3.00 Units

Learn various sewn binding structures such as case bindings and multiple signatures, coptic binding, album structures, pop-up and tunnel book forms. Basic ingredients--text, structure and image--will be explored in depth. Students will also learn transfer techniques for creating images with table-top silk screening and make their own artists books--unique personal artwork expressed in book form. Includes one fieldtrip to the UCSD Mandeville Special Collections Library.

ART40304: Abstract Painting II (Advanced) - 3.00 Units

Discover your own creative language through the use of acrylic or oil paint and the formal elements of design. Students will pursue individual assignments based on a specific idea or subject matter for the entire quarter. Ideas can range from the purely non-objective (a sustained exploration of color, form, rhythm via line, etc.), or may have more to do with representation (narration of a story, description of an object, a memory, a person, or even the investigation of a specific emotion).

ART40311: Adobe Photoshop I: Introduction - 3.00 Units

An introduction to Adobe Photoshop, the imaging software application used by professional graphic artists to create and modify images for use in print and web media. This graphic design training course includes topics about working with the tools and user interface, working with selections, retouching, correcting, and enhancing photographs, layer basics, masking, compositing, preparing files for the web, and more. Students learn through hands-on practice and a series of creative projects.

ART40322: Capturing Time: Beyond the Basic Exposure - 1.00 Units

Capture the world in motion! Learn techniques needed to develop and expand your personal artistic vision by photographing movement not normally seen by the human eye. Using either film or digital cameras, students will develop their knowledge of manual camera controls, exposures, and various shooting techniques and learn about calculating long exposure times, reciprocity film failure, neutral density filters, and proper camera use with a tripod.

ART40324: 3ds Max I - 2.50 Units

Get a complete introduction to 3D modeling and rendering while learning to build and bring to life a 3D scene from plans. Learn to model or import interior details and furniture items to create a finished scene. Add lighting and textures, and learn how to render realistic images. In this 3dsMax course, students will gain the ability to navigate the user interface, manipulate views, modify parameters and choose the most efficient modeling techniques. Dive into modeling using many of AutoDesk 3dsMax's powerful parametric object creation tools.

ART40333: Introduction to Web Design - 4.50 Units

Familiarize yourself with the fundamentals of web design. Students will discuss basic terminology, and identify internet components. In an intense overview of site planning, students will explore techniques of effective design and layout. Students will learn how to create web graphics, optimize them for website usage, and build their first websites using current web tools and best practices.

ART40334: Introduction to Web Programming - 4.50 Units

This course is designed to further students' understanding of the principles of web design, including user experience and responsive design for viewing content on multiple devices. Emphasis will be placed on expanding HTML and CSS skills. Website projects will be introduced, challenging students to accommodate a variety of specific marketing-related requirements.

ART40335: Introduction to Content Management Systems - 4.50 Units

Students will continue to develop the skills necessary to design websites. Adhering to the contemporary practices of web design, and using top web design software, students develop and refine their portfolio sites to demonstrate thoughtful integrated media presentations and intuitive design and navigation structures.

ART40336: Intermediate Web Programming - 4.50 Units

Continue to develop the skills necessary to design websites. Adhering to the contemporary practices of web design, and using top software such as WordPress, students will develop a dynamic website for their portfolios that

will demonstrate thoughtful integrated media presentations and intuitive design and navigation structures.

ART40347: Portfolio Development for Graphic & Web Design Professional Certificate - 4.50 Units

Learn how to position yourself for a career in the creative industry. Review careers and jobs in the field. Address the issues of starting and running a successful design business, including working in the field and as a freelancer. Become skilled at marketing and self-promotion, budgeting, purchasing, manage documentation, and copywriting in the communications industry, as well as a comprehensive portfolio and the development of marketing materials.

ART40349: Digital Arts Center Internship - 10.00 Units

A quality internship experience is an essential contributing factor to the success of many individuals in this competitive job market. Advanced students enrolled in Digital Arts Center Professional Certificate programs may qualify for internships. Interns will gain real-world experience working for a minimum of 100 hours with professionals in their field of study. Under the mentorship of an intern manager, interns will participate in and learn the inner workings of a Digital Arts workplace, and will observe first-hand how different departments function in support of an artistic mission. Interns will be committed to a department and will carry out the duties of that department, including attending meetings and design presentations. Digital Arts Center internships will provide students with the resume building, hands-on experience needed to increase their professional marketability.

ART40354: Introduction to Mosaic Art - 3.00 Units

Create mosaic art by employing different methods and working with a variety of materials. Explore methods for creating realistic representations of three dimensional forms such as portraits, animals or landscape. Learn the contemporary European folk art technique called Pique Assiette ("Broken China Mosaics") combinations of broken china, ceramic dishes, stained glass, vitreous glass, ceramic tile and found objects such as rocks, shells and mirrors. Learn and apply the indirect method used for completing mosaics panels or mosaics off site. Students will complete a total of 4 projects.

ART40359: Digital Publication - 4.50 Units

Students will immerse themselves in the professional project development sequence by completing a series of design projects. Using Adobe InDesign, students will develop collateral material such as brochures, posters, packaging, labeling, corporate identities, and signage. From concept through output, each project will engage a specific production process.

ART40360: Visual Communications: Digital Imaging - 4.50 Units

Graphic design projects are not complete until a high quality product with acceptable output or reproduction clarity is accomplished. Whether it is printed collateral, screen presentations, or projected digital media, the visual designer must be familiar with the technical requirements associated with a variety of output methodologies. Using Adobe Photoshop, students will learn to identify key technical requirements such as color definitions, file formats, and resolutions, and understand how to implement these requirements into design projects.

ART40362: Introduction to Digital Design - 4.50 Units

Students will learn contemporary practices of web design using top web design software and Adobe Creative Suite. Students will develop and refine their portfolio websites by demonstrating thoughtful integrated media presentations and intuitive design and navigation structures.

ART40363: Intermediate Digital Design - 4.50 Units

Apply the advanced principles of design to real-world projects, taking on your first client work as introduced by your instructors. Clients may come from varying disciplines and backgrounds and present a variety of specific requirements and visual challenges. More in-depth work will enhance and sharpen your skills in Design.

ART40369: Landscapes in Oils and Acrylics - 3.00 Units

Explore the art of painting landscapes using oil and acrylic paints. Each class will focus on the development of technical skills while encouraging your creativity and original style. Topics include composition, fundamentals of color mixing, creating depth through perspective, and incorporating architecture and figures into a landscape. The techniques of the masters will be examined and discussed.

ART40385: Introduction to Mosaic Sculpture - 3.00 Units

Learn basic mosaic skills and advanced techniques to create 3-dimensional constructions and large flat mosaic surfaces. This class includes demonstrations, lectures and hands-on experience with a focus on 3-D construction techniques, finding and selecting the right materials, preparing and setting tesserae and grouting. Students will concentrate on a free-standing sculpture inspired by the work of Niki de St. Phalle suitable for indoor or outdoor use.

ART40388: Illustrating Children's Books: Portfolio Development - 2.00 Units

Do you have a story that you'd like to illustrate and submit for publication? Or do you dream of pursuing a career in illustration? If you already know how to draw and would like to polish your illustration style, develop or expand your portfolio and create professional children's book proposals, this class is for you. Students will examine a variety of traditional and contemporary illustration styles and complete a series of assignments that will focus on the development of style and result in a series of images for their portfolio.

ART40398: Understanding Photographic Light: Studio & Location - 2.00 Units

Light can be elusive. Knowing the theories and techniques behind photographic lighting--from utilizing studio strobes to controlling harsh sunlight--is an essential skill in making any image work. Gain more confidence and control over your work as you discover the best methods to determine light quality, quantity and direction, as well as the correct tool for the task. The proper use of soft boxes, grid spots, umbrellas, reflectors and mirrors will be presented in detail. Class meetings take place in a studio setting and on location and include lecture, hands-on involvement and assignments. Course fee includes studio, equipment and model fees. Enrollment limited to enable individual attention.

ART40402: Color Management for Photographers - 2.00 Units

Do you wonder why the photos you print don't match how they appear on screen? Learn how to color manage your system from capture to print in this short, intensive workshop. From basics of digital color, discover how to use a color management system including software & hardware. Topics include: limitations of color gamuts, color settings, calibration and profiling of a LCD display & profiling a media on the supplied photo quality inkjet printers. Prior experience in digital photography & working knowledge of computers & Photoshop required. Bring 5 digital images to 1st class meeting.

ART40412: A Short History of Photography - 2.00 Units

Examine major photographic movements and the individuals who have shaped the history of the medium. Beginning with discussion of pre-photographic experiments and continuing toward a look at contemporary photography, students will learn the relevance of the medium's rich and

complex history. Lectures will concentrate on the progression of visual culture, role of science and photography's dubious relationship with art. A print viewing assignment will bring students face to face with rare examples of original prints and masterworks of photography. The goal of this course is to engage history with a tangible understanding of the medium and its relationship to the act of making images.

ART40413: Reading Photographs: The Art of Seeing - 3.00 Units

Expand your ability to appreciate and create an array of photographic images by a variety of diverse artists as well as interpret and discuss your own photographs in a workshop setting. Through weekly hands-on activities and round-table discussions, we will learn to identify and utilize the tools an artists employs- vision, subject, symbolic value, tone, mood, framing, texture, metaphor, etc. This non-darkroom based course is designed for beginning to advanced students with basic technical skills in photography. Students can use either film or digital cameras.

ART40414: Plein Air: Fundamentals of Landscape Painting - 3.00 Units

Learn the basics of landscape painting in plein air! Students will explore the elements found in a landscape and learn to put them together to create a successful composition. Topics will focus on the visual components of landscape painting: color relationships, composition, creating distance, atmosphere and understanding light and shade. In this class, you will learn how to work outdoors and deal with materials and the unique challenges of outdoor painting.

Instruction will include demonstrations, critiques and class discussion as well as individual guidance. Students can choose to work in watercolor, oil, acrylics or with sketching materials.

ART40416: Visual Poetry: Ways of Seeing - 3.00 Units

Push your creative threshold and propel your work to new heights! In learning to interpret and create photographs that resonate as poems, you will further develop your artistic eye, sharpen your skills in poetic narrative, aesthetic vision and symbolic value. Instruction includes round-table discussions, hands-on activities and individual critiques that aim to hone your skills as both an aficionado and creator of images. This non-darkroom based course is designed for beginning to advanced students with basic technical skills in photography. Students can use either film or digital cameras.

ART40420: Art through the Ages: Prehistory to Ancient Egypt - 1.00 Units

In this art historical survey, the first of several parts, students will be introduced to the Paleolithic cave paintings of Lascaux, sculptures of the ancient Sumerians and the magnificent pyramids of Egypt. The course delves into the painting, sculpture and architecture of the Prehistoric periods, the ancient Near East and Egypt. Emphasis will be placed on major works of art as well as the terminology of art and style. Aspects of function, patronage, symbolism and subject matter will also be covered. A perfect introductory class for those interested in Art History or travel!

ART40422: Beyond Image: Using Photography with Other Media - 3.00 Units

Broaden your scope of photographic expression by using your camera in concert with other art forms. This course invites students to experiment with their photographic images using texture and structure in both the 2-dimension (such as collage, text and image, and earthwork/performance documentation) and the 3-dimensional (such as assemblage and installation). Additionally, students will be introduced to any array of work by 20th century mixed-media artists. This non-darkroom based course is designed for beginning to advanced students with basic technical skills in photography. Students can either use film or digital cameras.

ART40426: Art through the Ages: Ancient Greece and Rome - 1.00 Units

Explore the art and architecture of ancient Greece and Rome, from the legendary King Minos' palace on the island of Crete to the colossal portrait of Emperor Constantine among Rome's ancient ruins. In this four week course, students will be introduced to cultural hallmarks of the ancient world including wall paintings from ancient Pompeii, the famed Nike of Samothrace and Venus de Milo, the Parthenon, and feats of Roman engineering, such as the Colosseum. Style, function, patronage, symbolism, materials and techniques and context will be discussed in this second installment of a several-course series.

ART40428: Introduction to Illustration - 3.00 Units

Learn the fundamentals of illustration by exploring the link between language and image. Translate ideas, text, or narrative into pictures that communicates to others. Through demonstration, in-class exercises and homework projects, students will work on both concept and drawing skills. Basic techniques of using pen and ink, ink wash, and opaque paint (tempera or acrylic) will be covered.

ART40429: Digital Photography - 4.50 Units

Learn the fundamentals of the digital photographic process. In this course, students will gain a basic understanding of photography concepts such as lighting, composition, digital processing workflow, scanning, outdoor photography, architectural photography, product photography, portraits, studio set ups, filters, and more.

ART40434: Art of the Medieval World - 1.00 Units

Explore the art and architecture of the medieval period in this third installment of the Art Through the Ages series. From meticulous illuminated manuscripts to soaring Gothic cathedrals, this course will introduce students to the visual language of medieval monuments, paintings, sculptures, mosaics, and manuscripts. Topics will include the art and architecture of the Early Christian, Byzantine, Islamic, Romanesque and Gothic periods. By reconstructing the physical, geographical, sociological, and historical context in which the works were created, this course aims to bring medieval art to life.

ART40436: Architectural History of San Diego - 2.00 Units

San Diego offers many noteworthy examples of domestic, commercial, civic, industrial, entertainment and roadside architecture, as well as designed landscapes. This course will provide a historical overview of San Diego's built environment, beginning with San Diego's Hispanic architectural heritage, through the Victorian and Revival periods, followed by Arts & Crafts inspired styles into Modernism, Post-Modernism and the Contemporary and Neo-Revival styles. Through lectures, assigned readings, walking tours and independent study projects, the philosophy and character-defining features of each style will be presented along with representative local examples.

ART40444: Art of the Late Gothic and Early Renaissance - 1.00 Units

Towards the end of the 13th century, Europe is consumed by a profound metamorphosis and artists are increasingly influenced by nature, humanism, and antiquity (Roman times). In the North, artists meticulously render nature in paintings filled with symbolism as seen in the work of Jan van Eyck. In Italy, important artists such as Giotto, Masaccio, and Donatello renew the art of fresco, illusionistic painting, and classical sculpture. With the formulation of the principles of mathematical perspective, Brunelleschi opens up an endless world of illusionistic painting, which is embraced by Piero della Francesca and Mantegna.

ART40445: Introduction to Digital Printing - 2.00 Units

Learn techniques essential for generating high quality digital prints by exploring the relationship between image processing software like Photoshop and your printer. This course covers the basics of digital color and black & white printing, how to process images for print, common problems digital

photographers encounter and how to develop a cohesive personal workflow for consistent output. Students generate and print images on a variety of glossy and semi-gloss papers using dye and pigment printer technologies. Instruction includes lectures, demonstrations, critiques and hands-on exercises.

ART40447: Drawing Ideas: Developing Your Sketchbook - 3.00 Units

Drawing in your sketchbook regularly is one of the best ways to improve your drawing skills and to exercise your creativity, as well as develop and record ideas for larger drawings and paintings. Great ideas spring from sincere observation of the world around us. Class will meet weekly to draw in a variety of locations. Weekly assignments between classes will help maintain your momentum. One final drawing or painting will be assigned, using any element observed in your sketchbook. Instruction includes demonstrations as well as individual and group critiques.

ART40450: Art of the High Renaissance & the Baroque Age - 1.00 Units

Do you wonder what inspired Leonardo da Vinci, Raphael, Michelangelo and other significant artists of 16th Century Europe? In this class, we will examine the major social and theological shifts that took place in Italy, Germany and other centers of European power and how those changes are reflected in seminal works of the High Renaissance, Mannerism and the Baroque era. Through lecture and discussion, students will learn how artists attempted to best the work of their predecessors, pushing technical boundaries in various media while staying in the good graces of their patrons and either one of the two denominations of the Christian faith.

ART40451: Color Fields: An Exploration in Painting - 2.00 Units

Explore the realm of color and learn how light affects color! This short workshop is designed for novice artists eager to use color more effectively and master some techniques artists use in painting images. Topics focus on color mixing, tonal values, color theory, washes and direct painting. Students will paint both representational and abstract subject matter. Instruction includes demonstrations, hands-on exercises, discussion and critiques.

ART40455: Visual Communications: Fundamentals of Design - 4.50 Units

Designers are faced with the challenge of visual-problem solving and utilizing a wide variety of graphic elements. How they organize these elements in layout can determine the success of a project. In this introduction to InDesign, Illustrator and Photoshop, students will develop a broad range of skills to effectively bring a project from concept to completion. Students will learn to evaluate audience response, determine appropriate aesthetic sensibilities, identify effective spatial relationships, and explore color theory, typography, and effective page layout concepts.

ART40456: Visual Communications: Digital Illustration - 4.50 Units

Continue to build upon design processes and skill sets acquired. Use Adobe Illustrator to develop design projects based on specific aesthetic and goal requirements. Students will also learn about file management principles and branding, and advance their understanding of color theory, typography, and spatial relations.

ART40461: Art through the Ages: Rococo to Impressionism - 1.00 Units

Did you ever wonder what happened in Europe after the Sun King Louis XIV died? In this class, we will explore how the European political, social & cultural landscape changes after the demise of absolute monarchs. Starting with the Rococo & Naturalism, we will discuss how a new understanding of human nature leads to the birth of Neo-Classicism. We will also focus on Romanticism, which puts its emphasis on the emotional experience of the world around us. Then, Realism will lead the way to experiencing the world in a highly subjective fashion and finally, we will transition to our final artistic movement discussed in this class, Impressionism.

ART40464: Photo Silkscreen I - 2.00 Units

Discover the printmaking process that made Andy Warhol a superstar in the art world! In this hands-on class, you will learn how to transform your photographic images into silk screen prints. From prepress procedures including selecting appropriate images to printing 1-color and 2-color images, students will create a number of print editions on paper and textiles. Topics include screen tensioning, ink mixing, squeegee handling and stencil making.

ART40472: Introduction to Modern Art: Impressionism to World War II - 1.00 Units

After the decline of Impressionism, a wealth of European and American artists and movements start to appear not adhering to standard categories. Explore the paths of the post-Impressionists and uncover the origins of modern architecture, sculpture, painting and design. Among styles and movements discussed are Art Nouveau, Fauvism, Expressionism, Cubism, Futurism, de Stijl, Dada, New Objectivity, Surrealism and early movements of Abstraction. The stylistic and philosophical characteristic of each movement or individual are investigated and integrated into the broader framework of intellectual history.

ART40480: Contemporary Art 101 - 1.00 Units

Are you curious about contemporary art? Do you want to learn more about the art of our time? This class will examine the major themes and practices of visual art produced since the 1960's. Looking at such key movements as Pop, Minimalism, Feminism, Conceptualism, and beyond, we will explore the profusion of artistic production and content into the current century. We will consider ways in which contemporary artists look to past traditions of practice, and invent new ways of making meaning in the work they produce. Discussions and lectures will be complemented by field trips.

ART40483: Plein Air Painting: A Working Method - 2.00 Units

Learn how to capture the landscape in front of you! This six-day workshop will provide you with a step-by-step working method to tackle the challenges of outdoor landscape painting. Students will interpret a particular scene and make thoughtful and informed decisions on color, composition, values and edges. This workshop will enhance the skills of the experienced artist and give confidence to the new plein air artist. All levels of experience welcome. Instruction includes demonstrations, individual instruction, critiques and class discussion. Students can choose to work in oil or acrylics.

ART40494: Environmental Portraiture - 3.00 Units

In environmental portraiture, the surrounding background is used to convey crucial information about a subject's personality, interests, and lifestyle. This course is designed to encourage the intermediate photographer to examine and create environmental portraits. Our approach will focus on fictional storytelling and/or reality-based portraiture--in other words, your backdrops need not be strictly factual. Each week, we will discuss assigned readings, study the work of contemporary portrait photographers, and engage in constructive class critiques of our weekly assignments.

ART40507: Documentary Photography - 3.00 Units

Documentary photography is a powerful tool for telling a story, making a point or giving voice to people who have none. In this course, you will learn to document what you see with your photographs. By examining the work of respected documentary photographers, you will explore the boundaries of objective reporting while developing an awareness your own biases. Your photographs may be about a place— the San Diego River Valley; a topic that interests you— eating locally produced food or an issue that defines our times. Instruction includes demonstrations of field practice and weekly critiques of project photographs as well as a final group exhibition.

ART40511: Strobe Workshop: Lighting with Speed Lights - 2.00 Units

Learn how to light your photographs without the use of heavy or expensive gear. This intensive workshop teaches the art of strobe lighting using off-camera flashes and other equipment such as flash triggers, gels, grids, softboxes and more. Through demonstrations, in-class assignments and independent projects, students will learn to maximize their options shooting with a core set of gear including a camera with manual controls, inexpensive speed lights and basic light modifiers.

Please see the note below regarding equipment.

ART40526: Adobe Photoshop II: Intermediate - 3.00 Units

Advance your Photoshop skills. Using your own photographs, students will learn to effectively perform many of the image enhancements that could previously be accomplished only in the darkroom. Topics include advanced selections, masks, retouching, adjustment layers, portrait enhancements, perspective effects, and camera RAW. In this graphic design training course, efficiency techniques as well as color theory for print and screen will be explained, demonstrated and discussed.

ART40527: Adobe Illustrator - 3.00 Units

Learn the industry-standard professional vector drawing program Adobe Illustrator. In this graphic design training course, students will gain practical experience with Illustrator's precision drawing and transformation tools for creating and editing Bézier curves, color, gradients, gradient mesh, patterns, transparency, type, layers, and more. Through a series of creative projects students will gain experience in using Illustrator to produce art for both print and web design.

ART40533: Adobe InDesign - 3.00 Units

Learn to use this comprehensive page layout software in conjunction with Photoshop and Illustrator to create various kinds of publications and documents for print and onscreen viewing. This course includes easy-to-follow exercises and several projects which will be reviewed and evaluated throughout the course. Students will use InDesign to learn about three primary disciplines: type, images, and color. Students also learn how to examine, troubleshoot, fix, and package digital files.

ART40535: User Interface Design - 3.00 Units

Gain a strong understanding of user interface design. This graphic and web design training course covers references, user experience (UX), and usability principles. Topics include psychological and interaction principles, requirements analysis, designing for different screens (web, TVs and mobile devices), design standards, style guides, techniques and visual design principles. Gain the perspective to give consumers a high quality design experience. It is a great time to be an interactive designer.

ART40543: Advanced Post-Production - 3.00 Units

Expand your digital darkroom skills from batch processing to refining a particular image in this specialized hands-on course. Learn how to streamline and personalize your workflow, comparing different image management options including Lightroom. Explore more advanced Photoshop techniques and tools to fine-tune individual images, including the creative use of different filters or researching and utilizing plug-in software. Construct unique images from pre-visualization, photographic realization to post-production assembly of composite images.

ART40552: Contemporary Paper Art - 2.00 Units

Explore the world of contemporary paper-cutting in this hands-on class. Students will be introduced to techniques of cutting and layering paper to create images in two and three dimensions. Art work will be conceived and produced by students to suit their personal style as they discover many

possible applications of this art form beyond the norm. Topics discussed include history of the art form as well as line, space, color and structure. Instruction includes demonstrations, slide lectures, discussion and individual critiques.

ART40556: California Impressionism: Plein Air Painting - 2.00 Units

Capture the essence of the California landscape using the impressionist techniques of rapid wet-in-wet painting! Rather than focusing on detail, you'll use liberating strokes of vibrant color to interpret a scene. Step-by-step methods are presented to tackle the challenges of outdoor landscape painting, giving students the tools to make thoughtful and informed decisions on composition, values, color and more. Classes are taught in scenic locations around San Diego County. Instruction includes demonstrations, individual instruction, critiques and class discussion. Students can choose to work in oil or acrylics. All levels of experience welcome.

ART40557: Animation I: Introduction to Disney's 12 Principles of Animation - 3.00 Units

This is the first in a series of animation courses taught by longtime Disney and Warner Bros. animator Eric Van Hamersveld. Using the simplicity of basic 2D animation, students will become familiar with Disney's "12-Principles of Animation." Whether 2D, CG, or stop motion animation, these principles are the backbone for all character animation projects. Students will learn to use Key Pose Animation, Squash and Stretch, Anticipation, Staging, Lines-of-Action, and more to create several short animation projects and a final 10-15 second film.

ART40558: Animation II: Animation Skill Building - 3.00 Units

This is the second of the animation classes taught by Warner Bros. and Disney animator Eric vanHamersveld. The class begins with a couple of projects in syncing recorded dialog and sound effects to animation. Then, choosing from a set of supplied soundtracks and characters, you will produce a complete Synchronized Sound, Full-Color, Broadcast Quality TV Commercial, just like you would for a client! Upon completing this class you will have a solid grasp of what it takes to sync sound (both lip-sync and sound effects) with animation, add color, and produce complete professional animated films... you will be on your way to a career in the Professional Arena of Animation Studio Production.

ART40565: Intermediate Digital Printing - 2.00 Units

Improve your digital printing techniques so your color or black and white images look their best. This course focuses on the aesthetics of printing, especially the process of selecting fine art or specialty papers that accentuate a photo's subject or mood. Students will learn how to evaluate their images and identify the ideal paper for the outcome they have in mind. Topics covered include trouble shooting common problems, advanced printer controls as well as post-printing handling and treatment. Instruction includes lectures, demonstrations, critiques and hands-on exercises.

ART40575: Destination Photography - 2.00 Units

Are you planning the trip of a life time or even a local excursion and want to capture better images? Designed for photographers with sound experience with camera and software operation, this class teaches strategies to make the most of your journey. Discussions, demonstrations and individual critiques will help you learn and develop improved approaches to pre-trip preparation, shooting on site as well as storing and sharing your images from the road or once you are home. Topics include gear selection, cultural sensitivities towards photographers, lighting, composition and other technical and aesthetic considerations.

ART40580: Adobe InDesign: Creating Publications for Mobile Devices - 3.00 Units

Students will learn how to use Adobe InDesign to create reflowable and fixed-layout ebooks, interactive PDF files, and native apps which are intended for viewing on tablets and other mobile devices. We will look at various Adobe publishing solutions and other options. Students will learn how to produce ebooks with a navigational table of contents, animation, and other advanced features. Students will learn how to create interactivity including buttons and hyperlinks, slide shows, audio and video, panoramas, and images that can be panned and zoomed. We will discuss the rapidly evolving world of digital publishing and the designer's role in this exciting new frontier.

ART40587: Adobe After Effects I: Introduction to Motion Graphics - 3.00 Units

Learn Adobe After Effects, the digital motion graphics and compositing software used by professionals in filmmaking and television post-production. In this motion graphics training course, students will learn the basics of animation, visual effects compositing and use of titling in theatrical and broadcast graphics. Finishing techniques including image adjustment, color correction, and output settings for variety of media will be covered.

ART40592: ProTools I: Introduction to Audio Production - 3.00 Units

An introduction to audio production techniques. In this course, students will learn to record and digitize sound and apply it for audio enhancement of their productions. Students will also learn how to produce audio effects and transitions. After completing the course, students will be able to identify basic types of microphones, set up mics to record voice, examine sound/image relationships to select suitable audio, match audio effects with specific visual images, use audio to create mood in transitions, integrate and adjust levels in mix of voice, effects and music, and more.

ART40607: Architectural Photography - 2.00 Units

Architecture, new and old makes for amazing photographic subject matter! Build the skills necessary to photograph structures both exterior and interior, utilizing current digital equipment and techniques. Through discussions, demonstrations and hands-on assignments, you will learn about the materials and equipment, cameras, lenses and post-production software required for making stunning architectural photographs. Students will examine inspiring and educational examples of architectural photography, discuss the various components that make the images work and try their hand at developing a series of their own images, applying presented concepts by submitting weekly assignments.

ART40610: Introduction to Social and Digital Media - 4.00 Units

In today's media environment, it is essential for content creators to be comfortable working with many types of media. In this course, students will examine current professional and consumer trends in digital content creation and social media, following both the technological and theoretical advances that have disrupted mediums such as print, television, and film. This course is part of our certificate in Digital Media Content Creation, which provides newcomers and veterans in writing, marketing, corporate communications, graphic design, and journalism with the comprehensive set of skills necessary to create content for and/or manage many different types of social media platforms.

ART40611: Introduction to Graphics for Digital Media - 4.00 Units

This fast-moving, hands-on course prepares students to advance into various fields of digital media content creation using the latest software applications and concepts. Learning terminology, file management, file formats, resolution and page layout as they relate to visual communication for the web. Typography, user interface design, and use of color will be discussed.

ART40612: Business of Digital Media - 4.00 Units

Learn to manage a freelance digital media business. Students will learn how to develop a business model for their freelance enterprise, understand small business accounting, identify and research potential markets, and create a portfolio website for marketing their services. Students will also gain an understanding of digital media distribution methods, media trends, and legal considerations such as intellectual property rights and payment for services.

ART40613: Portfolio Development - Digital Media - 1.00 Units

This course provides in-depth feedback to students as they polish the website or blog portfolio that they have been developing throughout the Digital Media Content Creation Professional Certificate program. This course includes online coursework and portfolio building, online meetings with the instructor, as well as email dialogue.

ART40622: Poster Art: A Photo Silkscreen Workshop - 2.00 Units

Poster art can be powerful! Whether for a travel destination, concert, movie, political movement or event, a well-designed poster can attract attention and inspire action or reflection. Through demonstration and hands-on guidance from the instructor, students will learn how to design and create a 4-color poster. Drawing inspiration from historical and contemporary poster art, create your own poster and make a statement or just something beautiful for your wall. Silkscreen a limited edition (12 prints) of your design using water-based inks on poster paper up to 13 x 19 inches.

ART40625: Watercolor I: Basic Techniques and Materials - 3.00 Units

Watercolors are a brilliant, versatile and a fascinating medium to work with! Develop basic painting skills in transparency, washes, glazing, composition, color theory, color mixing and value along with masking techniques, and additive and subtractive methods of using paints. Each meeting will focus on developing basic skills while encouraging individual style and creativity. Class format consists of short lectures, painting demonstrations, group and individual critiques and individually supervised exercises.

ART40628: Studio Art Internship - 3.00 Units

Interested in learning more about how to facilitate a visual arts class? Designed for intermediate to advanced studio art students, this internship offers the opportunity to shadow the instructor of a college-level workshop or class. Topics covered include how best and when to provide demonstrations of techniques, how to pace a class in terms of maintaining a balance between instruction, in-class work time as well as critiques and more.

ART40629: Photo I: Aperture, Shutter Speed & ISO - 3.00 Units

Develop competence and confidence as a photographer while mastering camera operation (aperture, shutter speed and ISO). Learn basic design and composition rules to capture more compelling images and study fundamental photographic principles with industry experts. Take part in weekly shooting assignments and demonstrations, discussions, and class critiques to help make the most of digital imaging technology. Class includes an introduction to Adobe Lightroom that focuses on digital workflow including image management, types of files, image exports, how to make basic adjustments, and file resolution.

ART40631: Photo II: Technique & Style - 3.00 Units

Designed to inspire intermediate photographers who are comfortable with the basics of photographic camera work (aperture, shutter speed, ISO). Take your work to the next level, both artistically and technically while participating in detailed demonstrations, hands-on exercises and constructive critiques. Discover your personal photographic style while photographing a variety of subjects under varying conditions. Explore different methods and types of photography including narrative photography, still life photography, histograms, color theory, portraiture, electronic flash basics, night time photography, time exposures and more.

ART40632: Photo III: Portfolio - 3.00 Units

The key to success as a photographer is distinguishing yourself from your contemporaries through process, practice and vision. This advanced course helps synthesize the skills you've cultivated, and solidify your role as a photographic artist. Through purposeful assignments, as well as thought provoking and inspirational readings, refine your ability to analyze photographs from a technical and creative standpoint. Learn how to write a strong, effective artist's statement of your personal purpose in photography, putting your identity as an artist into sharp focus. Assignments include preparing and presenting a polished portfolio, investigating next steps to becoming a professional, working photographer, essentials in business practices in different markets (commercial, wedding, portraiture, artistic) as well as further exploration of copyright issues.

ART40634: Children's Book Illustration I: Thinking in Pictures - 3.00 Units

Do you have an idea for a children's book? Or have you always wondered how to make a story come alive through art? Learn to create stories through images and turn written narratives into a sequence of pictures. Through hands-on assignments, illustrated lectures, discussions, and critiques, students get a solid foundation in the basics of visual story-telling, and sketch story characters, make action drawings, develop story boards, and design working book dummies. Explore a wide variety of picture books for inspiration, alongside a real-world introduction to the publishing profession and the industry.

ART40635: Children's Book Illustration II: Focus on Style - 3.00 Units

Build on your illustration experience and develop your style with this fast-paced children's illustration intensive! We will focus on developing your children's illustration abilities by experimenting with materials and techniques, practicing characters and compositions, and creating work from the ground up -- sketch to final. Through a range of inspiring assignments, critiques, slideshows and collaborative exercises, we'll investigate environment, perspective, horizon, color, line/tone, mood, expression, body language, scale, and the unique ability illustration gives us to bring our imaginations into the picture! Prepare to have fun, work hard and be challenged.

ART40636: Getting Published: Navigating the Children's Book Market - 3.00 Units

You've polished your skills as a writer/illustrator…so now what? This course will guide you through the process of getting published, including traditional and independent publishing options, writing queries, how to choose professional representation (or self-management), navigating contracts, self-marketing techniques, and how to manage an effective online presence. Throughout the course you will also work on completing a portfolio of your work or a book dummy/proposal.

Enrollment Information

Once certificate requirements and electives have been completed, email ahl@ucsd.edu or call 858-534-5760 to request enrollment in this course. Please follow the portfolio guidelines below one quarter prior to your enrollment in this course.

Portfolio Submission Guidelines

ART40638: Principles of User Experience (UX) - 4.00 Units

Understand the principles of Human Factors and User Interface Design, including theories of human-computer interaction, and design principles and standards. The course also focuses on user and task analysis (framing, establishing goals), field research methods (observation, interviewing, testing, documentation of personas, budgeting), usability testing and the UX process (task models user journeys, content requirements, wireframes), and more.

ART40639: User Experience (UX) Design I - 4.00 Units

Focus on case studies, UX prototyping tools such as OmniGraffle and Axure, and techniques, metaphors, organization and navigation. Build a User Experience case study - personas, task models, user journeys, content requirements, sitemap and wireframes — and create a usability test plan.

ART40640: Responsive Design and User Experience (UX) - 4.00 Units

Build a responsive UX optimized site using HTML, CSS and Bootstrap. Utilizing a UX case study, including personas, task models, user journeys, content requirements, sitemaps and wireframes, students will design a responsive interface and conduct a usability test plan.

ART40641: User Experience (UX) Portfolio - 4.00 Units

This course provides in-depth feedback to students as they refine the portfolio that they have been developing throughout the User Experience (UX) program.

ART40642: User Experience (UX) Design II - 4.00 Units

This course covers style guides, designing for different screens (web, kiosks and mobile devices), user interface design, and best practices in typography, design and navigation. Participants will design a UX project, and conduct a usability test plan.

ART40649: Lightroom Workshop - 1.00 Units

Are you ready to organize your growing photographic library or make the transition from Bridge, iPhoto or Aperture? Whether you've been shooting for a while or just starting out, this workshop will give you the skills needed to create your own successful digital workflow in Lightroom 5. Learn to manage your photographic assets, edit your images and share with others the way the pros do. Demonstrations, directed tutorials and hands-on exercises combine for a balanced and effective learning experience. Topics include: file management, keywords, metadata, collections, presets, editing, batch processing and file export options.

ART40651: Digital Illustration Using The Wacom Intuos Pen Tablet - 3.00 Units

Learn to create digital illustrations and designs using Adobe Photoshop and the Wacom Intuos drawing tablet. The Intuos pen tablet combines Wacom's finest pen capabilities with intuitive multi-touch gestures and gives you the precision and control you demand when using professional software and time-savers to speed your workflow. It's a versatile, unique, and fun tool that allows designers and enthusiasts to be creative in all new ways. In this course, students will learn how to use a digital stylus to create drawings, illustrations, and designs, how to navigate using the Intuos tablet, shortcuts, and more.

ART40655: Introduction to Concert and Low-Light Photography - 2.00 Units

Getting great shots in low-light situations can seem quite the challenge. Getting great shots without a flash or other lighting can seem impossible. In this introductory course, students will learn the ins and outs of photographing events where lighting is inconsistent, non-existent, or otherwise problematic. This course will cover techniques, equipment, and best practices of low-light photography. Post-processing in Adobe Lightroom and using RAW files will also be discussed. Although this course focuses on concert photography as its primary example, lessons will apply to many low-light situations.

ART40656: Painting alla Prima - 2.00 Units

Painting alla Prima! Try something new that is centuries old! This fast-paced, "direct" painting method is a classic oil painting technique that coaxes the painter to be bold and decisive! Learn to apply layers of wet paint on canvas to quickly capture the essence of the subject matter- from landscape, still life

and figure. The instructor supplies the subject matter and demonstrates step-by-step as students follow along. Through demonstrations, in-class projects, individual critiques and group discussions, students will expand their creative abilities by trying this painting approach perfect for beginners and more advanced painters alike.

ART40657: Crash Course: the Art of Skateboard Photography - 1.00 Units

Whether you consider skateboarding an action sport, art form, mode of transportation or successful industry, skateboarding enjoys an enduring cultural status, fueled largely by the dynamic influence of skate photography. Skateboarders have a tradition of capturing their feats of daring and athletic skills through still photos. Amateur and professional photographers have documented this compelling subculture from its inception in the late 40's. This course, designed for anyone interested in exploring the genre and learning about the history, aesthetics and technical aspects of skateboard photography, places the emphasis on learning to adapt to the fluid aspect of the sport and capturing memorable images. Instruction includes lectures, demos, discussion of photo gear & critiques.

ART40659: Variations on Photographic Portraiture - 3.00 Units

A portrait photograph can offer itself to a multitude of implications and interpretations, serving as a realistic representation of a person, a fictional narrative, or even an allegorical idea. This class will help expand and reinvigorate your approach to portraiture. Using such artists as Emmet Gowin, Francesca Woodman, Harry Callahan, and Joyce Tenneson as inspiration, students will explore treatment of subject and composition. Instruction includes discussion, demonstrations and both individual and class critiques.

ART40661: Playing with Pen & Ink - 3.00 Units

Playing with Pen & Ink is an introduction to traditional modes of drawing using line, shape, texture, value, and space relation. Drawing skills will be developed using a variety of techniques. There will be drawing in class as well as drawing at home.

We will explore the broad variety and versatility of pen and ink techniques using dip pens, ballpoint pens, and an assortment of ink pens. Weather permitting, we may go outdoors to draw on occasion.

This class is appropriate for anyone that wants to draw, for whatever reason, whether you have drawn before or not.

ART40664: Scoring and Sound Design - 3.00 Units

Dive into the world of sound and music as used in film, television, and advertising. This course will explore the role of the composer and sound designer in cinematic movies, dramatic TV, and advertising. Each week will cover a segment of the artistry, the technique and the business of creating and delivering a finished score to picture. Students will also explore how the historical line between music and sound effects has blurred enough to offer new opportunities for the composer.

ART40665: Introduction to Adobe Creative Cloud - 3.00 Units

This course provides future graphic designers, artists, and illustrators with an overview of computer technology and its role in the production of graphic designs. Students begin by learning file management and page layout and how they relate to visual communication. This course prepares students for advancement in various fields of digital technology, graphic design, digital arts, and digital design. A must for beginners, this is the first recommended prerequisite course for several certificates, including Graphic Design Specialized Certificate and Web Design Specialized Certificate.

ART40666: Editorial Illustration - 3.00 Units

Editorial illustration is the bread and butter of a full-time freelance illustrator. No matter the current trends in illustration, art directors will always be in the market for conceptual thinkers, as well as accurate and inventive portraiture.

Learning to be an editorial illustrator is learning how to interpret a source and produce an illustration that represents the essence of its accompanying text.

This course goes through the step-by-step process of creating an editorial illustration—from thumb, to sketches, to final. Class work includes real-life editorial assignments that provide students with the same material and information an art director would provide. The class also discusses using reference material

and editorial promotion techniques, as well as reviewing examples of successful editorial illustration.

ART40667: Fundamentals of Graphic Design - 3.00 Units

A key course in learning the fundamentals of graphic design, this course introduces students to the principles of design and their application for print and web. Coursework will cover design fundamentals including gestalt design theory, color theory, typography and hierarchy, and imagery resulting in the successful integration of design concepts. Students will learn about print production and file format and management and their effect on both printed and digital/web projects. In this graphic design training course, gain an introduction to the essential design techniques required for the production of professional work from both an aesthetic and technical standpoint. Students will work with Adobe Creative Cloud design applications including InDesign, Illustrator, and Photoshop.

ART40668: Typography I - 3.00 Units

In this graphic design training course, students will explore applications of typography to achieve and improve upon effective visual communication. Students will apply techniques including layout, hierarchy, leading, tracking and font selection to design a variety of specific marketing, graphic design and web design needs. Coursework will incorporate student communication, presentation, and storytelling of design work. Students will work with Adobe Creative Suite design applications including Adobe Illustrator and Photoshop.

ART40669: Design Internship - 4.00 Units

A quality internship experience is an essential contributing factor to the success of many individuals in this competitive job market. Advanced students enrolled in Digital Arts certificate programs may qualify for internships. Interns will gain real-world experience working for a minimum of 120 hours with professionals in their field of study. Under the mentorship of an intern manager, interns will participate in and learn the inner workings of a professional workplace, and will observe first-hand how different departments function in support of an artistic mission. Interns will be committed to a department and will carry out the duties of that department, including attending meetings and design presentations. Internships will provide students with the resume building, hands-on experience needed to increase their professional marketability.

ART40670: Watercolor for Illustration - 3.00 Units

Ready to apply your watercolor skills to illustration? This course will consist of the practice and development of intermediate-level watercolor techniques, color usage, and materials. Students will learn to make washes, gradients, and a variety of textures. An assortment of watercolor media will be introduced, which may include watercolor pencils, ink, and marker. Students will be required to complete a series of illustrations demonstrating technique and application. Skills learned in this course may also be applied to studio and fine art. Students will learn to develop their own artistic style, and resource materials and usage will be emphasized.

ART40671: History of Communication Design - 1.00 Units

Throughout human history the design of visual communication has been a necessary and culturally important attribute of all societies. From the invention of alphabets to new media technology, mankind has evolved in tandem with advancements in communication. This course will enlighten

students and provide a foundation of visual design systems in historical context.

ART40672: Typography II - 3.00 Units

This course elaborates on the principles covered in Typography I. Coursework will include styles, hierarchy, and layout. This project-based course will use design history context and core design principles to creatively solve typographic challenges. Students will use Adobe Illustrator, InDesign, and traditional materials. Coursework will advance student communication, presentation, and storytelling of design work.

ART40673: Print Design I - 3.00 Units

This course will build upon the foundations laid down by Fundamentals of Design. Students will create portfolio-ready pieces in this course through a process of evaluation, critique and refinement. Projects include: business systems, brochures, and advertisements. Coursework will advance student communication, presentation, and storytelling of design work.

ART40675: Introduction to Video Editing using Adobe Premiere - 3.00 Units

Gain an understanding of Adobe's CC / Premiere video editing software. In this course, students will learn how Adobe Premiere works, understand the basic principles of shooting and editing digital video, learn media management techniques, and practice time-based storytelling principles. Audio editing, color correction, and some advanced techniques will be covered. Students enrolled in this course will use their new skills to complete one project using Adobe Premiere.

In addition, this workshop style production class examines the new frontier of online publishing for film and video narratives and explores editing and compression techniques for online distribution. Through discussion and group critiques students will develop an effective language for describing their work, providing constructive critiques to their peers and collaborators, and analyzing time-based media works. This course will demand significant self-guided editing work outside of class time and a dedication to being available as crew member for all in-class shooting and editing projects.

ART40676: Introduction to Curvilinear Mosaic Sculpture - 3.00 Units

Learn basic mosaic skills and advanced techniques to create a curvilinear 3-dimensional constructions. This class includes demonstrations, lectures and hands-on experience with a focus on 3-D construction techniques, finding and selecting the right materials, preparing and setting tesserae, use of tools, grouting and finishing. Students will concentrate on one free-standing sculpture inspired by the work of James Hubbell suitable for indoor or outdoor use. All levels welcome.

ART40677: Web Design I: Principles & Techniques - 3.00 Units

Become familiar with the principles and techniques for creating websites for desktop, tablet and mobile devices. Learn the steps of the online design process: define goals, identifying the message(s) and target audience, gathering user data, creating responsive visual design and coding. The course will cover the use of Adobe Photoshop for creating web designs and saving individual images that are web-optimized. The course will also introduce students to programming logic and coding principles using Adobe Dreamweaver. Students will also receive a brief introduction to user experience (UX) principles as an integral part of the web design process.

ART40678: Branding I - 3.00 Units

This course is a continuation of the concepts and practices introduced in Fundamentals of Graphic Design and Print Design I. Students will pursue an intermediate identity and branding project with a strong focus on process. Coursework will advance student communication, presentation, and storytelling of design work.

ART40679: Packaging Design I - 3.00 Units

Students will use branding, typography, and illustration to apply a visually effective design to a three-dimensional form within given specifications. Coursework will advance student communication, presentation, and storytelling of design work. Packaging projects will focus on structure, functionality, and modular systems.

ART40681: Typography III - 3.00 Units

In this advanced graphic design course, students will work on exploratory techniques to solve complex typographic problems. Typography will be used as a core element in an advanced design project. Coursework will deepen student understanding, appreciation and creation of typographic solutions.

ART40682: Branding II - 3.00 Units

In this advanced graphic design course, students will work on design assignments that challenge them to produce solutions based on research and methodology. Students will work on an advanced identity and branding project that extends from the client's brick-and-mortar company to a broad advertising campaign. Coursework will advance student communication, presentation, and storytelling of design work.

ART40683: Packaging Design II - 3.00 Units

In this advanced graphic design course, students will work on design assignments that require sophisticated solutions. Students will work on an advanced print packaging project that will include use of client-determined branding and specifications. Coursework will advance student communication, presentation, and storytelling of design work. Packaging projects will focus on concept, material, and strategy.

ART40684: Print Design II - 3.00 Units

In this advanced graphic design course, students will work on progressively challenging design assignments. Students will develop their portfolio by working on advanced print design products to create professional-quality pieces. Coursework will advance student communication, presentation, and storytelling of design work.

ART40685: Web Design II: Intermediate Principles and Techniques - 3.00 Units

Become familiar with the user experience principles and techniques for creating websites for desktop, tablet and mobile devices. Learn the steps of defining your target market and user community by creating user personas and user journeys/use cases. The course will cover the use of Adobe Photoshop for creating web designs and using Adobe Experience Design and other online tools to create interactive prototypes.

ART40686: Web Design III: Responsive Design - 3.00 Units

Gain greater interactivity from your websites and build responsive design using a responsive framework. Students will learn how to incorporate CSS, JavaScript and JavaScript frameworks in the creation of more advanced projects. Responsive design will be an essential theme of the course, as well as User Experience and Interactive Design strategies. Students will be expected to develop a fully functioning, responsive website. Coursework will advance student communication, presentation, and storytelling of design work.

ART40687: Color Theory for Photographers - 2.00 Units

This course will cover the basics of color science and color theory, including the language of color, color primaries, the color wheel, and color relationships. These concepts will be framed in a way that is relevant for photographers especially in composition, control of mood, and image processing. Some additional topics include the importance of memory color, light source, light

directionality, and special topics such as photographing glass, water, and metal.

ART40688: Introduction to Scratchboard - 2.00 Units

This course will focus on building drawing skills and learning a variety of techniques using the very unique medium of scratchboard and scratch knife tools. This high contrast black and white medium can be manipulated to achieve many interesting styles of image making. We will explore light and shadow, and practice use of highlights, cast shadows and reflective light in the creation of form. We will hone skills in sketching and planning of darks and lights, while learning to see in simple bold shapes. Assignments will cover hatching techniques, linear engraving style, chunky woodcut looks, ink pen and brush combinations and loose, softer, even painterly approaches, using both black and white scratchboard. Some color application techniques will be discussed and experimented with.

ART40689: Photographic Portraiture I - 3.00 Units

Develop competence and confidence as a portrait photographer while learning the photographic techniques associated with portraiture – proper aperture and shutter speed, posing, expressions, and environment. Learn portraiture composition rules to enhance your subject and create meaningful, powerful portraits. Participate in weekly shooting assignments and demonstrations, discussions, and class critiques to help make the most of digital imaging technology for the entire portrait process – from image design and capture to processing and printing. Class includes a discussion of the digital workflow of portraiture, including coordination, planning, and design of portrait session, image management and post-processing techniques, image exports, and how to provide image selection to your subjects and/or clients.

ART40690: Photographic Portraiture II - 3.00 Units

Enhance understanding of portraiture and build on basic knowledge from Photographic Portraiture I with increased control over lighting, posing, and more complicated portrait scenarios. Design elements will be considered for photographing multiple people, various skin tones, and a variety of more advanced lighting techniques such as Hollywood Glamour and Beauty Light. Class includes a discussion of working with multiple people to create your images – including art directors, models, and additional contributors – advanced portrait image management and post-processing techniques, image exports, and how to provide image selection to your subjects and/or clients.

ART40691: Business of Photographic Portraiture - 2.00 Units

Discuss the basics for launching and succeeding with a freelance photographic portraiture business. Topics will include how to create competence and confidence with the business side of being a photographer, including creating a unifying brand presence; initiating required paperwork including model releases, licenses, and copyright protections; balancing your expectations and reality with both your time and finances; and keeping your business going as a self-perpetuating enterprise.

ART40692: History of Photographic Portraiture - 2.00 Units

Enhance understanding of the relevancy of the photographic portrait in our world history by discussing the origins and evolution of photographic portraiture as it pertains to the medium's technical and creative advances. This will include in-depth discussions of the value of photographic portraits for various class and ethnic groups; portraits in times of war; portraits as revolutionary, civil rights, and human rights tools; portraits as advertising tools within arenas of commercial enterprises such as fashion, product, and catalog; and the evolution of the portrait in the modern era including editorial and mass media.

ART40693: Introduction to Photo Journalism - 2.00 Units

Photographs can change the world and how we see it. In this course, students will be introduced to the history of photojournalism, exploring the stories behind iconic images of critical moments in human history captured by various photographers. Instruction will include the technical aspects of photojournalism including understanding composition, using editing software, using different qualities of light and capturing decisive moments. The course will also cover ethics in photojournalism, the importance of captions and learning to read human behavior. Out of class assignments include researching a subject, shooting and editing a photo essay.

ART40695: Art Now - 1.00 Units

In this class, students will examine a sample of contemporary art pieces made since 2000, and how they fit into art historical themes, practice, and meaning. Discussion and lectures will be supplemented by field trips.

ART40696: Introduction to Interior Design - 3.00 Units

ART40697: Color Theory for Fine Artists - 3.00 Units

ART40698: Adobe Illustrator II - 3.00 Units

ART40702: Costume Design: Theory and Practice - 3.00 Units

ART40703: - 3.00 Units

ART40704: - 3.00 Units

ART40705: - 3.00 Units

ART40707: - 3.00 Units

ART40708: - 3.00 Units

ART40709: - 3.00 Units

ART40710: - 2.00 Units

ART40711: - 3.00 Units

ART40712: - 3.00 Units

ART40713: - 3.00 Units

ART40714: - 2.00 Units

ART80002: DIY Wedding Floral Design - 0.00 Units

Are you planning your own wedding and want to make your own bouquet, personal flowers and floral décor? Or are you thinking about becoming an event planner or wedding coordinator? Master the basics of wedding floral design and learn how to customize wedding florals, based on color palette, theme, season and flower selection. Projects include bridal bouquets, attendants' flowers, flowers to wear- corsages, wristlets, boutonnieres, hair flowers and detailed accessories. Whether your style is contemporary-modern or vintage-chic, learn the basic skills to create your own wedding floral décor.

ART80006: Introduction to Calligraphy - 0.00 Units

Calligraphy is a timeless and elegant art form. In this hands-on workshop, students will learn the foundations of a very popular lettering style developed in Italy around the Renaissance. The Italic hand, a graceful and legible hand, is very current today and used for many lettering applications. Beginning with pencil, students will gain an understanding of the underlying structure of the

Italic hand before moving on to render the alphabet with a calligraphy pen using ink or gouache. Each session will build on the previous one in order for the student to become comfortable not only with their tools, materials, and lettering, but also to become confident in developing a calligraphic composition. Instruction includes guided practice and demonstration.

ART80010: Introduction to Calligraphy: English Round Hand - 0.00 Units

Put pen to paper and make a real flourish! Using dip pens and ink, students will learn the foundations of calligraphy and be introduced to the classic and elegant script, commonly known as "Copperplate." Each session will build on the previous one in order for the student to become comfortable not only with their tools, materials, and lettering, but also to become confident in developing a calligraphic composition. Instruction includes guided practice and demonstrations including a lesson focusing on flourishing and how to play with Copperplate to create a fun, whimsical look.

ART80011: Portfolio Development - Web Design - 0.00 Units

Upon successful completion of the required courses in the Web Media certificate program, a consolidation of your design projects for presentation will be reviewed one-on-one with the lead program adviser. Suggestions for areas of growth will be discussed as well as avenues for application.

ART80012: Portfolio Development - Graphic Design - 0.00 Units

Upon successful completion of the required courses in the Design Media certificate program, a consolidation of your design projects for presentation will be reviewed one-on-one with the lead program adviser. Suggestions for areas of growth will be discussed as well as avenues for application.

ART80014: Design in Practice: Client Mockup - 0.00 Units

In this hands-on course, students will undergo a complete mock client cycle – from design brief to completion – simulating possible communication inaccuracies, creative predicaments, and business mix-ups that may happen during the design process. This course can be taken as an alternative to the Graphic Design Portfolio Development as the capstone for the specialized certificate in Graphic Design.

ART80015: - 0.00 Units

ART81315: Contemporary Floral Design: Fall Flowers - 0.00 Units

Enjoy the color and beauty of working with fall flowers! Students of all levels will learn the art of contemporary floral arranging through demonstrations & hands-on practice. In addition to learning about container selection, design theory, care and handling of cut flowers, students will be introduced to a variety of techniques and creative ideas.

ART81510: Contemporary Floral Design with Spring Flowers - 0.00 Units

Enjoy the abundance of flowers blossoming this spring! Students of all levels will learn the art of contemporary floral arranging through demonstrations & hands-on practice. Learn about container selection, design theory, care and handling of cut flowers while working with a variety of unusual cut flowers and foliage. Design styles include armature vase, vegetative, interpretive waterfall, new wave and tropical high style.

ART90015: Casual Gaming Development - 6.00 Units

This course is designed to give students theoretical and practical introduction to casual game development including fundamentals of game design, art for casual games and programming/scripting techniques for interactive games. Students will apply their knowledge by solving visual and technical problems through the process of guided and independent research while creating a functional prototype of a casual game.

ART90041: Appreciation of Indigenous Dance and Theatre - 6.00 Units

Appreciation of Indigenous Dance and Theatre is both a survey course and movement laboratory. This course explores both historical and contemporary dance and theatre. In this course we will be look at the history and influences of indigenous dance and theatre by attending performances and embodying these aesthetics within a laboratory/studio setting. Students will gain a background in historical, theoretical and physical perspectives within the Indigenous realm, with a culmination of a performance of all the students

ART90042: Math & Material Science - 0.00 Units

Design a mural while simultaneously discovering how to use math to prefect the execution of the final project. Explore how different types of paints adhere to different surface types and become efficient at calculating the needed materials and costs to complete large scale murals. Investigate obtaining permission and permits for final mural placement. Topics will also include a discussion of funding and grants and how to use technology to enhance designs. All students will participate in creating a sample mural, either individually or in groups.

ART90044: Inflatable Engineering - 0.00 Units

Explore the fascinating world and possibilities of bubbles. Be introduced to the intersection of engineering, architecture, art and nature through amazing experiments with bubbles and inflatables. We will learn how to be inventors and designers of our own unique constructions through an introduction to the design to build process. We will turn ordinary plastic bags into giant inflatables through group and individual work. Our final project will be a public art display. This course is designed for high-school students who have little to no experience with inflatables.

ART90045: Introduction to Inflatables (NExT) - 0.00 Units

ART90048: - 0.00 Units

ART90050: - 6.00 Units

ART90051: - 6.00 Units

ART90052: - 6.00 Units

ART90053: - 6.00 Units

BENG90000: Stem Cells: Making and Mending a Body - 6.00 Units

Stem cells have the potential to regenerate and develop into many different specialized cell types in the body. Because of these remarkable abilities, scientists and engineers in the field of regenerative medicine are investigating ways to use stem cell therapies to treat diseases. This course will introduce the biology of stem cells and where they are found in the body. We will then survey the cutting-edge technologies scientists use to engineer stem cells and how doctors use stem cells to repair damaged and diseased tissues.

BENG90001: - 12.00 Units

BENG90002: - 1.00 Units

BENG90003: - 3.00 Units

BENG90004: - 3.00 Units

BILD10: Fundamental Concepts of Modern Biology - 4.00 Units

BILD X10 is an introductory course on the molecular and cellular biology of microbes, plants, and animals for non-Biology majors. The course initial focuses on structures and mechanisms of action required for the smallest unit of life - the cell. We will then progress to discussion of biotechnology,

mechanisms of inheritance, the diversity of organisms on earth, evolution, and natural selection, and the microbial world.

BILD22: Human Nutrition - 4.00 Units

A survey of our understanding of the basic chemistry and biology of human nutrition: discussions of all aspects of food: nutritional value, diet, nutritional diseases, public health, and public policy.

BILD3: Organismic & Evolutionary Biology - 4.00 Units

This course deals with the living world at the level of whole organisms, populations, communities, biomes, ecosystems and the biosphere. It is designed to introduce you to the fields of evolution, systematic, ecology, environmental science, behavior and conservation biology. The major focus of the course will be on evolution, since an understanding of the evolutionary process enables us to grasp why there are so many different kinds of living things, how they interact with each other to produce complex ecosystems, the ways in which the interactions may lead to evolution of complex behaviors, how evolution has often brought about large changes in body plan, and how species (including ourselves) are likely to continue to evolve. Such knowledge is essential for understanding biology in general, and provides the tools for our stewardship of the planet's biota and the sustainability of the ecological services we take for granted.

BIMM90000: Oncofertility Science Academy - 5.00 Units

The Oncofertility Science Academy at UC San Diego is a hands-on educational program that inspires 10th to 12th grade girls to become the next generation of scientists and physicians. The curriculum is focused on oncofertility – an exciting new field in medicine that addresses the fertility needs and quality of life issues for young women with cancer. Sessions are held on a series of Saturdays during the summer and include topics such as, ovarian physiology, assisted reproductive techniques (including in vitro fertilization), cancer biology, radiation and chemotherapies and reproductive ethics. Students are taught by expert UCSD faculty from the Department of Reproductive Medicine as well as related departments at various locations including Moores Cancer Center, Scripps Institute of Oceanography, and Reproductive Partners IVF clinic.

BIMM90006: Introduction to Bioinformatics - 6.00 Units

BIOL30000: Cell Biology and Physiology CSET Preparation - 3.00 Units

Candidates demonstrate an understanding of the foundations of the cell biology and physiology. To ensure a rigorous view of cell biology and physiology and their underlying structures, candidates have a deep conceptual knowledge of the subject matter. Candidates demonstrate an understanding of the fundamental life processes of plants and animals that depend on a variety of chemical reactions that occur in specialized areas of an organism's cells. They recognize the coordination of organ systems and the relationship of structure to function. They use this understanding to apply the concepts of homeostasis and its mechanisms to the regulation of human body systems.

This course is part of the following California Commission on Teacher Credentialing program(s):
Added Authorization

BIOL30001: Genetics CSET Preparation - 3.00 Units

Candidates demonstrate an understanding of the foundations of the genetics. To ensure a rigorous view of genetics and its underlying structures, candidates have a deep conceptual knowledge of the subject matter. Candidates demonstrate understanding of the structure and function of genetic material. They understand the genetic coding of DNA (deoxyribonucleic acid) and how this coding specifies the sequence of amino acids in proteins characteristic of the organism. Candidates know that a multicellular organism develops from a

single zygote, and its phenotype depends on its genotype, which is established at fertilization. They understand the roles of mutation and sexual reproduction in genetic variation within populations. They know how new biotechnology methods incorporate exogenous DNA into cells to alter their genetic composition, and the resulting ethical implications of using such methods. Candidates also understand the relationship of genetics to evolution and how the frequency of an allele in a gene pool of a population depends on many factors and may be stable or unstable over time.

This course is part of the following California Commission on Teacher Credentialing program(s):

Added Authorization

BIOL40000: Good Manufacturing Practices - 3.00 Units

Gain a comprehensive understanding in FDA compliance with current good manufacturing practices (cGMPs), as regulated and guided by national and international agencies for the pharmaceutical and industry. The course will emphasize the US FDA cGMPs and briefly touch on differences between the other regional markets in the rest of the world. In addition to pharmaceutical applications, nutritional supplements will also be discussed since this industry is held to standards very similar to therapeutics.

The goal of this course is to teach you how to apply the knowledge gained about GMP regulations to institutions that are either trying to develop clinical trial materials or commercial product for human or veterinary treatment to assure compliance. Teaching the foundation of current Good Manufacturing Practices and similar legislative edicts in other countries that are applied to Chemistry Manufacturing and Controls (CMC) in the biotechnology, pharmaceutical and nutritional supplement industries should provide that knowledge base.

Learning Objectives

Understand the FDA's basic Good Manufacturing Practices regulations

Understand the historical evolution of current Good Manufacturing Practices

Understand the regulatory structure of other countries that follow GMPs

Understand the application of guidance documents to the GMPs (ICH and FDA)

Develop a basic Quality Management System to manage GMPs

Use risk management tools in developing a compliance strategy

Respond with solutions to practical case studies as a learning tool.

BIOL40001: Introduction to Molecular Biology - 3.00 Units

Do you need an introduction or refresher to molecular cell biology? This course will introduce students to the field of molecular biology by providing the necessary background in biology and chemistry; examining key discoveries and

figures from the history of the field of molecular biology; providing an overview of the key tenants and organizing principles of the discipline; introducing the most important methods and techniques used by molecular biologists; showcasing how advances in molecular biology have led to practical technologies; and discussing the ethical implications of certain lines of research.

By the end of this course, you will be able to:

Apply the scientific method to generate, test, critique, refine (or abandon) hypotheses

Summarize and explain the key tenants of molecular biology

Understand the design and significance of crucial experiments from the history of molecular biology

Describe common experimental methods and techniques used by molecular biologists

Recognize multiple important practical applications that have arisen from the field of molecular biology

BIOL40015: Overview of the Drug Development Process - 3.00 Units

Guiding a new product through the stages of research, development, clinical trials and submission of an IND and New Product Marketing Application requires the input of nearly every area within a pharmaceutical company. This course presents a road map for taking the product from bench-scale operations in the research laboratory to full-scale manufacturing production and the requirements for GMP product approval. Pitfalls will be discussed and consideration will be given to the regulatory and quality requirements at each step.

BIOL40021: Advanced QA/QC for Drugs & Biologics - 3.00 Units

Highlighting the challenges facing QA/QC in today's pharmaceutical manufacturing and control environment, this course examines what it takes to have an effective, functional QA/QC. Instruction covers the risk management decisions that the Quality Unit must make for (1) failure and Out of Specification investigations, (2) approving validation protocols and reports, (3) setting scientifically defensible specifications, (4) establishing quality agreements when outsourcing, and (5) preparing for regulatory inspections. The role of QA/QC in auditing GMPs (GMP, GLP, and GCP) will be covered.

BIOL40038: Introduction to QA/QC for Drugs & Biologics - 3.00 Units

This introductory course in Quality Assurance/Quality Control (QA/QC) for Drugs & Biologics provides guidance in the following areas: 1) understanding the importance and underlying principles of QA/QC; 2) developing a cost-effective, risk-managed QA/QC strategy for products through the different phases of clinical development and into commercialization; 3) handling biosafety, potency, and impurity profile issues for biologic/biopharmaceutical products; 4) setting appropriate and meaningful product specifications and expiration dates; 5) managing manufacturing process changes; 6) identifying pressures on QA/QC groups today; and 7) meeting FDA's expectations for the role of Quality Systems.

BIOL40043: Applied Immunology - 3.00 Units

Innovative immunological approaches aimed at modifying immune response will continue to play a significant role in the future of biomedical, medicine, biotechnology, and the pharmaceutical industries. This course will examine newer techniques and applications in the immunology field as they pertain to medical diagnostics and biotechnology. It will cover current principles and theories being developed, antibody structure and function, innate and adaptive immunity, cells involved in the immune response, complement, antigen-antibody reactions, and antibody detection for the diagnosis of infectious disease.

BIOL40047: Introduction to Pharmacology - 2.00 Units

Gain an introduction to classical pharmacology. This course will emphasize the understanding of drug effects on organ systems and drug use as clinical therapeutics. Topics covered include: receptor structure/function and signal transduction pathways; pharmacokinetics - rates of drug absorption, distribution, metabolism, and excretion (ADME); pharmacodynamics - dose-response relationships of drugs and their mechanism of action; and a survey of major systems physiology and pharmacology including renal/cardiovascular pharmacology, neuropharmacology, and chemotherapy.

BIOL40049: Biostatistics - 3.00 Units

Biostatistics

Statistics provides the basic framework for thinking about data in a rigorous fashion. Biostatistics applies this rigorous examination of data to information gathered in the biological sciences, including clinical trials, public health, genetics, and genomics. It seeks to differentiate between correlation and causation to uncover the proper interpretation of data.

This course is intended as both a refresher course and as a first course in the applications of statistical thinking and methods. Both descriptive and inferential statistics will be covered, and students will complete a collaborative, real-life project demonstrating their understanding of the methods and applications covered in the course.

Topics include:

- Basic probability
- Discrete and continuous distributions
- Descriptive statistics
- Confidence intervals
- Hypothesis testing
- Correlation
- Simple regression
- Chi-square tests
- Analysis of variance (ANOVA)

Practical experience:

- Organize, summarize and present data
- Describe the relation between two variables
- Understand basic probability and probability distributions
- Work with sample data to make inferences about a population

Software: Students will need access to Excel or a similar spreadsheet software to complete course assignments.

Course typically offered: Online in Fall, Winter, Spring, and Summer (every quarter)

Prerequisites: None

Next Steps: Upon completion of this course, consider taking Biostatistical

Methods I: Linear Regression and ANOVA to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

BIOL40071: Introduction to Bioethics - 2.00 Units

Recent advances in medicine and biomedical research raise substantive ethical and public policy issues of broad concern. In this course, you will examine a variety of case studies that have shaped current legal and ethical thinking in the area of bioethics, supplemented by cases drawn from a variety of biotech industries. This case-study approach will then be used to critically examine our own moral intuitions, conclusions, and experiences, drawing upon the resources of established ethical traditions and the principles of moral reasoning. The goal of the course is to develop effective and ethically consistent strategies for resolving difficult professional and personal choices.

BIOL40080: Overview of Regulatory Affairs for Medical Device Professionals - 2.00 Units

Important: The Overview of Regulatory Affairs for Medical Device course BIOL-40080 has been updated to BIOL-40322. To enroll in this course please click on the link below:

[Overview of Regulatory Affairs for Medical Device](#)

Get a comprehensive picture of the medical device regulatory process. The focus will be on FDA laws and regulations required to successfully develop and commercially market medical devices in the United States. Topics include: product development/approval process (IDE, 510(k), PMA), post-market controls, state and federal site inspections, enforcement activities, and suggestions for working proactively with the FDA.

BIOL40085: Good Laboratory Practices - 2.00 Units

By addressing fundamental regulatory compliance principles relative to the FDA's current Good Laboratory Practice regulations, this course will show how GLP's affect the conduct of non-clinical laboratory research, QA audit programs and FDA inspections. You will gain an in-depth understanding of specific critical GLP requirements such as the role of the QAU, study director, test and control articles. Preparation for FDA GLP inspections and current inspection trends, basic elements of GLP documentation, and considerations for lab facilities, equipment, and animals are covered.

BIOL40101: Regulatory Compliance for Drugs & Biologics - 2.00 Units

Regulatory Compliance is the level of activity that provides assurance to the sponsor and the regulatory agency that all phases of drug development are conducted in compliance to the good practice regulations as mandated by the Federal Food, Drug, and Cosmetic (FD&C) Act. In this course, you will learn the practical applications for ensuring regulatory compliance as required by FDA regulations for biologics and drug development. You will also examine how a pharmaceutical or biotechnology company can use the graded approach when following the good manufacturing practice (GMP) regulations for manufacturing, testing and control of clinical supplies and commercial products.

BIOL40102: Regulatory Requirements for Drugs & Biologics - 2.50 Units

Discover the FDA regulatory requirements as they pertain to biotech and pharmaceutical companies. In this course, you will review topics such as: FDA organization and operations; U.S. Pharmacopoeial convention; INDs; the product development process; product characterization and pre-clinical evaluation; pharmacology/toxicology for new drugs and GLPs; clinical investigations, bioresearch monitoring and GCPs; and CMC requirements and GMPs. Also covered are the roles that regulatory affairs professionals play in the process.

BIOL40110: Advanced Topics in Regulatory Affairs - 3.00 Units

This capstone course will help you examine current, often complex, Regulatory Affairs issues impacting regulated biopharmaceutical industry. Presented by leading professionals with broad industry and FDA experience, this class will provide you with the opportunity to learn about and examine critical development decisions and practices at leading companies. A final project is required, where you will develop and present analysis of a significant RA topic to a panel of instructors and peers.

BIOL40116: Medicinal Chemistry Intensive Program - 3.00 Units

September 19-22, 2016

This intensive, four-day program focuses on the chemistry of drug molecules and drug action. It covers topics essential for understanding the multidisciplinary areas of medicinal chemistry including: Reducing the barrier to creative contribution and discussion with biological collaborators. An increased understanding and confidence in biological literature. An increased

awareness of the meaning and relevance of biological data and the limitations of its interpretation

This program is directed primarily at graduate and post-doctoral chemists and biologists who have a basic knowledge of drug discovery and development.

BIOL40125: Preclinical Drug Discovery & Development - 3.00 Units

Gain a comprehensive understanding of preclinical drug discovery and development. Through the use of lectures, case studies and discussion, this course will cover the framework of the various stages of developing a therapeutic agent including biologics. This course is appropriate for those without a strong technical background as well as experienced biologists and chemists, who want to gain knowledge into how new drugs are discovered and the processes needed to take them to clinical studies.

Topics include:

Drug targets, mechanisms and target identification

Target based drug design and modeling

Lead generation and optimization

Cell and animal experimentation

ADME

Pharmacokinetics and Pharmacodynamics

Toxicity, drug safety pharmacology

Biologic drugs

Formulations

Investigational New Drug (IND) filings.

Learning Objectives:

Understand the different stages of the process of drug discovery and development

Identify the role played by different disciplines in preclinical drug development

Appreciate the interplay between business and science in drug discovery

Be aware of the legal regulations to be thought through to get a drug commercialized

Analyze case studies that exemplify the modern drug discovery and preclinical processes

BIOL40133: High Throughput Screening Methods in Drug Development - 2.00 Units

Advances in chemistry, biology, biophysics and engineering have increased efficiency in screening compounds for drug-like activity. We will discuss screening methods for hit identification and lead optimization, including the interaction of medicinal chemistry with the screening process, as well as new approaches to biological models for drug discovery. Topics include: assay and screening technologies, liquid handling, automation, assay miniaturization for screening in ultra-HTS formats, compound handling and management, readers and detection technologies for high throughput and for high content screening, data analysis, assay transfer from assay development to HTS, cell culture for cell-based HTS and computational approaches and high-density high throughput assay formats for fast and comprehensive ADMET guidance in hit-to-lead chemistry.

BIOL40145: Introduction to Biochemistry - 3.00 Units

Gain an understanding of the molecules that drive living organisms In this course we will study life at the atomic and molecular level. We will study the four classes of biomolecules that are the building blocks of living organisms – proteins, carbohydrates, lipids, and nucleic acids. We will study how bioenergy is stored in and extracted from food sources. Finally, we will study how inheritable genetic information is stored in the form of DNA and orchestrates the functions of cells through the processes of transcription and translation. The course is appropriate for students who have not taken a biochemistry course and those that have and want to refresh their knowledge in the area. A rudimentary understanding of biology and chemistry is recommended.

BIOL40151: Introduction to Human Physiology - 3.00 Units

Gain a basic understanding of how the human body works. This course is designed to cover the fundamental concepts of human physiology. A general overview of most of the systems of the human body will be presented along with a discussion about regulation and the medical relevance of the physiological concepts. Although the course is geared toward students who have limited science and math backgrounds, the textbook provides enough detail to satisfy those students who want to enter the health professions. Topics include the following systems: nervous, endocrine, cardiovascular, respiratory, urinary, digestive and reproductive.

BIOL40161: Medicinal Chemistry of Leading Drugs - 1.00 Units

Explore the drug discovery process using case histories in various therapeutic areas. Following an analysis of the leading prescription drugs and their physicochemical properties which ensure they are 'drug-like', case histories will focus on target identification and validation, design and synthesis of relevant molecules, structure activity relationships and a summary of the pharmacokinetic properties of the selected drugs. Therapeutic areas which will be discussed include antihypertensives, anxiolytics and antidepressants, anti-viral agents and antihyperlipidaemia agents and will cover both earlier drugs in the field as well as the most recent advances.

BIOL40170: Drug Metabolism - 3.00 Units

Approximately one out of every 1,000 compounds identified in preclinical studies is eventually found suitable for human use. This creates a need to

shorten the time and cost to increase the "hit" rate of finding drug candidates. This course will give you a comprehensive understanding of the biochemical aspects of drug metabolism in the drug discovery process and related pharmaceutical principles. Topics include pharmacokinetics, Phase I and II drug metabolism, factors affecting drug metabolism, and recent advances in drug metabolizing and absorption technology. The goal of this course is to give students a full appreciation of the drug metabolism aspects of the NDA process as well as an ability to predict drug metabolism and distribution of new chemical entities.

BIOL40176: Pharmacokinetics - 3.00 Units

Get an overview of the application of pharmacokinetic concepts to all stages of drug development. The focus will be on the practical application of pharmacokinetic principles in the design and conducting and interpreting preclinical and clinical pharmacokinetic studies. Areas to be covered will include pharmacokinetic concepts (absorption, distribution, metabolism, and elimination), pharmacodynamics, regulatory requirements, and guidance for in vitro and in vivo studies, and practical examples of preclinical and clinical pharmacokinetic and pharmacodynamic analyses. This entry-level course will be appropriate for individuals with a background in biological sciences who contribute to the design, conduct, analysis or interpretation of pharmacokinetic studies or who have an interest in the role of pharmacokinetics in drug development.

BIOL40186: Stem Cell Biology - 3.00 Units

Advancements in stem cell biology are occurring at a rapid pace. Discoveries in this field may lead to regenerative therapies for diabetes, heart disease, age-related organ failure, genetic diseases, Parkinson's, and severe tissue traumas such as spinal cord injuries. Scientists also use stem cells to gain a better understanding of mammalian development, cell differentiation, and gene regulation. In this course, learn the fundamentals of stem cell biology, the most recent and significant scientific breakthroughs in the field, and the governmental policy and societal views on stem cell research and how recent discoveries may influence these views. Topics include: embryonic stem cells, adult stem cells, induced pluripotent stem cells, cloning, and the potential applications of stem cells in medicine and science.

BIOL40189: Toxicology - 3.00 Units

Gain a basic understanding of the introductory concepts and use of toxicology in drug discovery and development. The basic principles of toxicology will be presented as they relate to the assessment of drug safety from the initial selection of a drug for development through the registration of a drug for human use and post-marketing surveillance. The principles and applications of toxicology will be taught through the use of actual examples encountered in the drug discovery and development process to help you deal with toxicology issues you may encounter in the work environment. Chemists, biologists, clinicians and others who are involved in pharmaceutical research and development would benefit from this course.

Goals and Objectives:

This course will provide an overview and practical applications of the discipline of toxicology to studying and understanding the adverse effects of chemicals on biological systems. The fundamentals taught in this course can be applied to the development of small molecules as well as biologics.

BIOL40190: SAS Programming I: DATA Step and PROC Fundamentals - 3.00 Units

SAS Programming I: DATA Step and PROC Fundamentals

The SAS system is a software suite for data analysis and management, widely used in business, government, and academia. Because the pharmaceutical, biotech, and clinical research industries use SAS to analyze clinical trial data, SAS programmers are in especially high demand in these industries.

In this course, students will learn the tools necessary to write SAS programs to perform elementary data management, analysis, and reporting. Students will also gain the skills necessary to create and document data sets, manage and reshape data, write simple reports, and compute basic statistics on dataset variables.

Topics include:

- Creating, viewing, and inspecting SAS data sets
- Formats and labels
- Conditional processing
- Iterative processing
- Numeric functions and missing values
- Subsetting, interleaving, and merging data sets

Practical experience:

- Writing SAS programs to read in data, manipulate the data, and generate reports

Software: Students must download and install SAS OnDemand for Academics: Enterprise Guide. There is no additional cost for this product. Registration and download information will be provided by the instructor on the start date.

Course typically offered: Online in Fall, Winter, Spring, and Summer (every quarter)

Prerequisites: Completion of Introduction to Programming or basic programming skills required.

Next Steps: Upon completion of this course, consider taking SAS Programming II: Advanced DATA Step Programming to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

BIOL40195: Analytical Chemistry - 3.00 Units

There is a growing need in the pharmaceutical industry to develop fast and reliable analytical procedures and strategies within a short timeframe. This course details the role of the laboratory analyst in the pharmaceutical industry. Topics include: the CFR and ICH regulations and guidelines in relation to the pharmaceutical industry; the US Pharmacopoeia and other compendial methods; and analytical method development (e.g. HPLC and LC/MS). Additionally, how these methods are used for raw material analysis, drug substance, drug product, stability studies and bioavailability studies will be explained.

BIOL40201: Good Documentation Practices - 3.00 Units

The most vital tool available for assuring product quality, integrity, and consistency is good documentation practices. This highly interactive course covers fundamental principles and techniques required to write cGMP procedures. Students can bring samples of their own documentation to be audited during the course. Students will learn techniques to write and improve cGMP documentation to ensure compliance with regulatory documentation.

Topics Include:

- Document Hierarchy, Document Pyramid
- SOPs
- Document Control
- Laboratory notebook Con
- Data Integrity and GXP Compliance
- Auditing

Practical Skills:

- Understand the fundamental laws and regulations applied to various stages of product development

Authoring documents fundamental to GXP compliance, such as SOPs, Work Instructions, Data Collection Forms and Document Templates.

Maintaining Laboratory Notebooks for R&D work and assessment of the same

Auditing documents to ensure data integrity that is critical to an effective Quality System, including the importance of having supportive documents, such as raw data and Training Records

Applying Technical Writing techniques important to scientific documents and understanding the difference between poorly documents and the consequences of the latter

Understanding fundamentals of Change Control and Documentation Management.

When to communicate electronically and when this might not be the best venue for communication

BIOL40219: Predicting & Selecting Promising Drug Compounds - 2.00 Units

Learn the process and considerations in predicting and selecting the most promising alternative among various candidate drug compounds. In a very practical way, this course applies the principles taught in previous courses related to the likelihood of positive absorption, distribution, metabolism, excretion and toxicology/patient safety outcomes of each compound. This course will include the use of in vitro studies utilized to predict in vivo outcomes in both test animals and humans

BIOL40234: Cell and Molecular Biology - 3.00 Units

Get an overview of what is currently known in cellular and molecular biology and its application in biotechnology in this introductory course. In this course, you will start with a review of necessary basic chemistry concepts, cover the molecules and processes essential for living systems and reach a basic understanding of biotechnology and the fundamental techniques it uses. Topics covered include: DNA and protein structure and function, elementary genetics, cell structure, cell cycle, inheritance and DNA sequencing.

Goals and Objectives:

Briefly review some basic chemistry, and cover some of the molecules important to living systems

To cover DNA structure and function and how this was determined, including transcription, translation, prokaryote and eukaryote differences, mutations, DNA repair, and how all of this relates to Darwinian evolution.

Discuss differences between prokaryote and eukaryote cells, and the functions of intracellular organelles in eukaryote cells.

Cover basic Mendelian inheritance.

Discuss the evolution of modern methods of isolating and identifying genes and displaying individual DNA patterns.

BIOL40236: Bioinformatics - 3.00 Units

Bioinformatics is the glue that allows us to manipulate, utilize and learn from vast amounts of biological data. Bioinformatics tools and databases enable a range of scientific, technological, and biomedical applications that would otherwise be impossible to achieve. Familiarity with bioinformatics concepts and widely used tools allows one to effectively leverage biological data into useful biological information. The course will cover the use of resources like NCBI's Entrez and EBI, and encourages students to explore various web tools for sequence search, alignment, PCR design, protein structure, etc. An introduction to database design and the principles of programming languages will be provided as well as an overview of how bioinformatics is applied in the industry.

BIOL40237: Genomic Sequencing Technologies - 3.00 Units

Review current genomic sequencing technologies while exploring the scientific and medical applications that these technologies are enabling. Instruction

centers on traditional and next generation sequencing including: genetic test design strategies, bioinformatics workflows at genomic scale, population genetics and medicine. For each topic, we start with theoretical considerations and explore current literature examples. Coverage of current and developing next generation sequencing technologies is the primary goal. Bioinformatics aspects are explored from both theoretical and practical perspectives. Discussion of genetic applications enabled by emerging technologies is touched upon.

BIOL40240: Cheminformatics - 2.00 Units

The storage of chemical information in digital form, its management and use in a research environment are central to the pharmaceutical discovery process. The class will progressively build from the basic concepts of how to represent a chemical structure in machine readable form to the use of the informatics in chemical research. It will familiarize you with different representations of chemical structures, chemical databases generation and searching, sources of chemical information, chemical data workflows, calculation of molecular properties, techniques for molecular similarity and molecular diversity assessment. In addition, the class will provide a basic introduction to the three dimensional representation of chemical compounds and its applications in drug design and virtual screening.

BIOL40244: In Vitro Diagnostics Product Development - 2.00 Units

As biotech and In Vitro Diagnostics (IVD) companies mature, the need for professionals with a broad understanding of the skills required to be effective in a biological product development environment will increase. In this course, learn the requirements for moving an IVD product from concept to regulatory approval and market launch. Topics include planning for success by setting product requirements & specifications to meet customer needs, critical path management, resource planning, principles of assay development, instrumentation, role and composition of the product development team, risk analysis, and IVD clinical and regulatory issues including compliance and complaint handling. Specific product development cases will be discussed.

Agenda:

Day 1

- Introduction to IVDs
- Drafting of a Package Insert
- Product Development Process
- Product/Customer Requirements
- Design Control
- Risk Analysis and Failure Mode and Effects Analysis

Day 2

- Principles of assay development
- Instrumentation and software for IVDs
- Preclinical and Clinical Trial design
- Companion Diagnostics
- Case study in Cancer
- IVD Regulatory Issues

Speakers:

- Tammy Brach, MBA; Director Program Management, Dexcom
- Larry Mimms, Ph.D., Chief Scientific Officer, Prometheus Labs
- Al Maderazo, VP, Quality Assurance and Regulatory Affairs, GenMark Diagnostics
- Damon Getman, Ph.D., Senior Principal Scientist and Director, Hologic

Valerie Day, MBA, Senior Director Program Management, Prometheus Labs

BIOL40251: Molecular Diagnostics and Personalized Medicine - 3.00 Units

The emphasis of clinical practice is slowly shifting from one-disease and one-treatment-fits-all to more personalized care based on molecular markers of disease risk, disease subtype, drug effectiveness, and adverse drug reactions. Through the use of case studies, this course will review the genetic, genomic, proteomic, and metabolomic technologies being applied for biomarker discovery and molecular diagnostic development. The emerging role of the FDA in personalized medicine will be addressed. The economic impact and ethical issues arising from this next generation of diagnostics will also be discussed. The class is designed as a survey course and is appropriate for researchers and individuals in the business of biotechnology who possess a basic science background.

BIOL40255: Overview of International Regulatory Affairs - 2.00 Units

As the global market for medicinal products is expanding, the need for biotech companies to understand the regulatory issues in developing countries is becoming more critical. This course provides an excellent overview of the regulatory systems and agencies in the key global regions involved in the development of medicinal products. The regulatory requirements of product registration for pharmaceutical and biological products in Australia, Canada, Europe, Japan, and other emerging regions such as China, India, and Latin America will be described. Topics include: product designations, regulations and guidance, regulatory pathways and options, document submission requirements, Quality Systems, interfacing with regulatory Agencies, and post-market vigilance. Medical devices will be covered along with several regulatory hot topics.

BIOL40256: Dosage Form Design and Development - 2.00 Units

This course will review the scientific principles as well as practical aspects of dosage form design and development for traditional and biotech drugs. The content will include topics relevant to the discovery interface (drug candidate selection, preformulation, and route of administration considerations). In addition to addressing the various types of pharmaceutical dosage forms, there will be coverage of theories relevant to a variety of dosage forms such as solubility, surface chemistry, and reaction kinetics and mechanism. Practical aspects of development will address packaging, intellectual property, tech transfer, and regulatory and GMP considerations during the various phases of development. Prerequisite: Undergraduate level organic chemistry; biochemistry and physical chemistry preferred.

BIOL40258: Biomarkers - 3.00 Units

As an emerging topic of discussion within clinical diagnosis and drug discovery, biomarker research and developments are set to expand the scope of relevant clinical endpoints. During the three-day intensive Biomarker workshop, participants will gain a basic understanding of the study of biomarkers, as well as major concepts within the field.

Instruction from leading industry experts will deliver biomarker research and theoretical concepts, as well as practical issues involved in conducting drug discovery related biomarker research and disease related biomarker identification. Workshop participants will learn various biomarker research model systems and tools while learning the criteria required for identifying biomarkers in different diseases.

Topics may include:

Biomarker requirements, classification and criteria for evaluating potential markers.

The practice of sample collection and quality control for a biomarker study in conjunction with epidemiological studies, including design, analysis and more. Ethical and legal concerns.

Tools including flow cytometry, DNA arrays, gene expression arrays and proteomics.

Biomarker in diseases, including cancer and autoimmune disease, such as rheumatoid arthritis.

Biomarker in Drug Discovery in animal models, in vitro diagnostics and surrogate and endpoint biomarker.

Speakers:

Jelveh Lameh, Ph.D., Executive Director, Head BioPharma Services Laboratory, Genoptix, a Novartis Company

Hua Gong, Ph.D., Sr. Director, Clinical Trial Testing, BioPharma, Genoptix, a Novartis Company

Naveen Dakappagari, Ph.D., Director, Protein Biomarker Development Genoptix, a Novartis Company

Chad Ray, Ph.D., Senior Director, Pfizer

Scott Fountain, Ph.D., Former Executive Director, Pfizer

Reinhold Pollner, Ph.D., Director, Clinical Trial Assay Development, Genoptix, a Novartis Company

BIOL40274: Cultural Foods - 3.00 Units

This is a three-unit asynchronous online nutrition course that examines the regional, ethnic, cultural, religious, historical and social influences on food patterns and cuisine.

Over the ten-week length of the course, students will study cultural food and nutrition principles related to the following topics:

Food as identity and food in social organization

Evolutionary and revolutionary developments in food and cuisine

Food as spectacle

Food technology in non-industrialized and industrialized food systems

Food and health: political inputs and obesity

Food branding and marketing

Food in world religions

Global hunger: root causes and proposed solutions

Hunger in America and food and social change

BIOL40275: Nutrition Throughout the Lifecycle - 2.00 Units

This is a two-unit asynchronous online nutrition course designed to introduce you to the basic principles of nutrition throughout the lifecycle. The course is designed for current and future healthcare professionals and community health workers, with an overarching goal to promote optimal health utilizing adequate nutrition throughout the human lifespan.

Over the ten-week length of the course, students will study lifecycle nutrition principles related to the following topics:

Preconception nutrition and planning a healthy diet

Nutrition during pregnancy

Nutrition while breastfeeding

Nutrition during infancy

Nutrition for the preschool and school-aged child

Pediatric overweight and obesity

Nutrition during adolescence

Nutrition in older adulthood

BIOL40280: Introduction to Genetics and Human Disease - 3.00 Units

Genetics is a fascinating topic that is frequently in the news. "Learn valuable health and ancestry information" and "Discover your genetic risk for disease" are just a few of the advertisements for direct-to-consumer genetic test kits. This course demystifies genetics and is open to anyone who wishes to learn more about inherited traits, their variation, and how they are transmitted between generations. It will provide an introduction to the principles of genetics with an emphasis on human disease. Topics include: fundamental concepts of Mendelian inheritance; basic principles of molecular genetics; inheritance patterns of genetic diseases; the human genome project; and the potential of personalized medicine.

Goals and Objectives:

Provide a basic understanding of the inheritance patterns of traits as they are passed from parents to offspring.

Cover the fundamental concepts of the molecular structure and replication of the genetic material, gene expression, and types of mutations.

Highlight examples of human genetic disorders.

Other topics to be covered include genetic testing and treatment, the human genome project, and personalized medicine.

BIOL40281: Microbial Fermentation Workshop - 2.00 Units

Developed in partnership with UC San Diego's Division of Biological Sciences, this 3-day workshop is designed to provide a deep dive into bioreactor principles and bioprocess development. You will be equipped with the fundamental knowledge and practical skills needed to design, develop, optimize, control, scale-up, analyze, and troubleshoot your fermentation processes. Five case studies allow attendees to practice what they have learned. A "Fermentation Firing Line" provides a lively, open ended forum for attendees to pose questions to the instructional team on any fermentation-related subject.

Workshop Objectives:

Understand the biological principles behind microbial metabolism, growth, and genetic modification

Review the principles behind bioreactor design, operation, monitoring control, and scale up

Learn how to improve fermentation performance through statistical design and analysis of experiments

Learn a structured approach to downstream bioprocess design

Learn how to carry out economic analysis of bioprocess operating and capital costs

Solve real-world, industrial fermentation problems

Who Should Attend?

The workshop is intended for scientific, engineering, and business professionals with some prior fermentation-related experience.

Instructors:

Jeff Lievens, Ph.D., Senior Advisor to the CEO, Bioengineering & Technology, Genomatica

Rachel Dutton, Ph.D., Assistant Professor, Molecular Biology, UC San Diego

Jon Hansen, Ph.D., Chief Engineering Officer, Triton Algae Innovations

Tim Dodge, M.S., Senior Staff Scientist, DuPont

Michael Japs, Senior Director, Process Technology, Genomatica

Jason Ryder, Ph.D., CTO and Co-Founder, Miraculex

Jason Crater, Manager, Process Deployment, Genomatica

Joe Kurowski, Senior Brewing Manager, White Labs, Inc.

For more information, please contact unexbio@ucsd.edu or (858) 534-6648.

BIOL40283: Introduction to Biomedical Sciences - 8.00 Units

This course introduces post-baccalaureate students to the basic fundamentals of cell biology, physiology, pharmacology, and metabolic biochemistry, along with applications to medicine. Mastery of these concepts will be important preparation for the MCAT and medical school. This course has a significant portion devoted to team-based learning (TBL), an approach used to support long-term retention of the course objectives because it takes advantage of "test-enhanced learning" and "spaced learning". During TBL, students will actively work together in teams, assimilating knowledge, solving problems, and teaching one another. Another benefit of using TBL is that it helps develop the critical thinking and communication skills necessary to become competent future physicians.

BIOL40294: Applications to Biology and Medicine I - 4.00 Units

This course covers the medical applications to the nervous, endocrine, and cardiovascular systems. Medical applications will mostly be pathophysiology of disease states. The TBL approach is integrated into the course to support long-term retention of the course objectives because it takes advantage of "test-enhanced learning" and "spaced learning". Students are expected to come to class prepared, having mastered the basic concepts delivered in lecture. Class time is dedicated to assuring that students achieve competency in the biomedical concepts presented in lecture and reading assignments and are able to apply them to integrated problems. Students will actively work together in teams, assimilating knowledge, solving problems, and teaching one another.

BIOL40296: Applications to Biology and Medicine II - 4.00 Units

The medical applications covered in this course will be mostly the medical treatment of various disease states. A modified team-based learning (TBL) approach will be integrated into the course. Students will be tested frequently and there will be opportunities during class for students to work together in teams to solve challenging problems that stimulate a deeper understanding of the material. The team activities are also designed to allow students to teach one another and promote life-long learning.

BIOL40297: Applications to Biology and Medicine III - 4.00 Units

The medical applications covered in this course will be mostly the medical treatment of various disease states. A modified team-based learning (TBL) approach will be integrated into the course. Students will be tested frequently and there will be opportunities during class for students to work together in teams to solve challenging problems that stimulate a deeper understanding of the material. The team activities are also designed to allow students to teach one another and promote life-long learning.

BIOL40299: Structural Biology in Drug Discovery - 2.00 Units

Get an overview of the application of structural biology in the discovery of new therapeutics. This course is for research scientists who want to improve their knowledge of the drug discovery process and will explore the fundamentals of macromolecular structure biology with an emphasis on how those principles can be applied to the discovery of therapeutic agents. The course starts with a survey of macromolecular structure and a detailed analysis of certain protein classes that have been found to be important for drug purposes. We will describe how structural information can be used to optimize therapeutic proteins such as antibodies. The course will discuss how computational techniques can be used to identify small molecule ligands by applying docking techniques

BIOL40300: Public Policy Clinic - 2.00 Units

The Public Policy Clinic is an interactive training program to help participants engage effectively in public policy analysis, communication, and outreach. Learn how to analyze current policies, regulations, legislation, identify issues of concern, assess alternatives, and develop policy priorities and recommendations for an employer or client. Practice essential research and communication skills to engage effectively with clients and stakeholders. Guest speakers will be invited to share their professional experiences with relevant and interesting policy initiatives in an informal setting. Participants will choose a current issue for analysis/case study, either individually or as a group.

AICP Credit: AICP members can earn Certification Maintenance (CM) credits for this activity. For a list of additional UC San Diego Extension AICP CM Events go to American Planning Association.

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BIOL40302: Survey Design and Analysis - 2.00 Units

Surveys are an important tool for collecting information and are used in many private and public sector jobs, as well as academic research. This course will guide participants through the nuts and bolts of designing an effective survey research program and basic statistical methods for analyzing survey research data. Participants will learn how to develop testable hypotheses, write effective and well-organized questions, avoid survey bias, collect and compile actionable survey data, increase survey response rates, and manage the survey research process from start to finish. Participants will also learn basic statistical methods for evaluating survey data and how to write reports that present data in a way that efficiently and effectively communicates survey results. Students will design and field a survey online.

BIOL40303: International Regulatory Affairs - 3.00 Units

As the global market for medicinal products expands, the need for biotech companies to understand the changing regulations in established global regions, as well as in developing countries, is becoming more critical. This course provides an excellent overview of the regulatory systems and agencies in the key global regions involved in the development of medicinal products. The requirements of product registration for pharmaceutical and biological products in Australia, Canada, Europe, Japan, and other regions such as China, India, and Latin America will be described. Topics include: product designations, regulations and guidance, regulatory pathways and options, document submission requirements, interfacing with regulatory Agencies, and post-market vigilance. Medical devices will be covered. Regulatory hot topics will be discussed.

BIOL40304: FDA Audits and Inspections - 2.00 Units

GXP audits are conducted to identify non-compliances, but also regulatory weaknesses and the potential for non-compliance. This course familiarizes students with GXP audit activities and helps regulatory affairs professionals develop the skills to participate in the preparation, hosting, and follow-up to GXP audits.

BIOL40313: Biomedical Research using Non Animal Models - 3.00 Units

For scientific, ethical and economic reasons, cell-based, computational and other non-animal study methods are being increasingly developed and implemented by biomedical researchers. Additionally, federal regulations and guidelines state that researchers proposing animal-based methods in research must demonstrate that they have considered the methods that can avoid or minimize animal use. In some cases in the U.S. and abroad, the use of alternatives to animals in experiments is required. Yet, there is currently little training on the availability and efficacy of these critical research tools and reports show that researchers and administrators are often not familiar with these techniques. At the completion of this course, which includes guest lectures from renowned subject matter experts, students will:

Understand the past and current use of animals in research and the limitations of animal models

Be familiar with the wide range of non-animal research, testing and training techniques available

Understand laws and policies in the US and internationally that relate to alternatives to animal research

Be able to search for and identify appropriate non-animal methods using available databases and other resources

This course is intended for undergraduate and graduate students enrolled in biomedical sciences programs, university and industry faculty and staff researchers, bioethicists, grant reviewers, and Institutional Animal Care and Use Committee coordinators and members. No prerequisite is needed.

Course Goal and Objectives: The development and utilization of non-animal methods (often called "alternatives") in biomedical research, testing and education is a burgeoning field. The course will introduce students to the range of non-animal research methods available, their efficacy, how to identify and implement them and policies affecting their use.

BIOL40314: The Structure of Proteins - 2.00 Units

Proteins play a fundamental role in biology and their structure and dynamics provide a key perspective on their function. This course aims to provide an introduction to those with an interest in developing an understanding on how the available proteins structures can be used to gain a better understanding of their function and how it could be applied to drug discovery and optimization. After an introduction to amino acids as the building blocks of proteins, we discuss the different levels at which protein structure can be analyzed, and the experimental and modeling techniques that can be used to obtain them. We show the importance of computational molecular modeling methods for extracting information from the protein structure. We carry out a survey of different protein classification schemes and carry out a survey of the structure of major classes of therapeutic proteins and drug targets. Finally we discuss the elements that govern protein interactions with other proteins and small molecules. We summarize the main techniques to analyze the motion of proteins.

Goals and Objectives:

Develop an understanding of how protein structure influences its function

Become familiar with how structural biology can be used in drug discovery.

Practice the use of common visualization tools for structural biology.

Learn basic techniques in molecular modeling useful in structural biology

BIOL40315: Biostatistical Methods I: Linear Regression and ANOVA - 3.00 Units

Biostatistical Methods I: Linear Regression and ANOVA

Regression analysis is used to estimate the relationships between variables, and includes many different techniques. Linear regression serves as the basis for other types of regression. It is used extensively in many fields, but especially in the biomedical field.

This course covers simple and multiple linear regression, analysis of variance and covariance, and nonparametric analysis. Model building techniques, evaluating model fit, and dealing with violations of model assumptions are also introduced in this course. Through the completion of real-world problems, students will learn to analyze continuous response data and to write the method and result sections for a scientific paper.

Topics include:

- Simple linear regression
- Multiple linear regression
- Analysis of variance and covariance (ANOVA and ANCOVA)
- Model diagnostics
- Nonparametric analysis

Practical experience:

- Use SAS to analyze continuous response data
- Write method and result sections for a scientific paper

Software: Students will use SAS OnDemand for Academics: Enterprise Guide. There is no additional cost for this software. Registration information will be provided by the instructor on the course start date.

Course typically offered: Online in Fall and Spring

Prerequisites: Biostatistics and SAS Programming I or equivalent experience required.

Next Steps: Upon completion of this course, consider taking Biostatistical Methods II to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

BIOL40316: Biostatistical Methods II: Logistic Regression and Survival Analysis - 3.00 Units

Biostatistical Methods II: Logistic Regression and Survival Analysis

The most common types of analysis in the healthcare or pharmaceutical industries are logistic regression models and survival analysis. To analyze data with dichotomous outcomes, such as having (or not having) a certain disease, one often needs to use a logistic regression model. Survival analysis focuses on time to event data. The event of interest can be death (most commonly encountered) or occurrence of a disease.

In this course, students learn to identify situations when it is best to utilize logistic regression and survival analysis and how to run these types of analysis by using SAS software. Sample size calculation and power analysis are also introduced.

Topics include:

- Simple logistic regression
- Multiple logistic regression
- Goodness of fit and model diagnostics for logistic regression
- Introduction to survival analysis
- Cox Proportional Hazards Model
- Model diagnostics for Cox Proportional Hazards Model
- Nonproportional Hazards Model
- Power and sample size analyses

Practical experience:

- Use SAS to run logistic regression and survival analysis
- Write method and result sections for a scientific paper

Software: Students must download and install SAS OnDemand for Academics: Enterprise Guide. There is no additional cost for this product. Registration and download information will be provided by the instructor on the start date.

Course typically offered: Online in Winter and Summer

Prerequisites: Completion of Biostatistical Methods I: Linear Regression and ANOVA required.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

BIOL40317: CDISC Standards for Clinical Data - 3.00 Units

CDISC Standards for Clinical Data

The Clinical Data Interchange Standards Consortium (CDISC) is a non-profit organization that develops and supports data standards to improve medical research and ensure research data is easily interpreted and understood by regulators. The CDISC established standards support the acquisition, exchange, submission and archive of clinical research data.

In this course, students will learn the skills and tools necessary to apply the CDISC standards when processing clinical data used for FDA submissions. Specifically, this course will focus mapping raw datasets to CDISC's Study Data Tabulation Models (SDTM) and Analysis Dataset Models (ADaM).

Topics include:

- CDISC terminology and standards
- ISO 8601 dates and durations and creating DM and ADSL demog datasets
- Processing AE, SUPPAE and ADAE adverse datasets
- Converting LB and ADLB Lab datasets
- Understanding QS, RELREC, EX and TE/TA/TV datasets
- Validation of SDTMs and ADaMs
- ODM-XML files structure and content
- Creating and QCing DEFINE.XML
- Understanding oncology domains

Practical experience:

- Create DM/SUPPDM and ADSL datasets
- Create AE and ADAE datasets
- Create LB dataset

Software: Students must download and install SAS OnDemand for Academics: Enterprise Guide. There is no additional cost for this product. Registration and download information will be provided by the instructor on the start date.

Course typically offered: Online in Winter and Summer

Prerequisites: Prior knowledge of clinical trials and familiarity with SAS programming (such as SAS Programming I) suggested.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

BIOL40318: Medicinal Chemistry - 3.00 Units

BIOL40319: Overview of the Drug Development Process - 2.00 Units

BIOL40320: Foundations of Nutrition I: Introduction to Nutrition Science - 3.00 Units

Over the ten-week length of the course, students will study nutrition science principles on the following topics:

- The importance of nutrition research, research study designs, the scientific method
- Planning a healthy diet; utilizing balance, moderation and variety
- Guidelines for nutrition; the Dietary Reference Intakes, Dietary Guidelines for Americans, the food label
- Nutrient digestion, absorption and transport and common disorders of the GI tract
- Carbohydrates, lipids and proteins, including their functions, needs, sources and roles in health
- Vitamins, minerals and dietary supplements

Nutrition throughout the lifecycle including nutrition for pregnancy, breastfeeding, infancy, childhood, adolescence and older adulthood

- Energy balance, weight management and eating disorders
- Food safety and technology
- Global hunger and malnutrition

The course is taught by a Registered Dietitian Nutritionist (RDN) and Certified Diabetes Educator (CDE).

BIOL40321: Foundations of Nutrition II: Diet and Disease - 3.00 Units

This is a three-unit asynchronous online nutrition course that explores the relationship between diet and disease. The course is designed for current and future healthcare professionals.

Over the ten-week length of the course, students will study evidence-based nutrition guidelines in the following areas of wellness and disease:

- Nutrition screening, assessment, counseling and nutritional genomics
- Nutrition support (tube feeding and total parenteral nutrition), hospital and modified diets and food-drug interactions
- Nutrient digestion, the human microbiome and disorders of the gastrointestinal tract
- Hypertension and heart disease
- Diabetes and prediabetes
- Energy balance, weight management, overweight and obesity and metabolic syndrome
- Energy metabolism, inborn errors of metabolism, metabolic stress and respiratory disorders
- Liver and kidney disease
- Cancer and HIV/AIDS

The course is taught by a Registered Dietitian Nutritionist (RDN) and Certified Diabetes Educator (CDE).

BIOL40322: Overview of Regulatory Affairs for Medical Devices - 3.00 Units

The healthcare industry is dynamic and full of exponential growth. In this innovative and regulated industry, it is essential for medical device professionals to understand the business, science and regulations in developing a medical device from concept to commercialization.

In this course students will develop an understanding of the regulatory affairs environment, how to navigate and work with the FDA; and the steps and timetable to develop and commercially market medical devices in the United States. It will also highlight post market compliance issues once a device has been commercialized.

This course is designed for individuals new to the medical device and biotechnology industries or who are considering a career in Quality, Regulatory Affairs or Project Management. Professionals employed in research and development, bioengineering, quality, regulatory, law, sales and marketing who are seeking a more comprehensive picture of the medical device regulatory process will also benefit.

Topics include:

- Working with the FDA
- Device Classifications
- Product development/approval process (IDE, 510(k), PMA)
- Post-market controls
- State and federal site inspections
- Enforcement activities
- Universal Device Identification
- International Marketing

Practical Skill Development:

- Understand the Product Development Life Cycle
- Preparations for State and Federal Inspections

How to work proactively with the FDA and California State FDB
Understand International Regulations

BIOL40323: Quality Management Systems for Medical Devices - 3.00 Units

The cornerstone in the efficient manufacturing of a medical device is the implementation of a quality management system. Medical Device companies are required to develop a QMS that conforms to the regulations imposed by the FDA and ISO 13485 to ensure the safety of a medical device on the market. This course will provide an in depth look into the FDA Quality System Regulation (21CFR820), and International Standard ISO 13485 for Quality Management Systems. You will also learn the related aspects of Risk Management and Medical Device Reporting.

Topics include:

- Design, Document , Production and Process Control
- CAPA
- Risk Management
- Medical Device Reporting

Practical Skills:

- Understand what a Quality Management System is
- Understand how a Quality Management System works practically in a Medical Device company
- Understand the elements of a Quality Management System and how they work together
- Know how to design an FDA/ISO compliant Quality Management System
- Know how to development a complete set of Quality Management System procedures
- Know how to implement an appropriate Quality Management System for a Medical Device company

BIOL40324: Design Control for Medical Devices - 3.00 Units

Developing a new medical device for commercialization is a complex process. The FDA has guidelines that provide a framework for designing and manufacturing medical devices.

This course will provide a detailed and practical overview of the design control process for medical device design and development. The course will cover design control under the FDA Quality System Regulation (21CFR820.30) and international Standard ISO 13485 for Quality Management Systems, in addition to the practical application in the design and development of electronic hardware, software, mechanical elements and labels. The course will also cover related aspects of associated Standards and Regulations such as Risk Management (ISO 14971), Usability (IEC 62366-1) and Software lifecycle (IEC 62304).

Topics Include:

- Initial Design Control Process
- Design Output Process
- Verification and Validation
- Design Transfer
- Tagging, Tracing, Packaging and labeling
- Risk Analysis

Practical Skill Development:

- Understand the overall Design Control process
- Understand the (10) elements of Design Control
- Know how to apply each element of Design Control to the most common design disciplines
- Know how to do Design Risk Analysis

Know how to do tracing between Risk Analysis, Design Input, Design Output, Design Verification and Design Validation

Know practical methods for Design Transfer and Design Review

BIOL40325: Regulatory Submissions for Medical Devices - 3.00 Units

Are you ready to enter your medical device into the commercial marketplace? This course covers the specifics of regulatory submissions made to the FDA for the purpose of placing a medical device on the commercial market. Submissions covered will include: pre-submissions (pre-IDE and pre-510(k)); IDE; PMA; and 510(k). Additionally international submissions for CE mark will also be introduced.

This workshop style course will offer students an opportunity to practice understanding and gathering the complex scientific information required in various regulatory submissions. You will examine the process of writing medical device submissions for regulatory agencies, both nationally and internationally and will culminate with a preparation of a sample 510(k) submission.

Topics include:

- Laws and regulations of medical devices
- Device classifications
- Product development process
- Submission structure and content.

Practical Skill Development:

- Understand medical device product classifications
- Understand the premarket submission process, including 510(k), PMA and IDE
- Introduce students to the international submissions required to obtain CE mark for medical devices.
- Competently use the FDA website to find information for preparation of a FDA regulatory submission.
- Understand all the sections of a 510(k) submission and how to gather the information required
- Prepare a sample 510(k) submission for a medical device.

BIOL40326: Post Market Topics for Medical Devices - 3.00 Units

Once a medical device is commercialized, FDA requirements mandate that a company must perform Post Market Surveillance (PMS) to ensure public safety and efficacy.

This course will provide a detailed training on a variety of Post Market Topics and will introduce professionals to the many typical situations they may be responsible for during the weeks, months and years after commercialization of a product. Learning will be done by studying regulations, investigating the history of other companies (particularly failures), and sharing experiences within the class.

Topics Include:

- * Complaint Management
- * Failure Investigations
- * Recalls
- * Internal Audits
- * Inspection Management Marketing Material

Practical Skill Development:

- * How to manage complaints
- * How to decide between a recall or enhancement
- * Do's and Don'ts during an FDA inspection
- * Tools used to improve internal audits
- * Best Practices for Marketing Materials
- * Tools to protect company from off-label promotion

BIOL40327: Processing Actionable Data in Genomics - 3.00 Units

Explore bioinformatics approaches to processing genomic scale datasets and distilling consequential biomedical information. Genomic sequencing technologies deliver such huge volumes of data that specific, dedicated

handling methods are critical for analysis. This course focuses on methodologies appropriate for analysis tasks commonly employed with various sequencing experiments. Instruction covers general considerations ranging from experiment configuration, data QC, and software systems, to tuning of algorithms and visualization of results. In addition, assigned work with public datasets will provide students hands on experience with several widely used methodologies, including variant discovery (e.g. cancer treatment), metagenomics (e.g. gut flora), and "Seq"; technologies (e.g. RNA-Seq). Class sessions consist of slides, assigned reading and a quiz. Mandatory data processing homework is a significant part of this class. Slides summarizing performed analyses (e.g. homework) are required for completion.

By the end of the course, you will be able to:

- Compare the utility of different types of sequencing experiments
- Structure bioinformatic pipelines to fit the experiment
- Implement steps in bioinformatic processing
- Critique genomic processing results

BIOL40328: Navigating The Genomic Regulatory Landscape - 1.50 Units

BIOL40329: Introductory Pharmacology - 3.00 Units

Learn the fundamental principles of pharmacology. This course will emphasize the major classes of clinically important drugs currently used in medical practice. Within each anatomic system, emphasis is placed on discussion of drug groups and prototypes. Following a review of receptor biology and signal transduction, basic principles of drug action, metabolism and toxicity are discussed as they relate to specific organ systems and disease targets. Anatomic systems covered include: autonomic, neuropharmacology, immunopharmacology, cardiovascular, endocrinological, and chemotherapy drugs.

Learning Objectives:

- Grasp the general principles of pharmacology and mechanisms of drug action at the molecular level
- Be familiar with the current topics of pharmacogenomics and gene/protein therapy, as well as the regulatory (FDA) and industrial aspects of pharmacological science.
- Gain a general knowledge of

BIOL40330: - 3.00 Units

BIOL40331: - 2.00 Units

BIOL40334: - 1.50 Units

BIOL40335: - 6.00 Units

BIOL40336: - 4.50 Units

BIOL40348: - 6.00 Units

BIOL40349: - 4.00 Units

BIOL40350: - 2.00 Units

BIOL40351: - 2.00 Units

BIOL40352: - 4.00 Units

BIOL80002: Industrial Stormwater Compliance Workshop - 0.00 Units

This two-day intensive workshop provides participants with the skills and knowledge needed to manage industrial stormwater permitting and compliance at their industrial facility. Learn how California's reissued Industrial Stormwater Permit applies to you and strategies businesses can implement now to minimize permit impact. Bring your facility SWPPP and monitoring data with you and receive hands-on training in developing and implementing compliant Stormwater Pollution Prevention Plans (SWPPP) and Monitoring Implementation Plans (MIP).

Learning Objectives:

- Learn strategies in SWPPP development and best practices in plan development and implementation.

- Learn how to conduct effective sampling and monitoring

- Learn how to identify and implement practical best management practices

- Learn how to manage first, second, and third party inspections

- Receive hands-on training in navigating the state's SMARTS database and discover common challenges and pitfalls that can increase exposure to third party enforcement actions

MCLE Credit: UCSD certifies this activity is approved by the State Bar of California for 9 hours MCLE credit.

BIOL80003: Annual CEQA Update - 0.00 Units

The California Environmental Quality Act (CEQA) is the State's preeminent environmental protection statute. Compliance with the law and its implementing guidelines has never been more important to the success of planning and development projects – nor has it ever been as complex. Practitioners and stakeholders alike will benefit from this one day seminar covering critical changes to CEQA and the CEQA Guidelines, legislative updates, and review of recent court decisions that inform best practices for preparation of defensible environmental review documents. While the seminar will address important changes that affect projects state-wide, the instructors will bring a decidedly San Diego and southern California focus, coloring concepts with local case studies and environmental issues most relevant to the region.

MCLE Credit: UCSD certifies this activity is approved by the State Bar of California for 4 hours MCLE credit.

AICP Credit: AICP members can earn Certification Maintenance (CM) credits for this activity. For a list of additional AICP CM Events at UC San Diego Extension go to American Planning Association.

CM | 2

CM | 4 | Law

BIOL80005: Metabolic Engineering for Industrial Biotechnology - 0.00 Units

BIOL90008: Science in the Media - 1.00 Units

In this course we will examine how to creatively and accurately write about science. By investigating sources such as the New York Times Science section, National Geographic and Newsweek, as well as supporting research papers, we will ask whether the piece is both approachable and a true reflection of the primary literature.

We will also explore the history of science and the media, from the dawn of the scientific revolution to the present day. By examining case studies, we will gain insight on how social and/or political climate has historically influenced the media's portrayal of science. The course will culminate in students writing lay-friendly scientific pieces for peer critique. Students should have high-school level science comprehension and strong writing skills.

BIOL90013: Scripps Institution of Oceanography: Genetic Engineering and Genetically Modified Organisms - 6.00 Units

In the past few decades, our understanding of molecular biology and genetics has enabled us to transform the face of food production and to drastically increase access to human therapies, and in the near future it may help us mitigate the looming energy crisis. This course will explore the ways in which GMOs have already impacted our society, examine their potential to confront the challenges that lie ahead, and delve into the biological details of what GMOs are and how they are made. Students will also become trained scientists at the bench, learning the skills to create their own GMO by the end of the course through a strong hands-on laboratory component. Completion of high school-level biology is strongly recommended but not mandatory.

BIOL90020: Discovering Environmental Studies 1 - 1.50 Units

This course is based on the fundamental principle that natural systems change over time. Students will dissect ecosystem features and consider the impact of human beings, population growth, and technology on the environment. This course has three main sections: first, species adaptations for survival and interaction within the ecosystem; second, public awareness of issues like climate change, pollution, and population control (regionally and internationally); and, third, future opportunities for related involvement through professional and personal commitments.

BIOL90021: Discovering Environmental Studies 3 - 4.50 Units

This course is based on the fundamental principle that natural systems change over time. Students will dissect ecosystem features and consider the impact of human beings, population growth, and technology on the environment. This course has three main sections: first, species adaptations for survival and interaction within the ecosystem; second, public awareness of issues like climate change, pollution, and population control (regionally and internationally); and, third, future opportunities for related involvement through professional and personal commitments.

BIOL90023: - 6.00 Units

BIOL90024: - 3.00 Units

BIOL90025: - 16.00 Units

BIOL90026: - 8.00 Units

BIOL90027: - 8.00 Units

BIOL90028: - 4.00 Units

BIOM90000: Body Language: How Cells Use Hormones to Communicate - 6.00 Units

This course will introduce students to endocrinology, the study of hormones and endocrine systems, and will also provide an overview and discussion of fundamental biological principles and techniques that enabled important discoveries in this field. Students will learn how the brain, pituitary, and peripheral organs work together to produce hormones that act as chemical messengers to regulate virtually all physiological processes, including stress, metabolism, growth, reproduction, blood pressure, blood sugar, salt and water balance, bone density, and more. By exploring the specific mechanisms through which different organ systems use hormones to communicate, students will also achieve a basic understanding of molecular biology.

BREW40000: Overview of Brewing Science and Technology - 1.00 Units

Get an overview of craft brewing on an industrial scale, from raw materials through finished product. Learn technical brewing terminology for equipment and processing. Throughout the course, the science and technology underlying each step is clearly explained, as well as providing a focus on the practical considerations involved in the industrial production of craft beer.

BREW40001: Raw Materials and Malting - 3.00 Units

Discover the vital details in the selection and processing of the key raw materials of beer—water, a starch source such as grain, hops, and yeast—as well as the ins and outs of grain handling and malt analysis. The carefully controlled germination of the grain, through the multi-step malting process, is presented and demonstrated. Expert guest speakers will join students in class and focus on specific topics related to the selection of quality raw materials.

BREW40002: Wort Production & Recipe Formulation - 2.00 Units

Knowing how to customize the fermentability and body of beer is a key component in producing a quality brew. Get the essential details in the process of preparing, on an industrial scale, malted grain for fermentation and the variations on this process that create specific styles of beer. The science and technology of the process, as well as the industry brewhouse standards involved in milling, mashing, lautering and boiling, are discussed.

BREW40003: Yeast & Fermentation Processes - 3.00 Units

Fermentation determines both the alcohol content and the level of carbonation in beer production. Learn the professional-scale standards and practices key to producing beer from wort by fermentation with a specific brewing yeast strain. Various fermentation processes, leading to different beer styles, are discussed, including yeast propagation and proper handling, as well as maintaining consistency of product in a commercial brewing environment.

BREW40004: Finishing Practices - 3.00 Units

Finishing involves the control of beer maturation, the filtration of particulates such as yeast, equilibrium in carbonation, and the packaging, kegging or bottling of beer. Study the science, technology and management involved in finishing beer on a professional scale. Learn the specifications for the equipment necessary to produce high quality beer including chillers, filters, carbonators, centrifuges, aging and holding tanks.

BREW40005: Sensory Evaluation and Beer Styles - 3.00 Units

Effective sensory analysis is essential both to correct flaws in raw materials and in the brewing process, and to control the ingredients and process to produce various outcomes and styles, such as lager, pale ale, IPA, saison, amber ale and stout. Get training in the industry’s standard sensory analysis tool, the Beer Flavor Wheel, by review of the four basic flavors, progressing to off-flavors and fermentation by-products, mouthfeel and fullness.

BREW40006: Technology of Brewing - 3.00 Units

Knowing how brewing equipment is conceived of and constructed, as well as the engineering principles important in successful commercial brewing, enables brewers to evaluate engineering proposals and discuss them with engineers. Learn about the vital engineering models and concepts that are key to operating a working brewery including fluid flow (principally regarding pumps, pipes and valves), steam, energy balances, heat transfer (conduction, convection and radiation) and refrigeration, and gas laws.

BREW40009: Marketing and Distribution for Breweries - 2.00 Units

Craft beer production in the United States has expanded from just eight breweries in 1980 to over 2,500 today. Learning how to get the word out about your brewing business is a vital skill in today’s growing craft beer market. Explore the building blocks of effective marketing programs and receive hands-on, practical advice about integrated marketing communications. Course topics include research, audience measurement, product development, positioning, branding, advertising, pricing, distribution, social media, public relations and strategic marketing plan development.

BREW40012: The Origins and History of Beer - 2.00 Units

It has been argued that the discovery of beer and bread are responsible for our ability to advance technology and develop civilization over the last eight thousand years. Explore the social and cultural dimensions of beer, as well as the scientific and technical breakthroughs which have led to the sophisticated 21st century brewery. Follow brewers from ancient Mesopotamia through the Industrial Revolution where brewing, as we knew it, changed from artisan-based endeavor to industrial manufacturing and back.

BREW40013: Food Pairings and Beer Dinners - 1.00 Units

The craft brewer combines the connoisseurship of the gourmet, the scientific, technical and business sophistication of the tech entrepreneur, and the awareness of the value of a local, sustainable community. Focus on the development of a distinctly refined beer palate, and apply the skills and knowledge learned in the Sensory Evaluation and Beer Styles course to the matching of food and beer. Course focuses on sensory development rather than the analysis of the brewing process.

BREW40014: Barrel Aging - 1.00 Units

Aging beer in barrels that have been used previously to age red wines such as cabernet sauvignon, merlot and pinot noir—rather than storing in stainless steel or aluminum kegs—achieves a range of sophisticated and unique effects. Learn how to take artisan brewing to a distinctive level of complexity and refinement. Types of beer to be discussed include—but are not limited to—lambic, saison, barleywine, and blonde ales.

BREW40015: - 2.00 Units

BREW40016: - 3.00 Units

BREW40017: - 2.00 Units

BREW40018: - 2.00 Units

BREW40019: - 2.00 Units

BREW40020: - 2.00 Units

BREW40021: - 3.00 Units

BREW80001: - 0.00 Units

BREW80002: - 0.00 Units

BREW80003: - 0.00 Units

BUSA40009: Financial Accounting for Non-Accountants - 4.00 Units

Gain an overview of how to use accounting and financial data for more effective and profitable decisions. Learn the information necessary to interpret and evaluate the financial effects of day-to-day management decisions. This course emphasizes the interpretation of accounting concepts that underlie basic financial statements without focusing on detailed mechanics.

BUSA40010: Managing Human Resources: An Overview - 4.00 Units

Discover emerging trends and new regulations in personnel management practices. This comprehensive course covers: human resource planning, staffing, performance management, training and development, compensation and reward systems, benefit design and administration, employee and labor relations, health and safety, state and federal legislation, productivity and

organizational effectiveness. You will benefit from this course whether you are active in the field, exploring a career transition, or managing a business.

BUSA40017: Employee and Labor Relations - 3.00 Units

Review the practical application of state and federal employment law. Topics include at-will employment and wrongful discharge; discrimination, harassment, and retaliation; ADA; employee rights and intellectual property; wage and hour benefits; occupational health, safety, and workers' compensation; reductions-in-force; alternative dispute resolution; labor relations; and corrective action and terminations.

BUSA40020: Training and Development - 3.00 Units

The training and development function is often responsible for designing, conducting, evaluating and/or recommending programs to meet the training needs of the organization. Learn to accurately assess organizational training needs and identify priority training topics, learning objectives, instructional approaches and evaluation techniques. Explore techniques for overcoming resistance to change. Practice establishing and justifying a training budget and critiquing training products and services offered by vendors and consultants. Learn to quantify training results and their impact to the organization's bottom line.

BUSA40026: Financing Strategy: Sources of Capital and Business Plans - 3.00 Units

Learn to identify and understand potential sources of capital for business ideas. Practice using a hands-on approach to the business plan preparation and presentation process. Key concepts include evaluation of financial risk and return, investor interests, relationships with lenders and investment bankers, ways to make the right impression, and writing business plans.

BUSA40034: Advanced Accounting Theory and Practice - 4.00 Units

Explore the topics of accounting for wholly-owned created subsidiaries, cost versus the equity method of accounting for subsidiary operations, accounting for partnership formation, operations and liquidations, accounting for estates and trusts, and operations for nonprofit organizations. You will learn the requirements for financial statement interim reporting and accounting practices for troubled debt restructuring, bankruptcy reorganizations, and liquidations.

BUSA40035: Intermediate Accounting Theory and Practice II - 4.00 Units

This course covers recording, valuation, and presentation of investments, leases, pensions, corporate income taxes, paid-in capital and retained earnings. Statement of cash flows and statement analysis are also discussed.

BUSA40036: Elementary Accounting I - 4.00 Units

Learn the basics in financial accounting theory and practice. Topics include: recording, analyzing and summarizing procedures used to prepare balance sheets and income statements such as payroll, special journals, cash control, receivables and payables, inventory and depreciation.

BUSA40037: Elementary Accounting II - 4.00 Units

Understand managerial accounting theory and practice to evaluate organizations and execute appropriate business decisions. Learn about budgeting, cost-volume-profit analysis and incremental decision analysis. Cost accounting topics taught include product, process and activity-based costing. Concepts related to value-based systems and the relationship of these systems to supply chain applications will be covered.

BUSA40046: Business Law for Accounting - 4.00 Units

Recent accounting scandals and the turbulent economic environment have created situations which challenge our legal and accounting systems. Students will gain an understanding of government regulation of business, the legality

of agreements and contracts as related to accounting issues, and an introduction to various forms of business entities. Topics include an overview of laws pertaining to: sole proprietorships, partnerships, LLCs, corporations and their actual formation (as an in-class project, bankruptcy, real and personal property, professional ethics, and the Sarbanes-Oxley Act. This course is appropriate for candidates preparing for the business law segment of the California CPA exam.

BUSA40047: Federal Individual Income Taxation - 4.00 Units

Receive an introduction and overview of federal individual income tax law and procedures. Topics include taxable entities and tax calculations, filing status and exemptions, gross income inclusions and exclusions, business and personal deductions and losses, depreciation and tax credits, and property transactions. A brief review of California tax coverage is also included, with an emphasis on tax law and tax planning, rather than on tax preparation.

BUSA40048: Auditing - 4.00 Units

Are you an entry-level auditor, accounting student or professional who needs to learn or review auditing objectives and techniques? This course will teach you about internal control processes and procedures based on Generally Accepted Auditing Standards; audit procedures and techniques; recent developments and trends in auditing; and the history and development of auditing practices through case studies, lectures and in-class discussions.

BUSA40049: Cost Accounting - 4.00 Units

Examine current trends in effective cost management and information gathering. Explore traditional costing theories and procedures (developing standards, computing variances, determining process costs). Survey innovations in cost accounting such as just-in-time (JIT) inventory systems, and look at new process efficiency measures through contemporary success stories. This course combines textbook theory with practical tools for collecting and analyzing key accounting data.

BUSA40063: Principles of Facilities Management - 3.00 Units

Learn critical and practical skills needed for facilities management that you can apply immediately, whether you are looking to enter the industry or increase your knowledge and skill set. Review both the theoretical and applied aspects of facilities management. Gain an understanding of facilities operation, maintenance, staff management, budget, schedules, design and construction management, energy management, and effective relationships with contractors and vendors. Discuss facilities management as a process, and consider its relationship to other functions within an organizational setting. Explore the most current strategies and issues in the industry today, including sustainability, productivity, as well as human and environmental factors.

Learning Objectives:

- Understand organizational theory and facility management

- Gain insight on planning, finances, and budgeting

- Gain knowledge, skills and abilities in building systems, operations and maintenance, leadership, real estate, and space planning

BUSA40064: Project Management Essentials - 3.00 Units

Effective project management skills are important to professionals in any industry. Learn how to define, plan and execute a project whether your goal is simple or complex. Gain the tools and knowledge for delivering projects on time and on budget, while meeting performance specifications. Explore the basic components of project management and the project life cycle: determining the correct project through strategic portfolio analysis; creating a successful charter; assembling and managing a team; analyzing and controlling risk; monitoring project milestones; and closing out the project. Get the hands-on skills you need to help you successfully complete your next project management assignment.

This course will provide 27 education hours. To receive Professional Development Units (PDU’s), submit your UCSD transcript to the Project Management Institute (PMI).

BUSA40066: Systems Engineering Management - 3.00 Units

Intended for managers, engineers, and technical specialists who desire a broader understanding of the systems engineering process and its management applications, students will examine typical system life cycles and acquisition processes, engineering management planning, tools for technical program planning and control, and activities within the systems engineering process.

Course Highlights

- Systems engineering defined
- System life cycle and acquisition processes
- Engineering management planning
- Technical program planning and control
- Engineering decision and control process
- Risk and margin management
- Interface, configuration and data management
- System and performance requirements
- Functional analysis
- System architecting
- Systems integration
- Logistics support analysis
- Specialty engineering integration
- Applying systems engineering principles

Course Benefits

- Cultivate a broader understanding of systems engineering process and technical program planning and control
- Identify impacts of integrated product development and total quality management of systems engineering
- Develop a greater cross-functional awareness, understanding and appreciation of other departments contributions to any project
- Acquire skills and tools that will increase effectiveness in environments where multi-disciplined teams are developing the requirements, design, and production processes for new systems and products

BUSA40091: Planning & Project Management for Facilities Managers - 3.00 Units

Are you responsible for developing and executing large projects for your facility? Gain a fundamental understanding of how to use project management concepts in the development, design, and operation of facility-related projects. Learn basic project management processes and procedures and how to apply those processes to the various elements of facility management. Explore project management best practices to improve organizational performance. Learn how and why project management fits into a program of continuous quality improvement in facility management. Discussions will cover the planning, coordination, implementation, close-out, and evaluation of facility-related projects.

Learning Objectives:

- Learn how to identify and initiate a project
- Develop project scope, schedule and budget plans
- Execute a project and control project plans
- Lead and manage a project team

BUSA40094: Intermediate Accounting Theory and Practice I - 4.00 Units

Learn how to prepare the principal financial statements, including the recording, valuation, and presentation: of cash, temporary investments, receivables, inventories, plants and equipment, intangibles, and current obligations.

BUSA40109: Work Team Concepts and Skills - 3.00 Units

Do you work in groups or teams in your workplace? Learn how to develop effective teams in the context of project management and how to implement communication and conversation strategies that help your team meet its project goals. Discover key factors that distinguish teams and shape team excellence, particularly communication and conversational dynamics. Study theories and models of individual and group conversational dynamics. Learn how to design powerful conversations to produce the results you want to achieve. Explore common team-related issues including: team charter and team contracts, trust, culture, and conflict resolution. You will also have the opportunity to practice diagnosing and dealing with a variety of group dynamics through a team project.

This course will provide 27 education hours. To receive Professional Development Units (PDU’s), submit your UCSD transcript to the Project Management Institute (PMI).

BUSA40125: Systems Requirements Analysis - 3.00 Units

Poor requirements management and development continues to be a leading characteristic of failed projects. The goal of this course is to teach system and software engineers of any background the essentials of eliciting and starting requirements and constraints bearing on system development from users and other stakeholders. The material covered in class can be applied to hardware and software intensive systems. Students will explore the relationship of requirements to the system development life cycle, including the relationship between product requirements and verification requirements.

Course Highlights:

- What is a requirement?
- Are some requirements more important?
- What is requirements elicitation?
- What techniques should we use?
- What is requirements management?
- What models are applicable?
- Where do we start?
- What tools should we use?
- What attributes should we apply?
- How do we know our requirements are well formed?

Course Benefits:

- Comprehend that requirements are statements of user needs and quality attributes that support those needs, not bound by solutions but affected by governing constraints
- Develop an understanding of how to develop and manage system requirements within the system life cycle
- Learn the characteristics of high quality requirement statements and expressions

BUSA40128: Interest-Based Negotiation - 3.00 Units

Becoming a skillful negotiator is essential for all professionals. Learning to produce superior outcomes through negotiations is a learnable skill that can benefit individuals in any field. Negotiation is both a science and an art. The science is in the elements of the negotiation process, and the art is in how those elements are combined and emphasized to produce greater results. In this course you will:

- Assess the strengths and weaknesses of your existing negotiation style
- Understand the phases and elements, and their roles in the negotiation process
- Practice identifying the strategies and tactics that achieve desired outcomes
- Understand how the roles, interests and positions are factored into the negotiation process
- Learn the types, sources and uses of influence
- Practice preparing for, and negotiating, a range of agreements with classmates
- Understand where a collaborative (Win-Win) approach is effective, and when competitive bargaining should be employed
- Learn how to bargain, make smart concessions, and avoid common pitfalls

This course will provide 27 education hours. To receive Professional Development Units (PDU's), submit your UCSD transcript to the Project Management Institute (PMI).

BUSA40130: Financial Statement Analysis - 4.00 Units

Financial statement analysis has many applications, including the evaluation of department and senior management performance, accounting compliance, and the profitability of business activities. Accounting principles, economic theory and empirical research are integrated to provide a framework for analysis. Students will be introduced to the concepts of analyzing and evaluating accrual-based financial statements using various analytical methods including ratio analysis and market comparisons. ROI, equity, and credit analysis will also be covered. Many of the topics discussed in this class will be relevant to the CFA Level I Exam.

BUSA40131: Directed Studies-Contemporary Marketing - 2.00 Units

With an instructor's help, you'll complete an internship or conduct a project relevant to your personal and business interests. You'll meet periodically with your instructor to review and integrate your learning. You'll perform independent research analysis and compile recommendations from your studies for presentation to your instructor for critique and comment. This course to be taken upon completion of other coursework.

BUSA40162: International Finance and Capital Markets - 3.00 Units

Advancements in the global marketplace have resulted in an increased flow of global capital. Learn the various strategies related to business finance when applied to international markets. Topics include: foreign exchange markets and international central banking; foreign stock and bond markets; international risk management, hedging, international sources of funds; and investment strategies and capital budgeting for foreign projects.

BUSA40217: Product Management - 11.00 Units

Next program begins in February 2018!

Developing new products and managing them through their life cycle is the lifeblood of companies—especially those in technology and science—but new product development is risky and most new products fail. The solution lies in an organization's ability to successfully

implement and manage a professional product management process that takes new ideas from concept to launch using a rigorous multi-department process led by a Product Manager and a cross functional team.

The UC San Diego Extension Product Management program offers students a comprehensive look into the elements and skills necessary to manage a successful product management process at their company. From learning the phase-gate process critical to product management success to the team and leadership skills necessary to lead a cross functional product management team, the Product Management program provides the real world tools necessary to be a successful product manager. Coursework includes class lectures, field trips, hands-on cases, projects and market simulations to maximize learning in a short period of time.

The program benefits both new and experienced professionals who want to sharpen their skills and learn the latest product management techniques. Professionals include current product managers and those in engineering, marketing, sales, finance, operations, customer service and manufacturing.

Program Benefits:

- Learn what it takes to be a successful product manager
- Discover ways to help your company be more innovative
- Stay up-to-date on the latest product management practices
- Improve your skills while increasing your value to the company
- Experience real-world situations through simulations and company tours
- Miss minimal time from work with Friday and Saturday courses
- Complete the program in just five months

Learning Modules:

- Product Management, Planning and Leadership
- Cross Functional Product Teams, Decision Making
- Finance for the Product Manager, Analyzing the Industry and Competition
- Market Segmentation, Target Markets, Product Planning and Sales Forecasting
- New Product Process including Phase Gate
- Product Portfolio Management and End of Life

Program Schedule:

The program consists of six modules and is scheduled every three weeks between February and June. Class sessions are held Fridays from 9 a.m. to 4 p.m., and Saturdays 9 a.m. to 12 p.m..

For more information, contact:

Susie Baranowski, (858) 534-9148, sbaranowski@ucsd.edu

BUSA40257: Directed Studies Internship Preparation - 2.00 Units

BUSA40263: Intellectual Property Law - 2.00 Units

Explore the basic concepts of intellectual property. The nuts and bolts of patents, trademarks, copyrights and trade secrets are explained in layman's terms. Real-life examples and "war stories" are interwoven to clarify and emphasize the hot intellectual property issues that can make or break a company's financial health.

BUSA40301: Business Law for Managers - 2.00 Units

Get an overview of important legal and business ethical issues related to business dealings. Survey the legal rules, legal theories, and legal reasoning as applied to everyday issues and problems found in business activities. Topics in business law and government regulation will be discussed including: ethics, the court system, torts and crimes, contracts, sales, consumer protection, intellectual property, employment law, business entities, real and personal

property, and landlord-tenant. Upon completing this course, you will have a basic understanding of the U.S. legal system and how business entities act within it.

BUSA40341: Introduction to Fundraising and Development - 3.00 Units

Do you need the basics of fundraising under your belt or a refresher in the fundamentals of development? Come review everything you need to know about the fundraising process, fundraising as a career, and standards of professional practice. With expert guidance, you will explore the structure of a non-profit and learn the roles of the board, staff and volunteers. See step-by-step what goes into developing and executing a fundraising plan and review different giving methods, volunteer management and related ethical considerations. Get skills in strategic planning, marketing and public relations and learn about working with different consultants. From special project campaigns to fundraising technology, you will learn it all. Get your start today.

BUSA40342: Introduction to Business - 3.00 Units

Examine the foundation, principles, and practices upon which modern business enterprises are based. Become familiar with not only the functional elements of a for-profit company, but also the challenges presented by today's competitive global marketplace. Topics include: the business life cycle; balancing short and long-term demands; forms of business ownership and organization structure; leadership and managing competing priorities; competing in global markets; the employment relationship (employment options, compensation packages, managing and rewarding performance); marketing, promoting, pricing and distributing products and services; financial and operational information systems.

BUSA40348: Project Procurement Management - 3.00 Units

Do you want to know more about how goods and services are acquired in the project management environment? Examine the procurement planning and management process in its entirety, from request-for-proposal planning to final contract close-out. Learn how to evaluate potential sources for external procurement. Explore strategies for contract selection; risk assessment; negotiation; and administration; as well as the challenges that can arise during the life cycle of a contract. Discover effective techniques for controlling quality and cost, while measuring the performance of major contractors. Other topics include legal issues; product liability and risk; tender documents; invitation to bid; bid response and evaluation.

This course will provide 27 education hours. To receive Professional Development Units (PDU's), submit your UCSD transcript to the Project Management Institute (PMI).

BUSA40361: Working with Philanthropic Donors - 3.00 Units

Understanding how to nurture and sustain philanthropic relationships is essential to any successful fundraising effort. Explore how you can improve the quality of your relationship with your donors and increase support for your organization. Get insight into the psychology of philanthropy and fundraising. Learn to discern the interests of individuals in your donor base. Develop appropriate fundraising strategies and plans for your donors including: "packaging" development needs to match donor interests, soliciting the donation, ways of involving potential donors before and after donations, providing ongoing recognition and opportunities for giving. Study case histories, model programs, and development techniques that you can immediately apply in your organization.

BUSA40368: Business Communication Skills - 3.00 Units

Being able to communicate your ideas accurately and persuasively is essential in a business environment. Explore the communication skills necessary to be productive in today's complex workplace. Discover how to analyze and address a range of audiences. Learn the basics of speech organization, body

language, vocal variety and speaking without preparation. Improve your interactions one-on-one and in meetings.

Topics include recognizing and responding to nonverbal messages, personal vs. position power, negotiation, accommodating individual differences (age, culture, gender), giving and receiving constructive criticism, understanding group dynamics and team development, professional writing skills, and presentation skills.

This course will prepare you to communicate more effectively in business. You will explore the foundations of business communication, develop your business writing skills (applying clear communication principles to written communication), improve normal business correspondence, write more effective reports, and learn how to improve oral presentations.

Learning Objectives

By the end of this course, you will better understand:

- the foundations of business communication
- how to develop their writing skills
- how to properly manage correspondence report writing
- how to make better oral presentations
- how to improve employment communication

This course will provide 27 education hours. To receive Professional Development Units (PDU's), submit your UCSD transcript to the Project Management Institute (PMI).

BUSA40387: Capital Campaigns - 1.00 Units

Capital campaigns are a cost-effective way to raise large sums of money in a relatively short period of time. Determine if your organization is ready for a capital campaign and how to prepare to move forward. Investigate what it takes to launch and successfully conclude a capital campaign. Learn how to develop and tailor a campaign strategy for your needs. Explore how to identify potential volunteers and donors, develop a case for support, and create promotional materials for the campaign. Other topics include: planning and preparation for setting up a campaign office; required reporting and tracking tools; and how to keep volunteers motivated during the campaign.

BUSA40391: Computer and Software Law - 2.00 Units

This course will provide developers, vendors and users of computer systems with basic knowledge of intellectual property law as applied to software and the Internet – including strategies for protection of software and Internet content from piracy, and legal considerations involved in the marketing and sales of software and computer systems. Topics will include copyright, trade secret, trademark and patent law as applied to software and the Internet. Particular focus will be on the eligibility of different types of software related inventions to patent, copyright, and trademark protection.

BUSA40392: Supply Management I: Purchasing & Creating Requirements - 3.00 Units

Purchasing and supply management professionals must be equipped to face contemporary operational challenges. This class will expose students to industry best practices and provide an understanding of essential terminology. Learn the strategic components of purchasing and supply management, and understand:

- Supply cost analytics
- Purchaser-seller relationships
- Subcontracting
- Strategic alliances
- Basic purchasing applications
- Value added purchasing actions vs non-value added actions
- Operation techniques and department objectives

Legal aspects relating to purchasing and contracts

Additionally, students will become familiar with how supplier relations are a key element of supply chain management.

BUSA40393: Supply Management II: Sourcing and Analyzing Cost - 3.00 Units

The course will examine the core purchasing objectives: quality, quantity, time, place, source, service, and price. Topics include: methods of description/specification, measuring value, supplier certification, demand forecasting, inventory classifications and replenishment models, MRP, Just-In-Time, supplier evaluation and selection, competitive bidding, price and cost analysis and negotiation strategy.

BUSA40394: Supply Management III: Regulations, Contracting, and Logistics - 3.00 Units

Purchasing III builds upon the basic understanding of purchasing organizations and operational objectives gained during Purchasing I and II. More advanced and specialized topics such as capital asset acquisition, buying services, international purchasing, and purchasing in the public sector will be covered. The capstone session will be a review of the modern trends in Supply Chain Management.

BUSA40396: The Leadership Toolkit - 3.00 Units

Designed to provide valuable individualized assessment of the strengths and development needs of a cohort group of managers (and potential managers), these seminars focus on key skill sets required to be effective on the job. In addition to self-assessment, information is gathered from supervisors, peers, and direct reports to provide confidential and objective insights. This information then serves as a foundation for individualized action planning to improve and enhance managerial skills.

BUSA40397: - 3.00 Units

BUSA40410: Fundraising and Development Project - 2.00 Units

Apply all the skills you have learned throughout the Professional Certificate in Fundraising and Development. Choose a project tailored to your personal interest and gain practical experience in fundraising. You will be assigned an advisor who will coach you on your individual project throughout the quarter. Elements of the project include: selecting a cause, researching/identifying potential donors, developing a strategy for initiating and building a relationship with one targeted donor, and writing a proposal to that donor.

BUSA40414: Systems Verification and Validation - 3.00 Units

Understanding and applying core principles of Systems Verification and Validation is considered by many to be the key element of a solid systems engineering process. In this course, you will learn the importance of certifying customer requirements through a proven validation process. You will also acquire an understanding of product development and factory acceptance testing through an established system verification process. The application of "Verification and Validation" is the processes that establish a product's quality and "fit for use" prior to customer delivery. You will learn the significance of verification and validation through lecture and "hands-on" assignments designed to reinforce core values of the systems engineering process.

Course Highlights:

- Definition and application of the "V&V" process
- Understanding and applying test and evaluation metrics
- Developing customer requirements and system specifications
- Importance of test and evaluation management decisions
- Understanding commercial and DoD methodologies

- Application of system prototyping
- Application of modeling and simulation
- Learning from historical failures
- Importance of the risk mitigation process

Course Benefits:

- The tools provided in this course will support and improve your ability to identify, document and execute system testing prior to customer use
- Your understanding of system cost drivers will improve your ability to effectively manage a company's test and evaluation process
- Your understanding and appreciation of systems failures will provide a basis from which you will be an advocate for system testing that ensure product safety

BUSA40435: Financial Decision Making - 3.00 Units

Use of financial accounting and managerial economics to evaluate complex corporate financial decisions in areas such as budgeting and forecasting, corporate lending, capital budgeting, and capital structure. Case methods are used extensively. Coursework involves the analysis of financial issues faced in the business environment and the development of recommendations to achieve desired solutions.

BUSA40439: Finance Management - 4.00 Units

Learn the key concepts, terms and tools associated with the financial world. Topics include: analysis; management of working capital and short-term financing; time value of money and valuation of corporate securities; capital budgeting and long-term financing; risk management, investment and capital markets.

BUSA40441: Business Decision Making - 3.00 Units

Managers are invariably critiqued on their effective use of the complex decision making process. Refine your leadership skills and focus on the strategic decision-making process as viewed from the top of an organization in a multidisciplinary setting. Through case studies, explore the consequences of disregarding the decision-making process or of its ineffective use. You will also participate extensively in small groups and have the opportunity to integrate all you've learned into an effective interactive decision-making model.

Students will gain a solid understanding of the role of a general manager—using skills and information from the course to quickly assess, describe, investigate and navigate business strategy and decision making.

The course is intended for individuals with an interest in how business managers arrive at making a strategic decision. The class attracts individuals from all types of educational backgrounds and experiences.

The course will explore the characteristics of strategic thinking and the strategic decision making process. Students will evaluate the strategic management process, explore internal and external environments, and apply practical frameworks for creating, evaluating, implementing and monitoring business strategies. As a result, students will become more familiar with role of a general manager.

By the end of this course, the student will be able to:

- Define strategy and the strategic management process
- Articulate and write an organization's vision and mission statements
- Evaluate an organization's external environment
- Evaluate an organization internal environment including resources & capabilities
- Perform a SWOT analysis

- Identify the five basic (generic) strategies an organization can choose from
- Define the strategy implementation stage and identify its main components
- Identify the differences between domestic and global strategies

BUSA40442: Market Research and Analytics - 4.00 Units

Market research is used to obtain reliable information about customers, industry trends, competition, and even emerging trends that could affect the future of your organization’s products or services. This course will give you an overview of the use and applications of market research. Traditional qualitative and quantitative research techniques and methodologies will be covered, along with online research techniques. To gain practical market research experience, you will participate in an actual market research project and work on several “real world” market research case studies. You will also learn how to use market research results to drive successful product and service design.

Learning Objectives:

- A general working knowledge of the concepts and methods of marketing research and specific methods best utilized
- An understanding of the sources of marketing information and the various means for gathering such information
- The ability to translate a management problem into a feasible research question
- Gain insight into the strengths and weaknesses of alternative research designs
- Understand the biases and limitations of marketing data and basic data analysis

BUSA40443: Presentation Techniques for Marketers - 3.00 Units

Your key to success in today’s business environment is the ability to effectively present yourself and your ideas. In meetings and formal presentations, marketing professionals are required to speak persuasively and professionally. In order to be successful and advance in your career, public speaking skills are an essential competency. This course will cover the fundamentals of public speaking and give you opportunities to develop and deliver marketing and sales presentations. After the completion of the course you will have the tools and confidence to develop and deliver great presentations.

Learning Objectives:

- Understand how to build a presentation that flows from Point A to Point B
- Gain insight on how to understand your audience
- Learn how to brain storm without presenting a “data dump.”
- Find a “flow” that works for you and your presentation
- Learning how to initiate a “90 second” launch
- Understand the proper role of graphics in your presentation

BUSA40451: Brand Strategy and Positioning - 3.00 Units

Learn to create products and brands that customers love. Explore a hands-on approach to product development, applied customer research, competitive mapping, case study analysis, positioning, communications, and the development of creative branding strategies. In addition, learn tried-and-true best practices through in-depth case studies of real brands and products. With an emphasis on practical tactics that help shape a product and brand’s

positioning strategy, you’ll develop the ability to create a full product and branding plan to integrate into your organization and stay ahead of the competition.

Learning Objectives:

- Create positioning models that hone in on the features, advantages and benefits of products
- Understand the competitive landscape to accurately place products within the marketplace
- Create branding strategies that include messages, imagery, internal culture statements, brand audits
- Learn how to apply appropriate marketing channels to branding campaigns
- Create a full product and brand plan

BUSA40453: Online Marketing Strategies - 3.00 Units

More than ever, the cornerstone of every targeted marketing plan should be an online marketing strategy. Explore website design, search engine optimization, pay-per-click advertising, social network marketing, e-mail marketing, mobile marketing, and other digital marketing elements. You will leave the class with an actionable marketing plan covering best practices as well as creative online marketing ideas. In-class sections may have guest speakers that include regional experts on various aspects of online marketing. Learn how to attract more of your targeted customers to your website, as well as ensuring that those customers take the actions you desire once they arrive.

BUSA40463: Grant Writing for Nonprofits - 2.00 Units

Gain a comprehensive understanding of the grants process and how you can use grants to fund your endeavors. This hands-on course will guide you through the entire process of writing a funding proposal. Practice writing problem statements and objectives; receive feedback on your writing; work effectively in group discussions; and learn how to construct a grant budget. Topics include “big-picture” program design; the research process for finding the right grant funders for a project; components of an effective grant proposal; and strategies for organizing the complete package. Discover the resources you need to help your organization with its own grant writing.

Learning Objectives:

- Students should be able to write effectively for multiple purposes and audiences required by a nonprofit organization (NPO)
- Comprehend the entire grant proposal writing process, including project/program management, financial projections and program evaluation
- Identify roles and expectations of a funding agency, foundation or giving institution
- Understand very basic NPO management systems and constraints
- Develop effective research strategies, data collection, and invention
- Understand basic principles of layout and visual communication design for proposals

BUSA40477: Business Valuation - 3.00 Units

This course will teach the generally accepted approaches, methods, and procedures for the valuation of business enterprises. Students will be introduced to the process of defining the scope and outlining the valuation project, as well as how to determine the proper standard of value, when aspects other than market value are used. The course will conclude with an appraisal project and report according to the Uniform Standards of Professional Appraisal Practice (USPAP).

BUSA40494: Earned Value Project Management - 3.00 Units

Explore how to successfully monitor project and program performance through Earned Value Project Management (EVPM). EVPM gives customers and suppliers the ability to track technical aspects, cost, and schedule. It also integrates cost, schedule and technical aspects into programmatic report synopses. Gain the tools used to conduct analysis of contractor-supplied documentation. Discover how to track progress and get information on cost and schedule performance data—including a visual depiction of budget efficiencies for both time and dollars. Discuss industry-recognized standards for monitoring work performance and strategic planning. Learn how you can measure accomplished efforts against the plan for management to effectively make risk management decisions.

This course will provide 27 education hours. To receive Professional Development Units (PDU's), submit your UCSD transcript to the Project Management Institute (PMI).

BUSA40517: Directed Studies in Accounting - 2.00 Units

Apply all the skills you have learned throughout the Professional Certificate in Accounting by completing a comprehensive project tailored to a particular segment of the accounting industry. Work with an advisor who will coach the project throughout the quarter. Elements of the advanced level project include: assessing accounting issues, developing solutions through a professional accounting initiative, presenting and evaluating the impact of the recommendations.

BUSA40529: Taxation of the Business Entity - 4.00 Units

Explore a comparative overview of the various business entities: the formation, capital structure and tax treatment of the sole proprietor, general and limited partnerships, LLPs, LLCs and S and C Corporations; and converting the existing entity into another type of entity. The course progresses into tax and strategic planning throughout the life cycle of the business.

BUSA40530: The Business of Biotech - 3.00 Units

Biotechnology companies comprise a unique industry. Whether you are considering joining a biotech start-up or want to be successful in a mature life science organization, it pays to understand biotech business fundamentals. This course has two primary objectives. The first is to cover the essentials of biotech business operations and challenges. The second is to design a potentially successful startup venture based on bioscience and addressing the biotech and healthcare markets. A secondary objective is to enhance your communications skills.

Topics include:

- Disruptive innovation – Understand the accepted theory and how to make use of it
- FDA regulation – Pathways and times to approval for drugs, devices and biologics
- Spinouts & licensing – Creating intellectual property and licensing rights to fields of use
- Financing – The basics plus bootstrapping, valuation, venture capital and acquisitions
- Fast exit ventures – Creating a lean startup with the goal of being acquired within 3 years
- Biotech business models -- Learn the 8 biotech business models and risk/reward of each
- Business development – Analyze/value a license or corporate acquisition

By the end of this course, you will be able to:

- Excel in career interviews through your comprehensive knowledge of biotech business fundamentals and functions

Utilize potentially disruptive technologies for solutions to problems in new and unserved markets

Make professional and convincing PowerPoint presentations based on a written analysis of product/market fit and intellectual property

Choose between financing alternatives to funding a startup venture with new technology or emerging university research

The format is highly interactive and informal, engaging students in workshop fashion. Most classes start with a discussion of the materials followed by a group exercise and conclude with a team presentation of a Harvard Business School biotech case. Projects measure and enhance your entrepreneurial abilities, interpersonal team skills, written communications and oral presentation abilities. Assessment is by two brief quizzes, demonstrated in-class knowledge of the course material, a one-page memo (with backup) analyzing a new venture, a HBS case analysis/presentation and a final team project presentation to a panel.

Testimonials:

"I've been in science and business development for 20+ years, but I've never had any formal business training. Already your class is connecting some dots for me and I'm very glad I enrolled."
- P. Schumann, winter 2018.

"It is true when I say that this has been one of the most interesting courses that I have taken. It wasn't like the courses one takes only to forget the content after exams. In fact, after every class I felt I learned something that will stay with me forever."
-M. Husain, winter 2018.

BUSA40531: Workplace Ethics - 2.00 Units

Strong workplace ethics, or the lack thereof, have had far-reaching consequences for companies and corporate leaders. This class will explore regulations that specifically address ethics in the workplace, and it will differentiate between compliance and ethics. You will be challenged to think through the relationships and impacts of your decisions on your organization, as well as to consider the impact on shareholder value and other stakeholder effects from unethical behavior.

BUSA40537: Principles of Patents - 3.00 Units

How are inventions protected? From obtaining a patent from the U.S. Patent and Trademark Office to enforcing the rights granted thereby, this course thoroughly explores aspects of the U.S. Patent System. The course places an emphasis on how rights are acquired and the scope of those protections. It will also cover recent U.S. Supreme Court and appellate level developments in the dynamic area of Patent Law, with an in-depth analysis of the requirements for patentability, validity, and enforceability of U.S. patents.

BUSA40538: Principles of Trademarks - 3.00 Units

Trademark law protects any word, symbol, design, device, logo or slogan that identifies and distinguishes one product from another. In this course, you will learn about the Lanham Act, federalization of unfair competition laws, the requirements for trademark eligibility, registering and protecting a trademark. Current events and up-to-date information at both the State and Federal levels are covered including the impact of e-commerce and the Internet.

BUSA40539: Principles of Copyrights - 3.00 Units

Copyright law protects music, architecture, writing, computer programs, plays, websites, dance, and visual arts. While appearing simple on the surface, copyright law is deep with complexity. Participants will learn the basics of copyright law along with many practical details including the registration process, ownership, assignment, works made for hire, licenses, and enforcement.

BUSA40540: Patent Prosecution - 3.00 Units

This course covers the patent process in detail and includes application, prosecution responses, and continuing applications using a practical approach. We will analyze PTO forms and particular attention will be paid to calendaring and moving the patent forward.

BUSA40541: Patent and IP Searching - 3.00 Units

Do you need to assist your company with novelty or patentability searches? Are you involved in trademark selection? This course will walk you through the use of the USPTO website, Trademark Electronic Search System (TESS), and other free internet resources to research patents, trademarks and copyrights. You will learn how to use the classification systems to improve your search results. Additional topics include patent family analysis, and searching for due diligence and litigation support. Students must have access to the internet outside of the classroom.

BUSA40542: Advanced Issues in Intellectual Property - 3.00 Units

Advanced Issues in IP Law. This course explores the role of patent professionals in Intellectual Property. We bring in a number of subject matter experts to try to give the students a chance to delve more deeply into some of the currently "hot" IP topics, including intellectual property in the drone industry, copyright issues in the music industry, trade secrets, IP litigation, TTAB and PCT procedures, and a look at the ever-evolving software patent issues.

BUSA40547: Certified Bookkeeper Program - 9.00 Units

One of the few national programs endorsed by the American Institute of Professional Bookkeepers (AIPB), this program helps you to get the knowledge and skills you need to become a Certified Bookkeeper. You'll learn from the AIPB workbooks, complete practice exams on a dedicated website, and take the AIPB Certified Bookkeeper examinations. A free 2-Day Information Session will be held on Tuesday, Sept. 25 and Saturday, Sept. 29. For details email AcctgTaxProgram@ucsd.edu.

BUSA40620: - 3.00 Units

BUSA40624: Foreign Patent Prosecution - 2.00 Units

Gain a thorough understanding of foreign patent protection and filing strategy with a focus on PCT practice. The number of PCT Contracting States is currently 123 and growing. It includes all the industrialized countries of the world. PCT is now firmly established as the most cost-effective instrumentality for obtaining international protection and creating an international patent portfolio. A basic working knowledge of the PCT will be taught in this six-week course.

BUSA40643: EPSE Module 1 Leading Knowledge Based Organizations - 8.00 Units

BUSA40644: EPSE Module 2 Understanding a Technology Business - 8.00 Units

BUSA40645: EPSE Module 3 Building New Value Through Innovation - 6.00 Units

BUSA40658: HR LearnAbout Tour - 0.50 Units

In this six-hour program, participants will ride together to visit two outstanding workplaces in the San Diego area. This is a unique opportunity to learn best practices from local HR and business leaders. Discussion topics and practical examples related to HR practices may include:

Attracting, developing and retaining high-performing millennials and talent across generations by designing an integrated rewards system

Optimizing performance through innovative methods that align people and business needs

Transforming the HR function to fuel the company's growth and sustainable business achievements

Achieving results through synergistic compensation and incentive practices

Planning and executing HR strategic goals that evolve along with company goals

Participants will meet in the lobby at our University City Center location (Address: 6256 Greenwich Dr, San Diego, CA 92122). Participants will board the bus by 7:45am to leave for the first location.

Space is limited! Transportation and lunch are included. Participants can also earn four hours of re-certification credits for SHRM-CP, SHRM-SCP, PHR, SPHR, etc.

For information, contact Alisa Watjara or Cláudia Schwartz.

BUSA40667: Project Management for Technical Communicators - 2.00 Units

How can you keep your technical communication project on track when the goal is always changing? Let an experienced project manager teach you how to tame your wild project. Learn to do document needs analysis, productivity metrics, project estimation (cost and timeline), and progress tracking and reporting. Get hands-on practice on a course project (a cost and timeline estimate) you will create from a set of starting requirements. For your convenience, homework assignments will build toward the course project, and you can do the coursework online at any time of day.

BUSA40673: Managing for Maximum Performance - 3.00 Units

Effective managers realize that organizational success is based on so much more than the contributions of its individuals alone. Success is based on the effective management of "teams" working together to achieve common goals. Knowing how to build, influence and lead teams can increase business performance to exceed goals and objectives. Explore the responsibilities, functions and skills required of managers today. Learn how to hire, train and lead teams efficiently and effectively. Boost teamwork and morale using proven communication, planning and goal-setting strategies. Identify leadership styles, and learn to adjust yours to motivate employees and increase their productivity. Tackle challenges, solve problems and mediate differences using practical management tools and techniques.

BUSA40676: Building Systems & Technology - 3.00 Units

Facility managers need a good understanding of building components and systems to maintain and manage them well. Review the function of primary building components and systems, including the structure, building envelope, mechanical and electrical systems and fire life safety systems. Discover how different components work; typical problems; and repair, restoration and maintenance alternatives. Also explore technology applications that help facility managers manage the assets more efficiently, including maintenance, space and project management software. Applications for condition assessment & capital planning, ERP systems, and CAD & GIS will also be discussed.

Learning Objectives:

Gain a basic understanding of Systems controls and building automation

Learn basic systems engineering, design and operation principles

Understand applications for facility planning and other facility management aspects

BUSA40677: Resource Management - 3.00 Units

Today’s business leaders face a burgeoning demand for both information and management techniques to implement programs on recycling, waste management, and water conservation. These are the issues critical to the protection of our physical environment; and these issues must be addressed in an economically feasible – and preferably profitable – manner. Learn how to analyze “best practices” in business, institutions, and governments to solve the challenges presented in these three areas. Receive guidance, formulas and templates for developing successful strategies and plans for solving related problems in facilities management and industrial operations. Make sure you can meet the sustainability challenges facing businesses today.

USGBC Continuing Education Hours: This course is approved by GBCI for 27 CE Hour(s) for LEED AP O+M. For more information go to USGBC-Continuing Education.

BUSA40679: Emergency Preparedness and Business Continuity - 3.00 Units

Emergency preparedness and business continuity planning are crucial for successful business and organizations. This course provides an overview of the strategic planning and tactical responses taken by operational leaders in response to man-made or natural incidents in the workplace. Understanding the risks associated with your business or facility, will allow you to be a vital asset to mitigate, prepare, respond, and recover sooner to those applicable risks. Students will also learn how to identify environmental factors critical to their organization and how to develop programs that will keep their facility in compliance with laws and regulations.

Topics May Include:

Identifying continuity risks associated with a business

Defining basic emergency management and business continuity terms

Steps required when building a business continuity and disaster recovery plan

Emergency response plans for moderate to high-risk facilities

Processes in an incident command system

Effective and ineffective communication techniques

BUSA40681: Facilities Operations & Maintenance - 3.00 Units

Proper operations and maintenance (O&M) is critical to preserving the large capital investment that companies and building owners have made in their facilities. Proper O&M can minimize costs and increase profits. This course provides a topical review of O & M concepts and strategies. Topics include work control methods, facility management plans, building system and equipment maintenance, and sustainable practices. The course is designed for those with some facility management experience as well as those who are interested but have little or no experience.

Topics covered include the following:

Operational plans

Maintenance plans

Work control strategies

Occupant support and customer service

Regulatory environment

Indoor environmental health

Energy management

Trends in sustainable (&green&) building design, operation, and maintenance

USGBC Continuing Education Hours: This course is approved by GBCI for 27 CE Hour(s) for LEED AP O+M. For more information go to USGBC-Continuing Education.

BUSA40682: Patent Drafting - 2.00 Units

Learning to write a patent application, a complex legal document, is fundamental to securing a patent and being able to enforce your rights for years to come. This course covers the patent drafting process and includes methodology and technique used in the drafting of patent applications. We will analyze different patent drafting procedures and practice. Students will be expected to draft sample patent applications. Students are also expected to have a basic knowledge of patent law.

BUSA40687: Historic Preservation Planning - 3.00 Units

Learn the role historic preservation plays as a component of the urban planning and development process at the local, state and national levels. Explore the important milestones in historic preservation and urban planning history; identify historic and contemporary styles of American architecture; survey established historical research methods and documentation programs; review benefits and incentive programs for historic preservation; study the adaptive reuse of historic properties and design review for historic preservation projects; and discuss issues encountered when selecting and working with a historic preservation consultant and municipal planners.

AICP Credit: AICP members can earn Certification Maintenance (CM) credits for this activity. For a list of additional UC San Diego Extension AICP CM Events go to American Planning Association.

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BUSA40691: Global Marketing - 3.00 Units

Explore the excitement and challenges of marketing your product outside of the U.S by analyzing cases featuring well-known companies and products. This course examines the global marketing environment’s legal, regulatory, political, cultural, and managerial issues; strategies for market entry and expansion; market research tools and obstacles; targeting and segmenting of markets; distribution channels and local selling; price setting; promotion through integrated communications and advertising; and negotiations. Everyone involved in the international marketing of a product or planning to enter the global marketplace will benefit from this course.

BUSA40693: Project Management within a Scientific/Research Environment - 2.00 Units

The need for project management in research stage projects is commonly overlooked. There is skill set required to manage projects and certain tools and techniques that mobilize productive interactions between project managers and technicians. This course will explore the project management approach for research stage projects implemented in your organization and demonstrate different project management approaches across companies and industries. You will learn how to set a project vision, gain buy in from technical team members, and how to develop a project plan by breaking a project down into manageable components. You will also discuss the role of project managers in decision making, the growth of knowledge-based assets; the organization structures that impact the management of R&D projects; and the challenges in managing a portfolio of research stage scientific projects.

BUSA40694: Applying Project Management Principles to Biomedical and Pharmaceutical Product Development - 4.00 Units

Life science industries are very complex and require the management of large portfolios and programs where best project management practice is essential

to successful product completion and subsequent enduring market leadership. The umbrella of programs required to feed the pipeline of therapeutic candidates and their subsequent development into commercial products are much diversified and range from exploratory research, determination of novel biological pathways, lead discovery and development, pre-clinical studies, clinical trials, regulatory compliance and filings, manufacturing and sales and marketing. This course will address most major components and phases of the drug, biopharmaceutical and medical device product development and cover in detail the various project management methodologies and core competencies associated with each of the essential elements of the product development cycle. Candidates will be invited to apply the principles learned in class to their real-life environment via custom designed projects.

BUSA40700: Social Media Marketing - 3.00 Units

The marketing world is rapidly changing, and so are the methods being used to reach out to and interact with customers. While traditional print media are still dominant, new media channels such as Twitter and Facebook are taking the marketing world by storm. Examine interactive marketing opportunities beyond websites, including blogs, vlogs (video blogs), forums, e-mail campaigns, social networking, communities, podcasts, mobile computing, and even virtual reality. In addition, study the implications of social media marketing on customer loyalty and engagement. This media allows consumers a greater public voice and role, creating numerous opportunities and ramifications for marketers as groups share, sell, and swap goods and information.

Learning Objectives:

- Gain insight on the operation and application of major social networking platforms
- Learn blogging, content curation, and social media management tools
- Learn to define business vision and goals, brand voice and how to align them with social media marketing activities
- Define a target market, how to engage with them and those who influence them in their respective communities
- Learn to create a marketing action plan based on desired outcome, and how to integrate social media into the mix

BUSA40707: Board Development, Relationships & Management - 2.00 Units

BUSA40715: Project Planning and Scheduling - 3.00 Units

Take a deep dive into planning and scheduling principles. Acquire knowledge and techniques necessary to initiate, plan, estimate, and schedule your next project successfully.

You will learn how to:

- Skillfully develop product scope (requirements) and understand its importance as the foundation for a successful project
- Create a project charter, scope statement, schedule, and cost baseline
- Develop a Work Breakdown Structure (WBS) and WBS dictionary; network diagrams; critical paths; and communication agreements
- Identify project risks, analyze their effects on the project and determine how to respond to them as part of the planning process
- Discover how current applications of earned value management concepts can be used to control schedule and cost against the project's original baseline values
- Apply scheduling tools to manage and analyze project schedules
- Understand the importance of the critical path in the determination of the project's completion

Work within project teams to experience the planning process while generating associated planning documents. Other topics include project software, team contracts and interpersonal skills.

This course will provide 27 education hours. To receive Professional Development Units (PDU's), submit your UCSD transcript to the Project Management Institute (PMI).

BUSA40716: Biotech Patent Law - 2.00 Units

Intellectual property rights are essential to the survival of life science companies. This course presents critical information to create and maintain the proprietary position required for commercialization and life cycle management. It provides an overview of key IP law issues, including distinct nuances for the life science industry. Class participants will study criteria for identifying and patenting their technologies, issues associated with patent enforcement and litigation, as well as patent issues associated with due diligence, freedom to operate, and investment. This course also provides a basic understanding of various kinds of agreements that involve intellectual property. The course is designed for life science executive, scientists and researchers, scientific directors, business development and tech transfer managers, investors and industry analysts seeking to acquire a basic understanding of these topics and the ability to identify key issues.

BUSA40726: Sustainable and Environmental Management Reporting - 3.00 Units

Learn how to more accurately determine, manage and report your company and sector performance through environmental management reporting—a growing industry with emerging job opportunities. Explore informal and prescriptive techniques for environmental accounting and reporting. Discover the flexibility of a range of environmental management reporting techniques, and how to tailor reporting to meet your needs. Learn the many forms that environmental management reports for governmental and non-governmental organizations and agencies may take, including sustainability reporting under the Global Reporting Initiative program. Other important topics will include tying environmental costs to products or services, instead of to overhead, to prevent good products from subsidizing environmentally bad products. USGBC Continuing Education Hours: This course is approved by GBCI for 27 CE Hour(s). For more information go to USGBC-Continuing Education.

BUSA40729: Introduction to Sustainability - 3.00 Units

Get an introduction to the basics of environmental sustainability - energy, transportation, water use, recycling, and natural resource life cycles. Discover ways individuals, organizations, and governments can manage resources in a responsible manner, with minimal impact on natural surroundings and climate. Learn scientific methods for measuring the effectiveness of eco-friendly practices, whether in kilowatt-hours of energy use, acre-feet of reclaimed water, or greenhouse gas emissions. Find out how and why leading-edge organizations are auditing their own practices and committing to long-term sustainability programs.

Learning Objectives:

- Understand sustainability challenges and opportunities
- Be able to define key concepts and understand sustainability practices used by leading businesses and organizations
- Understand the history and policy framework for sustainability
- Describe the elements of creating a sustainability plan
- Learn about innovation in the field of sustainability

BUSA40737: Environmental Sustainability Assessment Practicum - 3.00 Units

This independent study is the culminating course in the Sustainable Business Practices Certificate. Students will apply knowledge and skills gained in the

prerequisite courses to work toward implementing sustainable practices at a local business, government entity, non-profit or other organization. Students will spend at least 45 hours on site at their selected entity, collecting data while keeping a journal. Students will perform an assessment and compile a report for their entity. Students will make recommendations for improving programs and operations, and evaluate the economic impact of those recommendations.

BUSA40739: California Environmental Quality Act (CEQA) - 2.00 Units

Potential environmental impact is an important consideration in all planning and development projects. Review the CEQA process in detail, including its 17 key environmental issue areas. Learn how to determine if an action is a project under CEQA and the level of environmental review required (exemption, negative declaration, EIR). Discuss roles and responsibilities of a lead agency, responsible agency and trustee agency. Study the differences between a Negative Declaration and EIR. Learn how to use an initial study to streamline analysis, and how to determine direct, indirect, and cumulative impacts. Explore the impact of case law on CEQA documents, the role of public participation, and other topics including climate change and water supply. Read case studies that illustrate current CEQA issues, and conduct a review of a project.

AICP Credit: AICP members can earn Certification Maintenance (CM) credits for this activity. For a list of additional AICP CM Events at UC San Diego Extension go to American Planning Association.

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Other Credits: UCSD certifies this activity is approved by the State Bar of California for 12 hours of MCLE credit.

BUSA40742: The Sustainable Supply Chain - 3.00 Units

Managing a supply chain that is not only efficient, but encourages the sustainability of resources has become a challenge for companies of all sizes. Selection of socially responsible suppliers, mode of transporting raw materials, product design and disposal are just a few of the factors related to implementing a Green Supply Chain. Understand how actions taken within supply chain processes impact the depletion of resources on a global scale. Learn about successful supply chain best practices which have been implemented by corporations who have reduced their carbon footprint and improved their environmental performance. Course material will focus on presenting concepts and processes to enable students to formulate unique solutions applicable to their own organizations.

BUSA40770: Strategic Marketing Planning - 4.00 Units

Enrich your understanding of marketing planning tools and discover how to leverage them in the planning process for strategic competitive advantage. This course is a comprehensive discussion and application of marketing planning tools and is intended to provide students with an in-depth knowledge of the marketing planning process. Explore topics such as market segmentation, competitive assessment, SWOT analysis, portfolio management, product positioning, marketing mix considerations, resource allocation, and marketing execution. Students will develop a strategic marketing plan for a product or service of their choice.

Learning Objectives:

- Apply techniques for analyzing Industries and Competitors
- Apply theories of Market Segmentation
- Learn and apply the tools for a Marketing Audit
- Set Marketing Objectives and Strategies
- Understand and apply the Marketing Mix for effective resource allocation
- Develop an Executable Marketing Plan

BUSA40785: Transfer Pricing - 2.00 Units

Engagement in complex transactions by multinational corporations results in compliance requirements issues in multiple tax jurisdictions. An increase in the regulatory environment causes corporations to face more scrutiny in the enforcement of the arm's length principle on intercompany pricing by the U.S. and by international tax authorities. This introductory course is appropriate for accounting and finance professionals seeking to increase their knowledge in the international pricing of intercompany transactions (e.g., goods and services in a company's supply chain) as it relates to regulatory compliance, financial reporting and strategic planning.

BUSA40788: Managing People Via Projects and Processes2 - 6.00 Units

BUSA40789: Politics & Public Policy of US Healthcare - Washington, D.C. - 4.00 Units

Healthcare leaders face an extraordinarily challenging environment: continued implementation of health reform, a sluggish economy and quickly evolving clinical and reimbursement systems. Smart healthcare leaders want to know who within the various levels of government is responsible for implementing the provisions of health reform and how to influence them for the good of their patients.

During this week-long immersion in Washington, DC, you will initiate relationships with key legislative, agency and industry leaders through meetings in and around Capitol Hill to ensure your voice is heard – both during the trip and afterward. You'll learn about the roles federal, state and local government play in healthcare and the best times to communicate your position. Ultimately, the skills and relationships that result will help you advocate more effectively and assume greater leadership responsibility.

BUSA40791: Financial Management for Nonprofit Organizations - 2.00 Units

The leaders and staff of nonprofit organizations must ensure that accounting records and financial statements are accurate and comply with regulatory requirements. This class covers basic nonprofit accounting rules, procedures and best practices. Offering tips for improving financial efficiency and operational effectiveness, the curriculum also provides the "big picture" perspective that is so important to potential donors. Learn strategies to enable your organization to become stronger, more effective, and more sustainable.

Learning Objectives:

- Gain insight on the different types of non profits based on their funding models and how that impacts financial systems and reporting
- Understand a basic set of non profit financial statements and know the specialized accounting rules that apply
- Be able to analyze the financial health of an organization using the financials
- Learn to navigate form 990 and other compliance requirements
- Understand the concept of internal financial controls and management's responsibility in that area

BUSA40800: Career Preparation Strategies - 2.00 Units

For both the hiring manager and the job seeker, the recruiting process contains opportunities and obstacles. This class will introduce students to recruiting practices. Perspectives and activities of the HR department, the hiring manager, and the job seeker will be examined. The course will also look at special considerations present in the recruiting and hiring of workers in the U.S and abroad.

Learning Objectives:

Upon successful completion of this class, students should be able to answer the following questions:

- What are commonly used recruiting devices?
- How do employers plan for and conduct recruiting activities?
- How does a job seeker prepare to find a job?
- How can a job seeker leverage knowledge of the recruiting process to increase the odds of securing employment?

BUSA40801: Foundation Principles for Career Advisors - 4.00 Units

This first course will explore the basic skills required to perform effectively as a Career Advisor. Career Development is an interdisciplinary field which takes into account workplace dynamics and individual growth and change. Career advisors help focus clients’ skills, interest and values while teaching them how to gather information about workplace options and helping them develop strategies to reach their career goals.

The next scheduled offering will be for Fall 2018.

BUSA40803: Transformational Leadership - 3.00 Units

The ability to transform and adapt as leaders to meet the demand of an ever changing business environment is crucial in our current economy. Continual growth and personal development are imperative for leaders to be successful in our complex global economy. Transformational Leadership distinguishes between the skills of management and leadership, focusing on fundamental transformation from the inside out. This course helps individuals assess both how they show up as leaders (their “Way of Being”) and how they get work done (“Way of Doing”), which are equally important for leadership success. Transformational Leadership focuses on the development of leadership competencies in six fundamental intelligence areas:

- Cognitive
- Emotional
- Relational
- Somatic
- Spiritual
- Integrative

Transformational Leadership uses assessment and experiential coaching/development techniques designed to build self-awareness, mindfulness, and expand one’s ability to be self-correcting, self-generating in creating desired personal and organizational results, while creating long term excellence in performance.

This course will provide 27 education hours. To receive Professional Development Units (PDU’s), submit your UCSD transcript to the Project Management Institute (PMI).

For questions, contact: BizManagement@ucsd.edu

BUSA40805: Introduction to Six Sigma (Yellow Belt) - 2.00 Units

Six Sigma principles can be effectively applied to virtually any business. Even Major League Baseball has embraced Six Sigma, calling it “Winning”. Step up to bat and take a swing at understanding the basic fundamentals of Six Sigma through the lens of baseball. This six week course, will demonstrate the advantage of applying Six Sigma principles using this non-traditional case study. The participant will learn how to understand and speak the language of Six Sigma as well as gain the ability to apply basic principles. The course is designed for those who want to become stronger contributors to a Six Sigma organization, those who want to be able to evaluate the benefit of bringing Six Sigma into their business, or those who would like to instantly increase their marketability by learning this business-wide, process improvement method.

Learn about the various Six Sigma belts and which one is right for you. View tutorial

BUSA40806: Skill Development for Career Advisors - 4.00 Units

This second course will provide information for knowledge of basic skills required to perform effectively as a Career Advisor. Career advisors help focus clients’ skills, interests and values, while teaching them how to gather information about workplace options and helping them develop strategies to reach their career goals. A Career Advisor has a responsibility not only to help clients learn and grow to be successful, but also to keep learning themselves. Career Development takes into account a wide range of information from many diverse areas. The Career Advisor with current information, skilled at their role and with a great attitude has the ability to impact and make a difference in the lives of many!

BUSA40810: Specialty Areas for Career Advisors - 4.00 Units

This third course will provide information designed to introduce and educate Career Advisors about innovative programs and resources created to assist targeted populations and specialty areas, including: Veterans, older workers, ex-Offenders, ESL students / immigrants / refugees, disabled clients, and displaced professionals. Students will utilize a number of learning approaches, including structured activities, group discussions, guest speakers and lectures and project development. Class Teams will be established for various activities and assignments. The overall intent of the class design is to provide a learning climate that promotes understanding, awareness, skills and building a practical knowledge base to be used on the job.

BUSA40822: Real Estate Tax and Accounting - 2.50 Units

Gain an overview of tax and accounting methodology requirements, and strategies in relation to the development and management of rental real estate and other real estate transactions. Topics covered include: accounting reports; tax depreciation; Schedule E preparation; real estate loss rules; and Like-Kind Exchange Tax strategies. Course material is especially applicable to property managers, landlords, real estate investors, and accounting professionals.

BUSA40824: Business Bookkeeping-An Introduction - 3.00 Units

Students with no bookkeeping or accounting knowledge will be introduced to major concepts and processes in bookkeeping as the class works through the annual accounting cycle. Topics include: introduction to bookkeeping and accounting concepts, transactions through the journal and general ledger, financial reports (Income Statement and Balance Sheet) and closing the books at year’s end. This class may be taken in preparation for the Certified Bookkeeping Program offered in the Fall quarter. The course fee includes \$30 for materials. If the student withdraws from the course, \$30 will be withheld from the course refund but the student may retain the materials.

BUSA40827: Quantitative Financial Methods, Theory and Application - 1.50 Units

Quantitative financial methods provide an empirical, verifiable analytical approach to business decision making. Instruction will involve an interactive, problem-based learning approach integrating theory & practice. Students will become well versed in how to solve business problems through rigorous application of quantitative methods by analyzing problems with an interdisciplinary financial decision framework. Topics covered: Understanding and utilizing time value of money; financial metrics for planning, budgeting, analysis and decision making; Black Scholes options pricing model for financial and capital projects; applying game theory for maximizing gains and minimizing losses within prescribed financial constraints.

BUSA40828: Talent & Sourcing Strategies - 2.00 Units

An organization must be able to attract top talent and the right cultural fit in order to achieve its strategic goals and optimal profitability. When an organization leverages the combined power of its culture, branding,

marketing, technology, and people, it finds that profits and overall performance skyrocket. Discover how to look at sourcing strategically and learn how to utilize social media and other technical platforms to attract the best people. Explore hiring for cultural fit as the most important deciding factor in acquiring the right talent.

BUSA40829: Annual Giving - 3.00 Units

Annual giving plans incorporate many fundraising strategies from direct mail to capital campaigns. Explore an array of tools to bring in money each year. Discuss the links between an organization's mission and case for support. Examine the annual campaign process, building a donor and constituency base, donor communication and recognition, identification and cultivation of annual donors and how to utilize volunteers in each of these areas. Learn ways to best use media and direct communication tools, and to take advantage of special events and corporate and cause marketing opportunities. Other topics include: direct mail, online giving, grants, prospect identification, obtaining a gift, gift renewal and upgrading, budgeting, planning techniques and donor recognition.

BUSA40836: Directed Studies in Marketing - 2.00 Units

Apply all the skills you have learned throughout the Professional Certificate in Marketing by implementing a comprehensive marketing plan at a business or other organization. Choose a project tailored to your industry of interest and gain practical experience in marketing. Work with an advisor who will coach the project throughout the quarter. Elements of the project include: assessing client needs, developing solutions through a professional marketing plan, presenting to the client, and evaluating the impact of the recommendations.

BUSA40837: Directed Studies in Human Resources - 2.00 Units

Apply all the skills you have learned through the Professional Certificate in Human Resources Management. Work with an advisor who will coach you through a hands-on research or experiential learning project. This resume-enhancing project will result in either a completed white paper or a final project and presentation.

BUSA40838: Foundation Principles in Managing People - 1 - 6.00 Units

BUSA40845: Health Sci Leadership Academy - 16.00 Units

BUSA40859: Leading from the Middle - 3.00 Units

Mid-level professionals are frequently tasked to lead their teams to do more work with fewer resources, to champion new changes amidst uncertainty, and to resolve interpersonal conflicts. By learning to grasp key leadership tenets and management best practices, the middle manager will be better positioned to manage department performance. This course offers skill-building in areas such as: analyzing power dynamics in groups and organizations; communicating effectively; building strategic partnerships; thinking critically; identifying ethical dilemmas; and balancing planning, action and evaluation. Additional topics covered will include the art of constructive dialog, leveraging corporate values and culture, and connecting with an organization's mission. The particular challenges of "managing up" will also be addressed.

This course will provide 27 education hours. To receive Professional Development Units (PDU's), submit your UCSD transcript to the Project Management Institute (PMI).

BUSA40860: Agile Power Practices - 3.00 Units

Understanding organizational stability and agility is an essential skill for all program and project managers. In this course you will gain an overview of the power tools used in Agile methods and explore iterative, lean, and Agile practices.

Go beyond the "text" of books available on the subject and be able to:

- Define common terms used in Agile
- Explain the most commonly practiced methods for Agile
- Develop a working knowledge of Agile concepts and methods
- Describe the important leadership differences between classical and Agile project management
- Evaluate your work environment to implement Agile methods
- Describe the important differences in leadership needed for Agile environments
- Apply course learning to real-life situations
- Develop action plans for continuous improvement on your teams

This course will provide 27 education hours. To receive Professional Development Units (PDU's), submit your UCSD transcript to the Project Management Institute (PMI).

Project Management: About the Field | Alicia McLain, M.A., PMP, CSM - Video

BUSA40862: Project Management Essentials in Science and Technology - 3.00 Units

Effective project management skills are important to professionals in any industry. This particular course is geared to those students interested or working in the life sciences, engineering, and technology fields. Students will learn how to define, plan and execute a project whether the goal is simple or complex; gain the tools and knowledge for delivering projects on time and on budget, while meeting performance specifications; explore the basic components of project management and the project life cycle. This course will also help you determine the correct project through strategic portfolio analysis; create a successful charter; assemble and manage a team; analyze and control risk; monitor project milestones; and close out the project.

This course will provide 27 education hours. To receive Professional Development Units (PDU's), submit your UCSD transcript to the Project Management Institute (PMI).

BUSA40864: Fraud and Forensic Accounting - 4.00 Units

This course introduces the tools for identifying and discovering fraud in a business environment. Fraud heuristics, theory and criminal profiles are studied through case studies. Accounting investigation techniques are explored. Topics include: cash misappropriation, corruption, financial statement fraud, and cybercrime.

BUSA40867: Conscious Project Management - 3.00 Units

There is a growing trend in organizations toward a more conscious approach to business, where successful organizations are adopting a Stakeholder Relationship Management (SRM) approach. This approach takes into account the needs of all stakeholders and seeks win/win solutions in business decisions so that all stakeholders are treated equally and benefit from the organization's success. Organizations that take this approach tend to significantly outperform competitors. The project management profession is also moving in this direction, and this course will provide students with the knowledge, tools and techniques to effectively work in the new, more enlightened, environment. Students will learn the importance of communication, leadership and motivation in the pursuit of project success.

BUSA40869: Taxation: Practice, Procedure and Ethics - 3.00 Units

Tax professionals will benefit from this survey class covering the procedural aspects of representing clients in front of the IRS. The course will help you understand and prepare to handle practical issues regarding the duties, responsibilities and ethical obligations of all parties (the tax preparer, the client, and the employer) when dealing with the Internal Revenue Service, the IRS Chief Counsel's Office, and/or the Department of Justice Tax Division.

Topics covered will be relevant to those preparing federal tax returns. They will include: IRS examinations and appeals; deficiency assessments; penalties; and criminal tax prosecutions.

BUSA40872: Components of Workplace Compensation - 3.00 Units

In exchange for their time, talents and efforts, workers expect fair and motivating pay. This class covers the basics of compensation theory and practice. Job analysis and job evaluation, pay equity considerations, market rates and surveys, the various types of compensation, and other related topics of interest to human resources professionals will be explored. Students will be introduced to incentive pay concepts and to major pay regulations. Understanding will be reinforced with exercises and applied learning activities.

BUSA40874: Strategic Talent Acquisition - 3.00 Units

Effective talent acquisition strategies take a multi-year view of the workforce necessary to execute an organization’s business strategy today and well into the future. This includes recruiting with agility for skills that may not be necessary today, but may become critical to future organizational success. Through this course, students will learn how to: effectively source positions that drive business outcomes; analyze retention and attrition data to understand critical position drivers; and, ultimately, how to engage with stakeholders to optimally execute the recruiting plan. Students will also explore how enlightened HR professionals create talent pipelines that leverage their employment brands and enhance business outcomes as organizations adapt to ever-changing market conditions. Topics include aligning the HR function with business strategy, developing a talent profile, deploying talent acquisition techniques and tools, and identifying and measuring sourcing success.

BUSA40875: Fundamentals of Employee Benefits - 3.00 Units

Benefits, especially employee health plans, are an important part of any total rewards package. Benefit costs are increasing rapidly and unpredictably, creating a challenge to HR professionals. Learn the basics about how to design, evaluate, implement, and administer employee benefits that are relevant to employees, cost-effective for the company, and competitive enough to attract and retain workers. This class will cover the many types of benefits available, the regulatory environment, compliance requirements, selecting the best partners to meet your benefit goals, and important trends in the marketplace.

BUSA40877: Performance Management - 3.00 Units

Effective performance management is the key to leveraging employee talent and creativity in a dynamic 21st century workplace. When done correctly, it becomes fundamental to an organization's ability to select, train, retain, reward, and motivate the right talent in the right ways to execute strategy. This course focuses on performance management as a contribution to organizational strategy, linking all the elements of organizational success into a single, aligned approach. Students will learn how to design practices and administer a system that fully engages, and optimizes the performance of employees in the success of the enterprise.

BUSA40878: Customer Experience (CX) - 3.00 Units

Businesses that provide extraordinary customer experiences are better and different than their competitors and more profitable and longer lasting than their competition. Companies like Apple, Amazon, Starbucks, and newer start-ups including Square, Uber and Tesla, dominate their industries and marginalize competition. These “Experience Maker” companies have surpassed products, services, and price toward the purpose-built customer experience and the user experience within it. This class will explore the culture, the unique understanding of people, and the markets and decision making that guide the top five percent of experience companies. You will leave the class with actionable business management insights and best practices of

how leaders surpass product, service, and price-based business with purpose-built customer experience.

Learning Objectives:

- Understand what customer experience is and how it is used by leading companies to differentiate from the competition

- Understand the differences between customer satisfaction and customer experience and what it means for business strategy and product and service development decisions

- Learn about the impact of the social media in customer experience and its effect on company growth

- How to innovate customer experiences and gain knowledge on how leading companies are doing this

- Techniques to transition your organization toward a CX focus: making the case; resources; structures

BUSA40879: Digital Marketing - 3.00 Units

The cornerstone of every targeted marketing plan should be a digital marketing strategy. Students in this course will explore the development, production and implementation of digital-marketing delivery methods including, but not limited to, email marketing, web-based marketing, search-engine optimization (SEO), online advertising, and social media. The curriculum will introduce tools to appropriately measure and evaluate the effectiveness of digital-marketing campaigns that are designed to improve the experience of the consumer. New trends, as well as key opportunities for innovation, will also be included.

Learning Objectives:

- Understand the importance of a strong online presence and how it is achieved through strategic digital marketing practices

- Learn the core digital marketing channels and how they are managed in a business setting

- Understand how to evaluate the performance of each marketing channel using ecommerce metrics

- Understand how to interpret web analytics data critically, and how to identify key takeaways to make actionable business decisions

- Acquire tangible tools to build a digital marketing strategy

BUSA40880: Content Marketing - 3.00 Units

Content marketing is defined as the marketing and business process for creating and distributing relevant and valuable content to attract, acquire, and engage a clearly defined and understood target audience — with the objective of driving profitable customer action. Well-developed content is the heart of a successful marketing campaign.

In this course, students will learn to:

- Create content for a variety of industries and platforms

- Plan and create content for high-impact campaigns

- Create compelling communication with current and prospective customers

- Ensure that content aligns with the organization’s messaging, marketing strategies, products, and specific audience needs

- Students will also be introduced to various Content Management Systems (CMS), and they will learn to measure, analyze, and report on performance against key indicators

BUSA40881: Directed Studies: The Marketing Experience II - 2.00 Units

The instructor will guide students in developing their own marketing insights focusing on a specific industry. The insights are based on the compilation of

select company information, market and industry intelligence. This information will be applied in the development of questions used to interview one to two real-life California organizations. The interviews of the company will focus on understanding their marketing challenges, how they define and innovate market success. The student will prepare and deliver their marketing insights paper based on a combination of existing (secondary) information and new unique (original-primary) information from their company interview. The market insights development framework includes findings from company and market information, the live interview(s) and the student completing an analysis, implications, insights and conclusions, then selection of reporting method such as paper delivery, review or presentation.

BUSA40882: Essentials of Business Analysis - 3.00 Units

Business analysis is a disciplined approach for introducing and managing change within organizations by defining needs and then recommending solutions to stakeholders. The Essentials of Business Analysis course introduces the role of Business Analysts and highlights their important contributions to organizations and projects. Topics covered can be applied by any professional involved in business analysis functions, whether project leader or staff member, during the implementation of change management activities. Course material will emphasize the areas where business analysts and project managers collaborate for improved requirements and project success.

This course will provide 27 education hours. To receive Professional Development Units (PDU's), submit your UCSD transcript to the Project Management Institute (PMI).

BUSA40885: Sports Marketing - 3.00 Units

This course explores the complex and diverse nature of sports marketing. It applies fundamental marketing concepts to the sports industry, including the marketing mix, consumer behavior, marketing research, segmentation analysis, and assessment of marketing programs specific to sports. Guidelines for the formulation of marketing goals and strategies will be included. Trends, issues, and problems influencing the industry will also be examined.

Course Objectives:

- Identify opportunities in the various niches in the sports industry
- Be exposed to many different jobs within the industry
- Understand the structure of leagues and players unions and how they affect the industry
- Understand the use of licensing in the sports industry
- Learn how to develop a sports product
- Learn how advertising affects both sports and non-sports companies

BUSA40886: Effective Leadership and Teamwork in the Workplace - 3.00 Units

Effective Leadership and Teamwork in the Workplace
 This course, the first of the Gradvantage Leadership and Teamwork certificate program for UC San Diego graduate students and post-docs, introduces you to the various approaches to effective organizational leadership and teamwork. Significant time will be spent utilizing various personality assessment tools to provide you with a comprehensive picture of your leadership and team strengths, preferences, styles, and areas for development. In addition, practice and experiential application will help you develop a strong sense of self, solid communication skills, and effective teamwork strategies.

Topics Include:

- Purpose of teams and team roles
- Team development process
- Communication styles

- Leadership to motivate others for peak performance
- Leadership vs Management
- Situational leadership
- Influence strategies and tactics
- Leadership styles and organizational culture
- Managing conflict
- Conflict styles and assessment
- Giving and receiving feedback
- Building teams and minimizing team dysfunctions
- Presentation skills

Practical Experience:

- Working in multiple roles on a team
- Practicing communication, influence, and management styles
- Giving and receiving constructive feedback
- Delivering a short presentation

Course Typically Offered: Fall

Prerequisites: Acceptance in to the Leadership and Teamwork certificate program.

Next Steps: Upon completion of this course, you will take Project Management for the Collaborative Workplace.

More Information: For more information about this course, please contact drhammon@ucsd.edu.

BUSA40887: Leadership and Teamwork Practicum - 3.00 Units

Leadership and Teamwork Practicum

In this course, the third in the Gradvantage Leadership and Teamwork certificate program, you will put into practice the leadership and teamwork tools skills you learned in Effective Leadership and Teamwork in the Workplace by executing the project you and your team designed during Project Management for the Collaborative Workplace. You will gain the invaluable opportunity to hone your leadership, communication, time management, team dynamics, problem solving, motivation, negotiation, and conflict resolution skills, which are crucial to the success in any workplace. Timely issues in today's turbulent work environments will also be discussed.

Topics Include:

- Project governance and assessment
- Review of project management best practices
- Characteristics of high performing teams
- Project creep and workarounds
- Conflict resolution
- Essential skills for effective presentations

Practical Experience:

Working on a multi-disciplinary team to execute a real-life on-campus project

Course Typically Offered: Winter

Prerequisites: Completion of Project Management for the Collaborative Workplace.

Next Steps: Upon completion of this course, consider taking additional leadership or project management courses to continue to develop your skills.

More Information: For more information about this course, please contact drhammon@ucsd.edu.

BUSA40888: Directed Studies in International Business - 2.00 Units

BUSA40889: Project Management for the Collaborative Workplace - 3.00 Units

Project Management for the Collaborative Workplace

The independence and visibility of a project manager can be invigorating, while the perceived lack of authority can be deflating. In this course, the second in the GradVantage Leadership and Teamwork certificate program, you will learn the project management mind-set, tools, and skills to successfully define, plan, execute, monitor, control, and report a project. Particularly important topics include the project life cycle, fundamental project management processes, development of the project plan, interpersonal management skills, and managing changes during project execution. Skills to help you excel in today's fast-paced working environment are emphasized.

Topics Include:

- Project specification and plan development
- Meeting & facilitation skills
- Team development
- Work breakdown structures (WBS)
- Network schedules
- Resource management
- Monitoring the project
- Project communication
- Change management

Practical Experience:

Working on a multi-disciplinary team to execute a real-life on-campus project

Course Typically Offered: Winter

Prerequisites: Completion of Effective Leadership and Teamwork in the Workplace.

Next Steps: Upon completion of this course, you will take the Leadership and Teamwork Practicum course.

More Information: For more information about this course, please contact drhammon@ucsd.edu.

BUSA40891: Elicitation Techniques for Business Analysis - 2.00 Units

The Essentials of Business Analysis course introduced the role of the Business Analyst and surveyed the five domains of business analysis practices. This course delves into three specific and related skills related to business analysis: Elicitation - how to best draw out information from stakeholders and other sources; Documentation - the creation of culminating documents from the requirements collection process and how to best manage them; and Communication - how to communicate requirements in stakeholder-friendly formats. Coursework will include opportunities to learn and practice the following: analysis of reports, facilitation of focus groups, administration of surveys, and creation of prototypes.

BUSA40892: Business Process Modeling - 3.00 Units

Business Process Modeling provides an introduction to the modeling of business requirements and processes. It is based on a system of postulates, data and inferences presented as an analytical description of an entity or a state of affairs. It requires deconstruction of what is behind the numbers and thus integrates both behavioral and financial considerations when striving to model and forecast future outcomes and events. Students will develop modeling skills so that they are able to formulate a well-posed problem, carry out relevant analysis, interpret results, and make sound decisions

BUSA40893: Solution Assessment - 2.00 Units

In this course, students will be required to show their mastery of business analysis through presentations and case analyses. Learning activities will focus on the application of business analysis techniques learned in previous coursework to: evaluate solutions, identify deficiencies, develop strategies for implementation, and monitor needs for improvements. Each student will document and present findings therefore, demonstrating his or her ability to clearly articulate results and recommendations.

BUSA40896: Principles of Program Evaluation: Theory, Research, and Practice - 3.00 Units

Knowing how to demonstrate the impact of the projects and services that your organization offers is the key to developing and nurturing successful programs. Data is the most effective resource organizations have to review their past efforts and plan for the future. Find out how to conduct routine monitoring and program evaluations and show funders the impact of their investment. Discover the necessary foundation principles to practice the art of evaluating programs and services. Learn the theory of qualitative and quantitative research methods, the principles of monitoring and evaluating programs over time, communication strategies, data visualization, and the limitations of data. The class features a preview of the types of data that exist and are possible for program evaluations.

BUSA40897: Community Data Sources - 3.00 Units

This course teaches students how to access and analyze existing datasets at a community level. Data sources will include information on demographic, education statistics, workforce, environment, crime, and other community data. Students will learn how to clean data, filter for relevant information, and principles of tracking data over time.

BUSA40898: Mixed Methods Research - 3.00 Units

The course provides basic applied quantitative and qualitative research techniques used for evaluating programs. Students will learn how to design surveys, conduct focus groups, develop case studies, create psychographics, and interviewing techniques. This course will also address the ethics of research.

BUSA40899: Research and Evaluation Capstone - 3.00 Units

Students will work with an organization to develop and execute an evaluation under the supervision of one or more faculty members. Note: Prerequisites for this class are the successful completion of the Principles of Program Evaluation: Theory, Research, and Practice; Community Data Sources; and Mixed Methods Research. Students interested in enrolling in the Research and Program Evaluation Capstone without one or more of the prerequisites must submit a request in writing to the Program Representative for an exemption request.

BUSA40902: Employee Selection Tactics - 2.00 Units

Once a pool of job applicants has been identified, the next step is selection. Selection is the process of screening job applicants to determine and ensure that the most qualified candidates are hired based on skills and organizational fit. Understand how to navigate the selection process and accurately evaluate job candidates using various selection tools, such as interviewing, tests, assessments, and background checks. Learn how to: engage with other stakeholders involved in the selection process to develop selection criteria; recognize the legal and regulatory impact on employment testing and assessment; screen applications; prepare and conduct interviews; assess candidates against the selection criteria; and provide input about the final selection. This class will help you to understand why assessment tools work, how to use them, and how to successfully contribute to the selection process.

BUSA40903: Effective Onboarding Practices - 2.00 Units

New employee onboarding and orientation programs are critical initiatives to immediately engage new employees in company culture, avoid turnover during the first few months of employment, and lay foundation for employee success. When done right, onboarding and orientation programs can improve the long-term success of new employees as well as their employers. Onboarding and orientations do not only involve new-hire paperwork and explaining organizational policies; these practices are also designed to effectively assimilate new employees and provide them with the tools to navigate their new surroundings. In this capstone course, learn how to build effective onboarding programs that will help new employees feel comfortable, connected, and productive in their work environment. Evaluate onboarding and orientation practices to continuously increase the effectiveness of the programs.

BUSA40907: Behavioral Finance - 3.00 Units

This course describes how individuals and firms make financial decisions, and how those decisions might deviate from those predicted by traditional financial/economic theories. Students explore the existence of psychological biases in financial decision-making, and examine the impacts of these biases in financial markets and other financial settings.

BUSA40908: Start-up Essentials for Entrepreneurs - 3.00 Units

Building your own company can be one of the most rewarding experiences, however it is often the riskiest and requires a diverse set of skills. As a start-up entrepreneur you must do it all from market research to product development. For those entrepreneurs fortunate enough to come up with the next block buster idea, very often they feel unprepared to take their company to the next level, especially navigating the complexities of venture capital financing.

This nine-week class will create the foundation for students to understand key concepts in building a startup and also how venture financing works. The class will involve a team-based approach to building a new business idea and refining that idea for presenting to investors. Topics covered in this course include: product development, market research, intellectual property, financial terminology, presentation strategies, venture capital and negotiations. As a start-up entrepreneur you must do it all from market research to product development.

BUSA40909: Accounting Ethics - 4.00 Units

This course covers the AICPA Code of Professional Conduct. Students will discuss the conceptual framework and the necessity of ethics in the application of accounting principles, tax preparation and attest services. Throughout the course students will review actual cases where professional accountants have failed to uphold the moral and ethical code and subsequent social and economic damages. Students will learn what it means to be both independent in both fact and appearance. Students successfully completing this Accounting Ethics course will earn 4.0 quarter units which are eligible to be used towards the CA Board of Accountancy's Ethic Study educational requirement for licensure.

BUSA40910: Financial Modeling with Excel - 2.00 Units

This course will introduce students to financial modeling using MS Excel. Concepts such as pivot tables, formulas, basic data analysis will be covered. Course topics will involve various financial scenarios in order to build analysis and decision making skills.

BUSA40917: Advanced Digital Marketing - 3.00 Units

BUSA40918: Payroll Taxation - 3.00 Units

This course introduces federal payroll accounting functions to students including:

- Paying wages, withholding depositing and reporting taxes, and the preparation of financial forms

- Understanding basic reporting of wages and taxes for Forms 940, 941, 944, 945, W-2, W-3, and 1099.

- Making journal entries for the payroll distribution, payroll-related expenses, payroll liabilities, and the remittance of employer taxes

Through learning exercises, the goal of the course is for students to achieve a proficient understanding of the key elements of payroll accounting which can be successfully applied in a business setting.

The Mastering Payroll text published by the American Institute of Professional Bookkeepers (AIPB) will be used for this course. It must be purchased directly from <http://bookstore.aipb.org/> before the start date of the course.

Students achieving the minimum required grade on the course final examination are eligible to receive a certificate of course completion from the American Institute of Certified Bookkeepers (AIPB). This AIPB certificate represents achievement of one of the steps for designation as a Certified Bookkeeper.

BUSA40919: Business Economics - 2.00 Units

This introductory course integrates the study of economics with a myriad of business and financial related decisions. Students will gain an awareness of business and financial markets as well as relevancy of economics to the real business environment. Through lectures, discussions and course material, students will develop an understanding of current economic ideas and their relevancy to business and the financial decision-making process. Students will also acquire knowledge in quantitative/analytics as well as communication skills, and learn about their application in the business world.

Students will have the following learning opportunities:

- Learn Economic theories and quantitative methods to analyze business enterprise.

- Evaluate factors contributing to the diversity of firms' competitive positions and the relationships of firms with labor, capital and the product market.

- Integrate economic principles and strategies into daily business practices.

- Understand capital acquisition, profit generation, production efficiency, and overall management strategy.

- Analyze how other economic external factors influences business decisions such as changes in industry regulations or unexpected shift in prices of production materials.

- Comprehend the idea of utilizing available resources to maximize production while minimizing waste.

- Study how the Federal Government's Fiscal Policy and the Federal Reserve's Monetary Policy impact the business enterprises.

BUSA40920: The Practice of Designing and Running School Bonds - 2.00 Units

Because school bonds create a public financial obligation, officials who propose and manage such bonds have an ethical obligation to ensure their legitimacy and effectiveness. Measures should be considered to strive for the efficient use of public funds.

This course draws upon scholarly and practitioner knowledge to guide students as they answer three critical questions that organize the class:

- What legitimates a need for a school bond? If legitimate, how does a school bond get to the voter for decision?

- How do principles of effective public management apply specifically to school bonds?

- What best practices exist to ensure school bonds are transparent so they do not lose legitimacy?

Intended Audience: Professionals who are interested in cost-effective, transparent, legally-compliant, and—most notably—successful school bonds:

- Superintendents and Assistant Superintendents
- Principals on the district management track
- Other School District Staff and Senior Leaders
- Professionals in industries that service public schools

Learning Outcomes:

Assess the legitimacy of a need for a school bond, and if legitimate, describe the process to get a bond to the voter for a decision.

Analyze how principles of effective public management apply specifically to school bonds.

Define and recognize best practices that ensure school bonds are transparent and ethical so they do not lose legitimacy.

BUSA40922: - 3.00 Units

BUSA40923: - 3.00 Units

BUSA40924: - 3.00 Units

BUSA40925: - 2.00 Units

BUSA40926: - 3.00 Units

BUSA40927: - 2.00 Units

BUSA40928: - 3.00 Units

BUSA40929: - 3.00 Units

BUSA40930: - 2.00 Units

BUSA40931: - 2.00 Units

BUSA40932: - 3.00 Units

BUSA40933: - 3.00 Units

BUSA40934: - 3.00 Units

BUSA40935: - 2.00 Units

BUSA40936: - 3.00 Units

BUSA40937: - 3.00 Units

BUSA40938: - 3.00 Units

BUSA40939: - 3.00 Units

BUSA40940: - 3.00 Units

BUSA40941: - 4.00 Units

BUSA40942: - 6.00 Units

BUSA40943: - 6.00 Units

BUSA40944: - 6.00 Units

BUSA40945: - 3.00 Units

BUSA40947: - 3.00 Units

BUSA40948: - 2.00 Units

BUSA40949: - 2.00 Units

BUSA40950: - 3.50 Units

BUSA40951: - 1.00 Units

BUSA40952: - 3.00 Units

BUSA40953: - 2.00 Units

BUSA40954: - 3.00 Units

BUSA40955: - 3.00 Units

BUSA80018: Achieving Success in Public Participation - 0.00 Units

Involving the public in planning projects can result in outcomes that better meet community needs and hopes, and have stronger political support for implementation. But it can also result in delays, unexpected controversy, high-jacking by special interests, decision-maker apprehension, and even complete project abandonment. In this two-day workshop, participants will learn strategies and tools to achieve successful outcomes in the public arena, with a focus on community and environmental planning and the CEQA process. Special topics include advisory committees, online engagement and social media, outreach with underrepresented communities, interactive public workshop formats, and pop-up outreach. The workshop will also explore right-sizing outreach programs, and when it is to your advantage to go above and beyond CEQA public involvement requirements. Learn how to integrate these kinds of engagement tools as part of a multi-pronged approach for better representation of the full community spectrum, including the voices from the middle that are essential for building consensus and support.

AICP Credit: AICP members can earn Certification Maintenance (CM) credits for this activity. For a list of additional UC San Diego Extension AICP CM Events go to American Planning Association.

CM | 13.5

CM | 0.5 | Ethics

BUSA80020: HR Analytics Workshop - 0.00 Units

BUSA80021: Money Essentials Series: Taxes - 0.00 Units

BUSA80022: Money Essentials Series: Financial Planning I - 0.00 Units

BUSA80023: Money Essentials Series: Financial Planning II - 0.00 Units

BUSA80024: Money Essentials Series: Estate Planning - 0.00 Units

BUSA80025: - 0.00 Units

BUSA80026: - 0.00 Units

BUSA80027: - 0.00 Units

BUSA80028: - 0.00 Units

BUSA80029: - 0.00 Units

BUSA80030: - 0.00 Units

BUSA80031: - 0.00 Units

BUSA80032: - 0.00 Units

BUSA80033: - 0.00 Units

BUSA80036: - 0.00 Units

BUSA90005: WIT Social Entrepreneurship & Leadership - 1 - 6.00 Units

This social entrepreneur and leadership development course is focused on equipping students grades 9-12 with the skills needed to become entrepreneurs and leaders in their community. All students will participate in the design and launch of a sustainable social enterprise.

BUSA90006: WIT Social Entrepreneurship & Leadership - 2 - 6.00 Units

This social entrepreneur and leadership development course is focused on equipping students grades 9-12 with the skills needed to become entrepreneurs and leaders in their community. All students will participate in the design and launch of a sustainable social enterprise.

BUSA90013: Leadership and Character 1 - 1.50 Units

This course showcases individuals who demonstrate character and leadership and encourages students to identify with at least one. It helps students develop their own leadership skills. The course has students examine the difference between good performance and great performance; the degree to which one puts the interest of others ahead of their own; willingness to do things for others without regard for what's in it for them; the ability to coach and mentor; to be able to make decisions and recommendations that benefit the good of everyone; and who have the courage and trust of others. They are willing to speak up, even when expressing an unpopular view. The course looks at George Washington and his leadership in the face of adversity; students engage with a Holocaust survivor who stood up for what they believed in, even when others didn't; and they listen to a leader who has made an impact on the lives of students as a coach or mentor.

BUSA90014: Leadership and Character 3 - 4.50 Units

This course showcases individuals who demonstrate character and leadership and encourages students to identify with at least one. It helps students develop their own leadership skills. The course has students examine the difference between good performance and great performance; the degree to which one puts the interest of others ahead of their own; willingness to do things for others without regard for what's in it for them; the ability to coach and mentor; to be able to make decisions and recommendations that benefit the good of everyone; and who have the courage and trust of others. They are willing to speak up, even when expressing an unpopular view. The course looks at George Washington and his leadership in the face of adversity; students engage with a Holocaust survivor who stood up for what they believed in, even when others didn't; and they listen to a leader who has made an impact on the lives of students as a coach or mentor.

BUSA90016: - 3.00 Units

BUSA90017: - 3.00 Units

BUSA90018: - 3.00 Units

BUSA90019: - 3.00 Units

CHEM40004: - 4.00 Units

CHEM90003: AC - Research Scholars - 6.00 Units

Research Scholars is the premier component of Academic Connections. This component is targeted for students who demonstrate superior academic potential and intellectual curiosity. Research Scholars faculty are nationally and internationally renowned UCSD faculty and researchers in established and emerging areas of science. These faculty work one-on-one in their state-of-the-art laboratories and facilities with these high achieving and high potential high school students in a variety of research experiences within the fields of biology, biochemistry, chemistry and nanotechnology. The faculty are dedicated to academic excellence and engage the students in problem solving and discovery. This intensive program provides the confidence and foundation for each of the students to be successful in their future academic endeavors and gain long lasting friends from across the country and internationally.

CHEM90004: Culinary Chemistry & Design - 0.00 Units

Knowing how to safely work in the kitchen and create great food is a multi-faceted skill: it's a science, an art, encompasses elements of nutrition, can reflect culture, and ultimately is a form of personal expression. When food is prepared in a fun and responsible way, the benefits of having an inspired junior chef in the house are priceless. In this class, students learn the importance of kitchen safety, cleanliness, food choices, and experience the hands on fun of playing with their food in the presentation phase. Students learn about nutrition, organic and locally sourced foods and are introduced to basic culinary vocabulary. We learn what it means for people with specific dietary trends/styles/restrictions such as: eating vegan, paleo, gluten or lactose free, and being mindful of people with severe allergies. We conduct experiments to figure out if the old 'taste bud map' is real, or a myth.

CHEM90018: Research Scholars - 6.00 Units

The purpose of Research Scholars is to provide an opportunity for high school students to pursue independent scientific research alongside members of the prestigious UC San Diego faculty. Students will be given the opportunity to explore a variety of academic disciplines including life sciences, health sciences, physical sciences, arts, humanities, and social sciences. Some students will choose to dedicate time working in a lab or science facility with world renowned researchers and professors. Other students will study fields such as humanities or social sciences. These students will have the opportunity to engage in field research and in-depth analyses of their chosen topics. All Research Scholars will receive guidance, support, and supervision throughout the valued learning process of designing and implementing his/her research project.

Each Scholar will be paired with a faculty mentor whose special expertise and interests will be matched, as closely as possible, to the student's research interests and career goals. Students will either assist the faculty member in an ongoing research project or work collaboratively with the mentor in designing a new project of mutual interest.

CLRE40004: - 4.00 Units

COGS90001: Neuroscience: From Brain to Behaviors - 6.00 Units

This course offers an exciting introduction to neuroscience. Through a combination of lecture, laboratory experiments, and group projects, students will explore how the brain works and how neuroscientists design experiments to discover new brain functions. This class will begin with an introduction to the anatomy of the brain, the neurons that compose it, and the methods of communication between these neurons. Then, students will explore how changes in the environment (sensory cues) are represented by the brain and processed to produce appropriate behaviors (motor outputs). Finally,

students will investigate disorders of the nervous system to better understand the devastating consequences of any disruption to the complex functioning of the brain.

Students will be introduced to the model organism *C. elegans*, a tiny nematode worm, used by neuroscientists to study the genes and neurons that are responsible for producing particular behaviors. The relatively simple nervous system of *C. elegans* and its repertoire of quantifiable behaviors will be the basis for several laboratory experiments into the neural basis of behavior.

Many sub-fields of neuroscience will be explored in this course to provide a broad overview of how the brain works which should be useful to everyone, but especially to students interested in medicine, biology, psychology, chemistry, or neuroscience.

COGS90002: Introduction to Cognitive Science - 6.00 Units

Cognitive science is the study of the mind through psychology, neuroscience, computer science, linguistics, anthropology, and philosophy. In short, it's thinking about how we think. We'll learn about the brain, artificial intelligence (robots), and how we produce and understand language. We'll explore many topics like how we learn and perceive the world around us, experimental techniques like fMRI and EEG, and skills like statistics and computer programming. The course will also highlight the importance of cognitive science and the many ways it is all around us. Our exploration of cog sci will take numerous forms, such as reading and writing, discussing and listening, and experimenting and observing.

COGS90003: Minds, Machines and Mathematics - 6.00 Units

Cognitive science encompasses a variety of disciplines concerned with how minds receive, store, retrieve, transmit and transform information. Mathematical and computational models for representing and processing information have been at its conceptual center from the beginning. This course introduces topics in philosophy and math that motivated formalization of reasoning and knowledge representation 100+ years ago, how computer science emerged from that, what early models of human and artificial intelligence looked like as a result, and some of the challenges these models face(d); in parallel, students are introduced to foundational tools in math and computation and work with them in a simple programming environment to gain intuitions about formal models and see them play out in concrete scenarios.

COGS90004: Gray Matters: Brain Function and Neural Plasticity - 6.00 Units

COGS90005: The Brain in Health and Disease - 6.00 Units

This course will focus on brain structure and function in health as compared to disease. Through clinical case studies and research findings, students will delve deep into the etiology and presentation of debilitating conditions such as mood and anxiety disorders, post-traumatic stress disorder (PTSD), Alzheimer's, and autism spectrum disorders. The course will also introduce students to techniques that have been used to identify what goes awry in brain circuitry to produce the symptoms of these conditions. These techniques include, but are not limited to, functional magnetic resonance imaging (fMRI), electroencephalography (EEG), and transcranial magnetic stimulation (TMS). This course will not assume prior knowledge in neuroanatomy. AP Biology experience is recommended; AP Psychology experience would be useful but is not necessary.

COGS90006: - 6.00 Units

COGS90007: - 6.00 Units

COGS90008: - 6.00 Units

COMM40008: - 2.00 Units

COMM40009: - 2.00 Units

COMM40010: - 2.00 Units

COMM40011: - 2.00 Units

COMM40012: - 3.00 Units

COMM40013: - 3.00 Units

COMM40014: - 3.00 Units

COMM40015: - 2.00 Units

COMM40016: - 2.00 Units

COMM80000: Conversation Improvement - 0.00 Units

Increase your confidence and comfort level while improving your conversational ESL skills with both native and non-native English speakers in this course.

Identify key strategies and specific conversation techniques to help you improve your spoken English through:

practice dialogues

situational role-playing

Learn in a lively, fun classroom environment which builds your confidence in conversing in English while further developing your speaking and listening skills.

COMM80001: Advanced Conversation Improvement - 0.00 Units

Are you an ESL speaker and need to improve your English conversational skills and increase your spoken English fluency and accuracy? Want to express yourself more precisely in conversation with native and non-native English speakers?

If so, this English conversation course is for you!

With daily conversation topics and constant practice, this course emphasizes improvement in overall conversational fluency in an active learning class environment.

COMM80002: Accent Modification Seminar - 0.00 Units

In one evening, this accent reduction course provides high-intermediate to advanced ESL speakers with training and keys to speaking English more accurately and smoothly so that native speakers can more easily follow what you want to say.

Learn the importance of:

pausing

stress

linking

pitch

Get quick tips on reducing your accent and receive advice on classes and self-study materials that you can use to acquire a better accent in English.

COMM90003: Young Native Scholars Writing and Media - 6.00 Units

Digital technologies have introduced new platforms for the journalism industry. No longer limited to the newspaper or television screen, journalism now often integrates written content, photography, video clips, and graphics altogether to tell a more complete story. This is a production-oriented course designed to enable students to analyze, evaluate, create and participate in three of the media forms that have been historically central to journalism: writing, photography, and design. Students will learn what the central features of journalistic practices are, and how to evaluate forms of media production. The goal is for students to come away from the course with a strong grasp of how multimedia platforms work in American journalism and to understand what the ethical issues are for journalism in the digital age. Finally, students will gain practical experience in crafting and sharing their own multimedia stories in a capstone project.

COMM90004: Critical Thinking, Effective Communication in a Cross-Cultural Setting - 4.00 Units

The 2weeks introductory course is designed to engage international middle school and secondary students in developing their critical thinking and questioning skills, cultural understanding, and comfort level in English communication skills.

The critical thinking component will center around students learning and practicing debate-style argumentation skills with local students, as well as gaining an understanding of how to use questions to drive discussions and build relationships.

The class will stress hands-on learning as debate topics and all special activities and classes will be shaped to foster student reflection on their own assumptions, values, and understandings of the world and themselves.

To improve their English language fluency, students will have a wide variety of interactive opportunities with local students: small group discussions; two-on-one debating; one-on-one talks during meals, activities, and outings. They will learn to become better speakers and find effective ways of expressing their creative and analytical ideas through class presentations in the form of impromptu speeches, "Quick Responses" to short video clips, pictures, etc., participating in panel discussions, and, for their final, giving a self-evaluative speech on how they have grown during the course.

Because change is a process rather than a moment, journaling and self-reflection will offer a daily space for students to develop insight about their own emotions, attitudes, values, and beliefs and how they are affected by them.

COMM90005: Critical Thinking, Effective Communication and Leadership in a Cross-Cultural Setting - 6.00 Units

The advanced 3weeks course is designed to engage secondary students in developing their critical thinking and English communication skills, so they will be equipped to function effectively in cross-cultural settings.

Critical Thinking Strand: Students will explore critical thinking and communication skills through learning the basics of argumentation and debating in paired teams with American students. Using this collaborative, values-based methodology of debate will teach students to develop insightful, evidence-based opinions and to discuss these opinions with logic and civility, no matter how controversial the topics are.

Leadership Strand: Working with others in a common effort to effect positive outcomes calls for a complex mix of critical thinking, relational skills, and an empowered sense of self to reach the goal. Students will read, discuss, debate, and act in this area. Students will have multiple opportunities to challenge

themselves in such settings as the UCSD Challenge Course and relationally in planned out-reach activities in order to develop courage, reliability, and the motivational energy that comes when we move past our fears to leadership. They will also engage in service to the needy in San Diego, as service is a fundamental aspect of leadership.

English Strand: Finally, students will have many opportunities to integrate their knowledge of English, learning to express themselves verbally through activities such as small group discussions and paired sharing with American students, short impromptu speeches, formal speeches and written essays, etc. Journaling to integrate activities and learning will also be a key component of the program.

COMP90001: Introduction to Computer Programming (Python) - 3.00 Units

This course offers an introduction to computer programming via the Python programming language. Students listen to weekly explanation-demonstrations of and gain (ideally simultaneous) practical experience with basic coding concepts such as calculations, string formatting/manipulation, conditional statements, iteration, file i/o and the abstraction of functions, as well as programming style. Weekly homework assignments solidify understanding and a final project offers the opportunity to creatively deploy the class materials. This course is designed to prepare students for the final project of the class - the creation of a computer program that generates a poem.

COMP90039: Create Mobile Apps for Android with App Inventor - 3.00 Units

In this program, you'll learn how to create apps for android mobile devices and exploring ideas related to computer science, engineering, design and entrepreneurship. This programs uses App Inventor, a visual programming environment based on a visual blocks programming method that has been touted as having the potential to transform computer science education. This visual, drag-and-drop tool for building mobile apps on the Android platform is the most accessible tool in terms of allowing students with no programming experience to design computer programs.

This course is open to beginners with little or no previous programming experience. Students will work with a visual programming environment that lowers the barrier to app development through a building-block approach to traditional programming. Mobile Apps 1 is designed for students who may not have programming experience but want to be exposed to programming and designing dynamic apps without writing a lot of code. Mobile Apps 2 is more suited to students who want to learn to write code and program using Java.

COMP90042: Introduction to Computer Science with ThoughtSTEM - 4.00 Units

In this course students will learn basic computing concepts such as method calling, parameter passing, looping and conditional statements using a visual programming language (Scratch). Students will be required to work on small projects throughout the course and design and develop their own larger project that will constitute as their final project. Students will have a chance to explore making art in this course, all programmatically using Scratch. This course will give students the basic building blocks to be able to learn more complicated programming concepts and languages. Learning to program and be able to speak in programming terms will be beneficial to student, whatever field they go into.

COMP90043: Introduction to Application Development ThoughtSTEM - 2.00 Units

In this course students will engage with basic computing concepts such as method calling, parameter passing, looping and conditional as they build mobile Android Apps using App Inventor. Students will be required to work on small apps throughout the course and design and develop their own app that

will constitute as their final project. Students will have a chance to explore different forms of user input and output all through a mobile device. Learning to program and be able to speak in programming terms will be beneficial to student, whatever field they go into. Students must have taken Introduction to Computer Science with ThoughtSTEM before enrolling in this course. This course is geared towards high school students.

COMP90049: Game Making - Computer Science with ThoughtSTEM - 2.00 Units

In this course students will learn basic computing concepts such as method calling, parameter passing, looping and conditional statements using a visual programming language (Scratch). Students will be required to work on small projects throughout the course and design and develop their own larger project that will constitute as their final project. Students will have a chance to explore making games in this course, all programmatically using Scratch. This course will give students the basic building blocks to be able to learn more complicated programming concepts and languages. Learning to program and be able to speak in programming terms will be beneficial to student, whatever field they go into.

COMP90050: Interactive Art - Computer Science with ThoughtSTEM - 2.00 Units

In this course students will learn basic computing concepts such as method calling, parameter passing, looping and conditional statements using a visual programming language (Scratch). Students will be required to work on small projects throughout the course and design and develop their own larger project that will constitute as their final project. Students will have a chance to explore making art in this course, all programmatically using Scratch. This course will give students the basic building blocks to be able to learn more complicated programming concepts and languages. Learning to program and be able to speak in programming terms will be beneficial to student, whatever field they go into.

COMP90054: Introduction to Arduino - 3.00 Units

Students will gain an introduction to Arduino programming concepts such as conditional statements, variables, functions, parameters, and loops. Students will be introduced to basic circuit design and analysis, as well as physically building circuits using the Arduino micro-controller.

COMP90055: Game Design I - 2D Game Design with Scratch - 1.50 Units

Re-create classic video games like Pac-Man, Space Invaders, and Flappy Bird with easy-to-use drag-and-drop programming blocks. This project-based course will focus on digital art and game design in addition to covering basic coding fundamentals such as variables, conditionals, and event-driven programming.

COMP90056: Introduction to Arduino Programming & Electrical Engineering - 1.50 Units

In this course, students will be introduced to the basics of electrical engineering with Arduino. Arduino is a micro-controller (small computer) that allows students to attach electrical circuits of wires, LEDs, buttons, switches, LCD screens, speakers, and more; students can then use a block-based language to program and control those circuits to create useful devices. By the end of this course, students will design and program interactive light shows complete with complex LED configurations and even sound!

COMP90059: Introduction to Web Design - 1.50 Units

Has your student ever wanted to design their very own website? In this series, we work with students to program awesome websites to showcase what they are passionate about, whether it's photography, books, video games, anything! New students will be introduced to the programming languages of the web -- HTML, CSS, and Javascript -- while continuing students will hone

their skills even further and learn about advanced web design techniques like plugins, placement, and the perks of using HTML5.

COMP90061: - 1.00 Units

CSE40028: Introduction to Programming - 3.00 Units

Python is a relatively easy programming language to learn. Python statements can be interpreted using various operating systems. This course was developed with the first time programmer in-mind. Students will learn rules and syntax applicable to a modern programming language, learn how to understand and develop algorithms, gain an understanding of general programming constructs including variables, expressions, functions, branching, looping statements and data storage. Students will also design, write and debug simple computer programs using Python. This course serves as a good foundation for students looking to further their training in C, C/C++ and C# programming languages.
Course Highlights

- Computers and programming
- Storing and processing information
- Variables and expressions
- Branching statements
- Basic logic
- Looping and repetition statements
- Basic data structures
- Programming styles
- The languages Application Program Interface (API)
- Reading and writing to files
- Object oriented programming
- Frameworks and tools available to programmers

Course Benefits

- Attain the ability to participate in technical conversations
- Understand the rules and syntax of a programming language
- Walkthrough programming constructs
- Ask the right questions
- Write functional code in Python
- Be prepared for more in-depth programming courses

Prerequisites:

Students must have access to a web-enabled computer. Strong problem-solving skills and computer familiarity is highly recommended.

CSE40049: Data Structures and Algorithms in C/C++ - 3.00 Units

Gain an understanding of fundamental algorithms and data structures. Learn to write code that scales well with large data sets and how to identify hidden performance bottlenecks. The topics covered apply to all programming languages and software development domains. Participants will learn the fundamentals needed to answer algorithm and data structures questions common in programming interviews.
Course Highlights:

- Performance Analysis of Algorithms
- Recursion
- Pointers
- Dynamic Memory Allocation
- Data Abstraction and Time-Space Trade Offs
- Mutual Improvements

Prerequisite: "CSE-40476 C/C++ Programming II: Dynamic Memory and File I/O Concepts" or similar experience. No knowledge of C++ is required for this course. However, students enrolling in this

courses should possess a solid understanding of the C programming language. Students who lack this foundational knowledge MUST take the prerequisite course prior to enrolling in this course. Enrollees must have access to a standard C/C++ compiler.

CSE40475: C/C++ Programming I : Fundamental Programming Concepts - 3.00 Units

With emphasis on the syntax, semantics and structured programming style, this class examines the C and C++ programming languages. Students will learn to create and compile basic programs using C/C++.

Course Highlights

- Writing and debugging programs
- Preprocessor
- Standard library functions
- Fundamental data types
- Operators
- Flow control statements
- Functions
- Arrays and pointers
- Strings
- Dynamic storage allocation
- Structures
- Classes
- File operations

Course Benefits

- Understand basic C and C++ concepts
- Ability to read, write and debug elementary C and C++ code
- Obtain working knowledge of data types, basic operations, portability issues, standard programming practices and style

Prerequisite:

CSE-40028 Introduction to Programming or similar experience. Access to a standard C/C++ compiler is required. Students must have knowledge of basic general programming concepts as taught in any good introductory programming course in any language including constants, variables, operator precedence, arithmetic operations, conditional statements, looping statements, logical thinking, and general problem solving. Students who lack this foundational knowledge MUST take the prerequisite prior to enrolling in this first required course of the program.

CSE40476: C/C++ Programming II : Dynamic Memory and File I/O Concepts - 3.00 Units

Building upon C/C++ Programming I, level II will provide you with a further understanding of the C and C++ programming languages. Topics include: the run-time environment, advanced I/O features, advanced pointer and array concepts, basic data structures, efficiency and portability, the Standard C Library, and debugging techniques.

Course Highlights

- Bitwise operations
- Executive environment
- Recursion
- Advanced array and pointer concepts
- Storage map equations
- Dynamic pointer array allocation
- State diagrams and state machines
- Sorting and searching
- Lists, trees and hashings
- Data representation and portability

- Locating records within files
- Variable argument functions
- Non-local gotos

Course Benefits

- Execute concepts acquired in C/C++ Programming I to real-world programming situations
- Understand the diverse applications of C and C++ concepts
- Possess the ability to apply C and C++ to practical problems

Prerequisite:

CSE-40475 C/C++ Programming I: Fundamental Programming Concepts or similar experience. Access to a standard C and C++ compiler is required. Students must have a competent knowledge of basic C and C++ programming concepts as taught in any good C/C++ Programming I course, especially regarding data types and pointers. Those with minimal or distant knowledge of these concepts MUST complete the prerequisite prior to enrolling in this course.

CSE40477: C/C++ Programming III : Intermediate Programming with Objects - 3.00 Units

This class emphasizes using object oriented analysis and design techniques to learn the C++ programming language. Students completing the course will learn C++ syntax, how to make use of the C++ standard library, and how to design and implement custom types that extend the standard library.

Course Highlights

- Object oriented analysis and design
- Program structure, functions and variables
- Classes in-depth
- Operator overloading
- Inheritance
- Exceptions and templates
- Standard library string and vector
- Streams
- The Standard Template Library (STL)
- Two projects designed to expose the student to real-world programming concerns

Course Benefits

- Understand C++ concepts
- Understand the benefits of object-oriented programming
- Ability to read, write and debug C++ code including use of the C++ standard library
- Obtain a working knowledge of object oriented analysis and design and how it applies in C++

CSE40478: C/C++ Programming IV: Advanced Programming with Objects - 3.00 Units

Expanding on several topics in C++, this course includes object-oriented analysis, design, and programming. Advanced memory management, stream and file I/O, persistence, multiple inheritance, advanced polymorphic programming, templates, STL libraries, C++ style, and efficiency are also discussed.

Course Highlights

- Generic programming and the C++ standard library
- Exception, safety issues and techniques
- The transactional memory model

Class design and inheritance
 Compilers, names and interfaces
 Memory management
 Traps, pitfalls and anti-idioms
 Functors and iterators
 Control flow and multiple inheritance

Generic collections
 Files, Input/Output streams, NIO and XML serialization
 Recursion
 Multi-threading
 Java graphic user interfaces

Course Benefits

Gain a foundation for writing efficient, safe C++ code
 Learn how to use STL libraries
 Understand memory pitfalls in C++
 Learn how to expand the C++ memory model
 Use object-oriented for analysis and design
 Apply multiple inheritance to an application
 Understand how streams work
 See how to persist objects via streams
 Gain experience following C++ guidelines
 Learn how to identify potential bugs in code before they occur

Course Benefits

Development of Java competencies
 Object-oriented concepts
 Java language syntax
 Java application development

CSE40479: Java Programming I: Fundamental Java Concepts - 3.00 Units

Explore the fundamentals in Java programming concepts. You will examine methods, arrays, lists, hash maps, and object-oriented programming, and design focusing on inheritance, polymorphism, and abstraction.

Course Highlights

Classes
 Objects
 Methods
 Arrays
 Lists
 Debugging
 Object-oriented programming and design
 Focusing on inheritance, polymorphism, and abstraction

Course Benefits

Build experience writing simple Object Oriented programs in Java
 Learn to debug Java programs using a modern IDE
 Understand the costs and benefits of Java development
 Become familiar with Oracle's online Java documentation
 Gain experience running unit tests to verify program behavior

CSE40480: Java Programming II: Core Java Programming - 3.00 Units

Core Java Programming will explore the features of the Java programming language to create multi-platform applications. Topics include: object-oriented programming, Java class library, graphics programming, graphical user interface development, exception handling, and the newest features introduced in the latest release of the Java platform. As a developer, you will learn how to use the tools in the Java development platform, the proper object-oriented design strategies, and how to leverage the feature rich Java API to create a variety of applications.

Course Highlights

Object-oriented programming techniques
 Object super class
 Static imports
 Abstract classes and interfaces
 Abstract data types
 Exceptional handling

CSE40481: Java Programming III : Intermediate Java Programming - 3.00

Units

Building on the skills from "Core Java Programming," this class reinforces Java basics, including exception handling and event handling. It expands on the swing GUI components and introduces advanced concepts such as Generics, JDBC, and threads. It will also focus on object design principles, inheritance hierarchies, and the power of polymorphism (dynamic runtime binding).

Course Highlights

Gain experience with Graphic User Interface (GUI) development
 Understand design patterns
 Evaluate error handling approaches
 Analyze the how and why of generics and wildcards
 Integrate relational database technologies: JDBC, SQL, and MySQL
 Understand multithreading and concurrency

Course Benefits

Apply object-oriented design principles
 Design inheritance hierarchies that maximize reusability
 Employ interfaces to represent abstractions
 Compare abstract classes and interfaces
 Develop a complex GUI application
 Incorporate JDBC to connect to and interact with a relational database
 Develop custom exception classes to support error handling
 Use collections to organize data
 Evaluate the advantages of generics
 Observe the options available for concurrent programming

CSE40482: Java Programming IV : Advanced Java Programming Structures - 3.00 Units

Building on "Java Programming III: Intermediate Java Programming," you will cover many of the specific topics in the Oracle Certified Professional Java Programmer (OCPJP) exam, including the Java runtime environment, generic collections, thread handling and synchronization, native methods, standard file IO (java.io), socket-based network programming and serialization (java.net), and Java Remote Method Invocation (RMI). You will apply object-oriented techniques (interfaces, abstract classes, inner classes, etc.) to create applications using Swing components (javax.swing) and appropriate Javadoc comments. Additional topics include new I/O, JNI, and unit testing with JUnit.

Course Highlights

The Java Virtual Machine (JVM) - managing object creation, execution and garbage collection
 Reflection
 Annotations
 Test driven developments
 Java 9 modularity
 Concurrent programming - thread handling and synchronization
 Functional programming
 REST-based web services
 Java networking with sockets
 Distributed Java applications
 Java security

Course Benefits

Understand how to be a more effective Java developer
 Learn advanced Java concepts and apply them in the real world
 Understand the latests Java features
 Gain the knowledge to prepare yourself for the Oracle Java certification exam

CSE40534: C# Programming I: Fundamentals of C# - 3.00 Units

Learn the basics of programming using C#, Visual Studio and the .NET Framework. These fundamentals will help you gain the basic programming skills necessary to be a successful coder targeting desktops, web browsers or mobile devices. You will also learn to utilize Visual Studio as more than a text editor, leveraging many of its advanced features such as debugging, refactoring and code snippets.

Topics Include:

- Program structure and syntax
- Variable definition
- Data Types
- Arrays
- Operators
- Structures
- Object-oriented programming
- Delegates and events

Practical Experience:

Learn to open and create Visual Studio solutions
 Develop C# programs to solve practical problems related to the course topics
 Learn to debug C# applications

Software: Students will use Visual Studio Community Edition 2015 or later which is freely available on Microsoft's website: <https://www.visualstudio.com/>

CSE40591: Applied JavaScript I - 3.00 Units

This fast-paced complete introduction to JavaScript covers core syntax and usage principles of the most popular scripting language on the web. You will cover the syntax of JavaScript including control structures, the usage of regular expressions, creation of custom objects, the traditional browser object model, an introduction to the emerging Document Object Model (DOM), as well as the proper use of these constructs. You will learn to implement common scripts found on the web like form validation, rollovers, layered object manipulation, and page control.

CSE40592: Applied JavaScript II - 3.00 Units

Intermediate use of client-side JavaScript addressing emerging aspects of the language, advanced DOM usage, client side graphics using Canvas or SVG, proper event handling, use of Ajax, and more. The role of libraries such as jQuery and ExtJS will be a major emphasis of the course as well as application of modern software development principles and patterns for JavaScript applications.

CSE40603: C# Programming II: Object-Oriented Programming - 3.00 Units

This intermediate-level course will continue to build upon the foundation established in C# Programming I. C# Programming II focuses on Object Oriented Programming (OOP), one of the most widely-used programming paradigm in the industry. C# II will demystify OOP and help you become productive using practical, industry-standard coding techniques.

Topics Include:

- Interfaces
- Encapsulation and abstraction
- Method and operator overloading
- Polymorphism and inheritance
- Virtual and abstract members
- Overrides
- Anonymous types

Practical Experience:

Learn to use object-oriented techniques to solve problems using C#
 Gain enhanced knowledge of the .NET Framework and support classes

Software: Students will use Visual Studio Community Edition 2015 or later which is freely available on Microsoft's website: <https://www.visualstudio.com/>

For more information about this course, please contact the program manager at infotech@ucsd.edu or 858-534-9352

CSE40605: Fundamentals of the .NET Framework - 2.50 Units

The .NET Framework provides tools that yield an overall increase in productivity for developers. The goal of this class is to teach students about the various technologies available to .NET developers, to learn the value proposition of each, and to compare and contrast technologies where appropriate. Students will gain a well-rounded, high-level understanding of the power of the .NET Framework, the architectural possibilities for solutions, and the appropriate place for each technology within those solutions.

Topics Include:

- Language and platform trends
- Data access technologies
- Windows and web development
- Middle-tier and service-oriented technologies
- Federated identity
- Cloud computing

Practical Experience:

Gain a general understanding of the technologies available within the .NET Framework

Learn to make architectural decisions based on the best technology for the job, not just what is popular

Discover the basics of programming using Visual Basic, C# and F# (no prior programming skills necessary)

Software: Students have the option of using Visual Studio Community Edition 2015 or later which is freely available on Microsoft's website: <https://www.visualstudio.com/>

For more information about this course, please contact the program manager at infotech@ucsd.edu or 858-534-9352.

CSE40635: Design Patterns - 3.00 Units

Design Patterns provide distilled object-oriented design expertise that can be applied to resolve problems that recur within complex software architectures. This advanced design course analyzes, in depth, the classic GoF design patterns, and provides students with an understanding of the principles behind these patterns that make them work as optimal software solutions. Design heuristics are studied to know when to follow certain design principles and when to violate them. This course is intended for experienced software developers who wish to expand and refine their knowledge of advanced object-oriented design.

CSE40666: C# Programming for Beginners - 2.50 Units

C# is a powerful and popular programming language. This course is an introduction for complete beginners interested in C# programming. It provides an in-depth study of basic C# program structure, language syntax in conjunction with a detailed and step-by-step implementation of the concepts of writing code, based on the principles of object-oriented programming.

Topics include:

For more information about this course, please contact infotech@ucsd.edu or 858-534-9352

CSE40682: Introduction to PHP Programming - 3.00 Units

Introducing the popular open source, server-side web scripting language, this class presents a thorough introduction to the syntax of the language as well as programming techniques commonly used in PHP-based web applications. Emphasis is placed on building secure, robust, and performant web applications. By the end of the course, you will be able to build a basic database-driven web application in PHP.

CSE40691: Unit Testing - Supporting Modern Software Development Methods - 3.00 Units

Software testing is vital to small and large teams following agile practices and other current software methodologies. As software teams adopt shorter development life-cycles the practice of writing better tests will help ensure few bugs and stable releases. This course will help developers and managers understand the value of current testing patterns and guide them through writing their first Unit Tests. Topics will include Test Driven Development, Code Coverage, Dependency Injection, Mock/Fake Testing and working with Legacy Code . Examples will be presented in various languages; Java, C# and Python.

Course Highlights

Learn when to use and how to write various forms of Tests; Unit, Integration, Functional

Use dependency injection in unit tests and working software to provide state to objects

Understand the traits of "good" and "bad" unit tests to help you write better tests

Use Test Driven Development (TDD) to build a piece of software with the tests written first

Learn how to use testing patterns with legacy code to ensure new changes will not adversely impact existing code

Course Benefits:

Use NUnit and JUnit to write various types of Tests

Use Mocks to simulate functionality and isolate what is being tested

Use "Red, Green, Refactor" to build new software

Use tools including EMMA for code-coverage, Sonar Cube for code-quality, and PhantomJS for automated web testing

CSE40693: Data Modeling and Relational Database Design - 3.00 Units

Discover the theoretical foundation in data modeling and design of relational databases. Part one of this course explores the use of Entity Relationships (ER) Modeling in detail through many real life examples and practical business problems and solutions. After several iterations, the ER model captures the data requirements and business rules, and forms a sound basis for the initial design of a relational database. Part two of the course is about the design process and presents the considerations for creating a normalized, stable, maintainable and well-defined relational database.

CSE40706: C# Programming III: Memory Management and Multi-threading - 3.00 Units

This course will focus on some of the more advanced programming concepts available in the C# language, building on the topics learned in C# II.

Topics Include:

Memory management

Garbage collection

Generics

Events

Multi-threaded and parallel programming techniques using TPL

Functional programming

LINQ

Reflection and dynamic runtime binding

Practical Experience:

Continue to develop OOP skills utilizing some of the more advanced programming techniques available in C#

Gain a better understanding of the internal workings of a .NET program

Learn how to use multi-threading and parallel programming techniques to increase program performance and efficiency

Software: Students will use Visual Studio Community Edition which is freely available on Microsoft's website: <https://www.visualstudio.com/>

CSE40770: Data Mining for Scientific Applications - 3.00 Units

Data Mining for Scientific Applications

A large volume of complex, multi-dimensional scientific data is collected and stored daily. Data mining and predictive modeling offer a means of analysis of that data. Data mining and predictive modeling are capable of automatic extraction of knowledge deeply hidden in data, enabling discovery of knowledge not otherwise attainable.

This class is a shorter, less in-depth version of Fundamentals of Data Mining, customized for the world of science. Obtain an overview of the methods, techniques, and processes of data mining, with an emphasis on scientific applications. Explore a variety of scientific case studies learn how data mining can be applied to make meaningful conclusions, predictions, and classification of data. This course is application-focused and does not require prior programming experience.

Topics include:

Introduction to knowledge discovery process and standards

Classification and prediction

Preparing input and output for data mining

Decision tables, decision trees, classification rules

Mining association rules
 Numeric prediction and regression
 Clustering methods
 Evaluating, testing, and verifying models

Learning Objectives
 By the end of this course, you will be able to:

Practical experience:

Hands-on data mining exercises

Software: WEKA is used for class assignments.

Course typically offered: Online in Winter and Summer

Prerequisites: Biostatistics, Introduction to Statistics, or Statistics for Data Analytics or equivalent knowledge required.

Next Steps: Upon completion of this course, consider taking Fundamentals of Data Mining to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE40798: Instructional Technology Tools - 2.00 Units

This course will introduce participants to leading learning management systems (LMS). Participants will receive an orientation of what tools are available in each LMS, as well as best practices for accommodating various assessment and collaboration assignments. The course will also explore how to connect instructional tools with sound teaching pedagogy. In addition, ancillary tools that can extend the functionality of these LMS's will be explored.

CSE40798: Instructional Technology Tools - 2.00 Units

This course will introduce participants to leading learning management systems (LMS). Participants will receive an orientation of what tools are available in each LMS, as well as best practices for accommodating various assessment and collaboration assignments. The course will also explore how to connect instructional tools with sound teaching pedagogy. In addition, ancillary tools that can extend the functionality of these LMS's will be explored.

CSE40799: Enhancing Your Online Course with Multimedia - 2.00 Units

Study the latest techniques and software to enhance the creation and design of online learning courses or programs. This class will present an overview of graphics, audio, video, Flash, and other multimedia used to develop online learning activities. This course will also introduce students to audio and video technologies, general multimedia tools and those specialized in accessing learners with disabilities. Participants will be introduced to the concepts of streaming vs. progressive download vs. download, different multimedia, streaming formats and illustrated audio.

CSE40834: LabVIEW Programming - 3.00 Units

Learn how to develop intuitive, powerful programs with National Instrument's LabVIEW. Prior experience with LabVIEW is not required, though it is required that students be familiar with basic computer programming concepts. The course will begin with an introduction to LabVIEW, work through programming fundamentals, and move on to some advanced topics.

Course Goal and Objectives

The goal of this course is to develop intuitive, powerful programs with National Instrument's LabVIEW. The course begins with an introduction to LabVIEW, explores programming fundamentals and then moves to more advanced topics. Each class includes instruction and a series of hands-on programming exercises. You will leave this class with the ability to develop efficient LabVIEW programs for many projects encountered in today's high-tech workplace. You will be given the opportunity to take the Exam to become a Certified LabVIEW Associate Developer at the end of the course.

Solve problems using LabVIEW

Use modular programming practices

Develop, debug, and test LabVIEW VIs

Effectively use a State Machine architecture

Obtain Certified LabVIEW Associate Developer certificate from National Instruments

For more information about this course, please contact infotech@ucsd.edu or 858-534-9352.

CSE40848: MATLAB Programming for Science and Engineering - 3.00 Units

MATLAB is a scientific computing tool for data analysis, image processing, and other data intensive applications with a rapid development environment capable of prototyping scientific applications quickly. This class explains how to explore tool boxes in depth and use them in your own programs. You will learn to develop a graphical user interface and how to make your own toolboxes. This class is designed for the scientific programmer who is looking for entry into the field wants to use MATLAB to accelerate the development process. Knowledge of programming is recommended. Certain applications in Engineering design will be discussed.

CSE40849: Business Practices for Software Project Managers - 3.50 Units

Do you manage software development efforts? Explore both soft skills and organizational tools required to lead and manage software projects. You will learn: approaches to estimating, planning, and tracking software projects; the distinctions between agile vs. disciplined and waterfall vs. iterative. Reflecting the software industry's generally recognized practices, the course concentrates on agile development models. In covering the basics of business for a software project, the course uses industry consensus standards such as SWEBOK, PMBOK(r).

This course will provide 31.5 education hours. To receive Professional Development Units (PDU's), submit your UCSD transcript to the Project Management Institute (PMI).

CSE40850: Successful Software Requirement Analysis and Design - 3.50 Units

This course focuses on business and process perspectives. It is designed for senior technical contributors in preparation for their expanded leadership responsibilities. Topics include: disciplines and workflows associated with requirements gathering and analysis; the skills, processes, and methods recommended in successfully planning and designing a software project that meets customer time and budget requirements; stakeholder analysis; software and system architecture context; translating requirements into design elements; and issues of organization, value, and quality.

CSE40851: Successful Software Implementation and Delivery - 3.50 Units

As the third course in the Software Engineering Management certificate sequence, this course focuses on managing the software development process and delivering high quality products on time and within budget. You will learn various software development processes; methodologies (traditional and agile); software development; software testing and QA; and software release management. Also, you'll discover the software project planning process, various software implementation and testing stages, metrics collection for reworks and cost estimate, software quality assurance, and software version control.

CSE40933: Introduction to SQL Programming - 3.00 Units

Introduction to SQL Programming

Learn how to use the Structured Query Language (SQL) to create, manipulate, and create reports from database tables. Important concepts associated with relational databases will be covered. You will run SQL commands to create database tables and define data element types.

Single and multiple table queries will be created with simple and compound conditions using SQL operators such as:

- BETWEEN
- LIKE
- IN
- EXIST
- ALL
- ANY

Basic and complex reports will be created based on data in a table or view. Database Administration features of SQL will be discussed.

Course typically offered: Online in Fall, Winter, Spring, and Summer (every quarter)

Prerequisites:

Some experience with Microsoft Access, or a working knowledge of Database Management and Design.

The ability to download and configure the SQL Server environment on a Windows PC.

Recommended - Basic programming knowledge or "Introduction to Programming"

Next Steps: Upon completion of this class, consider enrolling in other required coursework in the Business Intelligence Analysis Certificate Program.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE40948: Intermediate SQL Programming - 3.00 Units

Intermediate SQL Programming

SQL is a language used in programming and designed for managing data held in a relational database management system (RDBMS), or for stream processing in a relational data stream management system (RDSMS).

SQL allows you to access many records with one single command and it eliminates the need to specify how to reach a record, e.g.: with or without an index. This intermediate course will be focused on using MS SQL Server and T-SQL.

Topics include:

- Data aggregation using aggregate functions,
- Writing sub-queries,
- Recursive queries
- Common table expressions

You will also gain experience creating views, stored procedures, functions, and triggers using different looping and database locking mechanisms. Specific areas in the SQL Server database using data file structures, database schemas, setting properties, snapshots, data space and type usage and identity columns will be covered. SQL tuning and use of execution plans will also be addressed. Course typically offered: In-class in Winter and Online in Summer.

Prerequisites:

CSE-40933: Introduction to SQL or equivalent knowledge and/or experience.

The ability to download and configure the SQL Server environment on a Windows PC.

Basic programming knowledge or "Introduction to Programming"

Next Steps: Upon completion of this class, consider enrolling in other coursework in the Business Intelligence Analysis Certificate Program.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE40956: CISSP Security Exam Preparation - 4.00 Units

This four-week, online and classroom, hybrid course is a cost effective option to boot camps for the CISSP candidate, as the pass rate has been high for students in this program. ISC has moved from ten to eight Domains and some modernized content has been added to the exam. This course is an updated collection of slides and audio, video, internet-based resources, and instructor-led curricula designed to support those professionals under pressure to get their certs. The fast-paced sessions requires the student to maintain self-discipline to sustain a rigorous study regimen. Lesser experienced CISSP candidates unfamiliar with the Domain topics or those requiring additional guidance should first consult with the instructor before committing to this course. This course is taught by a CISSP certified instructor, who is current in DoD systems architectures and cybersecurity engineering. This course does not include the CISSP exam managed by ISC2.

Topics Include:

- Domain 1 Security & Risk Management
- Domain 2 Asset Security
- Domain 3 Security Engineering
- Domain 4 Communications & Network Security
- Domain 5 Identity & Access Management
- Domain 6 Security Assessment & Testing
- Domain 7 Security Operations
- Domain 8 Security in the Software Development Life Cycle

Practical Experience:

Understand the 8 Security Domains (formerly 10 Common Bodies of Knowledge)

Become a contributing member of at least one CISSP user forum
Utilize a proven, but unique prepping method devised by the instructor

Use a quantifiable set of exhaustive exams that measure the student's readiness to take the ISC2 sponsored CISSP exam
ISC2 Exam Requirements:

ISC2 requires the successful CISSP candidate to have 5 years of cumulative paid full-time work experience in two or more of the 8 Domains.
CISSP Exam Information may be found at Pearson VUE ISC2

Course Notes:

This hybrid course includes online and traditional classroom instruction. Students will utilize the online learning tool called Blackboard over the

course of 4 weeks. Then the last two days of class will take place in a traditional classroom setting.

Student Testimonial:

“I took the CISSP preparation course taught by Gene Anderson back in January/February of this year. I can say without a doubt the course was instrumental in passing the exam on my first attempt. There is a huge amount of material and I had spent the month of December trying to study on my own and felt that while I was getting through the material, it was not necessarily able to be recalled correctly. Gene’s course takes an aggressive but fair pace, and he encourages communication between students to help gauge how each student is learning the material. There are weekly check-ins with practice exams, and Gene supplements the recommended materials with a tremendous amount of additional information available at no cost.

The live meetings were a pleasure, as he taught our class about encryption and then let us know that the following day, we’d be teaching him. I not only was able to teach the lesson back to Gene the following day, but a week later I taught it to my wife, and I feel that I could teach it now, four months later.

I took the exam two days after the final live meeting and was able to pass the exam. I can honestly say that had I kept at the self-pace I had been using, it would have been several months before I would have tested and I would not have been as well prepared. Even after the test, Gene has stayed in touch, and I contacted him recently to let him know that I had mentioned his name in a Secret clearance check that my new employer has submitted, which would not have been possible without obtaining my CISSP.”
Ed K., San Diego

CSE40981: Systems Engineering with OMG SysML™ - 3.00 Units

Discover model-driven systems engineering using the UML Profile for Systems Engineering (OMG SysML™). Systems engineering principles will be applied to developing a comprehensive model of a solution to a class problem using modern systems engineering development tools and a development methodology tailored to OMG SysML™. Begin with the presentation of a desired capability and continue through the performance of activities and the creation of work products to support requirements definition, architecture description, and system design. Learn to transition to specialty engineering, with an emphasis on interfacing with software engineering activities.

Course Highlights:

- Practical definition of Model Based Systems Engineering (MBSE)
- Description and application of basic systems engineering concepts expressed in OMG SysML™;

- System structure
- Systemsbehavior
- Requirements
- Parametrics
- Allocation

Leveraging object oriented concepts of type (definition) and property (usage) in a systems engineering sense, thus facilitating design re-use, libraries, and patterns

Practical applications of these concepts and their interrelationships and integrated system model

Course Benefits:

Understand the motivation and benefits of Model Based Systems Engineering (MBSE)

- Ability to clearly express basic Systems Engineering concepts in OMG SysML™;
- Experience selecting, installing, and operating an MBSE tool
- Understanding the practical advantages of a Model-Based design repository
- Experience building system model in OMG SysML™;tool
- Experience bounding system context, concept and requirements with a system modeling tool
- Experience developing practical behavioral and structural system models
- Experience characterizing system performance with parametric models
- Professional review and feedback of practical modeling exercises

CSE40991: GIS I: Introduction to GIS - 3.00 Units

GIS I: Introduction to GIS

The ability to analyze and manipulate spatial data is critical across many industries, including urban planning, healthcare, agriculture, mining, trade, environmental science, and military intelligence. The demand for skilled GIS analysts is projected to grow rapidly in the coming years, as this specialized area of data analysis is leveraged in an expanding number of fields.

In this introductory course, you will learn the fundamentals of geographic information systems (GIS). Upon completion of the course, you will be able to display, analyze, and store spatial data using GIS, as well as use the different components of ArcGIS, including ArcCatalog, ArcMap, and ArcToolbox. This course also includes an overview of GIS applications in many different industries.

Topics include:

- Cartography and spatial data display
- Querying data for spatial and attribute selections
- Data formats for GIS
- Spatial data analysis tools
- Editing and storing spatial and attribute data
- Map projections and coordinate systems
- Online map creation
- Geocoding

Practical experience:

Multiple hands-on assignments using ArcGIS, covering:

- Map design
- Spatial data analysis
- Digitizing and editing data
- Geodatabases
- ArcGIS Online

Course typically offered: Online in Fall and Spring

Software: Students will use ArcGIS by ESRI in this course, and a license for this software is included with purchase of the required textbook. A computer with a native Windows operating system is required to run ArcGIS; the software will not work properly on a Mac computer, even if you have configured your system to dual-boot or otherwise run Windows.

Prerequisites: Strong familiarity with Windows required.

Next steps: Upon completion of this course, consider taking GIS II: Spatial Analysis to continue learning.

Contact: For more information about this course, please contact unextechdata@ucsd.edu.

CSE40996: HSI I: Introduction to Human System Integration - 4.00 Units

Human Systems Integration (HSI) is the professional discipline that brings the human component into systems acquisition and design. Fundamentally, HSI ensures that systems are useful and relevant to the mission tasks or business processes, as well as usable by the operator in the real world environment. This course gives you the knowledge and skills of HSI's seven domains and the integration of these domains with systems engineering processes, resulting in the proper management and coordination of HSI in an acquisition program. HSI participation begins with defining requirements and preparing the Request for Proposals (RFP) that include HSI Planning and its execution. The requirement for HSI involvement throughout the acquisition program includes Follow-on Operation Test and Evaluation (FOT&E) and life-cycle support.

CSE41007: HSI II: Methods and Analyses/Measurements - 4.00 Units

The 2nd course in the Series, HSI Methods and Analyses/Measurement covers human factors methods, tools, and analyses/measurements used in the Acquisition Process. Some of the methods include: Task Allocation (TA), Job Task Analysis (JTA), Operation Sequence Diagramming (OSD), Modeling and Simulation (M & S) and Usability Testing (UT). Analysis/Measurements includes: Measures of Performance (MOP), Measures of Effectiveness (MOE), Probability Theory and the use of parametric and non-parametric statistics and their practical applications.

CSE41069: Introduction to Statistics - 3.00 Units

Introduction to Statistics

Statistics encompasses the collection, analysis, and interpretation of data and provides a framework for thinking about data in a rigorous fashion. Statistics is used in many areas of scientific and social research, is critical to business and manufacturing, and provides the mathematical foundation for machine learning and data mining.

In this course, students will gain a comprehensive introduction to the concepts and techniques of elementary statistics as applied to a wide variety of disciplines. The course emphasizes problem solving, statistical thinking, and results interpretation.

Topics include:

- Descriptive statistics
- Basic probability
- Probability distributions
- Sampling distributions
- Confidence intervals
- One and two sample hypothesis testing
- Categorical data analysis
- Correlation
- Regression

Practical experience:

- Organize, summarize, and present data
- Describe the relation between two variables
- Work with sample data to make inferences about a population

Software: Students will need access to Excel or similar spreadsheet software to complete the course assignments.

Course typically offered: Online in Fall, Winter, Spring, and Summer (every quarter)

Prerequisites: None.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41072: Business Intelligence: Microsoft Reporting Services SSRS - 3.00 Units

The key to any successful organization is ensuring data delivery in a format that optimizes their ability to make critical decisions. Reports are a key tool because they deliver data in a relevant, easy to use, and intuitive format. This course will give you the knowledge to utilize SQL Reporting Services (SSRS) to build those reports. This class will teach how to build reports using SQL Server 2012 and how to integrate those reports in your environment. We will be developing reports against both transactional and OLAP data sources along with exploring features such as Charts, Graphs, Interactive Reports, and Gauges.

CSE41097: Introduction to R Programming - 3.00 Units

Introduction to R Programming

Statistical computing is employed within a diverse range of industries. In recent years, an open source project, R, has emerged as the preeminent statistical computing platform. With its unsurpassed library of freely available packages, R is capable of addressing almost every statistical inference problem.

In this course, you will learn the most commonly-used (roughly 100) functions and operators from the R Base Package, which serves as the fundamental tools for accessing data from multiple sources, manipulating different types of R objects, performing character manipulation, and generating reports. Furthermore, you will also learn how to write your own functions by using different types of control structures.

Topics include:

- R objects: Vectors, matrices, arrays, lists, and data frame
- Subsetting objects
- Data manipulations
- Data aggregation
- Writing user-defined functions
- Character manipulations

Practical experience:

Most components for succeeding in this course are practice, practice, and practice! Students are required to complete multiple sets of practice problem sets and quizzes on a weekly basis, plus two main assignments for writing user-defined functions.

Software: R, a free software environment for statistical computing and graphics, is used for this course.

Textbook: The course notes are available to download for free for registered students.

Course typically offered: Online in Fall, Winter, Spring, and Summer (every quarter)

Prerequisites: Knowledge of basic programming or Introduction to Programming is recommended.

Next Steps: Upon completion of this course, consider taking other courses in data science to continue learning.

More Information: For more information about this course, please contact infotech@ucsd.edu

CSE41101: Business Productivity using Microsoft Excel - 2.50 Units

Microsoft Excel is a powerful spreadsheet application that can enable computations, graphical representation, and data analysis. This course is solution-based, dealing with real-life business situations and problems users come across frequently in their jobs. Learn to design your spreadsheet to take advantage of Excel's dynamic features. You will learn to utilize the basic features, such as the new quick formats, and advanced tools, such as subtotals, goal seek, solver, macros, and pivot tables. When you can generate faster and more accurate reports, it means your company can respond faster to the dynamic business environment, leading to generating higher sales and profits for the business as well as improving work productivity and efficiency.

CSE41109: Objective-C - 3.00 Units

Fully updated, this hands-on course is aimed at experienced software developers who want to learn how to program using Objective-C. Using Xcode and the iPhone simulator, all features of the Objective-C language are covered in detail, including all object-oriented features of the language. In addition, the Foundation framework, a key part of the Objective-C runtime environment is covered in detail, including how to handle Strings, Dates, Data, Files, Networking, and more.

CSE41131: Healthcare IT Capstone Project - 3.00 Units

Under the close supervision of the instructor, the students are exposed to a real life, complex project that will demonstrate integration of knowledge gained in the courses of the Healthcare IT certificate. This course is intended to be an intensive, active learning project, requiring significant effort in the planning and implementation, as well as substantial preparation of the final written work product, providing the students with the ability to specialize in a particular area of the field.

CSE41132: Web Analytics - 3.00 Units

Web analytics collect and represent internet data from your website. It tracks on-line visitors and their activities: referral sources, keywords, time on site, conversion rate – there are tens of metrics to choose from. Web analytics provide invaluable feedback that can help you improve your website to meet your business goals.

This course explores and teaches:

- Different ways of Internet data capturing
- Major web analytics metrics and dimensions
- How to use the free Google Analytics service from setup to reporting

For more information about this course, please contact the program manager at infotech@ucsd.edu or 858-534-9352

CSE41135: SQL Server Administration I - 3.00 Units

Acquire the information and hands-on skills necessary to install, configure, administer, and troubleshoot the fundamental features of Microsoft SQL Server. Topics include: creating, maintaining, backing-up and restoring databases; datafile and transaction log file inner-workings; implementing layers of security through logins, database users, and object permissions; concepts of transactions and referential integrity; automating tasks via jobs; monitoring; and troubleshooting.

CSE41141: LabVIEW Application Development - 3.00 Units

The LabVIEW Application Development course introduces you to structured practices to design, develop, test, and deploy LabVIEW applications. This course focuses on developing hierarchical applications that are scalable, readable, and maintainable. The processes and techniques covered in this course will help reduce development time and improve application performance and stability. By incorporating these design practices early in your development, you will avoid unnecessary application redesign, increase VI reuse, and minimize maintenance costs.

In addition, the LabVIEW Application Development course will teach you to identify the components of integrated systems and implement networking technologies for your applications. You will learn how to extend your application functionality and reduce development time by leveraging the capabilities of other applications using connectivity technologies such as DLLs, ActiveX, databases, and the Internet.

Learning Objectives

By the end of this course, the student will be able to:

- Establish a software lifecycle for future project development
- Communicate with customers during project definition
- Develop professional user interfaces
- Develop applications that are scalable, readable, and maintainable
- Investigate and implement VI timing techniques
- Handle errors that may occur during code execution
- Document VIs effectively
- Develop integrated systems.
- Use networking technologies such as UDP and TCP.
- Programmatically control VIs using VI Server.
- Implement VIs that use Shared Libraries such as DLLs.

The course is intended for those wishing to extend their LabVIEW knowledge towards developing LabVIEW applications that are Scalable, Readable, and Maintainable.

The material in this course follows that of National Instruments “LabVIEW Core 3” and “LabVIEW Connectivity.

After the conclusion of the course you will be given the opportunity to obtain a certification as a LabVIEW Associate Developer (CLAD) or LabVIEW Developer (CLD). Certification exam score does not affect your grade.

CSE41145: Android Programming I - 3.00 Units

Fully updated for the latest Android and Android Studio version, this hands-on course is for software developers who need to quickly learn how to write Android applications for both phones and tablets. It begins by introducing the new Android Studio and SDK Tools. Learn the organization of an Android project, including Java source code and XML layout.

Gain knowledge on:

- How to use popular widgets such as text views, buttons, and lists
- The key Android classes, including: Activity, Service, Broadcast Receiver, and Content Provider
- How to access the network, use WebView, access web services, perform file I/O, use the camera, and more.

By completion, you will have the skills to create basic Android applications.

For more information about this course, please contact the program manager at infotech@ucsd.edu or 858-534-9352

CSE41146: Android Programming II - 3.00 Units

Building on the foundation of Android Programming I, this class will give you the tools to make the most out of one of the most talked about mobile operating systems in the world. You'll go more in depth on topics covered in the first Android class, including UI development, Android services and the application lifecycle. We'll also look at the new Android 6 permissions model, using REST services, and data storage options, including the Android SQLite database. Each new concept will be demonstrated in the context of a real app. The final project will challenge students to develop an app that combines these ideas into a unique app ready for publishing.

CSE41147: iOS Programming I - 3.00 Units

Fully updated, this hands-on course focuses on the graphical user interface skills of iOS. Using Xcode, you'll quickly gain hands-on skills writing graphical apps for all iOS devices: iPhone, iPod Touch, and iPad. You'll learn important iOS skills such as touches and gestures, views and view controllers, alerts, multimedia, images, animations, web views, web services, table views, and more! At the end of the course, you will have the skills required to take iOS Programming II.

CSE41148: iOS Programming II - 3.00 Units

Fully updated to the latest version of Swift, this course focuses on new skills in the following areas such as:

At the end of this course, you will have hands-on experience with all major iOS Frameworks.

For more information about this course, please contact the program manager at infotech@ucsd.edu or 858-534-9352

CSE41151: Text Mining - 2.00 Units

Text Mining

With the vast amounts of unstructured data available on the web and stored in databases, and the promise it will provide insights unavailable in structured data, text mining has become an indispensable addition to traditional predictive analytics.

In this course, students will learn practical techniques for text extraction and text mining in a data mining context, including document clustering and classification, information retrieval, and the enhancement of structured data. Emphasis will be placed on the practical use of text mining in business. In addition, basic concepts of textual information such as tokenization, part-of-speech tagging, and disambiguation will be covered.

Topics include:

- Structured vs. unstructured learning
- CRISP-DM
- Data sources
- Dictionaries and lexicons
- Text parsing
- Regular expressions
- Structured data from unstructured data
- Document clustering and classification
- Sentiment analysis

Practical experience:

- Working with R
- Working with unstructured text
- Prepping text data for modeling
- Visualizing text data

Software: Students will use R in this course. There is no additional cost for this product.

Course typically offered: Online in Fall and Spring

Prerequisites: Introduction to R Programming or equivalent knowledge required.

Next Steps: Upon completion of this course, consider taking other courses in data science to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41157: Search Engine Optimization (SEO) and Marketing - 3.00 Units

In our current information age, Search Engine Optimization (SEO) is a method of marketing used by companies world-wide and is one of the most successful and cost-effective ways of obtaining business through a website property. Visibility in search engines can lead to better brand awareness and increased sales. Learn how to optimize your website for better positioning through search engines including Google, Yahoo, and Bing. This course covers the basics of how a website is structured, how search engines work, what they are looking for, choosing competitive keywords, writing content for your website, code optimization, link building, social media and some advanced optimization

techniques. Students will learn how to effectively optimize a website, rewrite HTML code, choose competitive keywords, create copy and utilize images and other media, as well as build a successful linking plan for higher rankings in search engines.

CSE41161: Advanced Excel for Analysis and Business Intelligence - 3.00 Units

Advanced Excel for Analysis and Business Intelligence

Excel can be intimidating, complex and confusing with so many features and tools to use. After covering the basics to lay the foundation, this course will move to advanced features of Excel that can be applied in healthcare data analysis, statistics, and visualization, while building pragmatic solutions to common business problems. This course will follow a problem-solution format to explore data analysis options and cover best-practices for delivering solutions in Excel.

Topics include:

- Dynamic dashboard
- Pivot table and pivot reporting
- Table and formatting
- Advanced formatting
- Advanced charting
- Advanced formulas
- Data tables
- Simulations and solver
- Functions
- In cell drop down menu
- Data validation
- Error checking and data monitoring
- Sparklines
- IF statement
- VLOOKUP
- Macro operations

Course typically offered: Online in Fall, Winter, Spring, and Summer (every quarter)

Prerequisites:

CSE-41250: Intermediate Excel or an equivalent intermediate mastery of Microsoft Excel.

A current and up to date version of Microsoft Excel on their computer.

Next Steps: Upon completion of this class, consider enrolling in other required coursework in the Business Intelligence Analysis Certificate Program.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41162: ASP.NET MVC - 3.00 Units

Over the last 20 years websites and web applications became a fundamental part of our daily lives. This course is dedicated to the modern architecture for building web applications using Microsoft platform. ASP.NET MVC is built on top of the powerful .NET framework but has the flexibility to be customized and extended to fit specific project requirements. The course covers variety of subjects, from the basics of creating a new web application project, to the details of implementing interactive web pages that accept and validate user input, to the inner workings of ASP.NET platform and its integration with Microsoft IIS web server.

Topics Include

- MVC fundamentals: controllers, actions, and views
- Regular and strongly typed HTML helpers

AJAX with partial views and JSON
 Traditional and attribute-based routing
 Windows Authentication and ASP.NET Identity

Practical Experience

Implement interactive web applications with user input validation
 Build contemporary user interface using AJAX
 Configure and deploy ASP.NET MVC solutions

For more information about this course, please contact infotech@ucsd.edu or 858-534-9352

CSE41168: PHP Model-View-Controller (MVC) - 3.00 Units

In this course, students will gain an in-depth understanding of the MVC Framework, including recent client-side technologies in a PHP environment, which will be the focus for this class. In MVC, the model represents the information (the data) of the application, the view corresponds to elements of the user interface, and the controller manages the communication of data and the business rules used to manipulate the data to and from the model. Topics include: writing PHP using OOP, writing models, views, and controllers, database interaction (CRUD), using class, driver and helper references, as well as write client server web apps. By the end of this course you will be able to develop a modern website using approaches learned in class.

CSE41183: SAS Programming II: Advanced DATA Step Programming - 3.00 Units

SAS Programming II: Advanced DATA Step Programming

A common perplexity facing beginning SAS programmers is that the SAS data set that they create is not what they intended to create; i.e. there are more or less observations than intended or the value of the newly-created variable was not retained correctly. These types of mistakes are most commonly committed because programming novices learn SAS language syntax without understanding the fundamental SAS programming concepts.

This course provides a comprehensive overview of how the SAS DATA step processes during the compilation and execution phases. Course topics include understanding how the program data vector (PDV) works, BY-group processing, writing loops in the DATA step, and array processing. Many programming work-related examples will be demonstrated and students will also have opportunities to practice solving real-life problems via exercises and assignments.

Topics include:

Creating variables conditionally
 Understanding how the PDV works
 BY-group processing in the DATA step
 Writing loops in the DATA step
 Array processing
 Combining data sets
 DATA Step functions
 Useful SAS procedures

Practical experience:

Writing SAS programs to read in data, perform data cleaning, and manipulate data

Software: Students must download and install SAS OnDemand for Academics: Enterprise Guide. There is no additional cost for this product. Registration and download information will be provided by the instructor.
 Course typically offered: Online in Winter and Summer

Prerequisites: SAS Programming I: DATA Step and PROC Fundamentals or one year of SAS programming experience is required.

Next Steps: Upon completion of this course, consider taking PROC SQL using SAS, SAS Macro Programming, or Output Delivery System (ODS) and Data Visualization Essentials using SAS to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41189: Visual Studio - 2.00 Units

This course introduces Visual Studio, the development environment that empowers programmers more than any other IDE in the marketplace. Visual Studio is used by everyone working with Microsoft technologies, such as .NET framework, SQL Server, ASP.NET, and Windows Phone, regardless of the programming language.

In this course we discuss fundamental features that are common to different project types. Students will become familiar with Visual Studio IDE and thus provide a foundation to any subsequent Microsoft technology class. This class may also be useful to students that have a working knowledge of Visual Studio but would like to learn additional features of the system.

Topics include:

Code Editor
 Code Analysis
 Source Code Explorer
 Transact-SQL Editor

For more information about this course, please contact infotech@ucsd.edu or 858-534-9352

CSE41190: PROC SQL using SAS - 2.00 Units

PROC SQL using SAS

SAS is a powerful and versatile language for data manipulation, and the ability to implement SQL within SAS creates additional levels of usefulness and flexibility. Not only does PROC SQL often use fewer and shorter statements than built-in SAS procedures, it also often improves the efficiency of the code. This course provides students with general knowledge of the SQL procedure using SAS software as a database language and the practical skills needed to become proficient using PROC SQL as a programming language. Students will put their newly acquired PROC SQL skills to use in real-world, hands-on programming projects.

Topics include:

Retrieving, subsetting, ordering, and grouping data
 Logic scenarios with case expressions
 Tables and "virtual" tables
 Aggregating data with summary functions
 DATA step merges and joins
 One-to-one, one-to-many, many-to-one, and many-to-many data relationships
 Complex queries using inner and outer join constructs and set operators
 Producing output using PROC SQL options

Practical experience:

Hands-on SAS programming projects, using PROC SQL

Software: Students must download and install SAS University Edition. There is no additional cost for this product. Please note, SAS University Edition is required, as not all functions taught in this class can be completed using SAS OnDemand for Academics: Enterprise Guide.
 Course typically offered: Online in Fall and Spring

Prerequisites: Completion of SAS Programming II or one year of SAS programming experience required.

Next Steps: Upon completion of this course, consider taking Output Delivery System (ODS) and Data Visualization Essentials using SAS or SAS Macro Programming to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41191: SAS Macro Programming - 2.00 Units

SAS Macro Programming

The SAS macro language adds power and flexibility to SAS. Using macros, you can write code a single time and reuse it repeatedly throughout your programs, which is particularly beneficial when making changes to the original code because the updates will propagate throughout your programs. Macros also enable you to make programs data-driven.

This course introduces the SAS programmer to the SAS macro language. The versatility of the macro language will be demonstrated through examples and programming projects. Upon completion of the course, students will be able to use the macro language in programs.

Topics include:

- Creating and storing macro variables
- Creating and calling macros
- Assigning and passing macro parameters
- Controlling program flow
- Using key macro language statements
- Coordinating DATA step and macro language variable values
- Understanding important macro language functions

Practical experience:

- Hands-on SAS programming projects, using SAS macros

Software: Students must download and install SAS OnDemand for Academics: Enterprise Guide. There is no additional cost for this product. Registration and download information will be provided by the instructor on the start date.

Course typically offered: Online in Fall and Spring

Prerequisites: Completion of SAS Programming II: Advanced DATA Step Programming or one year of SAS programming experience is required.

Next Steps: Upon completion of this course, consider taking Output Delivery System (ODS) and Data Visualization Essentials using SAS or PROC SQL using SAS to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41192: Output Delivery System (ODS) and Data Visualization Essentials using SAS - 2.00 Units

Output Delivery System (ODS) and Data Visualization Essentials using SAS
The traditional SAS output has limitations that can make it difficult to derive the most value from your data. Output Delivery Systems (OSD) removes those limitations by enabling the creation of reports in HTML, PDF, Microsoft Excel, or other formats. These reports can be customized with colors, fonts, graphics, and styles to create dynamic, engaging presentations.

This course teaches students to leverage ODS to create high-quality reports, while providing a better understanding of the statements, parameters, and options required to deliver the desired output. The topics incorporate DATA and PROC step programming techniques into hands-on projects creating outputs in RFT, PDF, HTML, and Excel.

Topics include:

- Selecting output objects with selection or exclusion lists
- Using SAS-supplied formatting statements, options, and styles
- Formatting output as RTF and PDF
- Formatting output as HTML
- Sending output to Microsoft Excel and Word
- Using ODS graphics statement options
- Constructing drill-down applications

Practical experience:

- Use ODS to create SAS output in RTF, PDF, HTML, and Excel formats
- Create data visualizations using ODS statistical graphics

Software: Students must download and install SAS University Edition. There is no additional cost for this product. Please note, SAS University Edition is required, as not all functions taught in this class can be completed using SAS OnDemand for Academics: Enterprise Guide.

Course typically offered: Online in Fall and Spring

Prerequisites: Completion of SAS Programming II: Advanced DATA Step Programming or one year of SAS programming experience is required.

Next Steps: Upon completion of this course, consider taking PROC SQL using SAS or SAS Macro Programming to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41193: SAS Programming Capstone Project - 3.00 Units

SAS Programming Capstone Project

Writing a white paper or technical report not only allows you to express your knowledge and ideas, but also provides an opportunity to participate more fully in your professional field. However, many readers will only read about 50% of a technical paper. Knowing how to make your content more readable will encourage others to engage more completely with your work and enable you to be seen as both credible and capable.

This mentor-lead, 9-week capstone course will give you an opportunity to demonstrate your cumulative subject knowledge of SAS programming and provide you with the skills to produce a technical paper. You will explore a topic that allows you to delve deeply into a particular area of interest while exercising your creativity and analytical skills.

Topics include:

- Defining an appropriate study topic
- Applying SAS programming language concepts and techniques to chosen topic
- Developing effective outlines for good content organization
- Understanding how to write effectively for readability
- Using emphasis, preciseness, and conciseness in the development of a technical report
- Accessing and effectively using research resources
- Mastering document design to develop a visually appealing report
- Developing visual aids for a presentation using PowerPoint

Practical experience:

- Write a technical paper suitable for presentation at a SAS conference

Software: Students will use SAS University Edition. There is no additional cost for this product.

Course typically offered: Online in Winter and Summer

Prerequisites: This course can only be taken after all other courses in the SAS Programming certificate have been completed.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41195: Advanced Web Analytics: Harnessing the Predictive Power - 2.00 Units

Advanced Web Analytics: Harnessing the Predictive Power

The success of today's organizations depends on the ability of workers to make better and faster fact-based decisions to solve complicated business problems. Statistics-based predictive analytics has become the key enabler for this evidence-based management. Digital analytics uses sophisticated traffic information about a web service to deliver a comprehensive array of vital business intelligence and visitor behavior insights.

Using Microsoft Excel, R, and KNIME software tools as a work engine for data analysis, this course will teach the applications of predictive analytics using web analytics data. Popular methods and algorithms, including regression, naive Bayes, and decision trees, will be covered and assessed for their value and validity.

Topics include:

- Linear regression
- Logistic regression
- Naive Bayes
- Decision trees
- Visitor segmentation
- Landing page experiments
- Predicting visits

Practical experience:

- Analyze data using Microsoft Excel, R, and/or KNIME

Software: Students will use the R statistical package, Google Analytics, Excel, and/or KNIME during this course.

Course typically offered: Online in Winter and Summer

Prerequisites: Familiarity with Google Analytics or another web analytics tool required. Basic math, including statistics, functions, and matrices, required.

Basic programming skills or Introduction to Programming required.

Next Steps: Upon completion of this course, consider taking Fundamentals of Data Mining to continue learning.

More Information: For more information about this course, please contact infotech@ucsd.edu.

CSE41196: Distributed Programming Using WCF, REST and the Web API - 3.00 Units

Distributed and service-based programming techniques are critical in an ever-connected world. Learn to leverage the .NET Framework to design and develop Internet-enabled applications that can communicate with all forms of devices from workstations and servers to tablets and phones. With WCF you can quickly create web services using the latest WS* specifications and SOAP. The Web API leverages HTTP to create robust RESTful services, popular for cross-platform compatibility.

Topics Include:

- Design, configure, deploy and consume WCF services and use them to create and consume Data services for the web
- Design, configure, deploy and consume RESTful applications using the Web API
- Advanced security techniques including OAuth and federated security
- Cloud deployment using WCF and the Web API with Azure

Practical Experience:

Gain a fundamental understanding of distributed programming architecture and n-tier deployment

Learn how to create efficient server-side applications that provide universal functionality and data to modern programs and apps

Develop client-side applications that can leverage servers using multiple protocols

Software: Students will use Visual Studio Community Edition 2015 or later which is freely available on Microsoft's website: <https://www.visualstudio.com/>

For more information about this course, please contact infotech@ucsd.edu or 858-534-9352.

CSE41197: Database Programming in .NET - 3.00 Units

The ability to interact with relational databases is an essential part of most .NET applications, especially line of business software. This course introduces two principal frameworks that are available to .NET developers: ADO.NET and Entity Framework. The first is a set of classes that allow database programming at a low level, while the latter is a fully-featured ORM framework. We start with a recap of T-SQL, and finish with data binding in .NET UI architectures.

You will learn how to:

- Bridge the gap between relational databases and .NET applications
- Retrieve data from queries or stored procedures and display it on the screen
- Add, modify, and delete data from any .NET application
- Build visual models that auto-generate data access code

For more information about this course, please contact the program manager at infotech@ucsd.edu or 858-534-9352

CSE41198: Introduction to Statistics using R - 3.00 Units

Introduction to Statistics using R

Statistics allows us to collect, analyze, and interpret data. The R programming language is one of the most widely-used tools for data analysis and statistical programming. Its easy to learn syntax, built-in statistical functions, and powerful graphing capabilities make it an ideal tool to learn and apply statistical concepts.

In this class, you will master the most widely used statistical methods, while also learning to design efficient and informative studies, to perform statistical analyses using R, and to critique the statistical methods used in published studies. No prior knowledge of statistics or R is required and emphasis is on concepts and applications, with many opportunities for hands-on work.

Topics include:

R Programming

- Accessing data
- Generating output
- Manipulating objects
- Performing statistical analyses
- Generating statistical reports
- Creating statistical graphics

Statistics

- Descriptive statistics
- Probability
- Hypothesis testing

Power and sample size
 Correlation
 Regression
 Categorical data analysis
 Design of experiments
 Analysis of variance (ANOVA)

Javascript
 Web browsers
 Servers
 CMS
 Various Social Media and their potential uses

Practical experience:

Hands-on experiments and statistical analyses using R

Software: R, a free software environment for statistical computing and graphics, is used for this course.

Course typically offered: Online in Fall and Spring

Prerequisites: Knowledge of basic programming or Introduction to Programming is recommended.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41199: Technology Alignment, Integration, and Compliance - 3.50 Units

Are you an IT professional? Learn to align your systems with the business systems and current regulations. Explore enterprise architecture as a foundation for systems design. Through both case studies and practical exercises, learn the application of architectural techniques toward real world business and IT challenges. Next, explore systems integration techniques in order to ensure that new systems can effectively work within the existing technology environment. Finally, alignment with the regulatory environment will be evaluated via a detailed study of three major groups of regulations, GxP (FDA), HIPAA, and Sox, which will culminate in student presentations on the impact of specific aspects of these regulations on an enterprises architecture.

CSE41201: Introduction to Swift Programming - 3.00 Units

This hands-on course is aimed at software developers or aspiring developers who want to quickly learn Apple’s new Swift programming language to write applications for macOS, iOS (for iPhone and iPad), watchOS, and tvOS. Using Xcode Playgrounds, you will learn all of the major features of Swift with particular attention to the type system. Fully updated for Swift 3, this course will include in-depth coverage of the Swift Standard Library and Foundation types. You will become familiar with using protocols and generics as well as more traditional object oriented approaches. At the end of the course, you will have the skills required to take iOS Programming I.

CSE41204: Data Analytics Using Python - 3.00 Units

The advancement of science increasingly relies upon the use of Data Analytics, a fusion of Computer Science, Big Data, and scientific investigation to uncover insights, understandings and opportunities that would otherwise go unnoticed. This course presents the rich set of tools, libraries, and packages that comprise the popular and highly practical Python data analysis ecosystem. Students will apply these powerful pattern finding, correlation plotting, and insight yielding tools to a various case studies across diverse disciplines.

CSE41206: Web and Internet Literacy - 4.00 Units

Students will gain a high level knowledge of the medium of the Web, including an overview of different technologies used in the web front and back end. During the course students will produce simple web page and will build foundational skills necessary to complete future course work in the certificate program. The class provides an overview of the topics and concepts needed to create not only a web page but also an overview of understanding the functional aspects of websites and other server-side components.

Topics include:

HTML
 CSS

For more information about this program, please contact the program manager at infotech@ucsd.edu or 858-534-9352.

CSE41207: Introduction to HTML and CSS - 3.00 Units

This course introduces students to HTML5, the primary markup language for the world wide web and its modern style language, cascading style sheets (CSS). Students will learn about the language syntax, and layouts. This course shows how supporting browsers will render a web page and provides fallback solutions for non-supporting browsers. Students will develop an understanding of media queries and how to create a responsive web design.

CSE41208: Introduction to JavaScript - 3.00 Units

An introduction to the very basics of the JavaScript language and how it works with HTML5 on a web pages. Students will be introduced to object oriented programming as the JavaScript syntax is explored, Students will learn to use JavaScript to provide advanced functionality to their web sites, to provide user interactivity.

Some topics covered include:

The use of conditions
 Loops
 Functional arrays

For more information about this course, please contact infotech@ucsd.edu or 858-534-9352.

CSE41209: HTML5 and jQuery - 3.00 Units

Picking up where the HTML5 and Javascript course left off, this course introduces jQuery, a popular Javascript library. Connections will be made between the functionality offered by jQuery and how it differs from JavaScript and when to use each. Asynchronous development using both JavaScript’s XMLHttpRequest and jQuery’s Ajax models will be introduced. External API’s and RESTful services will also be taught. Students will use jQuery to access API’s and parse data in a project.

CSE41210: Front End Web Development Portfolio - 3.00 Units

This capstone course, serves as the culminating and integrative experience of the courses offered in the Front End Web Development certificate program. Students will create a portfolio website utilizing the techniques taught in,

HTML5 & CSS,
 HTML5 & Javascript
 HTML5 & Jquery

In addition students will be introduced to project management techniques such as agile and waterfall and will be asked to utilize them for the course long production of their projects.

These concepts will be implemented when students produce their projects with iterative cycles of feedback from both their peers and the instructor.

By the completion of this course students will have created a portfolio site with examples of their work.

For more information about this course, please contact infotech@ucsd.edu or 858-534-9352

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41216: Project Management in Healthcare IT - 2.00 Units

Although particularly challenging due to how integral they are to the functioning of the organization, the implementation of new IT systems within a healthcare environment requires the review of processes and structures. This course covers: the basic elements of project management; the approaches and issues surrounding the management of large projects within the healthcare organization, including the definition of roles, objectives, budgeting; and securing the support of all stakeholders. Particular attention is paid to understanding the factors that lead to failure and success in a healthcare related project.

CSE41219: MS Access - 3.00 Units

Microsoft Access is one of the most efficient and powerful relational database to manage data. Information can be stored, linked, and managed using a single relational database. Knowing how to store your data effectively, will allow you to generate faster, accurate, and day-to-day reports to keep up with the demands of today's working environment. Your company can respond faster, create dynamic reports for your business environment, leading to generating higher sales and profits for the business. In this course you will learn the skills to create, modify databases and use the various objects in Access. The course is designed to take students from understanding the foundation of a database to creating a relational database, database maintenance, and integrating Access with other programs.

CSE41221: Overview of BI and Data Analysis - 3.00 Units

Overview of BI and Data Analysis

As the amount of data companies collect continues to grow at a rapid rate, the ability to effectively transform that data into actionable information has become paramount for business growth and success. Business intelligence (BI) and data analytics enables businesses to make better decisions, improve processes, discover efficiencies, support customers, and reduce costs. In this course, students will learn the complete analytics cycle, from determining requirements to extracting and disseminating information. It will cover the process, technologies, applications, tools, and skills required to analyze data so that informed and timely decisions can be made.

Topics include:

- Analytics process and tools
- Understanding data
- Data warehousing
- Data design
- Big data
- Hadoop
- Cloud computing
- Data visualization
- Predictive analytics
- In-memory computing
- Data virtualization

Practical experience:

- Identify and analyze the best BI tools and vendors

Course typically offered: Online in Fall, Winter, Spring, and Summer (every quarter)

Prerequisites: None.

Next Steps: Upon completion of this class, consider enrolling in other required coursework in the Business Intelligence Analysis Certificate Program.

CSE41222: Dashboards and Data Visualization for Data Analysis - 3.00 Units
Dashboards and Data Visualization for Data Analysis

With the growing amount of data available to businesses, decision-makers must translate strategy into accountability, measure progress against goals, and leverage data for business decision making. Dashboards are used to present and analyzing enterprise performance data, both strategic and operational, and to perform business analysis easily and quickly.

This course will teach dashboards and data visualization technologies, using an approach that will include theory as well as a significant hands-on component. Students will learn how to design and build dashboards, as well as create content of different types that can be incorporated into dashboards.

Topics include:

- Dashboards and scorecards
- Key performance indicators
- Process, architecture and requirements
- Dashboard design principles
- Effective data visualization

Practical experience:

- Perform basic analysis functions in Tableau
- Develop data visualizations using Tableau
- Develop a dashboard using Tableau

Software: Students will learn to use Tableau to visualize data. Registration and download information will be provided by the instructor on the start date.

Course typically offered: Online in Fall, Winter, Spring, and Summer (every quarter)

Prerequisites:None.

Next Steps:Upon completion of this class, consider enrolling in other required coursework in the Business Intelligence Analysis Certificate Program.

More Information:For more information about this course, please contactunex-techdata@ucsd.edu.

CSE41225: Python for Informatics - 3.00 Units

Python for Informatics

Informatics is the study of structure, algorithms, behavior, and interactions of information systems. Its applications are powerful and broad, and include such fields as life sciences, data mining, business analytics, and social computing.

This hands-on course introduces the Python programming language, and is targeted toward students without prior programming experience who are interested in how informatics can be employed to provide solutions to complex, data intensive problems in a variety of scientific and business domains. After learning the core syntax and elements of the Python language, students will gain experience in the fundamentals of network programming, web services, databases and Structured Query Language (SQL), and data visualization.

Topics include:

- Variables, expressions, and statements
- Conditional execution and functions
- Iteration and strings
- Files and lists
- Dictionaries and tuples
- Regular expressions and network programming

Web services, database connectivity, and Structured Query Language (SQL)
 Data visualization
 Automation through scripting

Practical experience:

Write programs using the core Python language elements
 Create IPython Notebooks to document coding sessions
 Use Python to explore network programming, web services, databases, MySQL, and data visualization

Software: Students will use Python 2.7 and 3.X in this course. There is no additional cost to access this software.

Course typically offered: Online in Winter and Summer; In-class in Fall and Spring

Prerequisites: None.

Next Steps: Upon completion of this course, consider taking other courses in data science to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41241: GIS for Planning Professionals - 2.00 Units

This practical course will introduce students to fundamental geographic information system (GIS) skills and capabilities relevant to planning and development. Students will receive hands-on training on GIS software including map creation, spatial data analysis, and data sources, and will leave this course with an understanding of the different ways planners can use GIS to analyze spatial data and how to best communicate findings through mapping and visualization. This course is tailored to students in the planning and development sectors. Students will explore relevant case studies, best practices, and will understand typical issues that arise in on-the-job usage of GIS and how to fix them.

AICP Credit: AICP members can earn Certification Maintenance (CM) credits for this activity. For a list of additional UC San Diego Extension AICP CM Events go to American Planning Association.

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CSE41242: Introduction to Programming Using Java - 3.00 Units

Learning how to program can be the first step towards a lucrative and challenging career. Aimed at first time programmers, this course will help you leap onto that path covering the highly popular Java programming language. This course will cover fundamental statements, teach you how to write simple programs, and includes topics such as: objects, methods, branching, repetition, data structures, and inheritance.

Course Highlights

An Introduction to:

- Programming
- Data Modeling
- Functions
- Logic
- Algorithms
- Data Structures
- Testable code

Course Benefits

Upon completion of this course students will have foundational knowledge in key Java programming concepts:

- Syntax of the Java programming language
- Understand and develop algorithms

Write, run, debug and modify programs
 Familiarity of Object-oriented programming concepts
 Obtain fundamental programming knowledge for advanced programming courses

CSE41243: Discrete Math: Problem Solving for Engineering, Programming, & Science - 3.00 Units

Discrete Math: Problem Solving for Engineering, Programming, & Science

Discrete mathematics is used to solve certain types of math problems, such as how to count or enumerate quantities, and to describe their properties and the relationships among them. Discrete math is applied math: it provides the basis for much of computer science, statistics, and programming, as well as being integral to engineering and many different scientific disciplines. Discrete math helps to find solutions to every day, real-world problems.

In this course, students are introduced to the fundamental concepts and cover some of the essential techniques of discrete mathematics. With emphasis on the problem solving and a very hands-on approach, students will master concepts and techniques such as number theory and graph theory.

Topics include:

- Logic
- Ordering and sequences
- Integer functions
- Divisibility and primes
- Graphs and trees
- Counting and probability
- Asymptotics

Practical experience:

- Apply graph ideas to model simple situations
- Compute probability of some simple events
- Verify the correctness of an argument using truth tables
- Describe some simple expressions using big-O notation

Course typically offered: Online in Winter and Summer

Prerequisites: Strong understanding of college algebra required.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41245: Sports Predictive Analytics - 2.00 Units

Sports Predictive Analytics

Advancements in the field of predictive analytics have led to the creation of predictive models that can compute probabilities of sports win/loss prospects and analyze the performance of players. A well-known success story of sports predictive analytics is its role in predicting the performance of baseball players, which enabled the Boston Red Sox to win three World Series titles since 2004 after 86 years of losses.

In this course, students will compute simple statistics of a game which has already been played, then use correlation to detect statistical relationships between different game metrics. The science of rating and ranking will be covered in detail, and regression models will be used for estimating a metric from several predictor variables. Predictive models will then be used to compute win/loss probabilities.

Topics include:

- Metrics used for team and player evaluation
- Use of sabermetrics for the evaluation of teams
- Team ranking using Massey, Colley and Elo methods

Predictive models for win/loss probabilities
 Regression techniques for machine learning
 Feature selection using Ridge and Lasso regression
 Sentiment analysis and its role in predicting the game outcomes
 Player and team performance report generation

Practical experience:

Apply predictive analytics to sports data to predict win/loss and other probabilities

Software: R, a free software environment for statistical computing and graphics, is used for this course.

Course typically offered: Online in Winter and Summer

Prerequisites: Introduction to Statistics or equivalent knowledge recommended. Familiarity with R, SAS, SPSS, or similar statistical software recommended.

Next Steps: Upon completion of this course, consider enrolling in our Data Mining for Advanced Analytics certificate program.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41246: Android Java Fundamentals - 3.00 Units

You will be introduced to environments and concepts towards learning how to write Android programs. The Android Java programming language features are covered in detail.

As the first course in the Android Programming Certificate you learn how to use Android Studio, the Android Emulator, and the Android Java programming language. Android Studio provides you with the IDE (Integrated Development Environment), while Android Java provides you with the programming language.

Topics include

- Functions
- Structures
- Enumerations
- Classes
- Generics
- And more

At the end of the course, you will have the skills required to take Android Programming I.

CSE41247: Android Architecture - 3.00 Units

This Elective course is for those who want to explore the Android Architecture, using the Android source tree as the guide. You will explore the underlying Linux operating system, how it communicates with device drivers, the security architecture, and how Android Java apps access the underlying platform. You will also learn how native applications written in C/C++ can be accessed from Java applications.

CSE41248: Android App Production - 3.00 Units

This course will take the student through the process of conceiving, designing, developing and publishing an Android application. Students will begin the process by defining their app idea, as well as conducting an audience and competitive analysis. From there students move on to writing app specifications, creating paper prototypes and conducting preliminary user interface testing. Students will then begin production of their app, as they learn to work with Material Design requirements for Android, as well as quality assurance testing, Google Play store requirements and marketing strategies. Students will design and program their app and publish it in the Google Play store.

CSE41249: iOS App Production - 3.00 Units

As the forth course in the iOS Programming Certificate, this course will take the student through the process of conceiving, designing, developing and publishing an iOS application. Students will begin the process by defining their app idea, as well as conducting an audience and competitive analysis. From there students move on to writing app specifications, creating paper prototypes and conducting preliminary user interface testing. Students will then begin production of their app, as they learn the graphical design and interface design requirements for iOS, as well as quality assurance testing, app store requirements and marketing strategies. Students will design and program their app preparing them to be published in the iOS store.

CSE41250: Intermediate Excel - 3.00 Units

When you need to crunch numbers for sales, inventory, IT, or other departments, the ability to get the right information to the right people at the right time can create a powerful competitive advantage. The knowledge on how to manage data and effectively present the information is extremely important. To have a competitive edge in today's world market, you need to have the knowledge to produce reliable and actionable results from your data. Excel provides a way to extract the data to get the answers for you. This course will build a strong foundation of knowledge for you to use Excel in the most effective way to analyze your Excel data and keep up with market trends.

Our focus is to help you increase your productivity and minimize your frustration through the power of knowledge of Excel tools.

For more information about this course, please contact the program manager at

infotech@ucsd.edu or 858-534-9352

CSE41251: Introduction to Cross Platform App Development - 3.00 Units

Angular, Cordova and Ionic are a perfect blend of technologies for building hybrid applications that behave like a native app across multiple mobile platforms. In this course, you will learn how to build an Ionic v2 application from scratch using the Ionic CLI and explore its various components. We will also examine how to architect our app using Angular foundation of services, controllers, and views. Finally, we will extend our application to leverage some mobile specific capabilities.

Learning Objectives:

- Create cross-platform mobile apps with the Ionic framework (v2)
- Learn the basics of the Ionic framework and services
- Understand Apache Cordova to author hybrid mobile apps
- Understand basic mobile UX patterns and solutions

CSE41254: Introduction to SPSS - 3.00 Units

Unravel the mysteries within data with SPSS software! SPSS is one of the most popular software packages used for statistical analysis and understanding data. Big data, prediction, and data mining all use SPSS.

Academic courses that use SPSS include psychology, education, research methods, nursing, social research, engineering management, and, naturally, statistics. SPSS appears in a wide range of applications in the business world, too, such as, automotive, pharmaceutical, medical device, outsourcing, and project management.

Data is generated from everything. Social media, educational research, hip replacement studies, Alaska Iditarod dog sled races, and automotive surveys all generate data. Although SPSS can read data in excel format, the capabilities of SPSS software eclipse those of programs like excel.

In this course, students will learn how to analyze data using the IBM SPSS software package. Using interesting datasets, this course focuses on using SPSS user-friendly menus with point-and-click. The course also includes

introductions to statistics, data, and SPSS Command Syntax Language programming. No prior knowledge of statistics or programming is assumed.

Topics include:

- SPSS software download and installation guidance -license included in the first lecture

- Basic statistics: mean, median, range, standard deviation, histograms, frequency distribution

- Using SPSS: crosstabs, import, export, save, correlations, chart builder

- Data quality control, missing values, absurd values, data cleaning, formats, create new variables, file formats (xls, txt, pdf)

- Fun data! Iditarod dog sled race, 1662 wolf!, automotive, pharmaceutical, financial, environmental

- Advanced techniques: regression, correlation, ANOVA, ROC curves, nonparametric, big data, data mining

- Programming and code basics of SPSS Command Syntax Language, ASCII, hexadecimals, Braille, useful directory setup.

Course typically offered: Online in Winter and Summer. Will be offered during FA 18.

Software: Enrollment in the course includes your license for IBM SPSS for the duration of the course.

Prerequisites: None

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41258: Fundamentals of Data Mining - 3.00 Units

Fundamentals of Data Mining

An ever-increasing volume of research and industry data is being collected on a daily basis. Skilled data scientists are needed to process and filter the data, to detect new patterns or anomalies within the data, and gain deeper insight from the data.

This course provides students with a foundation in basic data mining, data analysis, and predictive modelling concepts and algorithms. Using practical exercises, students will learn data analysis and machine learning techniques for model and knowledge creation through a process of inference, model fitting, or learning from examples.

Topics include:

- Introduction to data mining and big data
- Data mining process and standards
- Classification and prediction methods
- Preparing input and output
- Decision tables
- Decision trees
- Classification rules
- Bayesian learning
- Association rules
- Numeric prediction: regression and model trees
- Clustering: k-means, hierarchical, probabilistic, EM
- Model training, testing, and evaluation

Practical experience:

- Hands-on data mining projects

Software: WEKA is used for class assignments. There is no additional cost for this product.

Course typically offered: Online in Fall and Spring

Prerequisites: Statistics for Data Analytics or equivalent working knowledge is required. Linear Algebra for Machine Learning is also recommended, but not

required. You can test your level of statistical knowledge by taking the online Self-Assessment quiz.

Next Steps: Upon completion of this course, consider taking Data Preparation for Analytics to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41260: User Experience (UX) Metrics - 3.00 Units

The course introduces a comprehensive set of UX metrics. It takes a very practical approach with the emphasis of the analysis being directly applicable to everyone's job. At the end of the course in depth case studies are provided to illustrate the metric applications. The course is organized in three main parts.

The first part provides background information needed to become familiar with the UX metric. First user experience is defined and the value of measuring explained. Then we review the most common statistical procedures related to the metrics analysis. We finish with how to plan a study involving the UX metrics.

The second part introduces five general types of UX metrics. Each of the metrics is explained as well as when to use and when not to use it. It is shown how to collect data, analyze it and present. Real world examples are provided. In the last part of the course we discuss how the UX metrics is put into practice. The use of UX metrics in different types of organizations is presented, as well as how to use these metrics within the organization.

For more information about this course, please contact infotech@ucsd.edu or 858-534-9352.

CSE41261: Data Preparation for Analytics - 2.00 Units

Data Preparation for Analytics

An essential, yet often under-emphasized step in the data mining process is data preparation. Habitually, people are more inclined to focus on knowledge discovery, but without sufficient preparation of the data, return on efforts will be limited. Without adequate skill and knowledge, preparing data for modeling can lead to less than adequate modeling results.

This class offers in-depth coverage of data preparation techniques and a step-by-step approach through a variety of tools while providing practical illustrations using real data sets. The hands-on exercises will anchor the learned concepts and offer valuable first-hand experience in cleaning, filtering, and preparing the data for mining and predictive or descriptive modeling. The goal is to transform the datasets so that their information content is best exposed to the mining tool.

Topics include:

- Prerequisites to good data preparation
- Dealing with variables
- Sparcity
- Monotonicity
- Increasing dimensionality
- Anachronisms
- Missing values
- Outliers

Normalization, transformation, feature extraction, and feature reduction

- Building mineable datasets
- Data separation
- Dealing with imbalanced data

Practical experience:

Hands-on data mining projects

Software: WEKA is used for class assignments. There is no additional cost for this product.

Course typically offered: Online in Winter and Summer

Prerequisites: Fundamentals of Data Mining or equivalent experience required.

Next Steps: Upon completion of this course, consider taking Data Mining: Advanced Concepts and Algorithms.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41262: Data Mining: Advanced Concepts and Algorithms - 3.00 Units

Data Mining: Advanced Concepts and Algorithms

As the amount of research and industry data being collected daily continues to grow, intelligent software tools are increasingly needed to process and filter the data, detect new patterns and similarities within it, and extract meaningful information from it. Data mining and predictive modeling offer a means of effective classification and analysis of large, complex, multi-dimensional data, leading to discovery of functional models, trends and patterns.

Building upon the skills learned in previous courses, this course covers advanced data mining, data analysis, and pattern recognition concepts and algorithms, as well as models and machine learning algorithms.

Topics include:

Data mining with big data
Artificial neural networks

Back-propagation
Feed-forward networks
Radial-basis functions
Recurrent neural networks

Probability graph models and Bayesian learning
Hidden Markov models
Support vector machines
Ensemble learning: bagging, boosting, stacking
Random forests
Data mining tools
Text mining

Practical experience:

Hands-on data mining projects

Software: WEKA is used for class assignments. There is no additional cost for this product.

Course typically offered: Online in Fall and Spring

Prerequisites: Data Preparation for Analytics and Fundamentals of Data Mining or equivalent experience required.

Next Steps: Upon completion of this course, consider taking the Data Mining Practicum to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41263: Data Mining Practicum - 3.00 Units

Data Mining Practicum

Theoretical knowledge of data preparation, data mining, and machine learning techniques can be very useful. However, in order to be a successful data scientist, you must be able to put the theory into practice and draw useful information and insight from large datasets.

This challenging course is designed to give students hands-on practical experience data mining and predictive modeling. Students will go through several data mining projects, planning and executing all the steps of data preparation, analysis, learning and modeling, and identifying the predictive/descriptive model that produces the best evaluation scores. This course will ensure preparedness for complex real-life data mining tasks.

Topics include:

Obtaining the right data
Preparing the dataset
Modeling and iteration
Evaluation and model selection
How to deal with issues
Ensemble modeling

Practical experience:

Hands-on data mining projects using real-life data sets from industries such as marketing, healthcare, and environmental

Software: WEKA is used for class assignments. There is no additional cost for this product.

Course typically offered: Online in Winter and Summer

Prerequisites: Fundamentals of Data Mining, Data Preparation for Analytics, and Data Mining: Advanced Concepts and Algorithms required.

Next Steps: Upon completion of this course, consider taking additional courses in data science, data storage and management, or programming and scripting languages to continue building your skills.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41264: Statistics for Data Analytics - 3.00 Units

Statistics for Data Analytics

Statistics can be used to draw conclusions about data and provides a foundation for more sophisticated data analysis techniques. Viewing questions about data from a statistical perspective allows data scientists to create more predictable algorithms to convert data effectively into knowledge. As such, it is essential for data analysts to have a strong understanding of both descriptive and inferential statistics.

In this course, students will gain a comprehensive introduction to the statistical theories and techniques necessary for successful data mining and analysis. Particular attention will be paid to topics critical to data analytics, such as descriptive and inferential statistics, probability, linear and multiple regression, hypothesis testing, Bayes Theorem, and principal component analysis. This course prepares students for subsequent Data Mining courses.

Topics include:

Descriptive statistics
Two variable relationships
Probability
Bayes Theorem
Probability distributions
Sampling distributions
Confidence intervals
One- and two-sample hypothesis testing
Categorical data
Least-squares regression inference

Principal component analysis (PCA)

Practical experience:

- Organize, summarize, and present data
- Describe the relation between two variables
- Work with sample data to make inferences about the data
- Gain an understanding of linear algebra

Software: Students will use MyStatLab and StatCrunch to complete assignments. Both are included with the purchase of the required course textbook and instructions for access will be provided by the instructor on the course start date.

Course typically offered: Online in Fall, Winter, Spring and Summer (every quarter)

Prerequisites: Strong understanding of college algebra required

Next steps: Upon completion of this course, considering taking Fundamentals of Data Mining to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41265: Managing Software Quality Assurance and Testing - 3.00 Units

Quality Assurance is defined as part of quality management that ensures that quality requirements are met. The requirements for high-quality, reliable, predictable software become increasingly necessary when we strive to meet the customer's quality expectations. These activities start before the product is developed and continue during the product development, and through the release cycle.

In this course you will learn how to produce and implement standards to improve the development life cycle and ensure the QA processes are followed. The course also describes how these processes fit into the overall software development process. You will learn how to deliver high quality products in terms of predictability and reliability on time and within budget. You will learn how testing has adapted to incorporate Agile methodologies.

Specific topics discuss the test management phases, test metrics & reporting, how to implement organizational quality policy, how to build an effective SQA organization by employing the right people & how to operate in a global environment. You will learn how test organizations use tools to increase productivity and the increasing role automation is playing in achieving project goals. You will also learn techniques and content of an SQA and how to conduct regular Software audits. Also you will discover basic concepts of risk management and metrics collection for such things as: reworks, cost estimate, and code coverage.

CSE41266: Software Testing for Quality Assurance - 3.00 Units

Software testing directly affects the quality of the final product and impacts all phases of software product development and life cycle. Not only are the technical aspects of testing important, it is also essential to have well-designed testing processes and overall test program management in place. This course presents software testing processes, by introducing the concept of white and black box testing and how it fits with the Agile/scrumb model. The relationship between software development testing and product life cycle support is established by covering unit, integration, system, and acceptance testing. Testing methods discussed include verification, validation, tools, and testing metrics. At the end the Git software for SW version control and GitHub for source code management will be introduced and their application discussed in the test environment on Amazon cloud.

CSE41267: Web Performance Testing and Test Automation - 3.00 Units

In this course you will learn how to become an expert in testing Web sites and web services. The course is designed for both software QA testers and test managers. Distributed software architecture, diverse and dynamic

environments (OSes, browsers, networks, run-time code generation), multiple programming languages, and a large user base all make Web testing more complex. The course covers how to set up test environments, automate functional and performance tests using common testing tools in the trade, and analyze the measurements.

The course first reviews the basics of the web architecture, its communication protocols and example architectures. Using an example of a feature in a large Web application, you will learn to develop a test plan and test cases. We will then develop and execute automated tests using industry standard tools such as Selenium. The course covers three aspects of Web testing: Web UI, Web services, and load/performance. This includes the process for Web testing, i.e. when to start functional and performance testing, specifying the test environment and selecting the tests and loads to run.

You will learn how to create and run the tests, measure the load, and perform analysis of the measurements. Scalability issues are addressed as well as testing for reliability (hardware and software failures). The course concludes with data analysis and diagnostics of automated web testing and performance problems.

CSE41268: UNIX & Linux Operating Systems Fundamentals - 3.00 Units

The UNIX-Linux operating systems are available in many computing environments, from small microcomputers and virtual computers, to the largest supercomputers, and has gained widespread commercial acceptance with its multi-user and multitasking abilities. This course introduces the UNIX and Linux operating system's user interface. Students learn common commands; practice displaying, copying, moving, and removing files and directories; and discover how to protect data by setting file metacharacters, redirection, and piping symbols at the command line. Other topics include full-screen text editing with VI, electronic communication, simple shell programming, and Shell features. In this class students will select "interactive" projects (associated with the web) to emphasize "test thinking" skills. Projects will correspond with topics discussed in chapter readings.

Topics Include

- The parts of the UNIX-LINUX operating system
- Bourne Shell
- C Shell
- UNIX-LINUX commands/utilities
- Simple Shell Programming
- Networking/System Administration
- Common commands
- Practice displaying
- Copying, moving, and removing files and directories
- How to protect data by setting file metacharacters, redirection, and piping symbols at the command line
- Shell features

Practical Experience

- Full-screen text editing with VI
- Electronic communication
- Simple Shell Programming
- Interactive web projects emphasizing "test thinking" skills

Prerequisites: Familiarity with computers

Next Steps: After completing this course, consider taking UNIX & Linux System Administration I to continue learning.

More Information: For more information about this course, please contact Infotech@ucsd.edu.

CSE41269: UNIX & Linux System Administration I - 3.00 Units

This course provides students with the skills to effectively handle UNIX and Linux system administration. Topics include installation in a virtual environment, networking, disk and file management, users and groups administration, and backing up and restoring a UNIX-Linux system. Extensive hands-on lab exercises with dedicated virtual systems immediately reinforce lecture material.

Topics Include

- Installation in a virtual environment
- Networking
- Startup and Shutdown
- Superuser/Root Privileges
- The File System
- Filesystem Backups
- Installation of UNIX Operating System
- Practical Experience
- System Administration of UNIX and Linux Operating Systems (OS)
- Installation of UNIX-Linux OS
- Adding New Users
- Disk and File Management
- Users and Groups Administration
- Backing Up and Restoring a UNIX-Linux OS
- Hands-on lab exercises with dedicated virtual systems

CSE41270: UNIX & Linux System Administration II - 2.00 Units

This intensive course provides an in-depth examination of the processes and theory behind UNIX and Linux systems administration and network support. In addition to network technology and specialized server environments, topics include common structural elements of different types of servers, including file servers, database servers, software and application servers, web servers (Internet, Intranet, Extranet), and name and directory servers. Students will also learn installation and configuration options, performance issues, including how things work, bottlenecks, and tuning, electronic mail, and network printers.

Topics Include:

- UNIX and Linux in the Client-Server Model
- Common structural elements of different types of servers including the role of:
 - UNIX Servers
 - File Servers
 - Database Servers
 - Software and Application Servers
 - Web Servers (Internet, Intranet, and Extranet)
 - Name and Directory servers
 - E-mail Servers
 - Basics of UNIX and Linux Systems Security
 - UNIX and Linux Performance Issues
 - UNIX and Linux Networking
 - Scheduling (Crontab) & Printing

Practical Experience:

- Installation of Software on a UNIX-Linux OS
- Basics of a Programming Language that runs on top of a UNIX and Linux system
- Basics on securing UNIX and Linux Systems
- Troubleshooting Skills
- Configuration Management

CSE41271: UNIX & Linux Shell Programming - 3.00 Units

UNIX & Linux Shell Programming

Discover the Bourne, Korn, Bash and C shells as programming languages that create interactive shell scripts and automate routine functions. Topics include: writing and debugging shell scripts, I/O redirection and pipes, file expansion, shell variables, quoting and regular expressions, shell functions and constructs, expressions, operators, job control, command-line argument processing, interrupt handling, and applications and tools. This course also provides a cursory introduction to the Python programming language. It is designed for both power users and system administrators of UNIX and Linux systems.

Topics Include:

- Writing and debugging shell scripts
- I/O redirection and pipes
- File Expansion
- Shell Variables
- Quoting and Regular Expressions
- Shell Functions and Constructs
- Expressions
- Operators
- Job Control
- Command-line Argument Processing
- Interrupt Handling
- Applications and tools
- Introduction to programming language, such as Python.

Practical Experience:

- Write Bourne Shell Scripts
- Automate the following tasks:
 - Introducing cfengine
 - Automate Security using SSH
 - Bootstrapping a new Infrastructure
 - Automated Installation
 - Automating a New System Infrastructure
 - Deploying your applications, Apache, NFS, rsync
 - Generating Reports and Analysing logs
 - Monitoring using Nagios and Ganglia
 - Improving System Security
 - Introducing basic tools: Shells, Perl, grep, sed and awk

CSE41272: UNIX & Linux Security Fundamentals - 4.00 Units

This fast-paced, hands-on class will teach you how to secure UNIX and Linux and lock it down to protect a system from compromise. You'll learn how system attacks work and how to use hard-core hardening to defeat the bulk of them. You'll learn how to take your machines to a state of minimum necessary risk.

This course will teach you how to tighten all major aspects of operating systems for security, balancing this with the purpose of the system and the needs of your organization. You'll learn how to tune kernel and operating system parameters, deactivate components, and tighten the components that remain. You will build and examine major server applications tightening, including Apache, MySQL and SSH server. Along the way, you'll understand how external and internal attackers use privilege escalation and how you can lessen their odds of gaining root. You will write small script to check all log files which will reject IP attempting to break-in or login to system servers. You will learn about the software hackers use and the tricks they use to compromise your system. This class will give you the framework to think like a hacker and the tools to protect your organization's systems.

Topics Include:

- Fundamental Security Concepts
- System Security

World Wide Web (WWW) Security
 Network and Internet Security
 Web Security
 Firewalls and Port Scanning
 Important Files in UNIX and Linux Processes

Practical Experience:

Understand the Fundamentals of Security
 Risk management
 Harden systems
 Keep attackers out of your systems
 Be able to apply security skills in your daily job

CSE41273: Python Programming Fundamentals - 3.00 Units

The Python programming language is easy to learn, and is also very powerful. This course will cover many unique features that make Python such a popular language, and will go beyond just “the basics”. We will discuss the Pythonic way to handle common computer science abstractions, delving deeper into comprehensions and iteration. Other subjects will include object-oriented programming, testing and test-driven development concepts. Python has a wide variety of libraries and third-party packages. No matter what you want to do, from deep learning, fuzzy text processing, or bioinformatics to web development, web scraping, and more, there is sure to be a Python package to help. At the end of the course, students will be ready to expand their Python programming horizons in whatever direction they desire.

Topics will include

- Setting up a Virtual Environment
- Coding and Docstrings style guides
- Command Line Interface
- Exceptions and Exception Handling
- Iterables, Iterators, and Generators
- OOP, Classes and Inheritance
- Decorators and properties
- Standard Libraries: Itertools, Collections, and Functools
- Inheriting from the Collections Module
- Testing and Test-Driven Development Principles
- Debugging with Pdb
- Files, CSV files and Fake files
- Context Managers
- Making code more Pythonic

Practical Experience

- Set up working project environments
- Write command-line programs with documentation
- Make Python modules that can be imported to other Python programs
- Follow Best Practices for coding style and documentation
- Use classes, inheritance, and basic OOP principles
- Work with the Python standard libraries
- Use files, context managers and fake files
- Install and use third-party packages
- Create unit tests and follow test-driven development principles

Prerequisites:

Introduction to Programming (CSE-40028) or a basic working knowledge of Python. Students must have access to a web-enabled computer.

Course Notes:

All homework and projects will be implemented in Python 3.

Next Steps:

Students who take this course may be interested in taking Advanced Python Programming (CSE 41289) and/or Python for Informatics CSE 41225

For more information about this course, please contact the program manager at Infotech@ucsd.edu or (858) 534-9351

CSE41279: Introduction to PostgreSQL - 3.00 Units

PostgreSQL is one of the most frequently used, powerful and easy to use open source database management systems. Many database and web developers love its rich features, transaction support, performance, and industrial-strength scalability. PostgreSQL is being actively developed with a new release every year. PostgreSQL supports the most advanced features included in SQL standards. It also provides NoSQL capabilities, and various data types and extensions. That makes PostgreSQL a vital option in various kinds of software systems.

Topics include:

- Proper query syntax and SQL commands
- Manipulate and update databases
- Customize queries
- SQL aggregates
- Use joins
- Combine SELECTs with subqueries
- Triggers and transactions
- Import and export data
- Use PostgreSQL query tools
- Creating tables
- Setting up constraints
- Building indexes
- Creating views and other schema objects
- Overview of NoSQL capabilities
- XML
- Json

This Introduction to PostgreSQL course is structured around the most recent PostgreSQL release.

The course will benefit:

Developers and Administrators who want to learn about open source relational databases such as PostgreSQL.

CSE41280: Cloud Computing Architecture using Amazon Web Services (AWS) - 4.00 Units

UC San Diego Extension has joined the Amazon Web Services Academy program to offer authorized AWS curriculum, Cloud Computing Architecture, to students in 2018.

Develop technical expertise in cloud computing architecture using Amazon Web Services (AWS). AWS is a secure cloud services platform that is used in almost 200 countries. With infrastructure services inclusive of computing power, storage options, networking and databases, it offers flexibility, scalability, and reliability useful to building sophisticated applications. This course will give students an understanding of business and technical tools, and architecting on AWS. It will include practical hands-on experience solving real-world cloud computing problems with AWS. These tools can be useful to managing your business’s IT infrastructure, and an understanding of how this cloud platform can help your company meet compliance, governance, and regulatory requirements.

Topics Will Include

- AWS Cloud
- AWS Platform
- Security and Compliance
- Cloud Financials
- Migrating to the Cloud
- AWS Infrastructure: Compute, Storage, and Networking
- AWS Security, Identity, and Access Management
- AWS Databases
- AWS Management Tools

AWS Certification Exam Readiness Workshop

Practical Experience

- Architecting on AWS
- Designing Your Environment
- Automating and Decoupling Your Infrastructure
- Designing Web-Scale Media Hosting
- Four Pillars of the Well-Architected Framework
- Troubleshooting
- Large-Scale Design Patterns and Case Studies

Course Delivery

The curriculum is taught through e-learning, instructor-led classes, hands-on labs, and project work. Students will receive an electronic student kit that includes course manuals, access to labs, and knowledge assessments. Additionally, a AWS Certified Solutions Architect & Associate certification practice exam and a 50% discount voucher for the AWS Certified Solutions Architect & Associate certification exam will be provided to students that successfully complete all elements of the curriculum (labs, assessments, project).

Course Materials

Students must bring their own laptop to each course

Intended Audience

Undergraduate, Graduate or Professional students seeking cloud computing expertise

Prerequisites

A strong foundation in multiple computing, software development, and IT concepts and skills.

Accreditations and Certifications:

UC San Diego Extension is an Amazon Web Services (AWS) Academy.

Instructors have completed the AWS Academy Instructor Accreditation process and are AWS Academy Accredited Instructors.

This course can also be used to prepare for the AWS Solutions Architect - Associate certification exam.

Students that have taken this course may be interested in courses in:

- Software Engineering Management
- Software Quality Assurance
- UNIX & Linux System Administration

For more information about this course, please contact the program manager at Infotech@ucsd.edu

CSE41281: MongoDB - 3.00 Units

In this course you will learn to use MongoDB as a way to put in place new methods of handling and storing data that can be displayed as a document format.

MongoDB is an open source database that centers on the concepts of a NoSQL (Not Only SQL) methodology. The MongoDB is used to handle unstructured data in a schema-less design that enables the developer to be flexible in the way they store and use data.

You will gain knowledge on how to integrate MongoDB with PHP, Python, Java, and .NET drivers. Administrative operations of MongoDB such as replication, sharding, GridFS and others will be covered.

The IT professional with a basic knowledge of programming and databases who wants to learn more about the NoSQL technology through MongoDB would benefit from this course.

For more information about this course, please contact the program manager at infotech@ucsd.edu or 858-534-9352

CSE41282: Storytelling Concepts for Data Visualization - 3.00 Units

Storytelling Concepts for Data Visualization

Data is one of the strongest assets a business possesses, but many businesses are not realizing the full potential of their data. Even when businesses do effectively mine their data, often the full value of the information gained by that analysis is difficult to communicate. Data visualization provides a powerful, and relatively simple, way to derive more value from business data by communicating findings succinctly.

In this course, you will learn how to present and analyze data using data visualization. Through a thorough examination of design techniques and processes, you will learn to communicate your analytics more effectively. You will also learn best practices for engaging stakeholders through visualization and storytelling, specifically for a business environment. This course includes hands-on assignments in designing, developing, and publishing visualizations. Topics Include:

- Data visualization fundamentals and principles
- Data visualization in a business environment
- Visual design and choosing effective visuals
- Telling a story with data
- Dashboard requirements, design principles, and best practices
- Data visualization for dashboards

Practical Experience:

Design, develop, and publish data visualizations and dashboards

Course Typically Offered: Online in Fall, Winter, Spring, and Summer (every quarter)

Software: Students may use any data visualization tool to complete course assignments. Some examples of visualization software include Tableau, Qlik, MicroStrategy, or Excel.

Prerequisites: None

Next Steps: Upon completion of this course, consider taking additional business intelligence courses to continue learning.

More Information: For more information about this course, please contact unex-techdata@ucsd.edu.

CSE41283: Information Technology Strategic Planning - 3.00 Units

Creating an Information Technology Strategic plan is a widespread task that has to be done by every IT organization. However, most organizations IT group do not have an IT Strategic plan because it is a process that takes time to develop and later implement. Prior to creating any IT Strategic plan, there are crucial steps that need to be done. This course introduces the process of creating an IT Strategic plan and through various methods, students learn how to understand what is required, understand and follow a process to develop the plan (including what to do in a decentralized IT environment) and the various sections, phases and the implementation process is reviewed.

This training is designed to offer technical personnel (employees, supervisors, managers) and non-technical supervisors of technical personnel an appreciation and practical knowledge in strategic analysis, especially in Information Technology (IT).

Course Goals/ Learning Objectives

How to develop, create and implement an IT Strategic Plan.

An IT Strategic process that can be used to develop the plan and how to align the IT Strategic Plan with the overall strategic priorities of the organization.

To gain an appreciation for understanding the strategic planning process and how it ties into the overall organizational strategic priorities.

CSE41284: Introduction to Virtualization - 3.00 Units

Virtualization has become the cornerstone of technology within the industry. There has been an increase industry as to how applications are delivered, accessed and how information is obtained to end-users worldwide. Virtualization plays a key role in the all facets of technology, as systems administrators have to retool their skillset in order to adapt to the constant evolution of the virtual space and eco-system. There is tremendous value for IT professionals to learn and understand virtualization. Learning this knowledge can potentially enhance your professional career as organizations are heavily virtualized, or are in the process of transitioning to a virtualized environment.

In this course, you will receive a complete overview of the VMware virtual datacenter environment, utilizing the vSphere Client and the web interface. You will be exposed the vCenter appliance, learning how to secure your vDatacenter, understand the role of the ESXi hosts, deploy VMs from templates, cloning VMs, vMotion, network configuration, storage delivery and more. The objective is to provide you with the best practices relating to how to manage a VMware infrastructure.

Topics Include:

- Virtual Datacenter, Clusters and Hosts
- Resource Pools
- Host Configurations
- Creating guest OS systems (VMs)
- vMotion
- LUNs and Datastores
- Storage vMotion
- Cloning
- Snapshots
- Networking (vSS and vDS)
- MuiltiPathing
- I/O (MPIO)
- 32 and 64 bit DSN connection
- Web Portal
- Critical VMware services
- VMware Tools

Course Benefits:

- Enhance you marketability
- Learn best practices
- Gain Infrastructure knowledge
- Learn about the virtualized eco-system.
- Become well versed with public, private and hybrid cloud solutions.
- Familiarize yourself with vDatacenter administration.

More Information: For more information about this course, please contact infotech@ucsd.edu.

CSE41285: PostgreSQL Administration - 3.00 Units

PostgreSQL is one of the most popular open-source database engines in the world and ranks highly in line with Oracle, MySQL and SQL Server.

The PostgreSQL Administration course is structured around the most recent PostgreSQL release.

Students will learn how to install, configure, and administer the world's most advanced open source database, PostgreSQL.

Course Goals/ Learning Objectives:

For more information about this course, please contact infotech@ucsd.edu or 858-534-9352.

CSE41286: MySQL Programming - 3.00 Units

MySQL is an open-source relational database management system (DBMS for short) based on SQL. A DBMS is a system that manages databases and connects them to software. The most common use for a MySQL database is to run a website. However, it can also be used for data warehousing, e-commerce, and logging applications as well as managing the database of an ERP. A good database management system is essential to a business. Some of the largest and fastest-growing organizations including Facebook, Google and Adobe rely on MySQL to save time and money driving their high-volume web sites, business-critical systems and software applications.

This course will teach you the basics of the SQL Programming Language for the MySQL Database. You will learn Data Definition Language (DDL) Statements, Data Manipulation Languages (DML) Statements, Data Control Language (DCL) Statements, Select Statements, as well as MySQL Stored Procedure Programming.

Course Goals/ Learning Objectives:

At the completion of this class student should be able to:

- Write MySQL SQL Programming Statements for Creating, Modifying, and Deleting MySQL objects
- Successfully write SQL Insert, Update, Alter, and Delete or rows in MySQL tables
- Perform successful Select statements to answer common business questions to be asked to the MySQL Database
- Implement security in the form of Granting and Revoking privileges related to accessing MySQL Database Objects
- Understand and use MySQL Stored Procedures for process automation and database integrity enforcement

Target Audience for MySQL Programming is:

- Back-End Web Developers
- Client / Server Database Developers

Job titles for MySQL include:

- Systems Administrator
- MySQL DBA
- Database Administrator (DBA)
- Back End Developer

For more information about this course, please contact infotech@ucsd.edu or 858-534-9352

CSE41287: Linear Algebra for Machine Learning - 3.00 Units

Linear Algebra for Machine Learning

Linear algebra provides a mathematical framework for organizing information and then using that information to solve problems, especially physics, math, engineering, or data analytics problems. Linear algebra is essential for understanding and creating machine learning algorithms, especially neural network and deep learning models.

In this course, you will learn the linear algebra skills necessary for machine learning and neural network modelling. You will begin by learning overview of basic matrices and vector algebra as applied to linear systems. Then you will learn advanced skills for finding the highest and lowest points of systems, quantifying the degree of learning, and optimizing the speed of learning in vector spaces and linear transformations. The hands-on lessons and assignments will equip you with the mathematical background required to build and train simple neural networks.

Key topics:

Fundamentals of matrix algebra: vectors, matrices, linear systems
 Matrix Operations
 Linear System, Solution Sets
 Vector Spaces
 Eigenvalues, Eigenvectors
 Matrix inversion of non-square Matrices
 Quadratic forms, gradient descent
 Principal Component Analysis
 Basics of Tensor Flow

Practical experience:

Hands-on lab assignments and projects using various open-source software programs

Course typically offered: Online in Fall, Winter, Spring, and Summer
 Software: Students will use Octave, Caffe, and TensorFlow to complete hands-on assignments and projects. These tools are free and open-source.
 Optional reading: A college-level Linear Algebra book (either of the first two below are suggested).
 Introduction to Linear Algebra, Fifth Edition (2016)
 ISBN-13:978-0980232776
 Linear Algebra and Its Applications, 4th Edition
 ISBN-13:978-0030105678
 Numerical Algorithms: Methods for Computer Vision, Machine Learning, and Graphics
 ISBN-13:978-1482251883
 From Neuron to Brain
 ISBN-13:978-0878936090
 Prerequisites: Basic knowledge of Linear Algebra - concept of vectors and matrices. Calculus I recommended.
 Next steps: Upon completion, consider taking courses in our Data Mining for Advanced Analytics program to continue learning.
 Contact: For more information about this course, please contact unextechdata@ucsd.edu.

CSE41288: Advanced Business Intelligence: Introduction to Predictive Analytics - 3.00 Units

CSE41290: - 3.00 Units

CSE41291: Microgrid Design, Economic Optimization and Simulation - 3.00 Units

CSE41293: Systems Engineering Software Overview - 3.00 Units

CSE41294: Introduction to Remote Sensing with GIS - 3.00 Units

CSE41296: LEAN Thinking for Big Data Analytics - 3.00 Units

CSE41297: Getting Started with App Development for Apple iOS - 2.50 Units

Have you ever had an idea for an app and wondered how to make it happen? If so, this course was designed for you. You'll start by focusing on iOS development tools, basic programming concepts, and industry best practices. Getting started with App Development. Students find out about the basics of data, operators, and control flow in Swift, as well as documentation, debugging, Xcode, building and running an app, and Interface Builder. They then apply this knowledge to the guided project in which they create a simple flashlight app.

After successfully completing this course students will be ready to build on this foundation and take the "Introduction to UIKit for Apple iOS" course.

CSE41298: Introduction to UIKit for Apple iOS - 3.00 Units

Introduction to UIKit. Students explore Swift strings, functions, structures, collections, and loops. They also learn about UIKit; the system views and controls that make up a user interface and how to display data using Auto Layout and stack views. They put this knowledge to practice in the guided project, Apple Pie, where they build a word-guessing game app.

CSE41303: Best Practices in Information Security for the Workplace - 3.00 Units

Cyber-attacks are becoming more and more sophisticated and prevalent. Every organization is under attack multiple times a day. 80-90% of all breaches originate with Social Engineering attacks against employees at every level. This course is intended to ensure that every employee understands their role in prevention. The question is not if you will be attacked or hacked but when. Companies need to be prepared to handle these incidents through incident remediation planning and employee training. This course provides an overview of cybersecurity privacy and security regulations to employees. Every session will include at least one WOW factor demonstration of tools used by the Cyber Attackers. This course is intended for all employees who have access to computers. It will prepare them to understand their responsibilities to the business, before during and after the inevitable breach occurs. All the principals are applicable for people protecting themselves as well.

CSE41304: Practical Cyber Security and Ethical Hacking - 3.00 Units

Enterprise and personal online presence is growing exponentially. Everyday, new users get online and become potential victims to cyber attacks. Cyber incidents and breaches are on the rise and have become more sophisticated. There is an increased demand for cyber security professionals. A Forbes magazine article has projected more than a million job openings in the Cyber Security domain.

It is imperative for IT professionals to think "security" into each and every aspect of their work. It means a change in the mind set; have a paranoid approach to security "Think like a hacker to catch a hacker!"

This course is a starting point for those considering a career in Cyber Security. It provides the theory and the practical aspects necessary for a cyber security practitioner. It is a blended course (lecture, demo, discussions, practical lab); it covers an array of topics in the Cyber Security space, including the "Knowledge Areas" of the Certified Ethical Hacker blueprint (CEHv9), accompanied with Lab exercises in a "Virtual Lab."

CSE41305: - 3.00 Units

CSE41307: - 3.00 Units

CSE41308: - 3.00 Units

CSE41309: - 3.00 Units

CSE41310: - 3.00 Units

CSE41311: - 3.00 Units

CSE41312: - 3.00 Units

CSE41313: - 3.00 Units

CSE41314: - 3.00 Units

CSE41315: - 3.00 Units

CSE41316: - 3.00 Units

CSE41317: - 3.00 Units

CSE41318: - 3.00 Units

CSE41319: - 3.00 Units

CSE41320: - 3.00 Units

CSE41321: - 3.00 Units

CSE41322: - 3.00 Units

CSE41324: - 3.00 Units

CSE80006: The Coding Boot Camp - 0.00 Units

The web development industry continues to thrive with plenty of dynamic, informative and entertaining sites sprouting up every day. Positions in this field keep emerging—the Bureau of Labor Statistics expects web development job growth to far outpace the rate of the average profession. This surge should provide skilled programmers a bounty of diverse and rewarding career opportunities. We encourage all students eager to join this growing trade to enroll in our Coding Boot Camp series, starting with Front-End & Back-End Essentials. The course starts with lectures on the HTML, CSS and JavaScript needed for building basic front-end web apps. Students will then learn how to use jQuery AJAX to update sections of their websites with remote API data. We’ll top off the front-end section of the course by exploring data persistence with local storage and the Firebase API—these technologies will allow students to create sites with user-generated information that remains on the page even when the user leaves the browser. At the course’s midpoint, we’ll introduce students to back-end coding with Node.js, a JavaScript runtime environment that executes code outside the browser. Students will use Node to build programs that read external data, write new files and accept command-line input. We’ll also provide lectures on the MySQL database management system and show students how to store, update and retrieve data for interactive apps with rich content. This course also includes a two-week group project. Each team will develop a web app from scratch and showcase it during a presentation day. This will be a prime chance for students to demonstrate the skills they’ve acquired from our lectures and exercises. The Coding Boot Camp encompasses two courses designed to prime students for careers in the web development industry. The boot camp also provides a career service specialist who will offer job support throughout and beyond the length of these courses.

CSE80008: The Data Science and Visualization Boot Camp - 0.00 Units

CSE80010: UX Metrics Workshop: How to Use UX Metrics to Produce Reliable and Actionable Business Results - 0.00 Units

This UX Metrics workshop is an overview of how to collect, analyze, interpret and present user experience metrics. We will discuss how to choose the right metrics for various situations or applications. The attendees will also learn how to use the metrics to produce reliable and actionable results. It gives the guidelines for analyzing metrics and provides examples of how to present the collected metrics to others. The goal of this workshop is to show how user

experience (UX) metrics can be a powerful tool for evaluating and improving the design of any product.

The UX metrics can be used for any type of product utilizing any type of technology. For example, task success and satisfaction are equally valid whether you evaluate a website, a medical device or appliance.

This workshop takes a practical approach with an emphasis on the analysis being directly applicable to everyone’s job.

Continental breakfast: 8am

Workshop: 9am to 12:00pm

A workbook with presentation and exercises included.

Students will receive the new book “Easy to Use 2.0: User Experience in Agile Development for Enterprise Software”.

CSE80013: - 0.00 Units

CSE90003: Level 0: Loops & Logic - 1.50 Units

During this course, students acquire basic programming skills in Java through practice. Using professional programming tools such as Eclipse and GitHub, students end this course with mastery of logic, loops and variables, and with a firm foundation in problem solving and logical thinking. In order to make this fun and interesting for kids, we use loops and logic to make simple games, user interactions and animations. The challenge-based curriculum encourages a growth mindset that requires building the student’s confidence in themselves as problem solvers. This course is designed for beginning programmers aged 9-15 years old.

CSE90004: Level 1: Object-Oriented Programming - 5.00 Units

During this course, students learn to understand and use Object Oriented Programming (OOP). We learn Java’s Swing libraries which gives you the ability to create elegant Graphical User Interfaces (GUIs) from scratch, while becoming familiar with the patterns and paradigms of OOP. Understanding OOP is challenging because it requires you to think in an abstract way about technical concepts, but mastering this mindset gives you a powerful tool for breaking complex problems into more manageable ones, which is a paramount skill for any software engineer. This course is designed for beginning programmers aged 10-15 years old.

CSE90005: Level 2: Build Your Own Game - 3.00 Units

During this course, students learn to design and build a game that aligns their interests (e.g. airplane piloting, spearfishing, drumming, math) with their own creativity, to create an original game.

This is an exciting time for students to apply their programming skills to create their first real-world application, with heavy emphasis on the end user as a driver for the evolution of the game. The functional game developed in this course goes through multiple iterations of usability testing and development. The projects are publicly published on GitHub and will form part of the student’s professional portfolio of work.

The purpose of this course is to flex the programming skills acquired in the previous two levels, to publish a significant piece of the students’ professional portfolio, and to give the student the confidence and motivation to create, rather than just consume, the digital world around them.

CSE90006: Level 3: Data Structures & Algorithms - 4.00 Units

During this course, students study and practice data structures and algorithms. All serious programmers need to be data virtuosos. In Level 3 students learn to master lists, stacks & hashmaps and to implement basic sorting and searching algorithms that are fundamental to computer science. This course is designed for intermediate programmers aged 13-16 years old.

CSE90007: LEVEL 4: JAVA NINJA - 2.50 Units

During this course, students study the higher-level aspects of object oriented programming, and they gain mastery over the remaining features of the Java

language. Upon completion of this level, students have a solid understanding of Java and are internship-ready. They have complete knowledge of the fundamental features of programming and have practiced that knowledge enough to work fluidly with code. At this point they are able to code at the level of a professional junior developer. At the League, we call them “Java Ninjas”.

CSE90008: LEVEL 5: AP COMPUTER SCIENCE - 1.00 Units

During this course, students prepare to take the College Board Advanced Placement (AP) Computer Science exam. Up to this point, League students have been learning by programming using professional tools, but this exam requires the new skill of being able to write code on paper. We also cover the theoretical Computer Science concepts that did not fall under any of the previous skill-based topics. League levels 0-4 are a prerequisite for this course.

CSE90009: Level 6: Project for Social Good - 3.00 Units

As a capstone course, Level 6 offers students the opportunity to collaborate on diverse teams to develop a novel software solution that addresses a real-world need originating from local citizens or other non-profits. Students apply computational thinking practices, interdisciplinary knowledge, and professional skills as they work through the software design process. Effective practices in problem solving, implementation, presentation, and collaboration are central to the course.

CSE90010: Level 7: Software Craftsmanship - 4.00 Units

Learn to craft code like a pro! This course takes you from code monkey to software engineer with topics such as advanced refactoring, clean code, test-driven development, design patterns, techniques for working with legacy code, and how to be an Eclipse ninja. This course has been developed in collaboration with some of the best and most experienced programmers in San Diego. This is stuff they don't even teach you in college!

CSE90011: LEVEL 8: ORACLE JAVA CERTIFICATION - 4.00 Units

In this course, you'll study for a professional certification as a Java programmer. Oracle-administered exams are recognized as the industry standard for Java developers.

During level 8, students prepare to take the Java SE 8 Programmer I (1Z0-808) exam. Even experienced professionals need to study for this exam, since it requires intricate knowledge of the language that may not be regularly used in practice. League levels 0-5 are a prerequisite for this course.

CSE90012: Virtual Reality - 0.00 Units

It looks so real! Join the virtual reality technology movement as you simulate experiences like riding a rollercoaster with Google Cardboard*, a virtual reality viewer. Work in groups to create your own virtual reality interactive tools and games and learn basic concepts of stereoscopy. Gain experience in C+ programming and 3D modeling, and learn how to use the popular Unity game engine. No prior experience with computer programming or 3D modeling is required. * Google Cardboard: <https://www.google.com/get/cardboard/>

CSE90015: Introduction to Python - 2.00 Units

CSE90016: Introduction to Videogame Programming Using Unity - 2.00 Units

CSE90017: Introduction to Virtual Reality Programming - 2.00 Units

CSE90019: - 6.00 Units

CSE90020: - 6.00 Units

CSE90021: - 3.00 Units

CSE90022: - 6.00 Units

CSE90023: - 6.00 Units

CSE90024: - 3.00 Units

CSE90025: - 3.00 Units

CSE90026: - 3.00 Units

CSE90027: - 3.00 Units

CSE90028: - 3.00 Units

CSE90029: - 3.00 Units

CSEX3: Fluency in Information Technology - 4.00 Units

This course introduces the concepts and skills necessary to effectively use information technology. Includes basic concepts and some practical skills with computer and networks. Information technology plays an increasingly large role in both society and the individual lives of citizens. This course attempts to provide students with basic information they need to deal with information technology. It is more of a concepts course than a programming course, but some simple programming will be done as part of teaching concepts.

This course is designed to provide the student an overview of the distribution and uses of world natural resources and the application of economic concepts to the management of specific renewable resources. Included will be a review of specific resources such as soil, water, grasslands, forests, marine habitats, fish and game populations and energy resources. The concepts of population, pollution, technological growth, land use, species diversity, habitat protection (parks and wilderness) and concepts of economic efficiency to evaluate and manage natural resources will be explored.

The course also introduces students to the basic principles of ecosystem functioning and how human misuse of our environmental resources has seriously affected the quality of life on earth. A major emphasis is on environmental activities and ethics that sustain and nurture our world rather than degrade and pollute it. Students will engage in studies that will promote sensitivity toward the environment, and encourage the development of an environmental ethic that serves our fragile planet well into the third millennium.

ECE40016: Digital Signal Processing (DSP) - 3.00 Units

Gain a practical introduction to techniques required for understanding, specifying, and designing DSP systems. Topics include DSP system architecture, the theory of signal processing, sampling, anti-aliasing, convolution, and digital filters. A practical understanding of the mathematical basis of signal processing is developed through algorithm design examples and demonstration. The course is geared toward interested hardware and software engineers, and scientists who need to know the fundamental techniques used in the rapidly expanding field of digital signal processing.

ECE40051: Signals and Systems - 3.00 Units

Signals and Systems is an introduction to analog and digital signal processing, a topic that forms an integral part of engineering systems in many diverse areas, including seismic data processing, communications, speech processing, image processing, defense electronics, consumer electronics, and consumer products.

In this course you will examine signal and systems analysis in continuous and discrete time.

Topics include:

- Complex variables
- Fourier series and transforms
- Laplace and z-transforms
- Linear time invariant systems
- Impulse response;
- Frequency response
- Transfer functions.

You will also gain an understanding of convolution and introductory digital signal processing, including filters, aliasing, and the sampling theorem.

Prerequisite: Current knowledge of differential and integral calculus, ordinary differential equations, and introductory complex variables required. Students who don't have this prerequisite knowledge should take the course MATH-40017 Introduction to Calculus in order to succeed in this course.

ECE40097: Embedded Controller Programming for Real-Time Systems - 3.00 Units

This advanced programming course covers real-time event-driven applications with instant and reliable access to systems resources for embedded microcontrollers.

The design of complex electronic systems requires a firmware that will respond, within a given time, to a multitude of possible inputs, any of which may arrive at unpredictable times and in an unpredictable sequence. This problem is common in most of embedded systems. It is also very common in operating systems of modern computers.

In this class you will learn about: low-level microcontroller programming, hardware aspects, interrupt-driven programming, I/O interfacing, timers and signal conversion. The main purpose of this course is to demonstrate practical application of embedded controllers to actual event-driven system design, interrupts handling, and to tasks processing.

Course Highlights:

- Introduction to Real Time Programming
- Overview of ATmega328P microcontroller (hardware aspects)
- ATmega328P's Registers, Timers, ADC, USARTs
- Interrupts, ISRs, Low-level Microcontroller Programming. Assembly

Language for ATmega328

- Using Hardware Interrupts
- Timer Interrupts

SPI Communication with FRAM chip. Read, Write and other commands

- Recording Analog Conversion Results from a Sensor into an FRAM Chip. Data Logger

Course Benefits:

Relate the ISRs (Interrupt Service Routines) to appropriate registers and modules of the ATmega family of microcontrollers

Write subroutines in assembly language for ATmega microcontrollers

- Understand the design of firmware for event-driven programming
- Gain hands-on experience designing and implementing Interrupt Service Routines in the project.

Prerequisites:

Successful completion of ECE-40191 Embedded Controller Programming with Embedded C and ECE-40001 Embedded Controller Hardware Design

Required Materials:

Students enrolling in this course must purchase an STM32L4 IoT Discover Kit for IoT Node. This microprocessor will be used for several of the courses in this program. It can be purchased from STMicroelectronics or any other reputable electronics dealer. It is the same kit used for ECE-40191 Embedded Controller Programming with Embedded C.

Students that have taken this course may be interested in courses in:

Embedded Computer Engineering

UNIX & Linux System Administration

For more information about this course, please contact the program manager at unexengr@ucsd.edu

ECE40105: Embedded Linux - 3.00 Units

Linux is rapidly emerging as the leading platform for embedded devices using high-performance 32-bit and 64-bit processors. A March 2015 market study suggests that "open source, freely and/or publicly available" Linux will grow from 56.2 percent share of embedded unit shipments in 2012 to 64.7 percent in 2017. To remain relevant in the embedded computing world, you must know Linux.

This course is designed to give you practical, hands-on experience in writing and debugging Linux-based application programs on real target hardware. You will install a cross-development environment and set up the Network File System to support rapid turnaround in the edit-compile-debug cycle. Development and debugging are a breeze with the Eclipse Integrated Development Environment.

Course Highlights:

- Basic Introduction to Linux
- Understanding the Host and Target Environments and How They Interact

- Application Development and Debugging using the Eclipse IDE
- Multi-Threaded and Network Programming
- Patching, Configuring, and Building the Linux Kernel
- Device Drivers

Course Benefits:

- Learn how to set up and use a Cross-Development Environment
- Set up and use the Network File System to Remotely Mount a File System on a Target Board
- Learn how to access Peripheral Hardware with or without Device Drivers
- Gain experience with the Eclipse Integrated Development Environment
- Learn to configure and build the Linux kernel

Required Course Materials:

Students are expected to have the Embedded Linux Learning Kit from Intellimetrix for completing programming assignments. The kit is a fairly typical ARM-based single board computer (SBC) that might be used in an embedded device. It is offered at a substantial discount to UCSD students. There are no required textbooks required for this course.

Software:

Most required software is supplied with the Embedded Linux Learning Kit. You will also need to install a Linux Distribution ("distro" for short). The recommended distro is CentOS 7.2. ISO image files are available here: http://archive.kernel.org/centos-vault/7.2.1511/isos/x86_64/

Prerequisites:

The course is intended for engineers and programmers involved in developing embedded computing systems and devices using the Linux Operating System. Students must have solid knowledge of material covered in ECE-40291 Embedded Controller Programming with Embedded C and CSE-40476 C/C++ Programming II: Dynamic Memory and File I/O Concepts

Students who possess proficient knowledge of these prerequisites and the subjects below may begin with the first required course in this program (no formal waiver is needed).

Fluency in C Programming

Some familiarity with basic digital hardware components such as network and serial ports

Some experience using Linux both from a command shell and a graphical desktop environment

Some experience debugging application code is helpful

Students that have taken this course may be interested in courses in:

UNIX & Linux System Administration
Embedded Computer Engineering

For more information about this course, please contact the program manager at unexengr@ucsd.edu

ECE40153: Introduction to Embedded Systems - 3.00 Units

Learn the elements of digital logic design required for study in embedded computer design. Topics include: number systems, codes, Boolean algebra, logic gates, small and medium scale integrated circuits, tristate devices, memories, combinational circuits and sequential circuits. The course also provides an overview of foundations of electronics, including elementary DC and AC circuit theory, semiconductor diode and the transistor model, feedback, oscillation and elementary digital gate responses.

ECE40164: Applied DSP - 3.00 Units

Do you want to know how to apply the basic concepts of digital signal processing to real world applications? This course will review signal processing basics with an emphasis on the practical application of fundamental concepts in DSP. DSP processors, system architectures and supporting circuitry such as ADCs and DACs are discussed. You will also explore the basic concepts of programming for real time applications.

ECE40170: FPGA Design Fundamentals - 3.00 Units

Acquire FPGA skills that are needed in industries such as aerospace, medical, communications, industrial control, defense and others. This course discusses Field Programmable Gate Array (FPGA) architectures, HDL synthesis/ place and route, FPGA configuration, hardware validation and embedded MCU solutions. The course curriculum consists of modules that teach a broad range of FPGA design topics, while hands on laboratory experiments exercise lecture content.

Course Requirements:

Students are required to purchase the following: (1) Nexys 4 DDR Artix-7 FPGA, SKU: 410-292

ECE40171: RFIC Design - 3.00 Units

RF technology is becoming more important as we are increasingly engaging with wireless devices in our daily lives. RF transceivers are one of the most important and essential part of mobile phones, WiFi routers, Bluetooth devices, radios and televisions. Alongside with these, the wireless communication infrastructure is continuing expanding.

RFIC is one of the core blocks in the above technologies. This development and expansion needs RFIC design experts in the wireless communication technology.

This RFIC Design course teaches the principals of RFIC design techniques to address this need.

The goal of this course is to teach the RFIC design principals, tools, knowledge of the technologies, topologies and concepts and designing of various blocks. The course will include low noise amplifiers, mixer structures, current sources and thermal management of RFICs.

Course Highlights:

Introduction and Review
Technology, Bipolar, CMOS

Noise, Noise Figure Calculations
Low Noise Amplifier Design
Differential Circuits, Non-linearity
Mixer Design, Class of Operation
Power Amplifiers,
Passive On-Chip Components
Layout, Thermal Management, Packaging
Current Mirrors, Bandgaps

Course Benefits:

By the end of this course, the student would be able to

Differentiate the Technologies for RFIC
Identify the Design Constraints and Remedies for some RFIC Design
Know RFIC Design Topologies, Techniques
Design Amplifiers, Mixers and Bias Sources

Course typically offered: Online in Fall.

Prerequisites: RF Principles and Applications (EE-40137) or familiarity with the electronics circuit analysis.

Software: Free online simulators are used in this class. You may use the commercial RFIC design packages should you already have access to it.

Next Steps: Upon completion of this course, consider taking RF Circuit Design, RF System Design for Wireless Communications, or courses in the RF Engineering Certificate

More Information: For more information about this program contact infotech@ucsd.edu

ECE40244: Mixed Signal Design - 3.00 Units

Applying new skills to a variety of design applications, such as wireless communications, digital audio, and digital telephony, SOC design involving mixed-signal processing, analog/digital conversion has become extremely important. This course covers fundamentals of data converters, Nyquist-rate converters, discrete-time signal processing, central concept of oversampling and noise-shaping, and delta-sigma modulators.

ECE40246: GIS II: Spatial Analysis - 3.00 Units

GIS II: Spatial Analysis

GIS spatial analysis allows us to understand better the spaces around us, and how those spaces relate to one another. Whether defining a location, measuring size or shape, quantifying the relationships between places, determining the best path or location, or detecting patterns to make predictions, visualizing and understanding data through spatial analysis is a crucial skill for all GIS analysts.

In this course, you will build upon the foundational skills learned in GIS I and learn the skills necessary for effective spatial data analysis with GIS. Through multiple hands-on projects, you will master various GIS spatial analysis techniques, such as interpolation, contours, data intersections, and overlay analysis. Upon completion of this course, you will have the ability to analyze spatial data using ArcGIS.

Topics include:

Spatial data and analysis
Data types and attributes
Classifying spatial data within a GIS
Interpolation methods
Displaying surfaces and contours
Mapping density
Overlay analysis for site selection
Analyzing differences in datasets
Buffers and distance analysis

Practical experience:

Multiple hands-on assignments using ArcGIS, covering:

- Visual analysis
- Classification
- Interpolation and contours
- Density
- Overlay analysis
- Change detection projections
- Buffers and distance analysis

Course typically offered: Online in Winter and Summer

Software: Students will use ArcGIS by ESRI in this course - a software license is included with the purchase of a new copy of the required textbook. A computer with a native Windows operating system is required to run ArcGIS; the software will not work properly on a Mac computer, even if you have configured your system to dual-boot or otherwise run Windows.

Prerequisites: Completion of GIS I: Introduction to GIS required.

Next steps: Upon completion of this course, consider taking GIS III:

Geodatabase Design to continue learning.

Contact: For more information about this course, please contact unex-techdata@ucsd.edu.

ECE40247: GIS III: Geodatabase Design - 3.00 Units

GIS III: Geodatabase Design

As with all types of data, without a way to organize large sets of geographic or spatial data, it can become increasingly difficult to extract useful information from the data. A geodatabase offers a reliable way to create an organized collection of geographic datasets.

In this course, you will continue to expand your knowledge of geographic information systems by focusing on the creation and design of databases. You will learn how to create a database by integrating spatial data from varied sources for use in GIS, as well as explore metadata and the ESRI Geodatabase format.

Topics include:

- Map packages
- Story maps
- Geodatabases and map models
- Creating and viewing metadata
- Schema
- Subtypes
- Coordinate geometry and domains
- Topologies

Practical experience:

Multiple hands-on assignments using ArcGIS

Course typically offered: Online in Fall and Spring

Software: Students will use ArcGIS by ESRI in this course; the instructor will provide license information on the start date of the course and there is no additional cost. A computer with a native Windows operating system is required to run ArcGIS; the software will not work properly on a Mac computer, even if you have configured your system to dual-boot or otherwise run Windows.

Prerequisites: Completion of GIS II: Spatial Analysis required.

Next steps: Upon completion of this course, consider taking GIS IV: 3-D Display and Analysis of Spatial Data to continue learning.

Contact: For more information about this course, please contact unex-techdata@ucsd.edu.

ECE40248: GIS IV: 3-D Display and Analysis of Spatial Data - 3.00 Units

GIS IV: 3-D Display and Analysis of Spatial Data

Data is most valuable when used to identify and quantify patterns and relationships. This is especially true with spatial data and spatial data analysis. GIS provides the tools and techniques for understanding and leveraging valuable information contained within spatial data.

In this course, you will learn advanced GIS spatial analysis skills and techniques. You will use this information to make decisions about the physical world through modeling and analysis of spatial data. Through hands-on projects, you will learn techniques to analyze two- and three-dimensional spatial data, including building digital elevation models, solving line-of-sight problems, calculating slope and aspect, and solving network analysis problems.

Topics include:

- Raster concepts, reclassifying, and resampling
- Map algebra, operators, and functions
- Conceptual models
- Site suitability analysis
- Hydrological modeling and analysis
- Risk analysis and hazard assessment
- Network analysis
- Line of sight analysis and viewsheds
- 3D visualization

Practical experience:

Multiple hands-on assignments using ArcGIS

Course typically offered: Online in Winter and Summer

Software: Students will use ArcGIS by ESRI in this course, and a license for this software is included with purchase of the required textbook. A computer with a native Windows operating system is required to run ArcGIS; the software will not work properly on a Mac computer, even if you have configured your system to dual-boot or otherwise run Windows.

Prerequisites: Completion of GIS III: Geodatabase Design required.

Next steps: Upon completion of this course, consider taking the GIS Capstone Project to continue learning.

Contact: For more information about this course, please contact unex-techdata@ucsd.edu.

ECE40260: FPGA II - 3.00 Units

This course discusses design concepts such as embedded processor integration, peripheral bus implementation, watch dog timers, external MCU interfaces, serial interfaces, interrupt handlers, register files, memory arbitration, embedded memories and embedded programming. Other aspects of embedded design, such as software debugging, hardware validation and device driver development, will be utilized to provide the skills needed to develop a complete embedded system environment.

ECE40272: GIS Capstone Project - 3.00 Units

GIS Capstone Project

Knowing how to design and execute a research project using GIS is critical to your success as a GIS analyst, as is your ability to present your research findings effectively and for a variety of audiences.

In this hands-on GIS capstone course, you will complete an individual guided research project and report, applying the knowledge and skills you learned in the four prerequisite GIS courses. You will begin the course by proposing a project, then you will complete the project according to your proposed research design, and finally you will present your resulting analysis.

Throughout the course, you will also learn basic project management techniques.

Topics include:

- Creating a project outline, including objectives and process flow diagram
- Using ArcGIS to interpret and draw conclusions from spatial data
- Presenting project results with visualizations of key conclusions

Practical experience:

- Comprehensive GIS project, including proposal, outline, and presentation

Course typically offered: Online in Fall and Spring

Software: Students will use ArcGIS by ESRI in this course; the instructor will provide license information on the start date of the course and there is no additional cost. A computer with a native Windows operating system is required to run ArcGIS; the software will not work properly on a Mac computer, even if you have configured your system to dual-boot or otherwise run Windows.

Prerequisites: Completion of GIS I, GIS II, GIS III, and GIS IV required.

Next Steps: Upon completion of this course, consider taking additional courses in data science to continue learning.

Contact: For more information about this course, please contact unex-techdata@ucsd.edu.

ECE40275: Data Acquisition Systems - 3.00 Units

Data Acquisition Systems (DAS) convert real-time measurement data to digital values for storage and/or processing by computers or embedded systems. These systems are commonly used in industrial, automotive, military, and medical applications, as well as multimedia signal processing and scientific research. This course helps students understand the fundamentals of real time embedded data acquisition systems: their architectures, components, algorithms, data storage and presentation.

ECE40283: DSP in Wireless Communications - 3.00 Units

Rapid developments in digital signal processing techniques have enabled many new advances in wireless communication systems. Wireless communications is prevalent. From mobile devices to security, its use is expanding into new applications with new requirements that are increasingly relying on digital techniques. Explore the key digital concepts driving wireless communications. Students will review topics such as:

- Digital modulation and detection
- Noise-shaping modulation
- Advanced data converters
- Fractional-N phase-locked loops
- Sampled receivers
- Digital linearization

ECE40284: Distributed Renewable Energy Resources - 3.00 Units

This class provides a solid foundation to renewable energy resources such as solar (both photovoltaic and concentrating solar power), wind power and hydro on distribution and transmission power systems. The class will explore the opportunities and challenges of integrating renewable energy sources into the conventional power grids in the USA and globally. It will present lessons learned from such applications from real-life situations.

ECE40285: Embedded Systems for Robotics - 3.00 Units

Robots are no longer confined to industrial automation. They are becoming increasingly reliable, affordable and user friendly. In addition, they are

improving the quality of life. Robots are performing everyday household tasks such as vacuum cleaning and personal assistance. The medical device industry is utilizing controller microchips that translate muscle movements into prosthetic responses. As the demand for these robots grows, so does the need for qualified professionals.

In a typical mechanical oriented task, robots use sensors, actuators, and software to perceive their environment and safely perform programmed goals. An embedded system resides inside the robot tying together the different subsystems. Without an embedded system, robots would need to rely on external computing systems which can increase the safety risks due to delay and failure in the communication link between the robot and its external control system.

In this hands-on, laboratory course, you will learn the basic skills necessary to develop and implement embedded systems that control a typical robot. You will explore embedded computer hardware that interfaces with sensors, embedded software that reads and processes sensor data, and actuators for physical motions. Upon course completion, participants will take home an embedded system development board based on the ARM architecture compatible with the mbed development environment.

Course Highlights

- Microcontrollers
- C Programing
- Digital I/O
- Analog to Digital Converter
- Digital to Analog Converter
- Encoders
- Infrared for measuring distance
- Ultrasound for measuring distance
- Laser Scanner LADAR/LIDAR
- Gyroscope
- Accelerometer
- Magnetometer
- RC Servo Motor
- Stepper Motors
- DC motors with encoders

Course Benefits

- Develop and implement an embedded system (hardware and software) necessary to control a typical robot
- Acquire and process data from typical sensors used in robotics
- Control typical actuators used in robotics

ECE40286: Introduction to Mobile Robot - 3.00 Units

ECE40287: ARM Mbed Cloud and Internet of Things (IoT) - 3.00 Units

ECE40289: Electronics and Telecommunications Review: Math, Circuits and Signals - 3.00 Units

We all know that in digital communications the electronics elements communicate using binary arithmetic.

The course will teach you how to design circuits that use this binary arithmetic and how simple Boolean

algebra plays a crucial role in the design of these circuits.

The course introduces the concepts and fundamentals of Electronic devices, Digital circuit fundamentals, Principles of digital electronics, signal transmission in communication systems and Boolean Algebra fundamentals.

Course Topics:

- Binary Number System and Algebra of Electronics

Transmission of signals in Communication Systems
 Semiconductor Diodes and Applications
 Bipolar Junction Transistors
 Operational Amplifiers
 Digital Electronics
 Microcontrollers
 Digital Circuits
 Flip-Flops
 Transducers

After studying this course, students will be able to:

- Appreciate the significance of electronics in different applications
- Understand the applications of diode in rectifiers, filter circuits and wave shaping.
- Apply the concept of diode in rectifiers, filters circuits.
- Design simple circuits like amplifiers (inverting and non-inverting), comparators, adders, integrator and differentiator using OPAMPS.
- Compile the different building blocks in digital electronics using logic gates and implements simple logic function using basic universal gates.
- Understand the functioning of a communication system, different modulation technologies, and the basic principles of different types of Transducers.

For more information contact infotech@ucsd.edu

ECE40290: - 3.00 Units

ECE40291: - 3.00 Units

ECE40292: - 3.00 Units

ECE40293: - 3.00 Units

ECE40294: - 3.00 Units

ECE40295: - 4.00 Units

ECE90004: Introduction to Electronics and Programming - 3.00 Units

Electronics and Programming is a beginner's overview of the use of electronics. Through this course, students will learn about the theories and concepts of electricity and electronics, as well as the fundamentals of microprocessors, and their place in history and society. At the end of the course, participants will have produced controllers and receptors based on the Arduino microprocessor in order to accomplish various tasks related to sensing and actuating, including controlling servo and stepper, motors, illuminating LEDs and programming the microprocessor to turn the LEDs on and off in a particular order.

ECE90005: Introduction to Circuits using Makey Makey - 0.00 Units

Do electronics and bananas go together? Absolutely! Learn how to create fun circuits using Makey Makey circuit boards that can be expanded and accentuated with everyday items like a banana, aluminum foil or a bouncy ball. Science and art collide as students use the technology of circuits to create art in the form of music, paintings and photographs.

ECE90008: Introduction to Circuits using Makey-Makey - 0.00 Units

Do electronics and food go together? In this engineering class they do! Learn how to create circuits using Makey-Makey circuit boards that can be expanded and accentuated with our favorite food items like bananas, potatoes, and

gummy bears. In this class, science and art collide as the technology of circuits are used to create art in the form of music and games.

ECON90000: Introduction to Macroeconomics - 6.00 Units

Whether your goal is to win every argument, to develop your sleuthing skills, or simply to be a more reasonable person, logic can be your trustworthy guide. This course provides an introduction to formal logic—everything from using symbols to represent natural conversations to the inner workings of a computer chip. We will explore various symbolic languages that describe fascinating and sometimes unexpected patterns underlying how we think and speak. In addition, this course will help you develop strong reasoning skills, which are essential for most careers as well as standardized tests. Students with no prior training in formal logic are welcome in this course.

ECON90001: Introduction to Logic - From Aristotle to the Information Age - 6.00 Units

Whether your goal is to win every argument, to develop your sleuthing skills, or simply to be a more reasonable person, logic can be your trustworthy guide. This course provides an introduction to formal logic—everything from using symbols to represent natural conversations to the inner workings of a computer chip. We will explore various symbolic languages that describe fascinating and sometimes unexpected patterns underlying how we think and speak. In addition, this course will help you develop strong reasoning skills, which are essential for most careers as well as standardized tests. Students with no prior training in formal logic are welcome in this course.

ECON90010: Introduction to Microeconomics - 6.00 Units

EDUC30007: Level I: The Instructional Process/Techniques of Teaching Vocational Education - 9.00 Units

This course provides the required background for teachers of vocational education subjects by explaining learning concepts and developmental skills as they relate to vocational instruction. Topics include establishing a foundation for the learning process, instructional techniques, curricula and media, instructional evaluations, the scope and function of vocational education, classroom counseling and guidance, learning styles, special needs of students, and evaluations of student achievement.

EDUC30008: U.S. Constitution Preparation Course and Examination - 1.00 Units

This course includes two informative lectures that cover essential elements of the U.S. Constitution. Participants will review and analyze the meaning of the Constitution as it was originally formulated and developed through amendments and judicial interpretation. The materials and course assignments will prepare participants to pass the U.S. Constitution Examination. The U.S. Constitution Examination is then required at the end of the course.

This course is part of the following California Commission on Teacher Credentialing program(s): California Clear Credential & Designated Subjects

EDUC30057: Health Education for the Teacher - 1.50 Units

This course focuses on the need for universal health-related education. In recent years, schools have assumed the responsibility for this aspect of social development, making it vital for educators to be fully informed of the legal, moral and pedagogical implications of such instruction. The course includes an introduction to health education including topics in weight management, nutrition, physical fitness, illicit drug use, substance abuse, sex education and much more.

This course is part of the following California Commission on Teacher Credentialing program(s): California Clear Credential & Designated Subjects

EDUC30060: Level II: Principles and Practices of Vocational Education - 9.00 Units

This course provides a comprehensive study of vocational education, with an emphasis on promoting excellence by exploring major factors affecting the vocational education delivery system. Topics include advanced curricula and media, cultural differences, advanced instructional evaluation, principles and practices of vocational education, community and occupational relationships and programs, special needs of advanced students, work-study programs, and intracurricular student leadership development.

EDUC30061: Level III: Designated Subjects Supervision of Vocational/ Occupational Education - 9.00 Units

This leadership development course is designed for prospective, newly appointed, or experienced administrators in community colleges, regional occupational centers and programs, and secondary school districts. Material covered in class examines educational, economic, and sociological trends and issues and how they relate to the future of vocational/occupational education. Topics will include program planning and evaluation and articulation strategies for community colleges, regional occupational centers, and secondary schools. Presented as a workshop, the course emphasizes problem solving, case studies, and interaction with guest speakers.

EDUC30145: The Reading Process - 4.50 Units

All K-12 teachers need to be aware of how the reading process relates to their classroom or subject areas. Topics include the process of learning a language, reading for the bilingual/bicultural pupil, a historical perspective on reading, reading readiness, models of reading instruction, reading as decoding, reading as comprehension, phonics, reading and learning disabilities, study skills, and modality and cognitive style as related to the teaching/learning process.

This course is part of the following California Commission on Teacher Credentialing program(s):

California Clear Credential

EDUC30146: Mainstreaming the Special Child - 4.50 Units

This course will give teachers valuable skills for promoting the integration of students with special needs in the regular classroom environment. Topics include state and federal special education legislation, the characteristics of exceptional learners, behavior management and problem solving techniques, teaching strategies, and consultation skills.

This course is part of the following California Commission on Teacher Credentialing program(s): California Clear Credential

EDUC30150: Integrating Technology in Education K-12, Level 1 - 4.00 Units

This course will explore the use of technology in education as a tool to enhance teaching & learning. Participants will learn & demonstrate the effective use of computer hardware & software and fundamental hardware care operations to ensure safety. Topics in this course will include legal aspects of technology in education, electronic communication tools, printed media, classroom & record management, introduction to technology uses across the curriculum & classroom, evaluation of electronic research tools & the maintenance of effective learning environments using technology in education.

This course is part of the following California Commission on Teacher Credentialing program(s): California Clear Credential

EDUC30151: Integrating Technology in Education K-12, Level 2 - 4.00 Units

This course reviews the effective use and practical applications of technology to enhance and support teaching and learning. Using a hands-on approach, participants will learn & demonstrate competence in integrating technology in their curriculum and instructional design. Some of the topics in this course include curriculum writing, data analysis and manipulation,

applications of electronic media, peer collaboration, the effective use of existing technology resources and student assessment.

EDUC30787: Introduction to Induction - 3.00 Units

The Introduction to Induction provides candidates admitted to the Induction program with an overview of the entire program, including its scope, goals, expectations, requirements, standards, competencies, the procedures regarding seeking a mentor, observations, field experiences, and Individualized Learning Plan expectations. Participants must be formally admitted to the Induction program prior to registering for this course.

EDUC30788: Implement ILP for Induction I - 4.50 Units

Collaboration between the Induction program, program candidates, site-based Induction mentors, site-based Induction partners, and school site administrators establishes a professional educational community, ensuring structures that support the activities of the program and coordinating collaboration and support for all program candidates. In order to facilitate the transition from teacher preparation to a clear credential by building upon and providing opportunities for implementation and application of pedagogical knowledge, concurrent enrollment in this course is required while completing the other Induction program requirements. In addition, participants will be provided with guidance, expectations, requirements, standards, competencies, required number of observations, and Individualized Learning Plan forms that are required in the Culminating Induction ILP Portfolio.

Candidates will focus on the ILP goals aligned to CSTP 1: Engaging & Supporting All Students In Learning and CSTP 6: Developing As A Professional Educator in order to support outcomes to practice and refine teaching practices.

EDUC30789: Implement ILP for Induction II - 4.50 Units

Collaboration between the Induction program, program candidates, site-based Induction mentors, and school site administrators establishes a professional educational community, ensuring structures that support the activities of the program and coordinating collaboration and support for all program candidates. In order to facilitate the transition from teacher preparation to a clear credential by building upon and providing opportunities for implementation and application of pedagogical knowledge, concurrent enrollment in this course is required while completing the other Induction program requirements. In addition, participants will be provided with guidance, expectations, requirements, standards, competencies, required number of observations, and Individualized Learning Plan forms that are required in the Culminating Induction ILP Portfolio. Candidates will focus on the ILP goals aligned to CSTP 2: Creating & Maintaining Effective Environments for Student Learning and CSTP 6: Developing As A Professional Educator in order to support outcomes to practice and refine teaching practices.

EDUC30790: Implement ILP for Induction III - 4.50 Units

Collaboration between the Induction program, program candidates, site-based Induction mentors, and school site administrators establishes a professional educational community, ensuring structures that support the activities of the program and coordinating collaboration and support for all program candidates. In order to facilitate the transition from teacher preparation to a clear credential by building upon and providing opportunities for implementation and application of pedagogical knowledge, concurrent enrollment in this course is required while completing the other Induction program requirements. In addition, participants will be provided with guidance, expectations, requirements, standards, competencies, required number of observations, and Individualized Learning Plan forms that are required in the Culminating Induction ILP Portfolio.

Candidates will focus on the ILP goals aligned to CSTP 3: Understanding & Organizing Subject Matter for Student Learning and CSTP 6: Developing As A Professional Educator in order to support outcomes to practice and refine teaching practices.

EDUC30791: Implement ILP for Induction IV - 4.50 Units

Collaboration between the Induction program, program candidates, site-based Induction mentors, and school site administrators establishes a professional educational community, ensuring structures that support the activities of the program and coordinating collaboration and support for all program candidates. In order to facilitate the transition from teacher preparation to a clear credential by building upon and providing opportunities for implementation and application of pedagogical knowledge, concurrent enrollment in this course is required while completing the other Induction program requirements. In addition, participants will be provided with guidance, expectations, requirements, standards, competencies, required number of observations, and Individualized Learning Plan forms that are required in the Culminating Induction ILP Portfolio.

Candidates will focus on the ILP goals aligned to CSTP 4: Planning Instruction & Designing Learning Experiences For All Students and CSTP 6: Developing As A Professional Educator in order to support outcomes to practice and refine teaching practices.

EDUC30792: Implement ILP for Induction V - 4.50 Units

Collaboration between the Induction program, program candidates, site-based Induction mentors, and school site administrators establishes a professional educational community, ensuring structures that support the activities of the program and coordinating collaboration and support for all program candidates. In order to facilitate the transition from teacher preparation to a clear credential by building upon and providing opportunities for implementation and application of pedagogical knowledge, concurrent enrollment in this course is required while completing the other Induction program requirements. In addition, participants will be provided with guidance, expectations, requirements, standards, competencies, required number of observations, and Individualized Learning Plan forms that are required in the Culminating Induction ILP Portfolio.

Candidates will focus on the ILP goals aligned to CSTP 5: Assessing Student Learning and CSTP 6: Developing As A Professional Educator in order to support outcomes to practice and refine teaching practices.

EDUC30793: Culminating Induction ILP Portfolio - 3.00 Units

The culminating Induction Individualized Learning Plan Portfolio serves for candidates to submit verification of their learning, observations, field experiences, and Individualized Learning Plan forms from courses and CSTPs in the Induction program. Candidates will collaborate with instructors from each course on an individual basis to determine the appropriate assignments based upon academic and professional interests to establish materials to include in the Portfolio. Although assignments will differ for candidates, everyone must submit a complete Portfolio that documents their learning, observations, field experiences, and competencies, including organized reflections and evidence of knowledge, skills, and abilities.

EDUC30794: Designing the Individualized Learning Plan (ILP), Track 1 - 3.00 Units

Candidate Individualized Learning Plan (ILP) is created in partnership with the Induction candidate, Induction program, site-based Induction mentors, and school site administrators.

The ILP must include candidate professional growth goals, a description of how the candidate will work to meet those goals, defined and measurable outcomes for the candidate, and planned opportunities to reflect on progress and modify the ILP as needed. The candidate's specific teaching assignment should provide the appropriate context for the development of the overall ILP;

however, the candidate and the mentor may add additional goals based on the candidate's professional interests such as. Within the ILP, professional learning and support opportunities must be identified for each candidate to practice and refine effective teaching practices for all students through focused cycles of inquiry.

The ILP must include each candidate's goals for implementing the ILP under each CSTP (1-6). Each candidate will be required to document and demonstrate the successful completion of outlined ILP activities throughout the Induction program.

EDUC30795: Overview for Site-Based Induction Mentor - 1.50 Units

An introduction for approved Site-Based Induction Mentors including an overview of the entire program, including its scope, goals, expectations, requirements, standards, competencies, the procedures regarding seeking a mentor, observations, field experiences, and Individualized Learning Plan expectations. Participants must be formally approved as a Site-Based Induction Mentor for the UCSD Extension Induction program prior to registering for this course.

EDUC30796: Site-Based Mentor Training and Support for Induction I - 3.00 Units

Guidance for the mentoring experience to provide Induction candidates with a professional educational community, ensuring structures that support the activities of the program and coordinating collaboration and support for all program candidates. The class serves to providing support for mentors so they can work with Induction candidates for the facilitation of candidate growth and development through modeling, guided reflection on practice, and feedback on classroom instruction; connecting candidates with available resources to support their professional growth and accomplishment of the ILP; periodically reviewing the ILP with candidates and making adjustments as needed. Mentors will review CSTP 1: Engaging & Supporting All Students In Learning and CSTP 6: Developing As A Professional Educator in order to support Induction candidates ILP goals and outcomes. Training and support will include, but not limited to: Coaching & Mentoring.

EDUC30797: Site-Based Mentor Training and Support for Induction II - 3.00 Units

Guidance for the mentoring experience to provide Induction candidates with a professional educational community, ensuring structures that support the activities of the program and coordinating collaboration and support for all program candidates. The class serves to providing support for mentors so they can work with Induction candidates for the facilitation of candidate growth and development through modeling, guided reflection on practice, and feedback on classroom instruction; connecting candidates with available resources to support their professional growth and accomplishment of the ILP; periodically reviewing the ILP with candidates and making adjustments as needed. Mentors will review CSTP 2: Creating & Maintaining Effective Environments and CSTP 6: Developing As A Professional Educator in order to support Induction candidates ILP goals and outcomes. Training and support will include, but not limited to: Goal Setting and Mentoring Challenges.

EDUC31022: Health Education for the Teacher: Advanced - 4.00 Units

This course focuses on the need for universal health-related education and covers topics relevant to a school and classroom environment such as diseases, weight management and nutrition, accident prevention strategies, state and federal requirements regarding health education, school and district procedures for crisis prevention and intervention, as well as social and economic factors that affect students' health.

EDUC31023: English Language Learners - 4.50 Units

This course will explore theories behind teaching in an English Language Development (ELD) setting as well as ELD's links to language arts and to State

standards-based academic content. This course will also look at current assessments & their role in curriculum design and instruction. Participants will explore issues in diversity such as learning differences & culturally responsive pedagogy in order to tap into students' prior knowledge, experiences & strengths to enrich students' learning and development.

EDUC31033: Mainstreaming the Special Child: Advanced - 4.00 Units

This course reviews general special education & gifted education concepts, legal issues, professional responsibilities, curriculum design & instructional practices. Participants will explore the importance of establishing working partnerships with families & school/community personnel who can provide support in the students' academic achievement. Participants will also examine their own curriculum and instructional models regarding teaching exceptional students and fostering a strengths-based community of learners.

EDUC31163: Current Issues in Tchng Wrtnng - 6.00 Units

This is an inservice for SDAWP- Invitational Inst.

EDUC31164: Sem. in Tchng Composition - 3.00 Units

This is an inservice for SDAWP- Invitational Inst.

EDUC31217: Culture and Inclusion - 4.00 Units

Examination of culture and cultural diversity and the relationship to academic achievement, development, implementation and evaluation of culturally inclusive instruction. Topics include cultural concepts and perspectives; cultural contact; cultural diversity in California and the United States; cross-cultural interaction; the roles of culture in the classroom and the school; culturally inclusive learning environments; family and community involvement; and culturally inclusive curriculum and instruction.

This course is part of the following California Commission on Teacher Credentialing program(s): CLAD Through CTCL

EDUC31218: Language and Language Development - 4.00 Units

Research-based conceptual understanding of language systems, structures, forms, functions, and variations of both aural and written language forms. Language functions and variations, discourse and pragmatics can be applied directly to assessment and instruction of English learners and the specific linguistic and socio-linguistic challenges of English learners are addressed. Materials, and methods for understanding and analyzing socio-cultural, and political factors that can affect second language development are presented. This course is part of the following California Commission on Teacher Credentialing program(s): CLAD Through CTCL

EDUC31219: Assessment of English Learners - 3.00 Units

Principles and design of standards-based assessment and instruction for English language learners and the relationship to identification of students' strengths and needs in English language/literacy development and academic achievement. Topics will include roles, purposes and types of formal and informal assessment that inform teachers in planning effective, differentiated instruction; monitoring English learners' progress with respect to a given standard; issues of norming, test reliability, validity, and cultural and linguistic biases with respect to children of diverse backgrounds.

This course is part of the following California Commission on Teacher Credentialing program(s): CLAD Through CTCL

EDUC31220: Foundations and Methods of English Language/Literacy Development and Content Instruction - 6.00 Units

Current research-based theories of second language acquisition; the differences between first & second language; & literacy development. Topics include cognitive, linguistic, socio-cultural & affective factors that affect language learning in children of diverse

backgrounds; use of the CELDT in instructional planning to promote both language development & academic achievement; and research-based approaches & methods for English language development. Students will learn to deliver comprehensible instruction to English Learners in the context of three instructional models: English Language Development (ELD), Content-based ELD & Specially Designed Academic Instruction in English (SDAIE). This course is part of the following California Commission on Teacher Credentialing program(s): CLAD Through CTCL

EDUC31221: CLAD Through CTCL Portfolio - 1.00 Units

The CLAD Through CTCL Portfolio course captures learning & field experiences from each course & connects them together in a cohesive manner. Candidates will collaborate with instructors from each course on an individual basis to determine an appropriate field assignment based on academic and professional interests and to establish what types of material should be included in the CTCL Portfolio. Although field assignments will differ between candidates, everyone must complete & submit a CTCL Portfolio that documents their experiences, including organized reflections & evidence of knowledge, skills and abilities.

This course is part of the following California Commission on Teacher Credentialing program(s): CLAD Through CTCL

EDUC31277: Edge 40-hour Institute - 4.00 Units

The purpose of the Institute is to provide participants with interactive instruction in teaching Edge Reading, Writing and Language Program that is consistent with the California Reading/Language Arts Framework and the California English-Language Arts Standards, and the State Board requirements for SB 472 Professional Development.

EDUC31278: SB 472 English Learner Professional Development - 4.00 Units

The 5-day training is intended to support teachers who have attended an initial SB 472 Institute focused on a specific state-adopted or state-aligned instructional program and its material.

- provide teachers with foundational knowledge needed to assist English learning pupils to attain a high level of English language proficiency and mastery of the California mathematics and English/language arts and other academic content standards;
- provide teachers instructional strategies to more fully implement the universal access components of the state-adopted/aligned program materials as well as differentiate instruction as needed with state-adopted or standards-aligned instructional programs;
- help teachers of English learners understand and apply knowledge of linguistic structures to state-adopted or state aligned instructional program materials.

EDUC31300: Orientation: CLAD Through CTCL - 0.00 Units

The CLAD Through CTCL orientation provides individuals interested in the CLAD Through CTCL Certificate Program with a clear understanding of the entire program, including its scope and goals, requirements, standards, the procedures that affect competencies, and field experience(s). It is mandatory for applicants entering Extension's CLAD Through CTCL program.

This course is part of the following California Commission on Teacher Credentialing program(s): CLAD Through CTCL

EDUC31307: San Diego Regional School Garden and Nutrition Conference - 1.50 Units

This is a one-day conference for educators to provide information and resources for school garden and nutrition programs. Topics include but are not limited to:

- Steps to develop an environmentally and financially sustainable school garden program

- How to build a team for sustainable school garden program, and develop fundraising sources
- How to integrate state standards with school garden and nutrition programs
- Examples of garden and nutrition based activities and lessons for all grades, with an emphasis on elementary grades
- Organic gardening, including composting and integrated pest management

EDUC31309: CRLP Results: Assessment, Instruction, and Intervention (K-6) - 5.00 Units

Participants will learn how to analyze student achievement to improve performance through the use of data from multiple measures, focusing on the word analysis, fluency, content, and language demands required for all students to access grade-level appropriate content standards.

EDUC31327: Inside SB 472 Institutes - 4.00 Units

The purpose of the Institute is to provide participants with interactive instruction in teaching Inside – Language Literacy and Content program that is consistent with the California Reading/Language Arts Framework and the California English-Language Arts Standards, and the State Board requirement for SB 472.

EDUC31355: Clear Credential Orientation - 1.50 Units

The Clear Credential Orientation provides candidates admitted to the Clear Credential program with an overview of the entire program, including its scope, goals, expectations, requirements, standards, competencies, the procedures regarding seeking a mentor, observations, and field experiences. Participants must be formally admitted to the Clear Credential program prior to registering for this course.

This course is part of the following California Commission on Teacher Credentialing program(s): California Clear Credential

EDUC31356: Collaboration and Support for Effective Teaching - 3.00 Units

Collaboration between the clear credential program, candidates, & site-based mentors establishes a professional educational community, ensuring support throughout the program while coordinating collaboration & support for all candidates. Concurrent enrollment is required while completing the other program requirements in order to facilitate the transition from teacher preparation to a clear credential by building upon & providing opportunities for demonstration & application of pedagogical knowledge. Participants will be provided with guidance, expectations, requirements, standards, competencies, observations, & field experiences for the Clear Credential Portfolio.

This course is part of the following California Commission on Teacher Credentialing program(s): California Clear Credential

EDUC31357: Pedagogy for Effective Teaching - 4.50 Units

This course will explore the specific pedagogical skills for subject matter instruction beyond what was demonstrated for the preliminary credential. Participants will utilize the adopted academic content standards & performance levels for students, curriculum frameworks, & instructional materials in the context of teaching assignments. Topics include the use & interpretation of student assessment data; summative assessments of student academic performance to inform instruction; planning & differentiation of instructions including multi-tiered interventions as appropriate based on assessed individual; academic language & literacy and diverse learning needs for the full range of learners.

This course is part of the following California Commission on Teacher Credentialing program(s): California Clear Credential

EDUC31358: Equitable and Inclusive Learning Environments - 4.50 Units

Examination of methods to protect & support all students by designing and implementing equitable & inclusive learning environments. Participants will address planning & delivery of instruction in a manner to examine and minimize bias in classrooms, schools, and larger educational systems while using culturally responsive pedagogical practices. Topics include academic achievement for students from all ethnic, race, socioeconomic, cultural, academic, and linguistic or family background, gender, gender identity, and sexual orientation, and students with a combination of special instructional needs.

This course is part of the following California Commission on Teacher Credentialing program(s): California Clear Credential

EDUC31359: Teaching English Learners - 4.50 Units

This course will explore theories behind teaching English learners to ensure academic achievement & language proficiency for English learners. Topics include theories behind teaching in an English Language Development (ELD) setting. ELD's links to language arts & to CA standards-based academic content. Assessments & their role in planning instruction & designing curriculum. Participants will explore issues in diversity such as learning differences & culturally responsive pedagogy to enrich learning & development, and integration of ELD in their current instructional program.

This course is part of the following California Commission on Teacher Credentialing program(s): California Clear Credential

EDUC31360: Teaching Special Populations - 4.50 Units

This course reviews the full range of special populations such as special education, students with disabilities, advanced learners, and students with a combination of special instructional needs. Topics include legal issues, professional responsibilities, curriculum design & instructional practices. Participants will examine their own curriculum and instructional models with respect to special population students and fostering a strengths-based community of learners.

This course is part of the following California Commission on Teacher Credentialing program(s): California Clear Credential

EDUC31361: Clear Credential Portfolio - 1.50 Units

The Clear Credential Portfolio serves as the culmination of your learning, observations, and field experiences from courses in the Clear Credential program. Candidates will collaborate with instructors from each course on an individual basis to determine the appropriate assignments based upon academic and professional interests to establish materials to include in the Portfolio. Although assignments will differ for candidates, everyone must submit a complete Portfolio that documents their learning, observations, field experiences, and competencies, including organized reflections and evidence of knowledge, skills, and abilities.

This course is part of the following California Commission on Teacher Credentialing program(s): California Clear Credential

EDUC31367: Designated Subject Foundations Course - 3.00 Units

The Designated Subjects Foundations Course is mandatory for all candidates new to teaching introducing candidates to fundamental precepts and practices of education. The course provides an overview for teachers of learning concepts and developmental skills as they relate to CTE and Adult Education.

This course is part of the following California Commission on Teacher Credentialing program(s): Designated Subjects

EDUC31368: Designated Subjects: CTE Emphasis Course - 9.00 Units

This course provides the foundation for teachers of Career Technical Education (CTE) by exploring learning concepts and developmental skills as they relate to CTE. Topics include but not limited to: Curriculum Development, Instructional Planning Skills, Instructional Strategies (including SDAIE), Students with Special Needs, Assessment and Student Achievement, Diversity & Inclusion, Classroom Management, and CTE Foundations.

This course is part of the following California Commission on Teacher Credentialing program(s):

Designated Subjects

EDUC31369: Designated Subjects Portfolio Course - 2.00 Units

The Designated Subjects Portfolio is a course that captures learning and field experiences from each of the courses and connects them together in a cohesive manner. Under the guidance of the Program faculty & District mentor, candidates will assemble a culminating portfolio. Candidates are required to present their portfolio within the context of the course. Although field assignments will differ between candidates, everyone must complete & submit a Designated Subjects Portfolio that documents their experiences, including organized reflections & evidence of knowledge, skills and abilities.

This course is part of the following California Commission on Teacher Credentialing program(s):

Designated Subjects

EDUC31370: Inside 3-day Institute - 2.50 Units

The purpose of the institute is to provide participants with interactive instruction in teaching using the INSIDE Language, Literacy & Content program that is consistent with the California Reading/Language Arts Framework and the California English-Language Arts Standards.

EDUC31371: Edge 3-day Institute - 2.50 Units

The purpose of the institute is to provide participants with interactive instruction in teaching the EDGE Reading, Writing, & Language Program that is consistent with the California Reading/Language Arts Framework and the California English Language Arts Standards.

EDUC31372: English Learner Professional Development 3-day Institute - 2.50 Units

The 3-day ELPD Institute is a condensed version of the SB 472 5-day model this is intended to support teachers who have attended an initial Reading/Language Arts or Mathematics SB 472 Institute. This institute will provide teachers with a foundational knowledge needed to assist English learning pupils.

EDUC31378: Language and Literacy for Academic Success - 4.00 Units

This course will include the study of a comprehensive literacy framework, a review of research on academic English language development for adolescent English learners and content area literacy, instruction in the use of text and task analysis and lesson planning tools, and an introduction to a variety of academic language and literacy instructional routines and strategies. Participants will have the opportunity to engage in lesson study within a professional learning community.

EDUC31384: Professional Development for BTSa Teacher Mentors: Year 2 - 3.00 Units

The course entails the analysis and application of effective teaching practices based on the California Standards for the Teaching Profession. The content includes a comprehensive review of the current knowledge base of effective teaching, with emphasis on both general teaching principles and content-specific pedagogy. The Formative Assessment System (FAS) framework will provide the foundation for the course.

EDUC31385: Professional Development for BTSa Beginning Teachers: Year 1 - 3.00 Units

The course entails the analysis and application of effective teaching practices based on the CA Standards for the Teaching Profession. The content includes a comprehensive review of the current knowledge base of effective teaching, with emphasis on both general teaching principles and content-specific pedagogy. The Formative Assessment System (FAS) framework will provide the foundation for the course.

EDUC31386: Professional Development for BTSa Beginning Teachers: Year 2 - 3.00 Units

The course entails the analysis and application of effective teaching practices based on the California Standards for the Teaching Profession. The content includes a comprehensive review of the current knowledge base of effective teaching, with emphasis on both general teaching principles and content-specific pedagogy. The Formative Assessment System (FAS) framework will provide the foundation for the course.

EDUC31387: Professional Development for BTSa Teacher Mentors: Year 1 - 3.00 Units

The course entails the analysis and application of effective teaching practices based on the California Standards for the Teaching Profession. The content includes a comprehensive review of the current knowledge base of effective teaching, with emphasis on both general teaching principles and content-specific pedagogy. The Formative Assessment System (FAS) framework will provide the foundation for the course.

EDUC31390: CTE Core for Clear Single/Multiple Subject Teachers - 4.50 Units

This course is intended for single subject & multiple subject clear credential holders who need to clear a Designated Subjects Career Technical Education (CTE) credential. Candidates will explore learning concepts and developmental skills (including SDAIE and special needs) as they relate to the CTE classroom. This course is part of the San Diego County Consortium Program.

This course is part of the following California Commission on Teacher Credentialing program(s):

Designated Subjects

EDUC31415: R & L: Culture of Literacy - 4.50 Units

This course will provide candidates with awareness and knowledge of Culture of Literacy in the school context, awareness and knowledge of the culture of the student and community as it relates to literacy, awareness and knowledge of factors involved in developing a culture of literacy at the school level, and awareness and knowledge of factors involved in developing student literacy. Candidates will conduct a survey and evaluation of the culture of literacy in the fieldwork assignment.

This course is part of the following California Commission on Teacher Credentialing program(s): Reading Instruction

EDUC31416: R & L: Assessment, Intervention, & Instruction - 4.50 Units

Candidates will have an opportunity to review, analyze, and integrate current, confirmed, reliable and replicable quantitative and qualitative research, and its influence on practice with respect to the relationship of assessment, instruction and intervention in language and literacy. Candidates will be given the opportunity to learn about, administer, and interpret a variety of assessments used for the purpose of screening, diagnosis, placement, RTI, and progress monitoring at the individual and classroom levels.

This course is part of the following California Commission on Teacher Credentialing program(s): Reading Instruction

EDUC31417: R & L: Research, Instruction, and Intervention - 4.50 Units

Candidates will review research pertaining to language & literacy instruction and intervention, the use of print, media, & digital resources, learn the normal progression of complexity for components of literacy instruction and how to instruct for each component, learn the implications of delays or differences in students' literacy development, assess for intervention and modify curriculum to address student needs. Candidates will plan a lesson of formal literacy instruction that is sequential, linguistically logical, systematic, explicit, differentiated, and based upon formal and informal assessments of individual students' progress.

This course is part of the following California Commission on Teacher Credentialing program(s): Reading Instruction

EDUC31418: R & L: Planning, Organizing, and Providing Instruction - 6.00 Units

This course will provide an opportunity to evaluate plan, implement, and monitor formal literacy instruction at the classroom and school wide level including instruction that assures that the full range of learners develop proficiency as quickly and effectively as possible. Candidates will review current research on the elements of and factors that support/develop an effective culture of literacy, that aligns resources to support high academic expectations for student achievement in reading and literacy, and fosters students' independence, engagement, motivation, at the classroom, school, district, and community levels.

This course is part of the following California Commission on Teacher Credentialing program(s): Reading Instruction

EDUC31419: Reading and Literacy Portfolio - 1.50 Units

The Reading and Literacy Portfolio is a course that captures learning and field experiences from each of the courses and connects them together in a cohesive manner. Candidates will collaborate with instructors from each course on an individual basis to determine an appropriate field assignment based on academic and professional interests and to establish what types of material should be included in the Reading and Literacy Portfolio. Although field assignments will differ between candidates, everyone must complete a Reading and Literacy Portfolio that documents their experiences, including organized reflections and evidence of knowledge, skills, and abilities.

This course is part of the following California Commission on Teacher Credentialing program(s): Reading Instruction

EDUC31421: Methods of Teaching for Elementary Schools - 4.50 Units

Intended for teachers who hold a Single Subject Teaching Credential and have passed the CSET exam for the multiple subject credential, and wish to obtain the Multiple Subjects Teaching Credential without completing the full professional preparation program. This is an umbrella course to teach in elementary schools and not a subject specific course. The course is directly related to teaching in a self-contained classroom, excluding the methods of teaching reading.

EDUC31422: Methods of Teaching for Secondary Schools - 4.50 Units

Intended for teachers who hold a Multiple Subject Teaching Credential and passed the CSET test in the subject you would like to teach, and wish to obtain the Single Subject Credential without completing the full professional preparation program. This course is an umbrella course to teach in secondary schools and not a subject specific course. The course fulfills the CTC requirement of a course in methodology directly related to teaching in a departmental setting.

EDUC31423: Honeywell Green Boot Camp - 4.50 Units

The Green Boot Camp is an intensive five-day, hands-on interactive educational experience to help educators become familiar with the latest methods of instruction to teach green and sustainable topics, methods, lessons and concepts to middle school students at their respective schools.

EDUC31459: Technology-Based Projects 3-12 - 5.00 Units

This course will focus on helping teachers create their own technology-based projects that introduce grade-level content to students. The course will also help teachers to work with students in helping them create their own content-related technology projects. These projects will include word processing projects as well as Internet and multimedia projects. Time will also be spent discussing how to assess students' technology projects and developing ideas for student projects.

EDUC31460: DESIGNING AND CREATING A SOCIAL STUDIES WEBQUEST - 5.00 Units

This course will focus on teaching participants how to use the Internet to find resources to enhance and support the teaching of the social studies curriculum through a WebQuest. A WebQuest is an inquiry-oriented activity in which most of the information students interact with comes from resources on the Internet. Participants will learn how to set goals, gather resources, and plan the social studies WebQuest. A template is provided for creating the online social studies WebQuest. Additionally, rubrics for assessing what students learned from the WebQuest are also introduced.

EDUC31484: SOLVING MATH WORD PROBLEMS: STRATEGIES YOUR STUDENTS NEED - 5.00 Units

This online course focuses on strategies students need to solve word problems. Teachers will learn a number of specific strategies students can use to approach a word problem. Teachers will also gain an understanding of how to teach specific problem solving vocabulary which will help students identify the types of problems they need to solve. Word problem patterns of organization will also be shared. Additionally, classroom management suggestions for a "problem-solving" classroom will be presented.

EDUC31495: Designated Subjects: Adult Education Emphasis Course - 9.00 Units

The Adult Education Emphasis course (AEEC) provides the foundation for teachers of Adult Education (AE) by exploring learning concepts and developmental skills (including SDAIE and special needs) as they relate to Adult Education. This course meets the competencies as identified by the California Commission on Teacher Credentialing (CCTC) Program Standards 5-13.

This course is part of the following California Commission on Teacher Credentialing program(s):

Designated Subjects

EDUC31502: VISTT: HS-BLACKBOARD PLATFORM TRAINING - 2.00 Units

Virtual Instructional Services Teacher Training "VISTT" program is designed by K12 Instructional Services Team to help teachers transform teaching skills into those required in the virtual setting. K12 Instructional Services Team pays particular attention to getting teachers over the learning curve quickly. New Teacher Start-Up (Asynchronous & Synchronous) - designed to get teachers started so that they can best support students and families during the first 30 days of school.

EDUC31503: VISTT: HS-ECOLLEGE AND BLACKBOARD PLATFORM TRAINING "MULTI-PLATFORM" - 4.00 Units

Virtual Instructional Services Teacher Training "VISTT" program is designed by K12 Instructional Services Team to help teachers transform teaching skills into those required in the virtual setting. K12 Instructional Services Team pays particular attention to getting teachers over the learning curve quickly. New Teacher Start-Up (Asynchronous & Synchronous) - designed to get teachers started so that they can best support students and families during the first 30 days of school.

EDUC31504: VISTT: 9-12 ECOLLEGE TRAINING - 2.00 Units

Virtual Instructional Services Teacher Training “VISTT” program is designed by K12 Instructional Services Team to help teachers transform teaching skills into those required in the virtual setting. K12 Instructional Services Team pays particular attention to getting teachers over the learning curve quickly. New Teacher Start-Up (Asynchronous & Synchronous) - designed to get teachers started so that they can best support students and families during the first 30 days of school.

EDUC31505: VISTT: 6-8 PLATFORM TRAINING - 2.00 Units

Virtual Instructional Services Teacher Training “VISTT” program is designed by K12 Instructional Services Team to help teachers transform teaching skills into those required in the virtual setting. K12 Instructional Services Team pays particular attention to getting teachers over the learning curve quickly. New Teacher Start-Up (Asynchronous & Synchronous) - designed to get teachers started so that they can best support students and families during the first 30 days of school.

EDUC31506: VISTT: K-5 OLS PLATFORM TRAINING - 2.00 Units

Virtual Instructional Services Teacher Training “VISTT” program is designed by K12 Instructional Services Team to help teachers transform teaching skills into those required in the virtual setting. K12 Instructional Services Team pays particular attention to getting teachers over the learning curve quickly. New Teacher Start-Up (Asynchronous & Synchronous) - designed to get teachers started so that they can best support students and families during the first 30 days of school.

EDUC31510: K-12 Pedagogy for Teachers - 4.50 Units

Participating teachers will be required to grow and improve in their ability to reflect upon and apply the CSTPs while exploring the specific pedagogical skills for subject matter instruction. Participants will utilize the adopted academic content standards & performance levels for students, curriculum frameworks, & instructional materials in the context of teaching assignments. Topics include the use & interpretation of student assessment data; summative assessments of student academic performance to inform instruction; planning & differentiation; academic language & literacy and diverse learning needs for the full range of learners.

EDUC31511: The Math for America San Diego Mathematics Common Core Summer Institute - 3.00 Units

The Math for America San Diego Mathematics Common Core Summer Institute is designed to promote a better understanding of the CCSS for algebra. The CCSS include eight mathematical practices, called Standards for Mathematical Practices. The institute will focus on the connection between the CCSS content of algebra and these practices. Participants will learn how to implement these practices as they teach algebra. The institute will support teachers of Algebra 1 and Algebra 2. The summer institute is open to all San Diego County middle and high school mathematics teachers, including pre-service and special education teachers.

EDUC31513: CTE Advanced Training Part I - 4.50 Units

This course is required for CTE candidates who have not completed two years of successful teaching. Candidates will study advanced teaching methodology and instructional technology as it is directly related to Career Technical Education. The Advanced Teaching Methods and Strategies course is also designed to support teachers’ attainment of the TPEs and CSTP’s and address the Category II teacher outcomes. Teachers complete an e-portfolio consisting of multiple lesson, unit, and course plans that reflect Secretary’s Commission on Achieving Necessary Skills (SCANS), state adopted CTE and academic standards, as well as, CTE curriculum framework.

This course is part of the following California Commission on Teacher Credentialing program(s):

Designated Subjects

EDUC31514: CTE Advanced Training Part II - 4.50 Units

This course is required for CTE candidates who have not completed two years of successful teaching. Candidates will study advanced teaching methodology and instructional technology as it is directly related to Career Technical Education. The Advanced Teaching Methods and Strategies course is also designed to support teachers’ attainment of the TPEs and CSTP’s and address the Category II teacher outcomes. Teachers complete an e-portfolio consisting of multiple lesson, unit, and course plans that reflect Secretary’s Commission on Achieving Necessary Skills (SCANS), state adopted CTE and academic standards, as well as, CTE curriculum framework.

This course is part of the following California Commission on Teacher Credentialing program(s):

Designated Subjects

EDUC31516: Math for America San Diego Summer Institute - 5.50 Units

The Math for America San Diego 2013 Summer Institute provides a forum for focusing on the learning process involved in mathematics instruction. The Institute is a mathematics retreat, in which participants “do mathematics” and observe the pedagogical lessons which emerge from the math process. The course is based on the methodology of UCSD Mathematics Professor Dr Guershon Harel’s DNR principles – duality, necessity, and repeated reasoning. Following Dr. Harel’s observation that solving puzzles is inherent in human nature, the Institute participants will explore ways in which students can become genuinely motivated to solve math “puzzles” and achieve a higher understanding of math concepts.

EDUC31519: TESOL Training - 0.00 Units

This training comprises a series of intensive TESOL workshops, focusing on three areas of interest, appropriate for professional educators and graduate students with an interest in the field. They comprise: (1) Basic Principles of Teaching English as a Second/Foreign Language; (2) Culture and Inclusion; and (3) Theories of Second Language Acquisition and Application to Teaching. Each intensive seminar will comprise six hours of direct instruction.

EDUC31520: Student Safety in the Online Environment - 1.00 Units

This course is designed by the K12 Instructional Services Team to introduce teachers to various topics dealing directly with student safety in the online environment. This course facilitates and discusses challenging topics including Cyberbullying and Plagiarism with key focus on prevention and intervention. There are no prerequisites for this course.

EDUC31523: Math for America San Diego Summer Institute Academic Year Sessions - 1.50 Units

: The Math for America San Diego Summer Institute Academic Year Sessions provide professional and leadership development support to Math for America San Diego fellows and district teachers who attended the Summer Institute. Session participants will “do mathematics” and observe the pedagogical lessons that emerge from the math process. The course is based on the methodology of UCSD Mathematics Professor Dr Guershon Harel’s DNR principles – duality, necessity, and repeated reasoning.

EDUC31525: Academic Management: Instructional Strategies for Children with Learning and Behavioral Differences - 2.00 Units

Academic Management fuses subject specific tutoring with educational therapy. Using the latest findings in the fields of psychology, education, and neuroscience, educators will learn to individualize curriculum in order to help their students succeed in school. Educators will learn how to develop positive and highly collaborative relationships with each student to effectively promote organization, time management, study skills, and executive functioning skills. Topics include: attachment theory, stress management, memorization strategies, understanding neuropsychological reports,

promoting self-advocacy, teaching strategies, and principles of educational therapy. There are no prerequisite requirements. This course is designed for potential instructors of Franklin Educational Services.

EDUC31527: Garden Enhanced Nutrition Education (GENE) - 1.00 Units

This course is designed for educators who teach grades K-7. The course will cover how to use the school garden to enhance nutrition education for children and youth and promote the consumption of fruit and vegetables. Participants will learn tools and strategies for involving children and youth in safe food handling and preparation in a garden, kitchen, or classroom. Other topics covered in the course: how to plan for an edible harvest, Garden to Cafeteria programs, online sources for child-friendly recipes and nutrition education lessons, comparative tastings. After taking this course, educators will be more confident in leading children through cooking activities safely and tying such experiences to learning objectives. They will have greater understanding of how to organize and time garden plantings.
Prerequisite: must already have an existing garden at their school site.

EDUC31534: CREATING AND SUSTAINING YOUR SCHOOL GARDEN - 1.00 Units

The CSYSG Workshop is for individuals working to create or enhance a school garden program. This workshop introduces several topics that should be addressed when implementing an instructional garden, based on decades of input from teachers and other garden educators. These topics include planning and designing a school garden, basic gardening skills, curricular connections, and outdoor classroom management. Time will be dedicated to aligning garden design and lessons to match program goals, and to strategies for drawing support from the school and community to sustain the program.

EDUC31537: Beginning Readers: Process to Practice - 4.50 Units

All multiple subject teachers need to be aware of how the reading process relates to their classroom or subject areas in the K-8 classroom. Topics include the process of learning a language, reading for the bilingual/bicultural pupil, a historical perspective on reading, reading readiness, models of reading instruction, reading as decoding, reading as comprehension, phonics, reading and learning disabilities, study skills, and modality and cognitive style as related to the teaching/learning process.
This course is part of the following California Commission on Teacher Credentialing program(s):
Added Authorization

EDUC31539: Math for America San Diego Summer Institute Common Core State Standards - Mathematics - Algebra - 4.00 Units

Mathematics CCSS Summer Institute are designed to promote a better understanding of the CCSS for algebra. Sessions will focus on the connection between the CCSS content of algebra and the Eight Mathematical Practices. Participants will learn how to implement these practices as they teach. This program supports teachers of both integrated and traditional pathways. The sessions are open to all San Diego County middle and high school mathematics teachers, including pre-service teachers.

EDUC31540: Math for America San Diego Summer Institute Common Core State Standards - Mathematics - Geometry - 4.00 Units

Mathematics CCSS Summer Institutes 2014 are designed to promote a better understanding of the CCSS for geometry. Sessions will focus on the connection between the CCSS content of geometry and the Eight Mathematical Practices. Participants will learn how to implement these practices as they teach. This program supports teachers of

both integrated and traditional pathways. The sessions are open to all San Diego County middle and high school mathematics teachers, including pre-service teachers.

EDUC31547: MATH INSTRUCTIONAL LEADERSHIP DEVELOPMENT - 4.00 Units

This course focuses on providing research-based support for identified math leaders at elementary and middle schools. With an emphasis on student-centered approaches, leaders will explore ways to assist in the instructional transitions required by the Common Core Math Standards. Topics include in-depth work with practice and content standards, building relationships on a site, communicating and collaborating with administrators, facilitating effective professional development, facilitating grade level and vertical collaboration (unit design, lesson design, differentiation, etc.), implementing lesson study, co-teaching models, demonstration lessons, observing and reflective conferencing (including video-elicited) and promoting a mathematical environment at a site.

EDUC31549: Math for America San Diego Summer Institute: Grossmont Union HS District - 3.00 Units

The Math for America San Diego Summer Institute provides a forum for focusing on the learning process involved in mathematics instruction. The institute is a mathematics retreat, in which participants “do mathematics” and observe the pedagogical lessons which emerge from the math process. The course is based on the methodology of UCSD Mathematics Professor Dr. Guershon Harel’s DNR principles – duality, necessity, and repeated reasoning. Following Dr. Harel’s observation that solving puzzles is inherent in human nature, the institute participants will explore ways in which students can become genuinely motivated to solve math “puzzles” and achieve a higher understanding of math concepts.

EDUC31550: Incorporating Latin American Studies into Your Classroom: Immigration - 3.00 Units

This yearlong professional development sequence is open to local educators interested in learning how to incorporate Latin American Studies into their classrooms, with a particular focus on the topic of immigration.

EDUC31552: Elementary Science Academy - 2.50 Units

The Elementary Science Academy will guide teachers as they implement the CCSS and NGSS through reflective, hands-on, practical, and engaging curriculum that will enhance their science content, pedagogical skills, and ability to effectively teach literacy through science. Elementary Science Academy participants receive a deep learning experience through a four day immersive summer institute and classroom integrated science and literacy lessons. This is the type of learning required to support teachers.

EDUC31553: Teaching Writing for College & Readiness {6-12}/CA Common Core State - 2.00 Units

This 3-day open institute offers middle and high school educators an opportunity to develop an understanding of the CA Common Core State Standards (CCSS) in writing and how they impact expectations for student writing in the classroom. Participants will explore the CC writing standards and the integration of the century skills of collaboration, thinking, creativity, and communication.

EDUC31565: Math for America San Diego/ UC San Diego Teacher Leader Collaborative - 3 Unit Program - 3.00 Units

The Teacher Leader Collaborative (TLC) is comprised of Math for America San Diego, San Diego Unified School District, UCSD Department of Mathematics

and UCSD CREATE (Center for Research in Educational Equity, Assessment and Teaching Excellence). This workshop is designed to help secondary teachers think deeply about challenging topics in the 7 – 12 curriculums. Teachers will engage in the mathematics as learners and learn strategies for helping their students succeed.

EDUC31566: Math for America San Diego/ UC San Diego Teacher Leader Collaborative - 6 Unit Program - 6.00 Units

The Teacher Leader Collaborative (TLC) is comprised of Math for America San Diego, San Diego Unified School District, UCSD Department of Mathematics and UCSD CREATE (Center for Research in Educational Equity, Assessment and Teaching Excellence). This workshop is designed to help secondary teachers think deeply about challenging topics in the 7 – 12 curriculums. Teachers will engage in the mathematics as learners and learn strategies for helping their students succeed.

EDUC31568: ETA - Orientation - Teaching Adult Learners/Blended Learning Environment - 0.00 Units

Designed specifically for Electrical Training Alliance instructors. The ETA - Teaching Adult Learners in a Blended Learning Environment orientation provides individuals participating in the ETA Teaching Adult Learners/Blended Learning Environment Certificate Program with a clear understanding of the entire program, including its scope and goals, requirements, standards, the procedures that affect competencies, and field experience(s).

EDUC31569: ETA - Capstone Portfolio - Teaching Adult Learners/Blended Learning Environment - 1.00 Units

Designed specifically for Electrical Training Alliance instructors. Students will work collaboratively with a program advisor to create a final capstone portfolio. This portfolio will consist of a compilation of highlights from throughout the program and a personal review of their progress. Students will submit this portfolio to a program advisor for final review.

EDUC31571: EXCEPTIONAL STUDENT EDUCATION FOR ONLINE TEACHERS - 1.50 Units

This course provides K-12 online teachers with the knowledge and strategies necessary to support students with exceptionalities in an online learning environment. Participants will consider the process for identifying students with exceptionalities and providing services for those students in the online environment. Participants will understand specific special populations within the 13 categories of Special Education, and online course strategies to be utilized toward student achievement. Participants will create a presentation highlighting a special population and the best practices for that population.

EDUC31577: Integrating 21st Century Skills into a STEM/STEAM Lesson - 1.00 Units

This course builds on participant's knowledge of 21st Century skills, researched-based instructional strategies, learning theory, leadership practices, facilitation strategies and coaching. Additionally, participants will develop and implement a STEM/STEAM (Science, Technology, Engineering, Arts, Mathematics) lesson in their classroom as they apply critical thinking, collaboration, creativity, learning theory and current brain research methods.

EDUC31581: High School Science Leaders Institute - 3.00 Units

This course is designed to support local high school teachers in the science disciplines of Biology and Physics. Teachers will gain increased expertise in the NGSS and learn from local Naval researchers conducting a variety of research. Teachers will have the opportunity to explore the application of the foundations of science in scientific research and network with other regional science teachers.

EDUC31582: Quantitative Reasoning and Early Algebra in the Common Core State Standards in Mathematics - 3.00 Units

This one week institute will provide teachers of grades 5 through 8 with opportunities to examine students' quantitative reasoning, including early understanding of fractions, ratio and proportion, and early algebra. Teachers will work on math problems, both individually and in groups, which will help them examine teaching tools to help students reason quantitatively.

EDUC31584: Brain-Compatible Learning - 1.50 Units

This course explores the neurobiology of teaching and learning and the cognitive/affective domains as they apply to gifted and talented pupils. Topics include brain physiology and development; cognition and metacognition; multimodal and multisensory teaching practice; the role of emotion in teaching; neuroplasticity; the 'gifted brain'; types of memory; and creativity.

EDUC31586: Socio-Emotional Needs - 1.50 Units

This course provides candidates with a comprehensive overview of socio-emotional characteristics and issues frequently encountered in working with gifted and talented pupils, including asynchrony; motivation; persistence; moral development; perfectionism; underachievement; social interaction; among others.

EDUC31587: Differentiated Instruction - 1.50 Units

Building on prior coursework in Brain-Compatible Learning and Socio-emotional needs, this course provides candidates with an extensive and robust review of assessments, foundational theories and proven strategies designed to effectively teach diverse gifted and talented pupils. In this course, candidates will become steeped in the assessment process (pre-/formative/summative) and use these data to guide placement and differentiation of content; learning process; and product in a way that presents opportunities for depth, complexity and novelty. Special attention is paid to tiering and grouping in the mixed-ability classroom (by interest, ability and learning style) and instructional delivery that engage the gifted and talented pupil cognitively and affectively. Finally, candidates will acquire practical instructional strategies to work with gifted pupils, including direct instruction; iconic teaching; framing; content imperatives; universal themes; choice; curriculum compacting; anchor activities; contract learning; among others.

EDUC31590: Understanding Autism Spectrum Disorders - 4.50 Units

Based on current research and literature, this course identifies the characteristics of students with autism spectrum disorder (ASD) and provides knowledge of cognition and neurology as well as the core challenges associated with ASD and their implications for program planning and service delivery. Topics include: language and verbal/nonverbal communication, social skills, behavior, and auditory/visual/sensory processing. Roles and responsibilities of various service providers involved in the education and support of students with ASD are explored as well as skills and strategies for effective collaboration with a variety of teams, service providers, and families.

EDUC31591: Effective Instructional Strategies for Students with ASD - 4.50 Units

Employing a variety of assessment tools and resources to allow for individual program determinations for students with ASD, this course provides knowledge and opportunities to become proficient in implementing evidence-based and multi-faceted methodologies and strategies necessary in teaching and engaging students with ASD. Focus on practical application of instructional strategies in the classroom, reflection of best practices, and collaboration with multidisciplinary teams and families.

EDUC31592: Positive Behavior Support for Students with ASD - 4.50 Units

Utilizing the components of culturally-inclusive positive behavior support, this course provides knowledge and practice of evidence-based strategies that enhance, facilitate, and promote successful social interactions and classroom behavior for students with ASD. Topics include positive peer interaction, language and communication, integrating social skills into the curriculum, as well as the challenges of bullying, isolation, and student anxiety and depression. Applied behavioral analysis (ABA) is also discussed. Focus on practical application of positive behavior preventions and interventions in the classroom, reflection of best practices, and collaboration with socio-behavioral teams and families.

EDUC31593: Autism Spectrum Disorder (ASD) Portfolio - 1.50 Units

The Autism Spectrum Disorder (ASD) Orientation Portfolio course captures learning & field experiences from each course & connects them together in a cohesive manner. Candidates will collaborate with instructors from each course on an individual basis to determine an appropriate field assignment based on academic and professional interests and to establish what types of material should be included in the Common Core Portfolio. Although field assignments will differ between candidates, everyone must complete and submit a Autism Spectrum Disorder (ASD) Orientation Portfolio that documents their experiences, including organized reflections and evidence of knowledge, skills and abilities.

EDUC31595: STEAMec (Science Technology Engineering Arts and Math for Early Career teachers) - 1.50 Units

This course provides Early Career Elementary School Teachers (5 years or fewer in the classroom) with tools and techniques to support an integrated approach to Common Core math instruction. With a focus on STEAM (Science, Technology, Engineering, Arts and Mathematics) participants will experience research-based theories and hands-on, problem-based activities to implement in their classrooms. The co-planning/co-teaching/co-reflecting model will be utilized as a means to develop a professional community and support teachers in their efforts to meet the needs and interests of all students through innovative instructional practices. Issues of equity, access and classroom-to-community engagement will be highlighted.

EDUC31596: Results: Word Recognition and Fluency/ Assessment, Instruction, and Intervention - 4.00 Units

This Institute (course) will provide elementary teachers with the theoretical knowledge, technical tools, and instructional strategies to teach the CCSS foundational reading skills.

This course will include the study of a comprehensive literacy framework aligned with CA's ELA/ELD Framework and review research on effective practices for beginning reading instruction and intervention. Teachers learn about the sequence of learning to read, the use of assessments to guide and differentiate reading instruction and intervention, and practice instructional routines that support reading development. Participants will have the opportunity to engage in lesson study within a professional learning community.

EDUC31597: PEAK Classroom New Teacher Training - 2.00 Units

FuelEd Instructional Services Team training provides platform training for instructors and managers. Each training course has modules, lessons, and/or simulations to provide a hands-on experience when working through the various areas.

PEAK Classroom New Teacher Training introduces new teachers to the PEAK Classroom platform and systems, including an overview of the platform, grading, PEAK Office basics, and Credit Recovery Information. In addition, new instructors receive training in Online Instruction, Blackboard Collaborate, Data Driven Instruction and Compliancy Trainings.

This training is for all new instructors assigned courses in PEAK Classroom.

EDUC31598: Cross-training to Online High School - 1.00 Units

FuelEd Instructional Services Team training provides platform training for IST instructors and managers. Each training course has modules, lessons, and/or simulations to provide a hands-on experience when working through the various areas.

Cross-training to Online High School introduces current teachers to the Online High School platform and systems, including the basics of the Online High School, Online High School grading, and utilizing TotalView School. In addition, cross-trained instructors receive training in Data Driven Instruction.

This training is for all current instructors assigned courses in Online High School.

EDUC31599: Cross-training to Online School - 1.00 Units

FuelEd Instructional Services Team training provides platform training for instructors and managers. Each training course has modules, lessons, and/or simulations to provide a hands-on experience when working through the various areas.

Cross-training to Online School introduces current teachers to the Online School platform and systems, including an overview of the K-8 Online School, TotalView School, working with the Learning Coach and the initial call, and the curriculum in the Online School. In addition, cross-trained instructors receive training in Data Driven Instruction.

This training is for all current instructors assigned courses in Online School.

EDUC31600: Cross-Training to Peak Classroom - 1.00 Units

FuelEd Instructional Services Team training provides platform training for instructors and managers. Each training course has modules, lessons, and/or simulations to provide a hands-on experience when working through the various areas.

PEAK Classroom New Teacher Training introduces new teachers to the PEAK Classroom platform and systems, including an overview of the platform, grading, PEAK Office basics, and Credit Recovery Information. In addition, new instructors receive training in Online Instruction, Blackboard Collaborate, Data Driven Instruction and Compliancy Trainings.

This training is for all new instructors assigned courses in PEAK Classroom.

EDUC31601: Online High School New Teacher Training - 2.00 Units

FuelEd Instructional Services Team training provides platform training for instructors and managers. Each training course has modules, lessons, and/or simulations to provide a hands-on experience when working through the various areas.

Online High School New Teacher Training introduces new teachers to the Online High School platform and systems, including the basics of the Online High School, Online High School grading, and utilizing TotalView School. In addition, new instructors receive training in Online Instruction, Blackboard Collaborate, Data Driven Instruction and Compliancy Trainings.

This training is for all new instructors assigned courses in Online High School.

EDUC31602: Online School New Teacher Training - 2.00 Units

FuelEd Instructional Services Team training provides platform training for instructors and managers. Each training course has modules, lessons, and/or simulations to provide a hands-on experience when working through the various areas.

Online School New Teacher Training introduces new teachers to the Online School platform and systems, including an overview of the K-8 Online School, TotalView School, working with the Learning Coach and the initial call, and the curriculum in the Online School. In addition, new instructors receive training in Online Instruction, Blackboard Collaborate, Data Driven Instruction and Compliancy Trainings.

This training is for all new instructors assigned courses in Online School.

EDUC31604: Differentiated Strategies - 1.50 Units

Understanding the Seminar in the Context of PUSD Priorities
KWL(H) on Differentiated Instruction (Strategies)

EDUC31607: Special Topics Capstone - 1.50 Units

This course is designed to offer students an in-depth seminar on special topics in Gifted and Talented Education. This course completes the Professional Development in Gifted and Talented Education program for Pasadena USD.

Topics are designed to provide more detailed information and/or hands-on skills in specific areas. As such, the objectives of the Special Topics course are to provide participants with additional knowledge and skills to effectively support GATE students.

EDUC31608: Project Prime CaMSP - 4.00 Units

This course will enhance the mathematics and language knowledge of mathematics teachers (grades K-8), as well as develop their teaching skills, through professional development activities. The course will be taught in six sessions throughout the academic school year, allowing teacher's time to implement the skills they learn. Mathematics content will address Number and Operations in Base10 (K-5), and The Number System (6-8). Specifically, the follow up will address Counting and Cardinality (K-1), Number and Operations – Fractions (2-5), Ratios and Proportional Relationships (6-8). This will include the understanding of fractions as measures, different representations of fractions, different operations of fractions, and fractions as ratios and percent's, as well as word problems. In addition the course will focus on the specific needs of English learners in mathematics classrooms and address the role of academic language in content knowledge learning. Teachers will be shown various tools and activities to effectively teach mathematics to English learners. Technology and manipulatives will also be explored as useful tools in the classroom. The follow up course will focus on classroom application of content and pedagogy with an emphasis on connections to California's Common Core Standards in mathematics.

EDUC31610: Socio-Emotional Needs - 3.00 Units

This course provides candidates with a comprehensive overview of socio-emotional characteristics and issues frequently encountered in working with gifted and talented pupils, including asynchrony; motivation; persistence; moral development; perfectionism; underachievement; social interaction; among others.

EDUC31611: Mindfulness-Based Stress Reduction - 4.00 Units

MBSR is an 8-week course designed to teach participants how to integrate and apply mindfulness into their daily lives. This program focuses on the development of four main mindfulness practices: the body scan, yoga, seated meditation and walking meditation. Participants meet for two hours each week and participate in one day-long retreat. Weekly discussion topics to be covered are: awareness, acceptance, perceptions and conditioning, reacting/responding, the power of presence, recognizing and coping with stress, and developing effective communication. Studies show the benefits of MBSR include: increased ability to manage stress, fear, anger, anxiety and depression, greater acceptance and feeling less judgmental, improved ability to focus, increased pain management skills, greater sense of well-being, and increased relaxation.

EDUC31613: Synchronous Instruction Training for the Online Teacher - 2.00 Units

SYNCHRONOUS INSTRUCTION TRAINING FOR THE ONLINE TEACHER develops expert synchronous teaching skills for the online teacher so that the teacher improves faster, learns to love the process of practicing teaching, and gains skills that are strongly correlated to teacher effectiveness. By focusing on synchronous classroom management and classroom culture in the online environment, while utilizing the tools available during synchronous instruction, the skills of the expert teacher are put into specific and concrete

actions readily translated to the day-to-day practice of the teacher in the online synchronous classroom.

EDUC31614: FuelEd IST Pathways Leadership Training - 4.00 Units

Designed as an extensive training for potential new members of the Fuel Education Instructional Services Leadership Team, Pathways focuses on four main topics: student engagement, leadership and communication, teacher staffing and performance, and an overview of some of the systems we utilize. At the end of this training, participants will be prepared to take their next step to become leaders of the Instructional Services Team.

EDUC31615: Programs for Infants and Toddlers - 4.50 Units

This course is specifically designed for caregivers of infants and toddlers. The class focuses on the growth and development of the child, birth through three years of age, within various social contexts. Topics include fostering relationships, implementing health and safety practices, designing early learning environments and activities, accommodating individual differences, and creating partnerships with parents and families. This course meets state licensing requirements for child care providers.

EDUC31617: STEAMec Part B (Science Technology Engineering Arts and Math for Early Career teachers) - 1.50 Units

This is the second half of a two-part STEAMec program. This course provides Early Career Elementary School Teachers (5 years or fewer in the classroom) with tools and techniques to support an integrated approach to Common Core math instruction. With a focus on STEAM (Science, Technology, Engineering, Arts and Mathematics) participants will experience research-based theories and hands-on, problem-based activities to implement in their classrooms. The co-planning/co-teaching/co-reflecting model will be utilized as a means to develop a professional community and support teachers in their efforts to meet the needs and interests of all students through innovative instructional practices. Issues of equity, access and classroom-to-community engagement will be highlighted.

EDUC31618: Principles of Differentiating Curriculum and Instruction - 3.00 Units

This interactive session explores the theory and practice of differentiating instruction within the diverse multicultural classroom. Differentiating content, process, and product are considered in the context of working with mixed ability classrooms; English Learners; multicultural giftedness and talent; Common Core State Standards; and 21st-century learning technologies. Elements of depth and complexity are reviewed and participants will engage in flexible strategies that can be used next day. Helping parents understand giftedness and differentiation serves as an integrated theme and a topic of collaborative conversation among participants.

EDUC31619: Strategies Used in Differentiating Curriculum and Instruction Across the Curriculum - 3.00 Units

Building on prior coursework, this course provides candidates with an extensive and robust review of proven strategies and practices designed to effectively teach diverse gifted and talented pupils, with emphases on linguistic and socioeconomic diversity and dual exceptionalities. In this course, candidates will become steeped in the assessment process (pre-/formative/summative) and use these data to guide practical placement and differentiation of content; learning process; and product in a way that presents opportunities for depth, complexity and novelty. Special attention is paid to tiering and grouping in the mixed-ability classroom (by interest, ability and learning style) and instructional delivery that engage the gifted and talented pupil cognitively and affectively. In so doing, candidates will acquire and demonstrate proficiencies in practical instructional strategies to work with gifted pupils, including direct/whole group instruction; iconic teaching;

framing; content imperatives; universal themes; choice; curriculum compacting; anchor activities; contract learning; among others.

EDUC31620: Special Topics Capstone - 1.50 Units

This course provides educators to demonstrate development and delivery of assessment-based strategies within gifted education (differentiated instruction, iconic teaching, depth and complexity, tiering, for example), connecting them together in a cohesive manner. Candidates will collaborate with the course instructor to determine an appropriate signature project based on academic and professional interests and to establish meaningful benchmarks and artifacts. Although field assignments will differ between candidates, all are expected to document experiences, including organized reflections and evidence of knowledge, skills and abilities.

Topics are designed to provide more detailed information and/or hands-on skills in specific areas. As such, the objectives of the Special Topics course are to provide participants with additional knowledge and skills to effectively support GATE students.

EDUC31670: Teaching Reading Comprehension in Transitional Kindergarten through 12th Grade Classes - 2.00 Units

This course is designed to improve teacher's understanding and skill in teaching reading comprehension through the use of complex text in transitional kindergarten through 5th grade and content area literacy in grades 6-12. Participants will study key policy and research documents as well as the new Common Core Standards. This is a blended course with five weeks of online reading, assignments and discussion and two face to face meetings for follow up on topics determined by participants during the online portion of the course.

EDUC31674: MindFueled: Expanding Student Centered Systems - 1.50 Units

During the 2.5 day conference instructional leadership teams from K-12 schools and districts will partner together to synthesize and leverage the latest research and efforts on mindfulness, social networks, cognitive development, and student motivation to take student-centered teaching practices system wide. The overarching goal of this course is to strengthen and expand student-centered systems while practicing mindfulness; empowering leaders to be more grounded, connected, focused and authentic. Teams will be creating strategic plans for their system across the 2.5-day conference with a focus on the 4 tenets of students centered learning: 1) Learning is Personalized 2) Learning is Student Owned 3) Learning is Competency Based 4) Learning Happens Anytime & Anywhere. Teams will explore complex change and how it relates to their system and learn concrete strategies for building capacity and creating focus.

EDUC31677: SUHSD UCSD Extension Teacher Induction First Quarter - 1.50 Units

Teacher Induction in the SUHSD is a job-embedded experience where the beginning teacher candidate works closely with an experienced Mentor to generate evidence of proficiency in the California Standards for the Teaching Profession (CSTPs). Successful candidates will address CSTPs #1-6 through completion of a personalized Individual Learning Plan (ILP) every quarter. The ILP involves ongoing collaboration with the candidate's Mentor and site administrator(s); candidates engage peers and colleagues via both in-person and online forums and assemble a variety of CSTP-related artifacts. Candidates work in content- and school-specific groups to plan, teach, assess, and reflect on student outcomes. They participate in professional learning communities (PLCs) that include colleagues at their own sites as well as those at schools across the district.

EDUC31678: SUHSD UCSD Extension Teacher Induction Second Quarter - 1.50 Units

Teacher Induction in the SUHSD is a job-embedded experience where the beginning teacher candidate works closely with an experienced Mentor to generate evidence of proficiency in the California Standards for the Teaching Profession (CSTPs). Successful candidates will address CSTPs #1-6 through completion of a personalized Individual Learning Plan (ILP) every quarter. The ILP involves ongoing collaboration with the candidate's Mentor and site administrator(s); candidates engage peers and colleagues via both in-person and online forums and assemble a variety of CSTP-related artifacts. Candidates work in content- and school-specific groups to plan, teach, assess, and reflect on student outcomes. They participate in professional learning communities (PLCs) that include colleagues at their own sites as well as those at schools across the district.

EDUC31679: SUHSD UCSD Extension Teacher Induction Third Quarter - 1.50 Units

Teacher Induction in the SUHSD is a job-embedded experience where the beginning teacher candidate works closely with an experienced Mentor to generate evidence of proficiency in the California Standards for the Teaching Profession (CSTPs). Successful candidates will address CSTPs #1-6 through completion of a personalized Individual Learning Plan (ILP) every quarter. The ILP involves ongoing collaboration with the candidate's Mentor and site administrator(s); candidates engage peers and colleagues via both in-person and online forums and assemble a variety of CSTP-related artifacts. Candidates work in content- and school-specific groups to plan, teach, assess, and reflect on student outcomes. They participate in professional learning communities (PLCs) that include colleagues at their own sites as well as those at schools across the district.

EDUC31680: SUHSD UCSD Extension Teacher Induction Fourth Quarter - 1.50 Units

Teacher Induction in the SUHSD is a job-embedded experience where the beginning teacher candidate works closely with an experienced Mentor to generate evidence of proficiency in the California Standards for the Teaching Profession (CSTPs). Successful candidates will address CSTPs #1-6 through completion of a personalized Individual Learning Plan (ILP) every quarter. The ILP involves ongoing collaboration with the candidate's Mentor and site administrator(s); candidates engage peers and colleagues via both in-person and online forums and assemble a variety of CSTP-related artifacts. Candidates work in content- and school-specific groups to plan, teach, assess, and reflect on student outcomes. They participate in professional learning communities (PLCs) that include colleagues at their own sites as well as those at schools across the district.

EDUC31681: SUHSD UCSD Extension Teacher Induction Fifth Quarter - 1.50 Units

Teacher Induction in the SUHSD is a job-embedded experience where the beginning teacher candidate works closely with an experienced Mentor to generate evidence of proficiency in the California Standards for the Teaching Profession (CSTPs). Successful candidates will address CSTPs #1-6 through completion of a personalized Individual Learning Plan (ILP) every quarter. The ILP involves ongoing collaboration with the candidate's Mentor and site administrator(s); candidates engage peers and colleagues via both in-person and online forums and assemble a variety of CSTP-related artifacts. Candidates work in content- and school-specific groups to plan, teach, assess, and reflect on student outcomes. They participate in professional learning communities (PLCs) that include colleagues at their own sites as well as those at schools across the district.

EDUC31682: SUHSD UCSD Extension Teacher Induction Sixth Quarter - 1.50 Units

Teacher Induction in the SUHSD is a job-embedded experience where the beginning teacher candidate works closely with an experienced Mentor to

generate evidence of proficiency in the California Standards for the Teaching Profession (CSTPs). Successful candidates will address CSTPs #1-6 through completion of a personalized Individual Learning Plan (ILP) every quarter. The ILP involves ongoing collaboration with the candidate's Mentor and site administrator(s); candidates engage peers and colleagues via both in-person and online forums and assemble a variety of CSTP-related artifacts. Candidates work in content- and school-specific groups to plan, teach, assess, and reflect on student outcomes. They participate in professional learning communities (PLCs) that include colleagues at their own sites as well as those at schools across the district.

EDUC31683: SUHSD UCSD Extension Teacher Induction Seventh Quarter - 1.50 Units

Teacher Induction in the SUHSD is a job-embedded experience where the beginning teacher candidate works closely with an experienced Mentor to generate evidence of proficiency in the California Standards for the Teaching Profession (CSTPs). Successful candidates will address CSTPs #1-6 through completion of a personalized Individual Learning Plan (ILP) every quarter. The ILP involves ongoing collaboration with the candidate's Mentor and site administrator(s); candidates engage peers and colleagues via both in-person and online forums and assemble a variety of CSTP-related artifacts. Candidates work in content- and school-specific groups to plan, teach, assess, and reflect on student outcomes. They participate in professional learning communities (PLCs) that include colleagues at their own sites as well as those at schools across the district.

EDUC31684: SUHSD UCSD Extension Teacher Induction Eighth Quarter - 1.50 Units

Teacher Induction in the SUHSD is a job-embedded experience where the beginning teacher candidate works closely with an experienced Mentor to generate evidence of proficiency in the California Standards for the Teaching Profession (CSTPs). Successful candidates will address CSTPs #1-6 through completion of a personalized Individual Learning Plan (ILP) every quarter. The ILP involves ongoing collaboration with the candidate's Mentor and site administrator(s); candidates engage peers and colleagues via both in-person and online forums and assemble a variety of CSTP-related artifacts. Candidates work in content- and school-specific groups to plan, teach, assess, and reflect on student outcomes. They participate in professional learning communities (PLCs) that include colleagues at their own sites as well as those at schools across the district.

EDUC31686: Elementary Science Academy - 3.00 Units

The Elementary Science Academy will guide teachers as they implement the CCSS and NGSS through reflective, hands-on, practical, and engaging curriculum that will enhance their science content, pedagogical skills, and ability to effectively teach literacy through science. Elementary Science Academy participants receive a deep learning experience through a four day immersive summer institute and classroom integrated science and literacy lessons. This is the type of learning required to support teachers.

EDUC31689: Building a Writing Community K-6 - 2.00 Units

This entry level open institute program offers teachers the opportunity to develop authentic writing experiences that build a community of writers from the beginning of the school year. Using personal writing as a catalyst for understanding the importance of developing community, participants will learn to create a safe and responsive classroom for student writers.

EDUC31690: Site-Based Mentor Training and Support for Induction III - 3.00 Units

Guidance for the mentoring experience to provide Induction candidates with a professional educational community, ensuring structures that support the activities of the program and coordinating collaboration and support for all

program candidates. The class serves to providing support for mentors so they can work with Induction candidates for the facilitation of candidate growth and development through modeling, guided reflection on practice, and feedback on classroom instruction; connecting candidates with available resources to support their professional growth and accomplishment of the ILP; periodically reviewing the ILP with candidates and making adjustments as needed. Mentors will review CSTP 3: Understanding & Organizing Subject Matter for Student Learning and CSTP 6: Developing As A Professional Educator in order to support Induction candidates ILP goals and outcomes. Training and support will include, but not limited to: Adult Learning, Best Practices.

EDUC31691: Site-Based Mentor Training and Support for Induction IV - 3.00 Units

Guidance for the mentoring experience to provide Induction candidates with a professional educational community, ensuring structures that support the activities of the program and coordinating collaboration and support for all program candidates. The class serves to providing support for mentors so they can work with Induction candidates for the facilitation of candidate growth and development through modeling, guided reflection on practice, and feedback on classroom instruction; connecting candidates with available resources to support their professional growth and accomplishment of the ILP; periodically reviewing the ILP with candidates and making adjustments as needed. Mentors will review CSTP 4: Planning Instruction & Designing Learning Experiences For All Students and CSTP 6: Developing As A Professional Educator in order to support Induction candidates ILP goals and outcomes. Training and support will include, but not limited to: Use of appropriate mentoring instruments.

EDUC31692: Site-Based Mentor Training and Support for Induction V - 3.00 Units

Guidance for the mentoring experience to provide Induction candidates with a professional educational community, ensuring structures that support the activities of the program and coordinating collaboration and support for all program candidates. The class serves to providing support for mentors so they can work with Induction candidates for the facilitation of candidate growth and development through modeling, guided reflection on practice, and feedback on classroom instruction; connecting candidates with available resources to support their professional growth and accomplishment of the ILP; periodically reviewing the ILP with candidates and making adjustments as needed. Mentors will review CSTP 5: Assessing Student Learning and CSTP 6: Developing As A Professional Educator in order to support Induction candidates ILP goals and outcomes. Training and support will include, but not limited to: Support candidate growth and effectiveness.

EDUC31693: Induction Site-Based Mentor Debrief - 1.50 Units

This culminating course is to provide Induction Mentors with the opportunity to provide purposeful feedback. This course will review the mentor experience throughout the Induction program. Topics will also include best practices in adult learning; support for individual mentoring challenges, reflection on mentoring practice, and opportunities to engage with mentoring peers in professional learning networks; program processes; and recommendations from mentors for improvement to the mentor experience during the Induction program.

EDUC31694: Overview for Site-Based Induction Partner - 1.50 Units

Designed specifically for Site-Based Induction partners, this course provides an overview of the induction process and the UC San Diego program, including scope; goals; expectations; standards; required competencies and related policies and procedures; observations; field experiences; and Individualized Learning Plan expectations.

EDUC31695: Designing the Individualized Learning Plan (ILP), Track 2 - 3.00 Units

The Individualized Learning Plan (ILP) is created in partnership with the Induction candidate, Induction program, Induction mentors, and school site administrators.

The ILP must include candidate professional growth goals, a description of how the candidate will work to meet those goals, defined and measurable outcomes for the candidate, and planned opportunities to reflect on progress and modify the ILP as needed. The candidate's specific teaching assignment should provide the appropriate context for the development of the overall ILP; however, the candidate and the mentor may add additional goals based on the candidate's professional interests such as. Within the ILP, professional learning and support opportunities must be identified for each candidate to practice and refine effective teaching practices for all students through focused cycles of inquiry.

The ILP must include each candidate's goals for implementing the ILP under each CSTP (1-6). Each candidate will be required to document and demonstrate the successful completion of outlined ILP activities throughout the Induction program.

EDUC31696: Continuum of Teaching Practice for Induction ILP I - 3.00 Units

Induction candidates engage in the Plan, Teach, Reflect, Apply process with Induction program, Induction mentors, Site-Based Induction Partners, and school site administrators who will assist in the completion of the inquiry process through reflective conversations, observations, feedback, and mentorship.

Candidates will focus on the ILP goals aligned to CSTP 1: Engaging & Supporting All Students In Learning and CSTP 6: Developing As A Professional Educator in order to support outcomes to practice and refine teaching practices.

The candidates will focus more in-depth information about their students and families, school, district and community and reflect on the effect that this information will have on their classroom environment and instructional practice. This includes the demonstration of but not limited to some of the following teaching practices: Using knowledge of students to engage them in learning; Connecting learning to students' prior knowledge, backgrounds, life experience, and interests; Connecting subject matter to meaningful, real-life contexts; Using a variety of instructional strategies, resources, and technologies to meet students' diverse learning needs; Promoting critical thinking through inquiry, problem solving, and reflection; Monitoring student learning and adjusting instruction while teaching; Reflecting on teaching practice in support of student learning; Establishing professional goals & engaging in continuous & purposeful professional growth and development; Working with families to support student learning; Engaging local communities in support of the instructional program; Managing professional responsibilities to maintain motivation and commitment to all students; and Demonstrating professional responsibility, integrity, and ethical conduct.

EDUC31697: Continuum of Teaching Practice for Induction ILP II - 3.00 Units

Induction candidates engage in the Plan, Teach, Reflect, Apply process with Induction program, Induction mentors, Site-Based Induction Partners, and school site administrators who will assist in the completion of the inquiry process through reflective conversations, observations, feedback, and mentorship.

Candidates will focus on the ILP goals aligned to CSTP 2: Creating & Maintaining Effective Environments for Student Learning and CSTP 6: Developing As A Professional Educator in order to support outcomes to practice and refine teaching practices.

EDUC31698: Continuum of Teaching Practice for Induction ILP III - 3.00 Units

Induction candidates engage in the Plan, Teach, Reflect, Apply process with Induction program, Induction mentors, Site-Based Induction Partners, and school site administrators who will assist in the completion of the inquiry process through reflective conversations, observations, feedback, and mentorship.

Candidates will focus on the ILP goals aligned to CSTP 3: Understanding & Organizing Subject Matter for Student Learning and CSTP 6: Developing As A Professional Educator in order to support outcomes to practice and refine teaching practices.

The candidates will focus more in-depth information about their students and families, school, district and community and reflect on the effect that this information will have on their classroom environment and instructional practice. This includes the demonstration of but not limited to some of the following teaching practices: Demonstrating knowledge of subject matter, academic content standards, & curriculum frameworks; Organizing curriculum to facilitate student understanding of the subject matter; Utilizing instructional strategies that are appropriate to subject matter; Using & adapting resources, technologies, and standards-aligned instructional materials, including adopted materials, to make subject matter accessible to all students; Addressing the needs of English learners and students with special needs to provide equitable access to the content; Reflecting on teaching practice in support of student learning; Establishing professional goals & engaging in continuous & purposeful professional growth and development; Working with families to support student learning; Engaging local communities in support of the instructional program; Managing professional responsibilities to maintain motivation and commitment to all students; and Demonstrating professional responsibility, integrity, and ethical conduct.

EDUC31699: Continuum of Teaching Practice for Induction ILP IV - 3.00 Units

Induction candidates engage in the Plan, Teach, Reflect, Apply process with Induction program, Induction mentors, Site-Based Induction Partners, and school site administrators who will assist in the completion of the inquiry process through reflective conversations, observations, feedback, and mentorship.

Candidates will focus on the ILP goals aligned to CSTP 4: Planning Instruction & Designing Learning Experiences For All Students and CSTP 6: Developing As A Professional Educator in order to support outcomes to practice and refine teaching practices.

The candidates will focus more in-depth information about their students and families, school, district and community and reflect on the effect that this information will have on their classroom environment and instructional practice. This includes the demonstration of but not limited to some of the following teaching practices: Using knowledge of students' academic readiness, language proficiency, cultural background, & individual development to plan instruction; Establishing and articulating goals for student learning; Developing and sequencing long-term & short-term instructional plans to support student learning; Planning instruction that incorporates appropriate strategies to meet the learning needs of all students; Adapting instructional plans & curricular materials to meet the assessed learning needs of all students; Reflecting on teaching practice in support of student learning; Establishing professional goals & engaging in continuous & purposeful professional growth and development; Working with families to support student learning; Engaging local communities in support of the instructional program; Managing professional responsibilities to maintain motivation and commitment to all students; and Demonstrating professional responsibility, integrity, and ethical conduct.

EDUC31700: Continuum of Teaching Practice for Induction ILP V - 3.00**Units**

Induction candidates engage in the Plan, Teach, Reflect, Apply process with Induction program, site-based Induction mentors, and school site administrators who will assist in the completion of the inquiry process through reflective conversations, observations, feedback, and mentorship. Candidates will focus on the ILP goals aligned to CSTP 5: Assessing Student Learning and CSTP 6: Developing As A Professional Educator in order to support outcomes to practice and refine teaching practices.

The candidates will focus more in-depth information about their students and families, school, district and community and reflect on the effect that this information will have on their classroom environment and instructional practice. This includes the demonstration of but not limited to some of the following teaching practices: Applying knowledge of the purposes, characteristics, and uses of different types of assessments; Collecting & analyzing assessment data from a variety of sources to inform instruction; Reviewing data, both individually and with colleagues, to monitor student learning; Using assessment data to establish learning goals & to plan, differentiate, and modify instruction; Involving all students in self-assessment, goal setting, and monitoring progress; Using available technologies to assist in assessment, analysis, and communication of student learning; Using assessment information to share timely and comprehensible feedback with students & their families; Reflecting on teaching practice in support of student learning; Establishing professional goals & engaging in continuous & purposeful professional growth and development; Working with families to support student learning; Engaging local communities in support of the instructional program; Managing professional responsibilities to maintain motivation and commitment to all students; and Demonstrating professional responsibility, integrity, and ethical conduct.

EDUC31701: - 0.00 Units**EDUC40001: Effective Strategies and Practices in Teaching and Training 'Older Adults' - 2.00 Units**

In appreciation of demographic data that forecast noteworthy increases in the number of Americans over 65 by 2050, this course offers a robust portrait of theory and practice associated with attending to the cognitive and affective needs of 'older adults' in diverse educational settings. The course serves as a platform to understand variations in learning styles and profiles across the age range, including motivation and commitment. Also explored are brain-compatible approaches to teaching and effective strategies to differentiate curriculum, instruction and assessment in working with older adults, including the use of current learning technologies.

EDUC40004: AE: Foundations Implementation (K-2) - 3.00 Units

This strand is designed for elementary educators, grades K–2, new to AVID Elementary. The strand focuses on the strategies outlined in the AVID Elementary Foundations book (provided to participants), which emphasizes the use of WICOR methodologies and strategies as a tool for success and college readiness beginning in the K–2 classroom. This strand aligns with the Foundations 3–6 strand, but is designed with developmentally appropriate on-ramps as seen through the lens of a primary classroom. As a result of this strand, participants will develop a clear understanding of WICOR, AVID Elementary Essentials, and the role of the K–2 classroom in the AVID Schoolwide system, in order to differentiate instruction for students and create an environment that promotes a culture of student success.

EDUC40005: AE: Foundations Implementation (3-6) - 3.00 Units

This strand is designed for grades 3–6 educators who are new to AVID Elementary. Participants will practice and discuss strategies, activities, and lessons focused on WICOR methodologies in order to facilitate students' access to rigorous academics across all content areas. As a result of this strand,

participants will develop a clear understanding of WICOR and their role in an AVID Schoolwide system that provides differentiated instruction to students to help develop a culture of student success, academic achievement, and college and career awareness.

EDUC40006: SI_AVID Bridges to Success: A Schoolwide Approach - 3.00**Units**

This strand is designed for a wide variety of educators. If you are an AVID Elementary educator who works directly with students in grades 6–8, this would be a great strand choice for you. If you are teaching at a middle school that does not have an AVID Elective class at your grade level, this would also be an appropriate strand to take. If your school is K–8, Bridges Implementation is a good choice for anyone teaching grades 6–8. Participants will be trained in AVID WICOR methodologies and strategies in order to facilitate students' access to rigorous content. This strand will provide activities to make site team connections that create an environment promoting a culture of student success, academic achievement, and college readiness.

EDUC40007: AE: Just WICORize It! - 3.00 Units

This strand is designed for experienced AVID Elementary educators and site teams, with guidance and support for developing engaging and rigorous instruction within their daily lessons through incorporation of embedded AVID Elementary methodologies and WICOR strategies. Teams will engage in the process of identifying effective AVID Elementary WICOR strategies and will plan lessons that embed these strategies, as well as differentiation, for instruction across core content. Educators/teams are supported during the process, with resources and guidance as well as opportunities for collaboration, and will leave with experience and greater expertise in developing differentiated WICOR-ized lessons that facilitate students' access to rigorous content.

EDUC40008: AE: The Art of Inquiry - 3.00 Units

The Art of Inquiry is designed for experienced AVID Elementary educators who are ready to delve deeply into strengthening their students' and their own abilities to think critically and question systematically across content areas. Teachers should have at least one year of implementation experience to scaffold to this next level of metacognition and inquiry. Participants will examine ways to build an inquiry-rich classroom culture and to use WICOR strategies to implement new inquiry techniques. Participants will explore ways to support the focus of their site team in the development of inquiry across all content areas and levels.

EDUC40009: AE: Leadership for Implementation - 3.00 Units

This strand is reserved for AVID Elementary site administrators or central office administrators overseeing the implementation of AVID Elementary within active AVID Elementary sites. As instructional leaders, AVID Elementary administrators will focus on the AVID Elementary 4 Essentials, initial implementation, and core strategies to guide implementation toward a strong AVID Elementary system. The roles and responsibilities involved in site implementation will also be explored, with opportunities to engage in conversations and activities to promote leadership and implementation with fidelity.

EDUC40010: AE: Leadership for Advancing - 3.00 Units

This strand is reserved for experienced AVID Elementary site administrators or central office administrators overseeing the implementation of AVID Elementary within active AVID Elementary sites. As Instructional Leaders, AVID Elementary Administrators will build upon their experience with the AVID Elementary Four Essentials with the goal of moving AVID implementation forward toward AVID Certification. Participants will develop a deeper understanding of how instruction, culture, leadership and systems impact schoolwide student success. Conversations and activities to maintain

implementation and develop the skills and tools necessary to lead change will also be explored.

EDUC40011: AVID District Leadership 1 - 3.00 Units

AVID District Leadership training comprises five training sessions that AVID Center provides to individuals designated as AVID District Directors to prepare them to support and sustain AVID implementation in their districts. AVID District Directors have many responsibilities. They ensure that AVID sites in their districts implement AVID with fidelity, they monitor and evaluate AVID Certification and data collection submissions for their district sites, and they attend the five sessions of AVID District Leadership (ADL) training. ADL training sessions are designed to include rich content and relevant research studies on academic achievement and AVID. Over the course of these sessions, participants will: learn to navigate the wealth of AVID curriculum in the AVID libraries; calibrate through hands-on activities; visit AVID National Demonstration schools; learn the AVID College Readiness System, along with its data-driven components; refine their coaching skills; and deepen their understanding of AVID's Certification System. The first of five ADL training sessions, AVID Core, focuses on: understanding the elementary and secondary program Essentials as they relate to the fidelity of AVID implementation; building a strong foundation of support in the grade level implementation in elementary and the AVID Elective class in secondary; supporting and coaching sites through the AVID Certification process; and the schoolwide implementation of AVID strategies.

EDUC40012: Advancing the DD Role - 3.00 Units

This strand is designed for experienced and veteran AVID Elementary and Secondary District Directors (DDs) who have completed some or all AVID District Leadership (ADL) for Elementary and/or Secondary sessions. The focus of this strand is on the continuation of deepening leadership and expansion strategies, as related to AVID's College Readiness System and Path to Schoolwide, through professional learning and collaborative discourse. The strand includes updates on AVID curriculum and initiatives to meet the needs of returning District Directors.

EDUC40013: Implementation: HS - 3.00 Units

This strand is reserved for first-year AVID Elective classroom teachers and AVID coordinators who teach the AVID Elective class and may also coordinate the AVID College Readiness System at their high school site. This strand focuses on the academic and organizational skills needed to effectively advocate for AVID students and implement the AVID Secondary 11 Essentials.

EDUC40014: Implementation: MS - 3.00 Units

This strand is reserved for first-year AVID Elective classroom teachers and AVID coordinators who teach the AVID Elective class and may also coordinate the AVID College Readiness System at their middle school site. This strand focuses on the academic and organizational skills needed to effectively advocate for AVID students and implement the AVID Secondary 11 Essentials.

EDUC40015: Tutorology - 3.00 Units

This strand is designed for experienced AVID Elective teachers, AVID coordinators, and designated site team members. Participants will learn to train, monitor, and coach tutors and students in implementing rigorous tutorials that increase student achievement. Please note that if you have already been trained in the 2012 Tutorology materials to meet Certification requirements, AVID recommends that you take a different strand.

EDUC40016: Advancing the AVID Elective: MS and HS - 3.00 Units

This strand is reserved for experienced AVID Elective teachers and focuses on continuous improvement of the AVID Elective class through advanced implementation of WICOR methodologies and instructional practices that support all students. Participants will explore methods of evaluating the

student success rate of the AVID Core Elements and help students get to the "why" of what they are learning by increasing the rigor of tutorials and collaborative study groups. Participants will increase their practice of vertical articulation, as well as clarify the roles of teacher, student, and parent leaders through implementation of the AVID Secondary 11 Essentials for grades 6–12 at their site through increased fidelity, both within the AVID Elective class and schoolwide.

EDUC40017: Essential Academic Skills for College Readiness - 3.00 Units

This strand is designed for high school teachers experienced with AVID methodologies and focuses on four academic skills essential for college readiness: analyzing a prompt; selective and purpose-driven reading; focused note-taking; and integrating sources into texts. The text provided (AVID College Readiness: Working with Sources Grades 11–12 Teacher Guide) was written primarily for high school juniors and seniors, but the practical resources and strategies are applicable to enhancing reading, writing, and critical thinking skills at all secondary grade levels.

EDUC40018: Leadership for Implementation: HS - 3.00 Units

This strand is designed for secondary leaders (administrators and AVID site coordinators who are not AVID Elective teachers) with no prior AVID experience. The focus of this strand is the AVID Secondary 11 Essentials, their initial implementation, and core strategies to guide implementation toward a stronger AVID Secondary system. The broader concepts of AVID Schoolwide and the AVID College Readiness System are also introduced and discussed. Additionally, break-out sessions will provide AVID site coordinators and administrators with opportunities to look more deeply at their specific roles and responsibilities in implementing the AVID College Readiness System at their sites. This strand will be combined with Leadership for Implementation: Middle School.

EDUC40019: Leadership for Implementation: MS - 3.00 Units

This strand is designed for secondary leaders (administrators and AVID site coordinators who are not AVID Elective teachers) with no prior AVID experience. The focus of this strand is the AVID Secondary 11 Essentials, their initial implementation, and core strategies to guide implementation toward a stronger AVID Secondary system. The broader concepts of AVID Schoolwide and the AVID College Readiness System are also introduced and discussed. Additionally, break-out sessions will provide AVID site coordinators and administrators with opportunities to look more deeply at their specific roles and responsibilities in implementing the AVID College Readiness System at their sites. This strand will be combined with Leadership for Implementation: High School.

EDUC40020: Leadership for Advancing - 3.00 Units

This strand is designed for secondary leaders (administrators and site coordinators who are not AVID Elective teachers) with at least one year of AVID leadership experience. In a combined middle school/high school section that promotes vertical articulation, leaders who are advancing their AVID Secondary system into its second year and leaders who are in their first year but have previous experience with AVID (as an AVID Elective teacher or AVID coordinator) will build upon the AVID Secondary 11 Essentials with the goal of moving AVID implementation forward, toward AVID Certification. Focusing on the Certification Self-Study (CSS) and the many important elements that must be supported in order to reach a given level of AVID Certification, strand participants will develop a deeper understanding of the AVID College Readiness System and of how instruction, systems, leadership, and culture each impact a site's ability to achieve schoolwide impact.

EDUC40021: Leadership for AVID Schoolwide - 3.00 Units

This strand is designed for leaders (administrators and AVID site coordinators who are not AVID Elective teachers) who have at least two years of AVID

leadership experience, who come from sites that have achieved AVID Certification, and who are ready to deepen the impact of their AVID implementation. Participants will understand how the four domains of instruction, systems, leadership, and culture impact change. The focus of the strand will be to enhance sustainability of the AVID College Readiness System at participants' schools and to embrace AVID's mission of ensuring college readiness for AVID Elective students and improved academic performance for ALL students based on increased opportunities. Prior participation in both the Leadership for Implementation and Leadership for Advancing strands is strongly recommended. In addition, individuals are encouraged to attend this strand as members of a site leadership team to maximize the potential of this professional learning and the impact at their school.

EDUC40022: Counseling: HS - 3.00 Units

This strand is designed for high school counselors new to AVID and focuses on developing knowledge, skills, and understanding of the AVID College Readiness System. Participants will experience AVID methodologies as they learn the school counselor's role in the site team, data collection, student recruitment and retention, articulation, implementation of the AVID Secondary 11 Essentials, and support for the AVID Elective class. Strategies are emphasized that increase student access and success in rigorous courses that will prepare them to be college- and career-ready. Resources specific to high school will be shared.

EDUC40023: Counseling: MS - 3.00 Units

This strand is designed for middle school counselors new to AVID and focuses on developing knowledge, skills, and understanding of the AVID College Readiness System. Participants will experience AVID methodologies as they learn the school counselor's role in the site team, data collection, student recruitment and retention, articulation, implementation of the AVID Secondary 11 Essentials, and support for the AVID Elective class. Strategies are emphasized that increase student access and success in rigorous courses that will prepare them to be college- and career-ready. Resources specific to middle school will be shared.

EDUC40024: Preparing for College - 3.00 Units

This strand is designed for counselors, teachers, site coordinators and administrators, and those involved in college-readiness support programs who are experienced with AVID concepts and methodologies. The strand will focus on how to support AVID students (especially those in grades 11 and 12) with the college application process, including financial aid and scholarship opportunities, college admissions, college entrance exams, gender inequity, and college "fit." Strategies will also be shared on how to establish and expand a college-going culture schoolwide.

EDUC40025: AVID District Leadership 1 - 3.00 Units

AVID District Leadership training comprises five training sessions that AVID Center provides to individuals designated as AVID District Directors to prepare them to support and sustain AVID implementation in their districts. AVID District Directors have many responsibilities. They ensure that AVID sites in their districts implement AVID with fidelity, they monitor and evaluate AVID Certification and data collection submissions for their district sites, and they attend the five sessions of AVID District Leadership (ADL) training. ADL training sessions are designed to include rich content and relevant research studies on academic achievement and AVID. Over the courses of these sessions, participants will: learn to navigate the wealth of AVID curriculum in the AVID libraries; calibrate through hands-on activities; visit AVID National Demonstration schools; learn the AVID College Readiness System, along with its data-driven components; refine their coaching skills; and deepen their understanding of AVID's Certification System. The first of five ADL training sessions, AVID Core, focuses on: understanding the elementary and secondary program Essentials as they relate to the fidelity of AVID implementation;

building a strong foundation of support in the grade level implementation in elementary and the AVID Elective class in secondary; supporting and coaching sites through the AVID Certification process; and the schoolwide implementation of AVID strategies.

EDUC40026: Advancing the DD Role - 3.00 Units

This strand is designed for experienced and veteran AVID Elementary and Secondary District Directors (DDs) who have completed some or all AVID District Leadership (ADL) for Elementary and/or Secondary sessions. The focus of this strand is on the continuation of deepening leadership and expansion strategies, as related to AVID's College Readiness System and Path to Schoolwide, through professional learning and collaborative discourse. The strand includes updates on AVID curriculum and initiatives to meet the needs of returning District Directors.

EDUC40027: Emerging Demo Schools - 3.00 Units

This strand is designed for sites that have received a recommendation to enter the Coaching Cycle of Readiness for Emerging National Demonstration Schools by the AVID District Director through the AVID Divisional Office. Participants in this strand—primarily teams consisting of an AVID site coordinator, a site administrator, and an optional site team member—will understand AVID's expectations, procedures, responsibilities, and guidelines governing AVID National Demonstration Schools. The roles and responsibilities in supporting the school during the coaching cycle in a schoolwide AVID College Readiness System, including the district director, coordinator, site team, and administrator, will be reviewed with an emphasis on college readiness; Schoolwide AVID; rigorous tutorials; and all aspects of the application process, including preparation for the Validation Visit. Continuing Demonstration Schools preparing for a Revalidation Visit are strongly encouraged to send any new AVID site coordinators and/or site administrators to the appropriate leadership or AVID Elective teacher strands.

EDUC40028: Writing: MS/HS - 3.00 Units

This strand is designed for subject-area teachers (grades 6–12) and AVID Elective teachers interested in infusing more strategic writing in their classes. The content will focus on the Middle Level Writing with Integrated Reading and Oral Language and High School Writing teacher guides (both texts are provided to each participant.) Participants will practice the writing process for narrative (reflective), persuasive (argument), and expository writing styles. Participants will practice and discuss specific lessons, engage in numerous strategies, define the role that writing instruction plays in the AVID Elective and subject classes, and discuss models for effective implementation. Participants will also learn how to use the writing teacher guides as resources for diagnostic and differentiated lesson development.

EDUC40029: English Language Arts: Reading - 3.00 Units

This strand is designed for English/Language Arts teachers (grades 6–12) who are new to AVID concepts and methodologies. Participants will apply strategies from AVID's The Write Path English Language Arts: Exploring Texts with Strategic Reading curriculum resource (provided to participants). A primary focus of the strand is a critical reading process that includes the following strategies: planning for reading, prereading, building vocabulary, interacting with the text, and extending beyond the text. Writing, Inquiry, Collaboration, and Organization are included as tools for developing critical reading skills across genres, from the foundational to the advanced levels. Participants will examine strategies for scaffolding students through rigorous texts in the English Language Arts class with an emphasis on college readiness.

EDUC40030: English Language Arts: Writing and Speaking - 3.00 Units

This strand is designed for English/Language Arts teachers (grades 6–12) with some experience in AVID concepts and methodologies. Participants will experience and learn about strategies from AVID's The Write Path English

Language Arts: Informing Ourselves and Others Through Writing and Speaking resource (provided to participants) with the primary focus on writing and oral language. Additionally, participants will explore writing processes and writing-to-learn strategies, as well as techniques for supporting students' discussion and oral language skills. Inquiry, Collaboration, Organization, and Reading are included as tools for developing writing and speaking skills, from foundational to advanced levels. Participants will examine strategies for scaffolding students through rigorous curriculum in the language arts class with an emphasis on college readiness. Please note that basic AVID concepts and methodologies that are covered in the curriculum guide titled The Write Path English Language Arts: Exploring Texts with Strategic Reading (specifically Cornell Notes, Socratic Seminar, and Philosophical Chairs) will not be covered in depth in this strand.

EDUC40031: Academic Language and Literacy - 3.00 Units

This strand is designed for schoolwide content teachers to support academic language and literacy in elementary through higher education classroom settings. Utilizing WICOR with intentional language development practices, participants will engage in fostering culture and language development while increasing listening, speaking, reading, and writing literacy for Academic Language Learners. All students are Academic Language Learners; therefore, AVID Schoolwide team members will experience opportunities to gain insight and align philosophies, resulting in ALL truly meaning ALL on the road to college and career success.

EDUC40032: AVID Excel Implementation - 3.00 Units

This strand is reserved for brand-new AVID Excel teachers in established AVID Excel districts and newly implementing AVID Excel district teams. An AVID Excel district team is made up of AVID Excel teachers, site administrators, ELL coordinators and AVID Excel district leaders. The strand will provide the opportunity for participants to identify the organizational principles of the AVID Excel program and to explore the foundational instructional routines of the AVID Excel curriculum.

EDUC40033: AVID Excel Scholar Groups/Tutorials - 3.00 Units

This is the Year 2 AVID Excel strand, which is reserved for AVID Excel teachers, administrators, and district leaders who have previously attended the AVID Excel Implementation strand. Participants will learn to train, monitor, and coach tutors and students in implementing rigorous Scholar Groups and Tutorials while maintaining a focus on academic language development.

EDUC40034: History/Social Science: High Engagement - 3.00 Units

This strand is designed for history/social science teachers (grades 6–12) who are interested in applying highly engaging strategies to increase critical thinking and rigor in the classroom. Participants will focus on Writing, Inquiry, Collaboration, Organization, and Reading (WICOR) strategies to scaffold activities in the history/social science classroom. High-engagement strategies examined in this strand include Cornell note-taking, primary source analysis, interacting with text, vocabulary building, and performance activities. This strand reinforces AVID Schoolwide, and each participant will receive AVID's The Write Path History/Social Science: Interactive Teaching and Learning Teacher Guide.

EDUC40035: History/Social Science: Inquiry - 3.00 Units

This strand is designed for history/social science teachers (grades 6–12) who are interested in applying rigorous instructional strategies to prepare students for challenging honors and advanced classes. Using primary and secondary sources, participants will engage in Writing, Inquiry, Collaboration, Organization, and Reading (WICOR) strategies as tools for bringing historical inquiry into the history/social science classroom. This strand will teach, model, and coach through the elements of Cornell notes, writing with original thought, primary source analysis, document-based questions, and a range of

academic language discussion group activities. This strand is organized to reinforce the strengths of vertical team articulation and the integration and connection to AVID Launches and Boosts. Each participant will receive The Write Path History/Social Science: Interactive Teaching and Learning Teacher Guide.

EDUC40036: Mathematics 1 - 3.00 Units

This strand is designed for mathematics teachers new to AVID concepts and methodologies. This strand focuses on strategies outlined in AVID's The Write Path I Mathematics Teacher Guide (provided to participants), which emphasizes the use of Writing, Inquiry, Collaboration, Organization, and Reading (WICOR) as tools for learning in the mathematics classroom. Participants will also explore techniques for implementing WICOR strategies in mathematics courses, including: Cornell notes, Philosophical Chairs discussions, vocabulary strategies, reading in mathematics, and effective collaborative strategies. Participants will also learn about the basics of AVID and how to support the AVID system in their respective schools. Mathematics 1 is organized to reinforce the strengths of vertical team articulation.

EDUC40037: Mathematics 2 - 3.00 Units

This strand is designed for mathematics teachers who have taken the Mathematics 1 strand and are experienced with AVID strategies and methodologies. This strand will introduce additional vocabulary and WICOR strategies as well as deepen participants' understanding of AVID methodologies practiced in Mathematics 1. The focus of the strand will be on ensuring that all students gain access to rigorous instruction through dynamic and engaging activities. Mathematics 2 is organized to reinforce and strengthen vertical team articulation.

EDUC40038: Science 1 - 3.00 Units

This strand is designed for science teachers who want to apply AVID concepts and methodologies to the science content areas. Focusing on the strategies in AVID's The Write Path I Science Teacher Guide (provided to participants), this strand emphasizes the use of Writing, Inquiry, Collaboration, Organization, and Reading (WICOR) as support structures for learning in the science classroom. Participants will learn how to apply WICOR methodologies to strengthen student processing of science content. The strand incorporates strategies for implementing critical reading and writing-to-learn processes, Cornell notes, interactive notebooks, effective use of discussion, and experimental design in science courses. Science 1 is organized to reinforce the strengths of vertical team articulation.

EDUC40039: Science 2 - 3.00 Units

This strand is designed for science teachers continuing their training in AVID methodologies. These teachers are experienced with WICOR strategies and are interested in achieving a better understanding of the rigor required to prepare students for challenging science courses. Participants will examine ways to engage students in interacting with and reflecting on content in order to develop and deepen knowledge. The strand incorporates additional WICOR strategies through intensive hands-on and mind-on activities that use the interactive notebook and the critical reading process to support rigorous instruction for all students.

EDUC40040: Critical Reading 1 - 3.00 Units

This strand is designed for experienced AVID Elective teachers and all subject-area teachers. Critical Reading 1 focuses on the explicit teaching of active reading strategies that help students gain a deep understanding of expository texts. Participants will engage in activities that demonstrate the proven effectiveness of WICOR (Writing, Inquiry, Collaboration, Organization, and Reading) methodologies.

EDUC40041: Critical Reading 2 - 3.00 Units

This strand is designed for experienced AVID Elective teachers and subject-area teachers. This strand builds upon the reading strategies covered in Critical Reading 1, moving beyond ways of reading texts and into ways of writing about texts. Critical Reading 2 supports the Essential Academic Skills for College Readiness strand and addresses various college-level writing concerns.

EDUC40042: CRT: Transforming Educators - 3.00 Units

This strand is designed for AVID administrators, coordinators, AVID Elective teachers, and site team members who are ready to work with their sites to conduct a self-examination and address issues of race, class, gender, sexual orientation, and accountability through a growth mindset. The strand will provide a framework of effective methodologies that validate the culture of all students in the classroom and on the campus. These research-based strategies will enhance the site's curriculum and make relevant learning connections to increase subject-matter comprehension. As a result of attending this strand, participants will be able to create multi-dimensional lessons and differentiated evaluations, while incorporating rigor through various learning styles.

EDUC40043: CRT: Empowering Students - 3.00 Units

The cultural, ethnic, and linguistic diversity of our students brings value and assets to our classrooms and communities. The Culturally Relevant Teaching: Empowering Students strand brings educators together to explore strategies and lessons that help empower students through examination, validation, and celebration of their own and others' cultures. Come ready to engage with colleagues in community-building activities and critical conversations around race, gender, class, sexual orientation, and other culturally relevant topics, all designed to equip participants with practical strategies for empowering students in our classrooms, schools, and districts. This strand welcomes all school and district staff, and provides a forum for everyone to collaborate around equity and culturally relevant practices in support of our students.

EDUC40044: Student Success - 3.00 Units

This strand is designed for teachers of subject-area elective courses, such as business, computer applications, visual and performing arts, and physical education. Participants will gain an understanding of how college readiness can be supported in all subject areas. Additionally, participants will learn about AVID methodologies and WICOR strategies, such as goal-setting, focused note-taking, organization, and time management. This strand will focus on incorporating these college-readiness skills into all classes, from physical education to visual arts, in both middle school and high school.

EDUC40045: AVID Career/Technical Education - 3.00 Units

This strand is recommended for CTE instructors and leaders new to AVID. Upon completion of this strand, participants will be able to incorporate AVID methodologies into CTE classes, programs, and academies. AVID's WICOR (Writing to Learn, Inquiry, Collaboration, Organization, and Reading to Learn) and professional employability skills support the workplace expectations that employers indicate are needed in the 21st Century. Participants will explore and experience how AVID's teaching strategies can be utilized as "tools" to help create a teaching and learning environment that supports all CTE students to ensure college and career readiness and success.

EDUC40046: SI_AVID for Higher Education: Harnessing the Power of Student Engagement - 3.00 Units

This strand is recommended for college and university instructors and faculty members. Strand activities will be organized using WICOR (Writing, Inquiry, Collaboration, Organization and Reading) and will foster discussions and reflections of teaching pedagogy and student success, while creating collaborative relationships with colleagues. Participants will model and engage in research-based, high engagement teaching strategies that will foster deeper

learning and engagement in the classroom, laboratory, and the online learning environment.

EDUC40047: SI_AVID for Higher Education: Teacher Preparation Leadership - 3.00 Units

This strand is designed to support the College of Education faculty and leadership as they implement the AHE Teacher Preparation Initiative (TPI). Leadership and facilitation of the TPI campus team and TPI processes including instructional mapping and implementation will be explored through a collaborative format. AVID's framework, methodologies, and strategies will be highlighted and modeled. Participants will learn and apply the tools and research-based background to design, lead, and implement an effective and collaborative AHE Teacher Preparation Initiative on their campuses.

EDUC40048: SI_AVID for Higher Education: Best Practices in Action - 3.00 Units

This strand is recommended for institutional leaders in both Academic and Student Affairs, including presidents, vice presidents, provosts, and deans. Participants will focus on the role of leaders in reviewing and assessing their institution's implementation of an AVID campus plan with an emphasis on student persistence and completion. Strand activities are designed to foster the development and/or articulation of shared goals regarding student success. Using pragmatic tools and current research, participants will consider how Academic and Student Affairs can work to create and sustain collaborative efforts, as well as cultivate an institutional culture that values this work. This strand will also offer strategies for assessing and overcoming current institutional obstacles to this collaboration. Finally, strand participants will have the opportunity to reflect on their individual leadership role(s) and ways to build productive working relationships across divisions.

EDUC40049: AHE: Seminar Instructors - 3.00 Units

This session introduces participants to the importance, value, and research underpinning the AHE Seminar. The session uses interactive AVID methodology and strategies to accomplish the goals. The session is appropriate for faculty/staff who teach and work with students in seminar and content courses.

EDUC40050: AVID Career/Technical Education - 3.00 Units

This strand is recommended for CTE instructors and leaders new to AVID. Upon completion of this strand, participants will be able to incorporate AVID methodologies into CTE classes, programs, and academies. AVID's WICOR (Writing to Learn, Inquiry, Collaboration, Organization, and Reading to Learn) and professional employability skills support the workplace expectations that employers indicate are needed in the 21st Century. Participants will explore and experience how AVID's teaching strategies can be utilized as "tools" to help create a teaching and learning environment that supports all CTE students to ensure college and career readiness and success.

EDUC40051: AHE: Liaisons - 3.00 Units

Focusing on how the AHE Liaison provides leadership, executes the AVID Campus Plan, coordinates the professional development and planning days, and completes research and assessment, this strand provides an understanding of the AHE Essential requirements and creates a professional network for effective implementation. The emphasis will be on articulating the issues confronting student success, what the research says, how institutions might turn the research into campus action plans, and how AHE can support their efforts. Returning institutions will continue to investigate and share the successes and challenges of building capacity, assuring sustainability, and enhancing support from faculty, staff, and administration. Other topics include learning community structures, the AVID cohort and control groups, and the AVID Student Center. A block of time is planned for experienced AHE liaisons to visit other strands and see their team members at work.

EDUC40052: Path to Schoolwide_Academic Language and Literacy - 1.50 Units

This strand is designed for schoolwide content teachers to support academic language and literacy in elementary through higher education classroom settings. Utilizing WICOR with intentional language development practices, participants will engage in fostering culture and language development while increasing listening, speaking, reading, and writing literacy for Academic Language Learners. All students are Academic Language Learners; therefore, AVID Schoolwide team members will experience opportunities to gain insight and align philosophies, resulting in ALL truly meaning ALL on the road to college and career success.

EDUC40053: Path to Schoolwide_Essential Academic Skills for College Readiness - 1.50 Units

This strand is designed for high school teachers experienced with AVID methodologies and focuses on four academic skills essential for college readiness: analyzing a prompt; selective and purpose-driven reading; focused note-taking; and integrating sources into texts. The text provided (AVID College Readiness: Working with Sources Grades 11–12 Teacher Guide) was written primarily for high school juniors and seniors, but the practical resources and strategies are applicable to enhancing reading, writing, and critical thinking skills at all secondary grade levels.

EDUC40054: Path to Schoolwide_Advancing the AVID Elective: MS and HS - 1.50 Units

This strand is reserved for experienced AVID Elective teachers and focuses on continuous improvement of the AVID Elective class through advanced implementation of WICOR methodologies and instructional practices that support all students. Participants will explore methods of evaluating the student success rate of the AVID Core Elements and help students get to the “why” of what they are learning by increasing the rigor of tutorials and collaborative study groups. Participants will increase their practice of vertical articulation, as well as clarify the roles of teacher, student, and parent leaders through implementation of the AVID Secondary 11 Essentials for grades 6–12 at their site through increased fidelity, both within the AVID Elective class and schoolwide.

EDUC40055: Path to Schoolwide_AE: The Art of Inquiry - 1.50 Units

The Art of Inquiry is designed for experienced AVID Elementary educators who are ready to delve deeply into strengthening their students’ and their own abilities to think critically and question systematically across content areas. Teachers should have at least one year of implementation experience to scaffold to this next level of metacognition and inquiry. Participants will examine ways to build an inquiry-rich classroom culture and to use WICOR strategies to implement new inquiry techniques. Participants will explore ways to support the focus of their site team in the development of inquiry across all content areas and levels.

EDUC40056: Path to Schoolwide_AE: Bridges Implementation - 1.50 Units

This strand is designed for a wide variety of educators. If you are an AVID Elementary educator who works directly with students in grades 6–8, this would be a great strand choice for you. If you are teaching at a middle school that does not have an AVID Elective class at your grade level, this would also be an appropriate strand to take. If your school is K–8, Bridges Implementation is a good choice for anyone teaching grades 6–8. Participants will be trained in AVID WICOR methodologies and strategies in order to facilitate students’ access to rigorous content. This strand will provide activities to make site team connections that create an environment promoting a culture of student success, academic achievement, and college readiness.

EDUC40057: Path to Schoolwide_AE: Foundations Implementation (3-6) - 1.50 Units

This strand is designed for grades 3–6 educators who are new to AVID Elementary. Participants will practice and discuss strategies, activities, and lessons focused on WICOR methodologies in order to facilitate students’ access to rigorous academics across all content areas. As a result of this strand, participants will develop a clear understanding of WICOR and their role in an AVID Schoolwide system that provides differentiated instruction to students to help develop a culture of student success, academic achievement, and college and career awareness.

EDUC40058: Path to Schoolwide_AE: Foundations Implementation (K-2) - 1.50 Units

This strand is designed for elementary educators, grades K–2, new to AVID Elementary. The strand focuses on the strategies outlined in the AVID Elementary Foundations book (provided to participants), which emphasizes the use of WICOR methodologies and strategies as a tool for success and college readiness beginning in the K–2 classroom. This strand aligns with the Foundations 3–6 strand, but is designed with developmentally appropriate on-ramps as seen through the lens of a primary classroom. As a result of this strand, participants will develop a clear understanding of WICOR, AVID Elementary Essentials, and the role of the K–2 classroom in the AVID Schoolwide system, in order to differentiate instruction for students and create an environment that promotes a culture of student success.

EDUC40059: Path to Schoolwide_AE: Just WICORize It! - 1.50 Units

This strand is designed for experienced AVID Elementary educators and site teams, with guidance and support for developing engaging and rigorous instruction within their daily lessons through incorporation of embedded AVID Elementary methodologies and WICOR strategies. Teams will engage in the process of identifying effective AVID Elementary WICOR strategies and will plan lessons that embed these strategies, as well as differentiation, for instruction across core content. Educators/teams are supported during the process, with resources and guidance as well as opportunities for collaboration, and will leave with experience and greater expertise in developing differentiated WICOR-ized lessons that facilitate students’ access to rigorous content.

EDUC40060: Path to Schoolwide_AE: Leadership for Advancing - 1.50 Units

This strand is reserved for experienced AVID Elementary site administrators or central office administrators overseeing the implementation of AVID Elementary within active AVID Elementary sites. As Instructional Leaders, AVID Elementary Administrators will build upon their experience with the AVID Elementary Four Essentials with the goal of moving AVID implementation forward toward AVID Certification. Participants will develop a deeper understanding of how instruction, culture, leadership and systems impact schoolwide student success. Conversations and activities to maintain implementation and develop the skills and tools necessary to lead change will also be explored.

EDUC40061: Path to Schoolwide_AE: Leadership for Implementation - 1.50 Units

This strand is reserved for AVID Elementary site administrators or central office administrators overseeing the implementation of AVID Elementary within active AVID Elementary sites. As instructional leaders, AVID Elementary administrators will focus on the AVID Elementary 4 Essentials, initial implementation, and core strategies to guide implementation toward a strong AVID Elementary system. The roles and responsibilities involved in site implementation will also be explored, with opportunities to engage in conversations and activities to promote leadership and implementation with fidelity.

EDUC40062: Path to Schoolwide_AVID Career/Technical Education - 1.50**Units**

This strand is recommended for CTE instructors and leaders new to AVID. Upon completion of this strand, participants will be able to incorporate AVID methodologies into CTE classes, programs, and academies. AVID's WICOR (Writing to Learn, Inquiry, Collaboration, Organization, and Reading to Learn) and professional employability skills support the workplace expectations that employers indicate are needed in the 21st Century. Participants will explore and experience how AVID's teaching strategies can be utilized as "tools" to help create a teaching and learning environment that supports all CTE students to ensure college and career readiness and success.

EDUC40063: Path to Schoolwide_AVID Career/Technical Education - 1.50**Units**

This strand is recommended for CTE instructors and leaders new to AVID. Upon completion of this strand, participants will be able to incorporate AVID methodologies into CTE classes, programs, and academies. AVID's WICOR (Writing to Learn, Inquiry, Collaboration, Organization, and Reading to Learn) and professional employability skills support the workplace expectations that employers indicate are needed in the 21st Century. Participants will explore and experience how AVID's teaching strategies can be utilized as "tools" to help create a teaching and learning environment that supports all CTE students to ensure college and career readiness and success.

EDUC40064: Path to Schoolwide_Counseling: HS - 1.50 Units

This strand is designed for high school counselors new to AVID and focuses on developing knowledge, skills, and understanding of the AVID College Readiness System. Participants will experience AVID methodologies as they learn the school counselor's role in the site team, data collection, student recruitment and retention, articulation, implementation of the AVID Secondary 11 Essentials, and support for the AVID Elective class. Strategies are emphasized that increase student access and success in rigorous courses that will prepare them to be college- and career-ready. Resources specific to high school will be shared.

EDUC40065: Path to Schoolwide_Counseling: MS - 1.50 Units

This strand is designed for middle school counselors new to AVID and focuses on developing knowledge, skills, and understanding of the AVID College Readiness System. Participants will experience AVID methodologies as they learn the school counselor's role in the site team, data collection, student recruitment and retention, articulation, implementation of the AVID Secondary 11 Essentials, and support for the AVID Elective class. Strategies are emphasized that increase student access and success in rigorous courses that will prepare them to be college- and career-ready. Resources specific to middle school will be shared.

EDUC40066: Path to Schoolwide_Critical Reading 1 - 1.50 Units

This strand is designed for experienced AVID Elective teachers and all subject-area teachers. Critical Reading 1 focuses on the explicit teaching of active reading strategies that help students gain a deep understanding of expository texts. Participants will engage in activities that demonstrate the proven effectiveness of WICOR (Writing, Inquiry, Collaboration, Organization, and Reading) methodologies.

EDUC40067: Path to Schoolwide_Critical Reading 2 - 1.50 Units

This strand is designed for experienced AVID Elective teachers and subject-area teachers. This strand builds upon the reading strategies covered in Critical Reading 1, moving beyond ways of reading texts and into ways of writing about texts. Critical Reading 2 supports the Essential Academic Skills for College Readiness strand and addresses various college-level writing concerns.

EDUC40068: Path to Schoolwide_CRT: Empowering Students - 1.50 Units

The cultural, ethnic, and linguistic diversity of our students brings value and assets to our classrooms and communities. The Culturally Relevant Teaching: Empowering Students strand brings educators together to explore strategies and lessons that help empower students through examination, validation, and celebration of their own and others' cultures. Come ready to engage with colleagues in community-building activities and critical conversations around race, gender, class, sexual orientation, and other culturally relevant topics, all designed to equip participants with practical strategies for empowering students in our classrooms, schools, and districts. This strand welcomes all school and district staff, and provides a forum for everyone to collaborate around equity and culturally relevant practices in support of our students.

EDUC40069: Path to Schoolwide_CRT: Transforming Educators - 1.50 Units

This strand is designed for AVID administrators, coordinators, AVID Elective teachers, and site team members who are ready to work with their sites to conduct a self-examination and address issues of race, class, gender, sexual orientation, and accountability through a growth mindset. The strand will provide a framework of effective methodologies that validate the culture of all students in the classroom and on the campus. These research-based strategies will enhance the site's curriculum and make relevant learning connections to increase subject-matter comprehension. As a result of attending this strand, participants will be able to create multi-dimensional lessons and differentiated evaluations, while incorporating rigor through various learning styles.

EDUC40070: Path to Schoolwide_English Language Arts: Reading - 1.50**Units**

This strand is designed for English/Language Arts teachers (grades 6–12) who are new to AVID concepts and methodologies. Participants will apply strategies from AVID's The Write Path English Language Arts: Exploring Texts with Strategic Reading curriculum resource (provided to participants). A primary focus of the strand is a critical reading process that includes the following strategies: planning for reading, prereading, building vocabulary, interacting with the text, and extending beyond the text. Writing, Inquiry, Collaboration, and Organization are included as tools for developing critical reading skills across genres, from the foundational to the advanced levels. Participants will examine strategies for scaffolding students through rigorous texts in the English Language Arts class with an emphasis on college readiness.

EDUC40071: Path to Schoolwide_English Language Arts: Writing and Speaking - 1.50 Units

This strand is designed for English/Language Arts teachers (grades 6–12) with some experience in AVID concepts and methodologies. Participants will experience and learn about strategies from AVID's The Write Path English Language Arts: Informing Ourselves and Others Through Writing and Speaking resource (provided to participants) with the primary focus on writing and oral language. Additionally, participants will explore writing processes and writing-to-learn strategies, as well as techniques for supporting students' discussion and oral language skills. Inquiry, Collaboration, Organization, and Reading are included as tools for developing writing and speaking skills, from foundational to advanced levels. Participants will examine strategies for scaffolding students through rigorous curriculum in the language arts class with an emphasis on college readiness. Please note that basic AVID concepts and methodologies that are covered in the curriculum guide titled The Write Path English Language Arts: Exploring Texts with Strategic Reading (specifically Cornell Notes, Socratic Seminar, and Philosophical Chairs) will not be covered in depth in this strand.

EDUC40072: Path to Schoolwide_History/Social Science: High Engagement - 1.50 Units

This strand is designed for history/social science teachers (grades 6–12) who are interested in applying highly engaging strategies to increase critical

thinking and rigor in the classroom. Participants will focus on Writing, Inquiry, Collaboration, Organization, and Reading (WICOR) strategies to scaffold activities in the history/social science classroom. High-engagement strategies examined in this strand include Cornell note-taking, primary source analysis, interacting with text, vocabulary building, and performance activities. This strand reinforces AVID Schoolwide, and each participant will receive AVID's The Write Path History/Social Science: Interactive Teaching and Learning Teacher Guide.

EDUC40073: Path to Schoolwide_History/Social Science: Inquiry - 1.50 Units

This strand is designed for history/social science teachers (grades 6–12) who are interested in applying rigorous instructional strategies to prepare students for challenging honors and advanced classes. Using primary and secondary sources, participants will engage in Writing, Inquiry, Collaboration, Organization, and Reading (WICOR) strategies as tools for bringing historical inquiry into the history/social science classroom. This strand will teach, model, and coach through the elements of Cornell notes, writing with original thought, primary source analysis, document-based questions, and a range of academic language discussion group activities. This strand is organized to reinforce the strengths of vertical team articulation and the integration and connection to AVID Launches and Boosts. Each participant will receive The Write Path History/Social Science: Interactive Teaching and Learning Teacher Guide.

EDUC40074: Path to Schoolwide_Implementation: HS - 1.50 Units

This strand is reserved for first-year AVID Elective classroom teachers and AVID coordinators who teach the AVID Elective class and may also coordinate the AVID College Readiness System at their high school site. This strand focuses on the academic and organizational skills needed to effectively advocate for AVID students and implement the AVID Secondary 11 Essentials.

EDUC40075: Path to Schoolwide_Implementation: MS - 1.50 Units

This strand is reserved for first-year AVID Elective classroom teachers and AVID coordinators who teach the AVID Elective class and may also coordinate the AVID College Readiness System at their middle school site. This strand focuses on the academic and organizational skills needed to effectively advocate for AVID students and implement the AVID Secondary 11 Essentials.

EDUC40076: Path to Schoolwide_Leadership for Advancing - 1.50 Units

This strand is designed for secondary leaders (administrators and site coordinators who are not AVID Elective teachers) with at least one year of AVID leadership experience. In a combined middle school/high school section that promotes vertical articulation, leaders who are advancing their AVID Secondary system into its second year and leaders who are in their first year but have previous experience with AVID (as an AVID Elective teacher or AVID coordinator) will build upon the AVID Secondary 11 Essentials with the goal of moving AVID implementation forward, toward AVID Certification. Focusing on the Certification Self-Study (CSS) and the many important elements that must be supported in order to reach a given level of AVID Certification, strand participants will develop a deeper understanding of the AVID College Readiness System and of how instruction, systems, leadership, and culture each impact a site's ability to achieve schoolwide impact.

EDUC40077: Path to Schoolwide_Leadership for AVID Schoolwide - 1.50 Units

This strand is designed for leaders (administrators and AVID site coordinators who are not AVID Elective teachers) who have at least two years of AVID leadership experience, who come from sites that have achieved AVID Certification, and who are ready to deepen the impact of their AVID implementation. Participants will understand how the four domains of instruction, systems, leadership, and culture impact change. The focus of the

strand will be to enhance sustainability of the AVID College Readiness System at participants' schools and to embrace AVID's mission of ensuring college readiness for AVID Elective students and improved academic performance for ALL students based on increased opportunities. Prior participation in both the Leadership for Implementation and Leadership for Advancing strands is strongly recommended. In addition, individuals are encouraged to attend this strand as members of a site leadership team to maximize the potential of this professional learning and the impact at their school.

EDUC40078: Path to Schoolwide_Leadership for Implementation: HS - 1.50 Units

This strand is designed for secondary leaders (administrators and AVID site coordinators who are not AVID Elective teachers) with no prior AVID experience. The focus of this strand is the AVID Secondary 11 Essentials, their initial implementation, and core strategies to guide implementation toward a stronger AVID Secondary system. The broader concepts of AVID Schoolwide and the AVID College Readiness System are also introduced and discussed. Additionally, break-out sessions will provide AVID site coordinators and administrators with opportunities to look more deeply at their specific roles and responsibilities in implementing the AVID College Readiness System at their sites. This strand will be combined with Leadership for Implementation: Middle School.

EDUC40079: Path to Schoolwide_Leadership for Implementation: MS - 1.50 Units

This strand is designed for secondary leaders (administrators and AVID site coordinators who are not AVID Elective teachers) with no prior AVID experience. The focus of this strand is the AVID Secondary 11 Essentials, their initial implementation, and core strategies to guide implementation toward a stronger AVID Secondary system. The broader concepts of AVID Schoolwide and the AVID College Readiness System are also introduced and discussed. Additionally, break-out sessions will provide AVID site coordinators and administrators with opportunities to look more deeply at their specific roles and responsibilities in implementing the AVID College Readiness System at their sites. This strand will be combined with Leadership for Implementation: High School.

EDUC40080: Path to Schoolwide_Mathematics 1 - 1.50 Units

This strand is designed for mathematics teachers new to AVID concepts and methodologies. This strand focuses on strategies outlined in AVID's The Write Path I Mathematics Teacher Guide (provided to participants), which emphasizes the use of Writing, Inquiry, Collaboration, Organization, and Reading (WICOR) as tools for learning in the mathematics classroom. Participants will also explore techniques for implementing WICOR strategies in mathematics courses, including: Cornell notes, Philosophical Chairs discussions, vocabulary strategies, reading in mathematics, and effective collaborative strategies. Participants will also learn about the basics of AVID and how to support the AVID system in their respective schools. Mathematics 1 is organized to reinforce the strengths of vertical team articulation.

EDUC40081: Path to Schoolwide_Mathematics 2 - 1.50 Units

This strand is designed for mathematics teachers who have taken the Mathematics 1 strand and are experienced with AVID strategies and methodologies. This strand will introduce additional vocabulary and WICOR strategies as well as deepen participants' understanding of AVID methodologies practiced in Mathematics 1. The focus of the strand will be on ensuring that all students gain access to rigorous instruction through dynamic and engaging activities. Mathematics 2 is organized to reinforce and strengthen vertical team articulation.

EDUC40082: Path to Schoolwide_Preparing for College - 1.50 Units

This strand is designed for counselors, teachers, site coordinators and administrators, and those involved in college-readiness support programs who are experienced with AVID concepts and methodologies. The strand will focus on how to support AVID students (especially those in grades 11 and 12) with the college application process, including financial aid and scholarship opportunities, college admissions, college entrance exams, gender inequity, and college “fit.” Strategies will also be shared on how to establish and expand a college-going culture schoolwide.

EDUC40083: Path to Schoolwide_Science 1 - 1.50 Units

This strand is designed for science teachers who want to apply AVID concepts and methodologies to the science content areas. Focusing on the strategies in AVID’s The Write Path I Science Teacher Guide (provided to participants), this strand emphasizes the use of Writing, Inquiry, Collaboration, Organization, and Reading (WICOR) as support structures for learning in the science classroom. Participants will learn how to apply WICOR methodologies to strengthen student processing of science content. The strand incorporates strategies for implementing critical reading and writing-to-learn processes, Cornell notes, interactive notebooks, effective use of discussion, and experimental design in science courses. Science 1 is organized to reinforce the strengths of vertical team articulation.

EDUC40084: Path to Schoolwide_Science 2 - 1.50 Units

This strand is designed for science teachers continuing their training in AVID methodologies. These teachers are experienced with WICOR strategies and are interested in achieving a better understanding of the rigor required to prepare students for challenging science courses. Participants will examine ways to engage students in interacting with and reflecting on content in order to develop and deepen knowledge. The strand incorporates additional WICOR strategies through intensive hands-on and mind-on activities that use the interactive notebook and the critical reading process to support rigorous instruction for all students.

EDUC40085: Path to Schoolwide_Student Success - 1.50 Units

This strand is designed for teachers of subject-area elective courses, such as business, computer applications, visual and performing arts, and physical education. Participants will gain an understanding of how college readiness can be supported in all subject areas. Additionally, participants will learn about AVID methodologies and WICOR strategies, such as goal-setting, focused note-taking, organization, and time management. This strand will focus on incorporating these college-readiness skills into all classes, from physical education to visual arts, in both middle school and high school.

EDUC40086: Path to Schoolwide_Tutorology - 1.50 Units

This strand is designed for experienced AVID Elective teachers, AVID coordinators, and designated site team members. Participants will learn to train, monitor, and coach tutors and students in implementing rigorous tutorials that increase student achievement. Please note that if you have already been trained in the 2012 Tutorology materials to meet Certification requirements, AVID recommends that you take a different strand.

EDUC40087: Path to Schoolwide_Writing: MS/HS - 1.50 Units

This strand is designed for subject-area teachers (grades 6–12) and AVID Elective teachers interested in infusing more strategic writing in their classes. The content will focus on the Middle Level Writing with Integrated Reading and Oral Language and High School Writing teacher guides (both texts are provided to each participant.) Participants will practice the writing process for narrative (reflective), persuasive (argument), and expository writing styles. Participants will practice and discuss specific lessons, engage in numerous strategies, define the role that writing instruction plays in the AVID Elective and subject classes, and discuss models for effective implementation.

Participants will also learn how to use the writing teacher guides as resources for diagnostic and differentiated lesson development.

EDUC40088: Path to Schoolwide_Essential Academic Skills for College Readiness - 1.50 Units

This strand is designed for high school teachers experienced with AVID methodologies and focuses on four academic skills essential for college readiness: analyzing a prompt; selective and purpose-driven reading; focused note-taking; and integrating sources into texts. The text provided (AVID College Readiness: Working with Sources Grades 11–12 Teacher Guide) was written primarily for high school juniors and seniors, but the practical resources and strategies are applicable to enhancing reading, writing, and critical thinking skills at all secondary grade levels.

EDUC40090: Teaching the Gifted and Talented: Recognizing Individual Differences - 3.00 Units

Familiarity with clusters of characteristics common to gifted people provides a basis for recognizing and understanding the individual differences and varied profiles that gifted students may exhibit. A historical perspective on the changing views of intelligence and case studies of gifted students provide the context in which to explore their intellectual, social-emotional and creative development. The aim of this course is to help participants understand the implications of all of these factors in order to assess, program, teach and parent the gifted.

EDUC40091: Current Issues in Adult Education - 2.00 Units

As learning has become a lifelong pursuit, educators as well as the media are placing more emphasis on adulthood. This course explores some of the issues that impact adult education, with a focus on understanding the legislative process, governing boards, adult education funding sources, delivery systems, diversity among students and communities, and occupational trends as they impact adult education.

EDUC40092: Work Smart, Teach Smart: Technology Skills for the Gifted and Talented Classroom - 1.00 Units

Explore the use of technology as a tool to enhance teaching and learning in the gifted and talented classroom. This hands-on, one-day workshop presents effective teaching paradigms, integrating technology into the classroom curriculum, and technology resources. Participants will leave with practical strategies to enhance their curriculum.

EDUC40093: Fundamentals of Teaching English as a Second Language - 3.00 Units

This course provides an overview of teaching English as a second language (ESL), beginning with a brief historical survey. Participants review basic principles of teaching ESL listening, reading, speaking, and writing, and examine the roles of teacher and learner, materials, texts, curricula, and lesson planning. In each area, instruction combines current theory, practical information, and resources. The class concludes with information on professional ESL associations, conferences, and employment locally, nationally, and abroad.

EDUC40094: Cultural Diversity in the Classroom - 3.00 Units

This course explores the cultural and sociological factors that affect instruction and learning, including issues related to migration, immigration, racism, and prejudice. Participants learn strategies for developing cross-cultural understanding within classrooms and schools and investigate approaches to resolving conflict. Applicable to all levels of teaching.

EDUC40095: Effective Classroom Management: Intervention Strategies that Work - 1.00 Units

This course will provide teachers with specific approaches and intervention strategies that will help establish a positive classroom community, stabilize the learning environment and build solid student to teacher relationships. An emphasis will be on establishing optimum conditions for learning in the classroom and positive approaches to disruptive behavior.

EDUC40096: Foundations of Adult Education - 3.00 Units

This course features practical strategies & effective instructional techniques for holding the attention of adult learners, thereby enhancing their educational experience. Topics include ages & stages in adult development, characteristics of adult learners, adult learning/teaching styles, establishing instructor/learning relationships, overcoming barriers to learning, increasing adult motivation to learn, building problem solving & critical thinking skills, promoting self-learning in adults, enhancing knowledge through experiential learning, and dealing with diversity in the adult classroom.

EDUC40097: Instructional Practices - 3.00 Units

This course explores the current and future directions in learning and adult education, focusing on successful techniques for developing relevant and effective adult-oriented educational programs and the practical application of adult learning theory. Topics include dealing with the diversity of adult learning styles, developing dynamic instructional strategies, and using learning retention techniques. The course will also cover the educational requirements for entering the field, and information for those who are preparing to teach at the community college level.

EDUC40098: Interpersonal Relations, Communication Skills, and Guidance - 2.00 Units

Adults participating in continuing education and post secondary programs reflect a wide range of interests and are of various ages and economic levels. Because we are all unique, educators must be able to facilitate effective communication among the students. Imaginative yet reality-based methodologies and techniques are presented. Topics include the principles and behavioral laws of adult learning (with attention to special populations), group dynamics and the functions of leadership, as well as guidelines for adult educational counseling.

EDUC40099: Teaching the Gifted and Talented: Differentiating the Curriculum - 3.00 Units

This course provides approaches for differentiating the curriculum for gifted and talented learners. These approaches are based on core-curriculum modifications that work within the regular classroom as well as in other settings. Attention is given to meeting the needs of a diverse group of students. Participants will learn to create a curriculum that gives students a solid grasp of the core material while advancing their gifted abilities.

EDUC40100: Program Development for the Gifted - 3.00 Units

This course explores various program models for educating gifted students. As participants study major issues and factors affecting program development (philosophical views, general attitudes, parent involvement, funding, grouping, teacher training, collaborative efforts among programs, and parent education), they will be encouraged to share program materials from their own or their children's school districts to review current practices. Class members will be furnished with such materials and receive guidance in developing a gifted program based on an assessment of student needs and pertinent district or school factors.

EDUC40101: Strategies for Teaching the Gifted and Talented - 3.00 Units

This course focuses on teaching & learning strategies that have proved successful with gifted students, including the Hilda Taba teaching strategies, the Parnes creative problem-solving strategy, and Kohlberg's discussions of moral dilemmas. Participants investigate the assumptions underlying each

strategy and the ways in which each meets gifted students' needs for differentiation. Selected strategies will be modeled in class which provides participants with opportunities for becoming proficient using the strategies and integrating them into both core and differentiated curriculums.

EDUC40102: The Next Generation Science Standards K-12 - 5.00 Units

This online course is designed for teachers in grades K-12 who want to begin to unpack the complexity of the Next Generation Science Standards. This course takes teachers through a step-by-step explanation of the standards, including how to interpret the science and engineering practices, crosscutting concepts, and disciplinary core ideas at each respective grade band. The role of curricula is discussed, as well as how Universal Design for Learning plays an important role in the assessment of the standards. Teachers will be introduced to an overview of assessment and how it applies to the Next Generation Science standards, as well as a brief overview of how to bundle some of the core ideas contained within the standards.

EDUC40103: Instruction and Management for Increased Learning - 4.50 Units

This course is designed as a professional development opportunity for practicing teachers to broaden and deepen their understanding of research-based approaches to increased learning for students through varied instruction and strategic management in classroom practice. In doing so, teachers will explore and employ variety of technological resources to support increased learning for students. Through further discovery, reflection, and discussion of best practices, teachers will also develop personal learning goals to enhance professional progress and career advancement as educators.

EDUC40104: Middle School Math Problem Solving (6-8) - 5.00 Units

This online course is designed for teachers in grades 6-8 who want to help their students become critical and logical mathematical thinkers. Information on the problem-solving process is shared together with distinct suggestions for incorporating specific problem-solving strategies such as thinking logically, predicting and estimating, using a model or diagram, creating a table to find a pattern, and using an algorithm or formula. Teachers will gain valuable classroom ideas including using manipulatives, developing real-world problems, checking and explaining solutions, how to differentiate within the math classroom, as well as how to appropriately assess students in the problem-solving process.

EDUC40105: Using Google Classroom for Teaching and Learning (K-12) - 5.00 Units

In this course, teachers will learn how to use all the features of Google Classroom to enhance their teaching. Strategies for using the announcement, question, and assignment options to enhance the learning process will be emphasized. Strategies for differentiating instruction using the features of Google Classroom will be explored. Specific instructions for integrating Google Classroom with other Google products, as well as, popular educational extensions and apps will be shared. Additionally, instructions for using the Google Classroom mobile app will be provided.

EDUC40106: Teaching STEM Using the 5Es - 1.50 Units

The course shows you how to design effective STEM lessons using the 5E instructional model. Under this model, developed by the Biological Science Curriculum Council, each lesson is divided into five easily remembered segments – Engage, Explore, Explain, Elaborate, and Evaluate. This approach is based on research showing that students learn more readily when they – not the teacher – are the ones assessing their existing understanding and doing the work required to improve that understanding. The course explains the research that supports this approach and shows what to do, and what not to do, at each stage of a 5E lesson. The course also shows

how to make 5E lessons even more engaging by embedding the stories of women and men from diverse background doing exciting work in STEM fields. The course uses excerpts from books published by Sally Ride Science in the Cool Careers in STEM series and the Key Concepts in Science series. At the end of the course you will design your own 5E lesson with an activity for each of the five stages: 1. Engage ‐ Activate students's prior knowledge and help them become engaged in a new concept. 2. Explore ‐ Provide a common base of activities so students can identify current conceptions and facilitate new understanding. 3. Explain ‐ Introduce concepts or skills and allow students to explain their understanding to each other. 4. Elaborate ‐ Challenge and extend students's understanding and skills. 5. Evaluate ‐ Allow students to demonstrate their understanding of key concepts.

EDUC40107: Engaging Students in Learning About Earth's Climate - 1.50 Units

This course is designed as a one-day workshop for STEM teachers of grades 3 – 8. After completing the workshop, participants will adapt one of the lessons presented in the workshop for use in their own classroom.

During the workshop, participants will examine STEM Modules on Earth's climate and climate change impacts developed by Sally Ride Science. Each module presents engaging lesson plans based on the 5E-learning model (Engage, Explore, Explain, Elaborate, Evaluate) and aligned to NGSS and CCSS. Participants will have the opportunity to play the role of the student in a 5E lesson sequence by engaging in discussions about the impacts of climate change, performing hands-on activities, increasing their content knowledge and learning about new careers in climate science. After the training, participants will gain access to the Sally Ride Science modules. They will customize one of the 5E lessons from either the Earth's Climate Module or the Climate Change Impacts Module for use in their own classroom and submit their customized lesson plan as well as feedback on classroom implementation

EDUC40111: Preparing English Language Learners (ESL/ELL/ENL) for Success (K-6) - 5.00 Units

Do you find yourself struggling for ways to better assist your English language learners? This online course is designed for teachers in grades K-6 who want to build a solid foundation in best practices for their ELLs while still keeping true to the Common Core State Standards. Information on ENL best practices is shared as well as specific strategies for incorporating them into the teaching of reading, writing, speaking and listening, mathematics, science, and social studies. Teachers will gain a solid understanding of the various ESL models and how to grow their ELL students' vocabularies and comprehension by setting goals, using their home language and culture, and communicating with caregivers.

EDUC40112: Teaching STEM and NGSS at the Primary Level (K-2) - 5.00 Units

This course takes K-2 teachers through a step-by-step explanation of the standards and includes examples and suggestions of how to incorporate them into your science classroom. The course also guides you through how to interpret the science and engineering practices, crosscutting concepts, and disciplinary core ideas at the K-2 level. The 5Es of inquiry-based science are discussed, as well as how Universal Design for Learning, multiple intelligences, and STEM strategies all work together to connect the design and implementation of science lessons, labs, and stations. Teachers will be introduced to an overview of assessment and how it applies to the Next Generation Science standards, as well as a brief overview of how to manage an inquiry-based classroom.

EDUC40113: LAUSD Module 1: Brain-Compatible Learning - 4.00 Units

Brain-Compatible Learning provides an interactive exploration of the neurophysiology of gifted and talented education in the conceptual age,

contextualized within the cognitive and affective needs of diverse gifted and talented students at the elementary and secondary levels. Rooted in the seminal work on the 'gifted brain' and Mihaly Csikszentmihalyi's research on 'Flow', Brain Compatible Learning explores the ways in which problem-centered learning; experiential and epiphany-based learning; empowerment and choice; memory; technology use; informal/formal learning resources; and practical relevance serve as catalysts for creativity and commitment within and across disciplinary areas embedded with state standards for gifted and talented students. Implications and strategies for instruction will be presented and discussed, especially as they relate to English Learners, low-SES learners and culturally and linguistically diverse learners. This course is a prerequisite for enrollment in Practicum in Gifted and Talented Education.

EDUC40114: LAUSD Module 2: Socioemotional Characteristics of the Gifted and Talented - 4.00 Units

Socioemotional Characteristics of the Gifted and Talented offers a review of the history and politics of GATE in the United States, setting the stage for a more detailed understanding of the nature of giftedness and talent. This course also explores the social and emotional characteristics unique to diverse gifted individuals, including the impacts of asynchrony; perfectionism; twice exceptionality; among others. Special attention is paid to the needs of multicultural gifted students and English Learners. Strategies for the design and delivery of curriculum that attend to these characteristics will be presented for collaborative discussion. This course is a prerequisite for enrollment in Practicum in Gifted and Talented Education.

EDUC40115: LAUSD Module 3: Practicum in Gifted and Talented Education - 4.00 Units

Practicum in Gifted and Talented Education is a course that provides educators an opportunity to demonstrate competencies in the development and delivery of assessment-based strategies within gifted education (differentiated instruction, iconic teaching, depth and complexity, tiered assignments, and technology use, for example), connecting them together in a cohesive manner. Candidates will collaborate with the course instructor to determine an appropriate signature project based on academic and professional interests and to establish meaningful benchmarks and artifacts. This may take the form of an action research project on a topic of professional interest or a curated portfolio of work. The signature project includes organized reflections of practice and artifacts offering evidence of knowledge, skills and abilities that can be used by peers. Prerequisites: Socioemotional Characteristics of the Gifted and Talented; Brain-Compatible Learning I; and Instructional Strategies (LAUSD)

EDUC40116: AVID District Leadership 1 (K-12) - 3.00 Units

AVID District Leadership training comprises five training sessions that AVID Center provides to individuals designated as AVID District Directors to prepare them to support and sustain AVID implementation in their districts. AVID District Directors have many responsibilities. They ensure that AVID sites in their districts implement AVID with fidelity, they monitor and evaluate AVID Certification and data collection submissions for their district sites, and they attend the five sessions of AVID District Leadership (ADL) training. ADL training sessions are designed to include rich content and relevant research studies on academic achievement and AVID. Over the courses of these sessions, participants will: learn to navigate the wealth of AVID curriculum in the AVID libraries; calibrate through hands-on activities; visit AVID National Demonstration schools; learn the AVID College Readiness System, along with its data-driven components; refine their coaching skills; and deepen their understanding of AVID's Certification System. The first of five ADL training sessions, Understanding AVID/ACRS, focuses on: understanding the elementary and secondary program Essentials as they relate to the fidelity of AVID implementation; building a strong foundation of support in the grade level implementation in elementary and the AVID Elective class in secondary;

supporting and coaching sites through the AVID Certification process; and the schoolwide implementation of AVID strategies.

EDUC40117: AVID District Leadership 2 (K–12) - 3.00 Units

AVID Center provides five sessions of trainings for individuals designated as AVID District Directors so that they are prepared to support the implementation of AVID in their districts. The District Directors accept the responsibility of ensuring that AVID sites in their districts will implement AVID with fidelity, monitor and evaluate AVID Certification and data collection submissions of their district sites, and attend all five sessions of AVID District Leadership (ADL) training. ADL training sessions are rich in content design and include relevant research studies on academic achievement and AVID. Participants will navigate the AVID curriculum libraries, calibrate through hands-on activities, visit AVID National Demonstration Schools and high-performing elementary schools, learn the AVID College Readiness System along with its data driven components, introduce and practice coaching skills, and deepen understanding of AVID’s Certification System.

EDUC40118: AVID District Leadership 3 (K–12) - 3.00 Units

AVID Center provides five sessions of trainings for individuals designated as AVID District Directors so that they are prepared to support the implementation of AVID in their districts. The District Directors accept the responsibility of ensuring that AVID sites in their districts will implement AVID with fidelity, monitor and evaluate AVID Certification and data collection submissions of their district sites, and attend all five sessions of AVID District Leadership (ADL) training. ADL training sessions are rich in content design and include relevant research studies on academic achievement and AVID. Participants will navigate the AVID curriculum libraries, calibrate through hands-on activities, visit AVID National Demonstration Schools and high-performing elementary schools, learn the AVID College Readiness System along with its data-driven components, introduce and practice coaching skills, and deepen understanding of AVID’s Certification System.

EDUC40119: AVID District Leadership 4 (K–12) - 3.00 Units

AVID Center provides sessions of trainings for individuals designated as AVID District Directors so that they are prepared to support the implementation of AVID in their districts. The District Directors accept the responsibility of ensuring that AVID sites in their districts will implement AVID with fidelity, monitor and evaluate AVID Certification and data collection submissions of their district sites, and attend all five sessions of AVID District Leadership (ADL) training. ADL training sessions are rich in content design and include relevant research studies on academic achievement and AVID. Participants will navigate the AVID curriculum libraries, calibrate through hands-on activities, visit AVID National Demonstration Schools and high-performing elementary schools, learn the AVID College Readiness System along with its data-driven components, introduce and practice coaching skills, and deepen understanding of AVID’s Certification System.

EDUC40120: CALIFORNIA ASSOCIATION FOR THE GIFTED Conference - 2.00 Units

California’s GATE Standards require that all teachers with gifted students in their classrooms must be trained in meeting the special needs of these students. Although it is up to local school districts to determine the requirements, many school districts look to CAG as a mark of quality training.

EDUC40121: Counseling Students with Learning Differences and ADHD - 6.00 Units

The number of students diagnosed with a learning difference has increased significantly over the past 10-15 years and consequently, the number of students with learning differences is increasing on college campuses. Students with learning differences have a great deal of potential for success at the post-secondary level. However, there are unique considerations when assisting a

student with a Learning Difference (LD), ADHD or High Functioning Autism to plan for college. Considerations such as the type and scope of diagnostic testing, college selection, campus support services, use of referral sources and transition planning become vitally important in laying a solid foundation for the student’s collegiate success.

This course will provide the student with an understanding of: the etiology and definition of different types of LD; the important laws governing high school and college LD students; the differences among college support programs throughout the United States and how to evaluate them; the importance of referral sources and how to match an LD student with colleges which are a good fit. Application of the information learned in the course will culminate with a capstone project of developing a comprehensive college and transition plan for a case study student.

EDUC40122: Unleashing the Power of the NGSS and STEM (3-5) - 5.00 Units

Have you been trying to find a way to incorporate the Next Generation Science Standards into your STEM classroom using a more hands-on approach to learning? This course takes teachers of grades 3-5 through a step-by-step explanation of the standards and includes examples and suggestions of how to incorporate them into their science lessons. The course also guides teachers through how to interpret the science and engineering practices, crosscutting concepts, and disciplinary core ideas. Teachers will be introduced to various instructional models for learning, including the 5Es of inquiry, the 4E x 2 model, and Universal Design for Learning. Teachers will learn how to create an active learner-centered classroom so that various STEM strategies can be used to connect the design and implementation of NGSS-based science lessons, labs, and stations. Teachers will be introduced to an overview of assessment and how it applies to the Next Generation Science standards, as well as a brief overview of how to blend technology and flip a science classroom to make it more student-centered.

EDUC40123: Experiential Learning for Pre-Service Teachers - 4.50 Units

This course is designed as a professional development opportunity for pre-service teachers to broaden and deepen their understanding of the value of experiential learning for their students, and how to best connect real-world experiences with traditional classroom instruction. Teachers will develop practical strategies for traveling with student groups, and engaging students in the real-world classroom. Teachers will explore and discover technology tools for both educators and students to capture and reflect upon their educational travel experience. Through further discovery, reflection & discussion of best practices, teachers will gain tangible tools for expanding their teaching beyond classroom walls.

EDUC40124: Empowered Teaching & Learning - 4.50 Units

EDUC40125: Empowered Behavior - 4.50 Units

This video course offers teachers, principals and mental health professionals research-based tools designed to help you support students in taking RESPONSIBILITY for their behavior. Specific topics include:

- ? Proactively Preventing Behavior Issues
- ? Trauma Informed Practices (Practices, not simply awareness)
- ? Restorative Practices
- ? Behavior Management (and empowerment)
- ? Socio emotional skills
- ? Effective Feedback
- ? Customized Student Plans

Whether you are practical tools to use with success today for novel ways to infuse restorative and trauma-informed practices into your powerful work, this course will provide effective support. Empowered behavior is accompanied by a user-friendly workbook to help you incorporate the tools with ease.

EDUC40127: Engaging, Motivating, and Managing Your Students (Grades 4-8) - 5.00 Units

Does your classroom seem like a nightmare at times? Let's face it — we've all been there at one time or another. It doesn't matter if you are new to the profession or a seasoned veteran, there's no doubt about it — managing an entire classroom of students can be tough. This online course addresses some of the most daunting classroom management issues including how to keep your students motivated, working with diverse student populations, social and emotional learning, and engaging students with limited resources. Teachers will also enjoy learning about the importance of being organized and proactive, as well as how to create clear and concise rules and routines which have logical consequences. Rounding out the course is managing small groups, developing a discipline plan, and how to prevent and address bullying issues, among others.

EDUC40128: SUHSD Lesson Study Semester One - 1.50 Units

Lesson study is a form of long-term professional development in which teams of teachers collaboratively plan, research, and study their lesson instruction as a way to determine how students learn best. It is a process that deepens the interaction of a school's professional learning community by developing the habits of self-reflection and critical thinking through very personal collaboration with their colleagues and structured observation of their students. Lesson study has the power to transform the life of a school. Participants in this process form a team, develop learning goals, design a lesson, plan how to implement the lesson and collect data, teach and observe the lesson, analyze and revise the lesson and document and disseminate findings with colleagues.

EDUC40129: Character Education for the 21st Century (K-12) - 5.00 Units

Does it often seem that students are lacking in how to show good character? Incorporating character education into your daily lessons can help your classroom run more effectively. Teachers work hard to help students become educated world citizens and whether they realize it or not, teachers are constantly modeling and teaching character education throughout the school day. This online course is designed to guide teachers through the six pillars of character education — trustworthiness, respect, responsibility, fairness, caring, and citizenship. Teachers will explore how to incorporate each of the six pillars into their daily lessons so that students are better able to make the right choices when confronted with problem situations. Throughout the course, teachers will learn specific strategies for incorporating the six pillars into their daily lessons through the use of scenarios, classroom activities, service learning projects, and literature. Teachers will learn about the relationship between character education and bullying, and how behaviors can be managed through the use of good character and strong, positive, inclusive classroom practices. Finally, teachers will learn how to use restorative justice to put the onus of good character back on their students through the use of conflict resolution and peer mediation.

EDUC40130: Principles of College Counseling - 6.00 Units

Assisting students and families through the college preparation and admission process has taken on even greater importance as higher education costs continue to rise. This course will give special attention to training in the college selection process while emphasizing the important issues impacting the profession. Participants will examine the fundamental concepts of setting up a college counseling office, while exploring the personal dimensions of working with families during one of their most crucial transitional experiences.

EDUC40131: College Counseling Strategies - 3.00 Units

College counselors have a variety of critical roles in the college admission process. This course provides training in areas of program development, including building successful programs and designing useful resources for students. Various areas of college admissions will be explored, including the

early decision debate, testing options, letters of recommendations and building relationships with college admission professionals. Strategies to successfully deal with students, parents and staff will also be addressed.

EDUC40132: College Counseling Practicum - 3.00 Units

The final component of the Specialized Certificate in College Counseling allows participants the opportunity to network with colleagues and apply their newly developed skills. Participants will engage in online discussions as well as research and develop a final project.

This course is intended for individuals who have completed the first two courses (Principles of College Counseling & College Counseling Strategies) in the UCSD Extension College Counseling Certificate Program. The goal of this last course in the certificate sequence is to allow students to apply their growing knowledge of college counseling in an extended, in-depth project designed to meet their own professional needs. Students are encouraged to be aware of the larger educational issues that impact their own work as a college counselor. It is hoped that students will continue to be involved in the college counseling profession in a serious manner and see themselves as influential and ethical practitioners who value research and best practices.

EDUC40133: Math Tasks for Authentic Assessment Semester One - 1.50 Units

Performance tasks build on content knowledge, process skills, and work habits and are strategically placed in a lesson or unit to enhance learning as the student "pulls it all together." Such performance tasks are not "add-ons" at the end of instruction. They are both an integral part of the learning and an opportunity to assess the quality of student performance. When the goal of teaching and learning is knowing and using, the performance-based classroom emerges. Performance tasks range from short activities taking only a few minutes to projects culminating in polished products for audiences in and outside of the classroom. This course will provide participants an opportunity to build, implement, analyze and evaluate tasks and it will also guide participants to analyze, evaluate and respond to resulting student work. Successful participants in this class will collaborate with course-alike colleagues to develop, implement and respond to three or more job-embedded tasks.

EDUC40134: Smart Tech Use for Equity Semester 1 - 1.50 Units

Teacher Induction in the SUHSD is a job-embedded experience where the beginning teacher candidate works closely with an experienced Mentor to generate evidence of proficiency in the California Standards for the Teaching Profession (CSTPs.) Successful candidates will address CSTPs #1-6 through completion of an Individual Learning Plan (ILP.) The ILP involves ongoing collaboration with the candidate's Mentor, site administrators, and representatives from the Smart Tech Use for Equity leadership group; candidates engage peers and colleagues via both in-person and online forums and assemble CSTP-related artifacts. Candidates work in content- and school-specific groups to plan, teach, assess, and reflect in student outcomes. They participate in professional learning communities (PLCs) that include colleagues at their own sites as well as those at schools across the district.

EDUC40135: SUHSD Lesson Study Semester One - 1.50 Units

Lesson study is a form of long-term professional development in which teams of teachers collaboratively plan, research, and study their lesson instruction as a way to determine how students learn best. It is a process that deepens the interaction of a school's professional learning community by developing the habits of self-reflection and critical thinking through very personal collaboration with their colleagues and structured observation of their students. Lesson study has the power to transform the life of a school. Participants in this process form a team, develop learning goals, design a lesson, plan how to implement the lesson and collect data, teach and observe

the lesson, analyze and revise the lesson and document and disseminate findings with colleagues.

EDUC40136: - 1.50 Units

EDUC40137: Fundamentals of Adult Learning for Safety Instructors - 1.50 Units

This online course explores the principles of effective adult learning theory and practice offered in the context of training for safety professionals. Following from established best practice, Fundamentals offers instructors opportunities to cultivate and employ teaching strategies that value and build effectively upon the experiences and expertise of the adult learner.

EDUC40138: Responsive Classroom Management in the Primary Grades K-3 - 5.00 Units

Does it sometimes seem like your students are running your classroom, instead of the other way around? Let's face it — we've all been there at one time or another. It doesn't matter if you are new to the profession or a seasoned veteran, there's no doubt about it — managing an entire classroom of young students can be tough. This online course addresses some of the most daunting classroom management issues including how to set boundaries and teach expectations, the important of establishing and teaching routines, keeping students motivated, working with diverse student populations, social and emotional learning, and using character education to offset bullying behaviors. Teachers will also enjoy learning about the importance of being proactive and positive, as well as how to create clear and concise rules and routines which have logical consequences.

EDUC40139: - 1.50 Units

EDUC40140: - 5.00 Units

EDUC40141: - 1.50 Units

EDUC40142: - 1.50 Units

EDUC40143: - 3.00 Units

EDUC40144: - 5.00 Units

EDUC40145: - 5.00 Units

EDUC40146: - 1.50 Units

EDUC40147: - 2.00 Units

EDUC40148: - 5.00 Units

EDUC40149: - 1.50 Units

EDUC40150: - 4.50 Units

EDUC40151: - 2.00 Units

EDUC40152: - 2.50 Units

EDUC40153: - 1.50 Units

EDUC40154: - 5.00 Units

EDUC40155: - 1.50 Units

EDUC40156: Classroom Management: You Can't Teach in Chaos (Grades K-12) - 1.00 Units

The ability to create and maintain an orderly, productive classroom environment is essential to effective teaching. There is more to effective teaching than classroom management, although well-run, stimulating, and task-oriented classrooms appear to be essential to learning. Effective classroom managers apply a systematic approach, one that requires preparation and planning. In this course participants will learn methods for increasing the amount of active learning time in the classroom. Topics include classroom management techniques; teaching roles and procedures; and handling discipline positively, quickly, and fairly.

EDUC40157: - 2.00 Units

EDUC40158: - 2.00 Units

EDUC40159: - 5.00 Units

EDUC40160: - 5.00 Units

EDUC40161: - 3.50 Units

EDUC40162: - 5.00 Units

EDUC40163: - 5.00 Units

EDUC40164: - 2.50 Units

EDUC40165: - 5.00 Units

EDUC40166: - 2.50 Units

EDUC40167: - 1.50 Units

EDUC40168: - 3.00 Units

EDUC40169: - 1.50 Units

EDUC40170: - 3.00 Units

EDUC40171: - 1.50 Units

EDUC40172: - 3.00 Units

EDUC40173: - 3.00 Units

EDUC40174: - 3.00 Units

EDUC40175: - 3.00 Units

EDUC40176: - 3.00 Units

EDUC40177: - 5.00 Units

EDUC40178: - 2.00 Units

EDUC40179: - 2.00 Units

EDUC40183: - 0.00 Units

EDUC40184: - 0.00 Units

EDUC40185: - 0.00 Units	EDUC40223: - 5.00 Units
EDUC40186: - 0.00 Units	EDUC40224: - 5.00 Units
EDUC40187: - 0.00 Units	EDUC40225: - 1.00 Units
EDUC40188: - 0.00 Units	EDUC40226: - 1.50 Units
EDUC40189: - 0.00 Units	EDUC40227: - 3.00 Units
EDUC40190: - 0.00 Units	EDUC40228: - 1.50 Units
EDUC40191: - 0.00 Units	EDUC40229: - 3.00 Units
EDUC40192: - 0.00 Units	EDUC40230: - 1.50 Units
EDUC40193: - 0.00 Units	EDUC40231: - 3.00 Units
EDUC40194: - 0.00 Units	EDUC40232: - 1.50 Units
EDUC40195: - 0.00 Units	EDUC40233: - 3.00 Units
EDUC40196: - 0.00 Units	EDUC40234: - 1.50 Units
EDUC40197: - 0.00 Units	EDUC40235: - 3.00 Units
EDUC40198: - 1.50 Units	EDUC40236: - 5.00 Units
EDUC40199: - 3.00 Units	EDUC40237: - 3.00 Units
EDUC40200: - 3.00 Units	EDUC40238: - 1.50 Units
EDUC40201: - 4.50 Units	EDUC40239: - 3.00 Units
EDUC40202: - 4.50 Units	EDUC40240: - 1.50 Units
EDUC40203: - 4.50 Units	EDUC40241: - 4.00 Units
EDUC40204: - 4.50 Units	EDUC40242: - 4.00 Units
EDUC40205: - 4.50 Units	EDUC40243: - 1.50 Units
EDUC40206: - 3.00 Units	EDUC40244: - 1.50 Units
EDUC40207: - 1.50 Units	EDUC40245: - 5.00 Units
EDUC40208: - 1.50 Units	EDUC40246: - 6.00 Units
EDUC40216: - 3.00 Units	EDUC40247: - 5.00 Units
EDUC40217: - 3.00 Units	EDUC40248: - 3.00 Units
EDUC40218: - 3.00 Units	EDUC40249: - 4.50 Units
EDUC40219: - 3.00 Units	EDUC40250: - 1.50 Units
EDUC40220: - 3.00 Units	EDUC40251: - 5.00 Units
EDUC40221: - 5.00 Units	EDUC40252: - 2.50 Units
EDUC40222: - 6.00 Units	EDUC40253: - 1.50 Units

EDUC40254: - 1.50 Units

EDUC40255: - 0.00 Units

EDUC40256: - 5.00 Units

EDUC40257: - 2.00 Units

EDUC40258: - 3.00 Units

EDUC40259: - 1.50 Units

EDUC40260: - 1.50 Units

EDUC40261: - 5.00 Units

EDUC40262: - 5.00 Units

EDUC40408: Teaching and Testing ESL Listening and Speaking Skills - 3.00 Units

This course presents the fundamental concepts of oral discourse as well as practical classroom techniques for teaching spoken English. Working from individual sounds to stretches of continuous speech, and considering stress, intonation, and rhythm, participants will learn effective ways to teach pronunciation. Topics include such interesting features of conversation as turn taking, the role of world knowledge, and reduced speech. Participants will also learn numerous exercises to enhance fluency and accuracy.

EDUC40544: Teaching and Testing ESL Reading and Writing Skills - 3.00 Units

This course is designed to expand or update knowledge of reading and writing theories, focusing on teaching techniques for the adult learner in a variety of educational settings. Specific skills to be discussed include skimming, scanning, inferencing, reading literature and poetry to develop critical thinking skills, journal writing, developing and revising essays, incorporating grammar, and error correction. Current and traditional issues will also be reviewed, including whole language, schema theory, connection between reading and writing, assessment, error correction, and the difference between process and product in writing.

EDUC40556: Preparing for a Community College Career - 1.00 Units

This course is designed for individuals interested in teaching, counseling, and administrative opportunities in the community colleges. Students gain an overview of the California community college system and the clientele it serves. Instruction includes information on where to find out about job opportunities, both full and part time, as well as guidance on preparing effective job applications and resumes. Strategies will also be presented for enhancing a job seeker's potential for receiving a job interview and the best way to prepare for it.

EDUC40658: Planning Your Lessons to be Brain-Friendly - 1.00 Units

Brain research tells us that students do best if they begin with an overview of the task to determine the following: if it's relevant, if patterns can be found, if our multiple intelligences or senses can be used, if the learning challenge is not too much or too little, and if the learning can be fun, exciting, new or different. Choices need to be provided and constructive feedback given along with your classroom rituals and time for reflection. How can we plan brain friendly lessons? This workshop will focus on the development of specific strategies for classroom teaching and homework assignments.

EDUC40756: Culture in the Language Classroom - 3.00 Units

It is important for students learning a new language to understand the culture connected to the language. This class will help participants develop instructional strategies and practical tools for integrating culture into a language curriculum. A definition of culture is followed by an in-depth view of American culture in particular, focusing on what are considered typical, mainstream American values. Cultural differences in the classroom will also be examined and suggestions will be provided for handling a variety of cross-cultural issues.

EDUC40989: Introduction to Online Learning - 2.00 Units

This course offers an overview of distance learning: its history, current status and future progress. Participants will also receive an introduction to learning theories and be introduced to different types of online teaching course design and educational technologies. Using case studies and a historical perspective of the evolution of online teaching, students will understand the challenges and advantages of establishing a distance learning course or program. The course will discuss course design, development, implementation and evaluation and the concept of building community.

EDUC40990: Foundations of Curriculum Design and Evaluation - 2.00 Units

This course presents an overview of curriculum development & an introduction to the Instructional Systems Design Model. Participants will learn to design & evaluate curriculum, develop instructional materials, assess student learning & measure instructional outcomes for use in online classes from K-20 and beyond. Topics include preparation of course outlines & syllabi, development of lessons plans, design of evaluation instruments and an explanation of how learning objectives & evaluation strategies affect the selection of content and materials.

EDUC41005: Project-Based Learning - 1.00 Units

This course introduces participants to the exciting possibilities of project-based learning and provides them with tools and strategies to implement this approach within their own classrooms. Project-based learning involves students in complex activities that build skills and knowledge through application. With this method, predictable outcomes are achieved while allowing students the freedom to expand and define their own learning experiences. Come explore this ground-breaking method with teachers who have been applying it in their own classrooms.

EDUC41231: Advanced Curriculum Design for the Online Classroom - 3.00 Units

This class examines elements of effective instructional design for the distance learning environment. Students will learn how to create tailored instructional models based on course objectives, target audience, subject matter content, class management and assessment methods. This course will study the design of effective, reliable assessment techniques and evaluation models for online teaching. The course is comprised of three major phases of the design process (Analysis, Design, and Development) that guide students through converting or developing course material for an online course.

EDUC41232: Teaching Online Practicum - 2.00 Units

Participants in this course will create a capstone project focusing on their lessons from throughout the entire Teaching Online certificate program. This course will focus on student's progress and practical application to current or prospective work opportunities. Students will work collaboratively with an advisor before submitting their final project.

EDUC41233: Adult Learners Capstone Portfolio - 1.00 Units

Students will work collaboratively with a program advisor to create a final portfolio. This portfolio will consist of a compilation of highlights from throughout the program and a personal review of their progress. Students will submit this portfolio to a program advisor for final review.

EDUC41266: Teaching and Training Adults in Diverse Settings - 3.00 Units

This course provides students with perspectives on working with adults from diverse backgrounds in divergent settings. This course focuses on the differentiation of teaching and training to build upon the educational and life experiences of adult learners. Special topics include: current issues in teaching adults; compacting content; pacing; working with non-native speakers of English; and project-based teaching and training.

EDUC41267: Effective Strategies for Teaching and Training Adults - 3.00 Units

This course presents effective research-based strategies to maximize adult learning in a variety of contexts. Effective Strategies examines Androgogy, the science of adult learning, including the following topics: learning physiology of the adult brain; learner demands and purpose of learning for adults; roles played by instructors of adults; task-focused curriculum and instruction; creating a productive learning environment for adults; and evaluation and assessment for adult learners.

EDUC41312: Critical Foundations in Algebra (6-8) - 2.00 Units

"Participants will focus on foundations for the instruction of algebra. Topics include development of conceptual understanding, computational fluency, problem-solving skills, automaticity in computation, providing adequate practice, encouraging effort and persistence, setting benchmarks for key skills, use of formative assessments, instruction for struggling students, offering acceleration and enrichment for gifted students."

EDUC41323: Math Solutions-Implementing the First Grade Common Core Standards - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core State Standards for Mathematics, including both content and practice standards, at the first grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific standards as well as strategies and activities specific to supporting the standards at the first grade level. Teachers will also have gained valuable recommended resources that coincide with and will support implementation of the standards in the classroom. Teachers will be prepared to immediately begin teaching to the new standards and preparing students for assessment.

EDUC41326: Alternative Assessments - 1.50 Units

This course is designed to provide instructors with alternative ways to assess student comprehension and mastery for students in the K-12 level. This course will develop your alternative assessment techniques for assignments including projects and presentations. Topics also include new ways of utilizing traditional assessment techniques such as non-traditional ways to use and give exams, homework, and lab activities.

EDUC41345: Multimedia Project Design and Development - 5.00 Units

In this course, teachers will learn how to take the proper steps toward designing an effective plan for assigning multimedia projects in the classroom. Teachers are taught how to properly plan for the multimedia project by determining standards and setting objectives. Strategies for organizing the project, creating cooperative groups, and effectively assessing student projects are discussed. The course also explores the various stages that teachers can guide students through to ensure success in their projects. Many multimedia platforms are detailed in addition to web-based tools and software for creating media elements.

EDUC41382: Differentiation System Design: District Initiatives - 3.00 Units

This course provides the student with a perspective of neuroscience as it relates to education, with the purpose of developing a depth of understanding

for district-level decision-making. The scientific and holistic (whole student) philosophical perspectives provided in this course will provide students with a knowledge base for developing an organizational system of informed and skilled practitioners who instruct through differentiated approaches. Additionally, it provides students a base of information that will assist in aligning resources to differentiated instruction to support specific learning needs.

EDUC41389: - 3.00 Units**EDUC41390: - 1.50 Units****EDUC41391: Differentiation System Design: School Practices - 3.00 Units**

Differentiation System Design: School Practices, develops the focus of the differentiation lens on the development of a school learning community organized around the concept of 21st Century skills attained through site instructional system design, differentiated instructional practices, and development of higher level thinking skills and skill application. Technology plays an important role in the differentiation processes of the present and the future, and concepts and ideas will be presented and discussed in the course.

EDUC41393: Implementing a Comprehensive School Counseling Program - 3.00 Units

This course is designed for counselors and school psychologists to help students with career planning, leadership development and character development. The school counselor's role has been redefined as one of leadership within the school counseling model. Following the American School Counselor Association (ASCA) model, this course explores how school counselors can influence systemic change through collaboration with other schools professionals and how to develop a framework for a school counseling program that is preventative in design and developmental in nature.

EDUC41411: CSE3 Fluency in Information Technology for Teachers - 3.00 Units

Information technology plays an increasingly large role in both society and the individual lives of citizens. This course attempts to provide students with basic information they need to deal with information technology. It is more of a concepts course than a programming course, but some simple programming will be done as part of teaching concepts.

EDUC41412: Special Topics in Gifted and Talented Education - 2.00 Units

This course is designed to offer students an in-depth seminar on special topics in Gifted & Talented Education (GATE). This course supplements our regular GATE course offerings. The content of the course changes each time it is offered.

Topics are designed to provide more detailed information and skills in specific areas. As such, the objectives of the Special Topics course are to provide participants with additional knowledge and skills to make them more effective GATE educators. The knowledge and skills each participant gains from this Special Topics course will ultimately improve their ability to contribute to course planning & design efforts.

EDUC41413: Special Topics in Teaching Online - 2.00 Units

"This course is designed to offer students an in-depth seminar on special topics in Teaching Online. This course supplements our regular Teaching Online course offerings. The content of the course changes each time it is offered.

Topics are designed to provide more detailed information and/or hands-on skills in specific areas. As such, the objectives of the Special Topics course are to provide participants with additional knowledge and skills to make them more effective online educators. The knowledge and skills each participant gains from this Special Topics course will ultimately improve their ability to online course planning & design efforts."

EDUC41420: Dealing with ADD/ADHD Children - 3.00 Units

This course will provide school counselors, therapists, parents, teachers, administrators and advocates with information about the nature of Attention-Deficit Disorder (ADD) and Attention-Deficit Hyperactive Disorder (ADHD). Participants will learn the origins and causes of the disorder, how to determine a child may have the disorder, how to secure help medically and with schools, and how to provide learning environments at home and school that help an ADD/ADHD child succeed. The course will also provide strategies for parents to help their child learn effective methods to manage their disorder. Lastly, the course will provide information on federally-mandated programs that assist children with this disorder.

EDUC41426: Assessment for Performance Improvement in Schools - 2.00 Units

The goal of this course is to introduce students to the various facets of student assessments that can have impact on improving the performance of students in private, independent, and public school settings with an emphasis on the assessments as part of the education process. Topics include the use of scoring rubrics, creating and managing student portfolios, writing performance tasks, creating common assessments, and assessments for the Common Core.

EDUC41427: Change Agency in Education: History, Culture, Politics, Systems - 2.00 Units

Change Agency in Education is designed to provide educational leaders (teachers and administrators alike) with unique theoretical and practical perspectives on topics related to school reform in California and the United States. Armed with a cohesive understanding of the historical, cultural and political landscapes of education, students will learn to employ effective strategies (human/social capital; loose coupling; Tipping Points; among others) to leverage change at the school site and beyond.

EDUC41428: Enhancing Creativity and Cross-Curricular Achievement Through the Arts and 'Flow' - 2.00 Units

Enhancing Creativity is designed to provide multiple- and single-subject teachers with unique and practical strategies to integrate the visual, performing and digital arts into the differentiated curriculum in ways that promote creativity and achievement for diverse learners. Pedagogies of the arts and their reciprocal cross-curricular relationships are explored, as are implications for brain-compatible learning and the infusion of intrinsic motivation and focus ('Flow'). Metacognitive elements of arts education are introduced through proven practice and standards-based case studies, as are evaluation strategies and project planning materials.

EDUC41429: Differentiation System Design: Classroom Level - 3.00 Units

This course will focus more specifically on developing the understanding of classroom teachers and school leaders to better tailor instruction through differentiated approaches, based on the cognitive and socio-emotional needs of the variety of learners that make up most classrooms.

EDUC41430: - 3.00 Units**EDUC41431: Strategies for Implementing the Common Core Standards - 4.50 Units**

In this class, teachers explore how the Common Core State Standards put students at the center of learning. They see a new emphasis on interdisciplinary skills and critical thinking skills in the area of reading, writing, speaking, and listening. Through video examples, in-depth readings, and downloadable applications teachers will discover that the CCSS have unique reading and writing standards for literacy in history, social studies, and science. Teachers learn practical ways to put the standards to work in their

classroom, especially in the area of textual complexity and collaborative activities.

EDUC41433: Reading Interventions for Middle Grade Students - 5.00 Units

This course is designed for teachers who work with readers in grades 4-8 who are one to four years behind grade level. The course materials are based on current best-practices research on helping students with reading difficulties. Topics addressed in the course include assessment and diagnosis of reading difficulties, differentiation strategies, fluency skills, vocabulary development, and cognitive reading strategies. Teachers will learn how to help all students become better readers with improved comprehension skills.

EDUC41434: Teaching Real World Math - 5.00 Units

This online training course will focus on appropriate instructional tools and techniques to help teachers connect math standards to instructional practice. The content will help teachers relate math basics to everyday life. The focus will be on teaching math using real world topics students are really interested in such as sports and food. The course will also discuss using real world math to help students who struggle in math to see the practical applications of what they are learning. Ideas for connecting math to literature and technology will also be shared, as well as ideas for real world math centers.

EDUC41435: Making the Most of the Internet in the Classroom - 5.00 Units

This course will focus on helping teachers make the most of the Internet in their classrooms. Teachers will learn how to conduct effective and efficient searches so that they may then progress to developing online activities and projects for students. The search skills will also help teachers find valuable resources to use in the classroom. Teachers will learn how to use Internet resources to create a WebQuest, virtual field trip, and online scavenger hunt. Other topics included in the course are citing Internet sources, digital research, information literacy, and how to do everything with Google!

EDUC41437: Implementing Kindergarten Common Core Reading Standards for Literature - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core Reading Standards for Literature at the kindergarten level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific Literature Standards at the kindergarten level. Teachers will also have gained valuable classroom activity ideas as well as a wealth of recommended literature books to help them immediately begin to implement the Literature Standards.

EDUC41438: Implementing First Grade Common Core Reading Standards for Literature - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core Reading Standards for Literature at the first grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific Literature Standards at the first grade level. Teachers will also have gained valuable classroom activity ideas as well as a wealth of recommended literature books to help them immediately begin to implement the Literature Standards.

EDUC41439: Implementing Second Grade Common Core Reading Standards for Literature - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core Reading Standards for Literature at the second grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific Literature Standards at the second grade level. Teachers will also have gained valuable classroom activity ideas as well as a wealth of recommended

literature books to help them immediately begin to implement the Literature Standards.

EDUC41440: Implementing Third Grade Common Core Reading Standards for Literature - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core Reading Standards for Literature at the third grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific Literature Standards at the third grade level. Teachers will also have gained valuable classroom activity ideas as well as a wealth of recommended literature books to help them immediately begin to implement the Literature Standards.

EDUC41441: Implementing Fourth Grade Common Core Reading Standards for Literature - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core Reading Standards for Literature at the fourth grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific Literature Standards at the fourth grade level. Teachers will also have gained valuable classroom activity ideas as well as a wealth of recommended literature books to help them immediately begin to implement the Literature Standards.

EDUC41442: Implementing Fifth Grade Common Core Reading Standards for Literature - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core Reading Standards for Literature at the fifth grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific Literature Standards at the fifth grade level. Teachers will also have gained valuable classroom activity ideas as well as a wealth of recommended literature books to help them immediately begin to implement the Literature Standards.

EDUC41443: Study Smarter Not Harder - 5.00 Units

This online training course will help provide strategies to improve students' study skills and gain techniques to improve tests scores and memorization and recall of content curriculum. Teachers will be given techniques, ideas, and resources for helping students to develop their study skills such as the use of mnemonics, time management and note-taking skills, and the ability to establish a good study environment. With the use of visual aids, innovative strategies, and helpful worksheets, teachers will be able to develop their students' study skills and help take the fear out of test-taking.

EDUC41444: Positive Discipline: A Powerful Approach to Classroom Management - 5.00 Units

This online training course helps teachers to learn new and innovative ways for managing and controlling behavior using traditional and non-traditional, positive methods for discipline and order. Teachers will be provided with many resources and ideas to effectively manage their classrooms and student behavior while proactively promoting organization, communication, safety, structure, and a positive classroom environment that supports learning.

EDUC41445: A Primary Teacher's Guide to Positive Discipline - 5.00 Units

This online training course helps teachers to learn new and innovative ways for managing and controlling behavior using traditional and non-traditional, positive methods for discipline and order. Teachers will be provided with many resources and ideas to effectively manage their classrooms and student behavior while proactively promoting organization, communication, safety, structure, and a positive classroom environment that supports learning.

EDUC41446: Active and Hands-On Science Instruction - 5.00 Units

This course is designed for educators interested in learning a variety of ways to enhance their science instruction through active, hands-on experiences. Teachers will gain a variety of ideas for conducting hands-on experiments, establishing science learning stations, integrating science with other content areas, and using technology to enhance science instruction. Time will also be spent on introducing ways to integrate science into other content areas including language arts and math. Teachers will also learn specific strategies for teaching hands-on science to English language learners.

EDUC41447: Putting SDAIE Theory into Practice - 5.00 Units

This course will provide elementary and secondary teachers (grades 2-12) with a variety of SDAIE strategies that can be used across content areas and grade levels. These SDAIE practices are the "scaffolds" that enable English language learners to access grade-level curriculum while simultaneously developing academic language. This course will focus on a lesson plan format in which SDAIE strategies are embedded. Emphasis will be on active, hands-on involvement and the immediate application of these strategies in the classroom.

EDUC41449: Response to Intervention in Reading K-6 - 5.00 Units

This course is designed for teachers who are beginning to implement Response to Intervention (RtI) in reading. The course materials are based on current best-practices research. Topics addressed in the course include an overview of RtI and the important of using multiple and varied assessments. The focus will be on progress monitoring and specific interventions for the big five ideas in reading. Interventions for struggling readers and English language learners will also be presented.

EDUC41450: Reading Workshop Approach for Middle Grade Students 4-8 - 5.00 Units

This course is designed for teachers who work with readers in grades 4-8. It details the basics of implementing a reader's workshop approach in your classroom. The course materials are based on current best-practices research. Topics addressed in the course include an overview of the workshop approach, using multiple and varied assessments, differentiation strategies, whole class, small group, and independent work teaching strategies, as well as tips and hints for record-keeping.

EDUC41452: Reading to Learn: Developing Strategic Reading Skills 4-12 - 5.00 Units

This online course focuses on helping teachers work with students on key reading skills. Teachers will learn how to develop active instructional strategies that facilitate student acquisition and development of reading skills in a variety of disciplines. Emphasis is on vocabulary development and comprehension strategies. Teachers will also understand the importance of text structure as students move from reading primarily narrative text to much more expository text. Assessment options for tracking reading skills and improvement will also be explored.

EDUC41453: Effective Strategies for New Teachers - 5.00 Units

This online training course will help new teachers become highly effective teachers. Topics addressed in this course include an introduction to standards, engaging curriculum ideas, writing quality lesson plans (with clear objectives that address key standards), assessment techniques (including authentic assessment such as rubrics and portfolios as well as standardized tests), themes and literature ideas, management techniques, discipline strategies (rewards and consequences), and, of course, technology integration.

EDUC41454: USING MICROSOFT EXCEL IN THE CLASSROOM - 1.50 Units

This course will focus on how to use Microsoft Excel 2010 in the classroom for both the teaching and the learning process. Teachers will learn how to input data and create formulas, charts, and graphs. Exciting classroom activities

using Excel will also be shared. You will have the opportunity to practice many useful strategies using Microsoft Excel.

EDUC41456: Using Technology in the Classroom - 1.50 Units

This course will focus on the basics of using technology in the classroom. Participants will learn strategies for managing technology in the classroom. They will also be introduced to using Microsoft Word and Microsoft Excel for classroom projects and activities. Participants will also learn how to evaluate software for classroom use. Additionally, time will be spent on effective search strategies.

EDUC41457: The Fundamentals of Teaching English Language Development - 5.00 Units

This introductory course is designed for K-12 teachers who have little or no background teaching English language learners (ELLs). It is intended to provide participants with an overview of the fundamentals of teaching English Language Development (ELD), including the types of programs for English language learners, theories of language acquisition, approaches to teaching a second language, the stages of language acquisition, and the dynamics of English language development in the classroom.

EDUC41458: Improving Your Students' Test Taking Skills - 5.00 Units

This online course focuses on helping teachers understand concepts related to standardized testing. In addition, it helps teachers work with students on test preparation and test taking skills. Teachers will learn how to develop instructional strategies that facilitate students as they aim for success in testing situations. Emphasis is on testing theory, helping students learn how to prepare for tests, and strategies that students can utilize while taking a test.

EDUC41461: DESIGNING AND CREATING A SCIENCE WEBQUEST - 5.00 Units

This course will focus on teaching participants how to use the Internet to find resources to enhance and support the teaching of the science curriculum through a WebQuest. A WebQuest is an inquiry-oriented activity in which most of the information students interact with comes from resources on the Internet. Participants will learn how to set goals, gather resources, and plan the science WebQuest. A template is provided for creating the online science WebQuest. Additionally, rubrics for assessing what students learned from the WebQuest are also introduced.

EDUC41462: DESIGNING AND CREATING A MATH WEBQUEST - 5.00 Units

This course will focus on teaching participants how to use the Internet to find resources to enhance and support the teaching of the math curriculum through a WebQuest. A WebQuest is an inquiry-oriented activity in which most of the information students interact with comes from resources on the Internet. Participants will learn how to set goals, gather resources, and plan the math WebQuest. A template is provided for creating the online math WebQuest. Additionally, rubrics for assessing what students learned from the WebQuest are also introduced.

EDUC41465: Effective Strategies to Improve Student Writing 4-12 - 5.00 Units

This online course focuses on helping teachers work with students on key writing skills. Specific strategies will be introduced that will improve student writing. Information on each stage of the writing process will be shared along with strategies that can be used to improve student writing. Teachers will also learn how to incorporate mini-lessons and writer's workshop into their writing programs.

EDUC41466: Effective Strategies for Emergent and Early Writers - 5.00 Units

This online course focuses on helping teachers work with emergent and early writers. Teachers will learn many useful and practical strategies they can use

to help young writers. The focus will be on developmentally-appropriate practices and writing domains. Teachers will also be introduced to each stage of the writing process in detail.

EDUC41467: Using Children's Literature in the Classroom - 5.00 Units

This online course focuses on providing teachers with excellent lists of children's literature and great activities for using the books in the classroom. In addition to picture books, trade books, and young adult novels, teachers will also be introduced to multicultural literature, fairy tales, folk tales, mythology, and poetry. The emphasis is also on teaching students skills and standards using quality books with an emphasis on comprehension. Teachers will also learn strategies for incorporating literature into content areas and theme units, as well as using literature in reader's workshop and literature circles.

EDUC41469: Reaching Students Through Character Education - 5.00 Units

In this online course, participants will learn the six building blocks of character and how to explore them with students through discussions, activities, and projects. They will learn how to teach students to make the right choices in problem situations and help build their awareness of accountability for their actions. Teachers will also learn how to help students handle conflict resolution.

EDUC41470: Hands-On Learning with Math Manipulatives - 5.00 Units

This online course focuses on helping participants learn how to use math manipulatives to teach important math concepts. Participants will learn what manipulatives are and why to use them, how they connect to math standards, how to successfully teach lessons using manipulatives, and how to manage them in the classroom. Teachers will also learn how to appropriately assess lessons that use math manipulatives. Teachers will also be introduced to virtual manipulatives.

EDUC41471: Teaching Reading to Struggling Readers: Identification, Intervention, and Remediation K-3 - 5.00 Units

This course focuses on teaching reading to struggling readers. The focus is on initial and early identification of these students and then specific intervention strategies to try based on the specific skill deficit. Information includes strategies for English Language Learners and special education students. All five key elements of teaching reading are addressed in the course: phonemic awareness, phonics, fluency, comprehension, and vocabulary.

EDUC41472: Instructional Strategies for ELD and SDAIE K-12 - 5.00 Units

This course will focus on using effective instructional strategies when working with English Language Learners (ELL). Attention will be given to ELD and SDAIE strategies such as scaffolding. Teachers will be provided with specific details and instructions for using the Into-Through-Beyond approach with their English language learners. Teachers will also learn appropriate ways to assess English language learners in the classroom.

EDUC41473: Classroom Management Survival Course - 5.00 Units

This online course focuses on helping teachers with classroom management strategies. Teachers will learn many useful and practical techniques for working with students. A particular focus is effective strategies for working with difficult students. Teachers will also time learning about the importance or establishing and teaching routines. Character education will also be introduced as it relates to classroom management.

EDUC41474: Comprehension: The Key to Successful Reading K-3 - 5.00 Units

This course focuses on improving students' comprehension skills. The course begins offering three different options for assessing comprehension. Then, teachers are introduced to a wealth of strategies that can improve and support a reader's comprehension. Strategies presented include: anticipation guides,

DRTA, questioning techniques, text structure, guided reading and reciprocal teaching.

EDUC41475: Focus on Phonics K-3 - 5.00 Units

This course focuses on effective ways to teach children to decode unknown words. Phonics basics will be emphasized along with specific ways to help students who are struggling in this area. Using context clues and structural analysis as a means of decoding will also be introduced. Teachers will also learn how to use the making words and chunking strategy and how to use reader's workshop. The course will also focus on assessment strategies for phonics and decoding including running records, miscue analysis, and informal reading inventories.

EDUC41476: Comprehension Strategies for Middle and Upper Grades 4-12 - 5.00 Units

This course focuses on improving students' comprehension skills. The course begins offering three different options for assessing comprehension. Then, teachers are introduced to a wealth of strategies that can improve and support a reader's comprehension. Strategies presented include: anticipation guides, DRTA, questioning techniques, text structure, guided reading and reciprocal teaching. There is also a focus on using literature to inspire students to read.

EDUC41477: Designing and Creating a WebQuest - 5.00 Units

This course will focus on how to develop a WebQuest based on any content area. Participants will begin with content standards and then develop the WebQuest based on a theme or topic that addresses the standards. Participants will also learn how to program a WebQuest online. Internet search strategies will be emphasized in order to find WebQuest resources efficiently. Every step necessary to create a WebQuest will be explored in detail in the course.

EDUC41478: Developing Phonemic Awareness in Emergent Readers - 5.00 Units

This course focuses on developing a child's phonemic awareness to prepare him or her to be a successful reader. The course begins with phonemic awareness assessment options. Based on the assessment results, the teacher can determine which strategies are most appropriate for each student. Instructional strategies presented in the course include: rhyming, alliteration, onset and rime, syllable segmentation, and many more. Teachers will also be introduced to the connection between phonemic awareness and writing.

EDUC41479: How to Manage Your Classroom for Student Success K-12 - 5.00 Units

This online training course will help teachers become highly effective teachers. Topics addressed in this course include engaging curriculum ideas, writing quality lesson plans (with clear objectives that address key standards), assessment techniques (including authentic assessment such as rubrics and portfolios as well as standardized Tests), themes and literature ideas, management techniques, discipline strategies (rewards and consequences), ELD techniques, and, of course, technology integration.

EDUC41480: WORD PLAY: VOCABULARY INSTRUCTION IN THE PRIMARY GRADES - 5.00 Units

This course focuses on how to improve students' vocabulary. The course begins with options for vocabulary assessment. The results of the assessment will be used to guide instruction and select appropriate and effective instructional strategies. Strategies presented include word roots, semantic feature analysis, categorization, analogies, concept maps, traditional resources, and cloze procedure. Teachers will also be presented with information regarding the strong connection between vocabulary development and comprehension.

EDUC41482: EXPOSITORY WRITING: FOCUS ON RESEARCH REPORTS - 5.00 Units

This online course focuses on helping students learn how to write research reports. The focus will be on teaching students organizational patterns, as well as how to develop an outline and thesis statement. Teaching students how to do research and then read and paraphrase for writing will also be emphasized. Revision techniques, including the use of technology, will also be presented.

EDUC41483: VOCABULARY INSTRUCTION FOR IMPROVED READING SKILLS - 5.00 Units

This course focuses on how to improve student's vocabulary in the middle and upper grades. The course begins with options for vocabulary assessment. The results of the assessment will be used to guide instruction and select appropriate and effective instructional strategies. Strategies presented include word roots, semantic feature analysis, categorization, analogies, concept maps, traditional resources, and cloze procedure to name just a few. Teachers will also gain ideas for creating a print-rich classroom in which reading is supported and promoted.

EDUC41485: WRITER'S WORKSHOP IN THE ELEMENTARY CLASSROOM - 5.00 Units

This online course focuses on helping teachers start a writer's workshop program in the classroom. The focus is on the components of writer's workshop as well as managing a writer's workshop classroom. Considerable time is also spent on developing mini-lessons, the writing process, and all of the writing domains. Ideas for writing assignments and projects will also be shared. Strategies for conducting several types of writing conferences will be presented. Teachers will also gain ideas for using literature as an example and inspiration for writing.

EDUC41486: DESIGNING AND CREATING A VIRTUAL FIELD TRIP - 5.00 Units

This course will focus on how to develop a Virtual Field Trip based on any content area. Participants will begin with content standards and then develop the Virtual Field Trip based on a theme or topic that addresses the standards. Participants will learn how to locate relevant resources and develop an effective Virtual Field Trip. Internet search strategies will be emphasized along with practical approaches to incorporating standards into the development of the Virtual Field Trip.

EDUC41487: DIFFERENTIATED INSTRUCTION: ONE SIZE DOES NOT FIT ALL - 5.00 Units

This online training course helps teachers to analyze the learning styles and readiness of their students and effectively develop a differentiated curriculum to meet the needs of a diverse population. Teachers will gain a clear understanding of the needs of multilingual, special education, and academically diverse classrooms and learn how to adjust their lessons to accommodate the different needs and learning styles of their students. Different strategies and resources will be presented to fully embrace the differentiated instruction concept and implement differentiation into the curriculum effectively.

EDUC41488: THE SIX TRAITS OF WRITING - 5.00 Units

This course focuses on improving students' writing skills using the six traits to enrich the writing process for primary students. The course begins offering detailed information on what to look for in students' writing and pictures and how to comment on their work in a way that will support and encourage their writing abilities. There are individual units dedicated to each of the six traits. Then, teachers are introduced to multiple strategies and ideas that can support and improve their students' writing.

EDUC41489: YOUNG ADULT LITERATURE IN THE CLASSROOM - 5.00 Units

This online course focuses on strategies for teaching literary elements using young adult novels. Specific definitions, strategies, and activities will be shared for teaching critical literary techniques such as character development, setting, plot, symbolism, point of view, and style. Ideas will also be presented for using literature as a connection to social studies using historical fiction. Strategies for using literature discussion groups will also be presented. Resources for selecting quality young adult novels will be shared.

EDUC41490: INSTRUCTIONAL APPROACHES FOR LITERACY DEVELOPMENT - 5.00 Units

This course focuses on emergent literacy skills for grades PreK-3. The instructional strategies focus on early reading strategies for teachers to incorporate into their curriculum, the connection to oral language, the development of reading fluency, vocabulary, and comprehension. Assessment strategies and techniques will be thoroughly discussed. Strategies for working with struggling readers are also included. An additional focus of the courses will be using literacy work stations for literacy development.

EDUC41491: CONTENT AREA LITERACY: NONFICTION BOOKS IN THE K-3 CLASSROOM - 5.00 Units

This course focuses on practical strategies teachers can use for integrating nonfiction, informational books into the K-3 classroom as a valuable supplement to classroom textbooks. With a focus on how to teach expository reading skills, the course also covers comprehension, text structure, and strategic reading instruction. Teachers will learn how to develop and benefit from the use of thematic units, how to teach expository reading and comprehension in the three content areas based on state standards, and how to adjust their teaching to help English Language Learners.

EDUC41492: A NEW APPROACH TO SPELLING INSTRUCTION - 5.00 Units

This course is designed for educators interested in learning a variety of ways to teach essential spelling skills to their students. Spelling is an essential and complex skill and an important component of the overall language arts curriculum. Instead of looking at spelling as a memorization process, spelling should be thought of as a building block of literacy development. In this course, teachers will learn a variety of proven ways to increase students' spelling skills using interactive, developmental, and fun activities.

EDUC41493: EDUCATIONAL TECHNOLOGY 101 - 5.00 Units

This course is designed for educators interested in learning about the most current cutting-edge technology being used in classrooms. Topics addressed in the course include information literacy, WebQuests, internet search strategies, wikis, blogs, podcasts, digital storytelling, virtual field trips, YouTube, social media, and interactive whiteboards. Teachers will learn how to use all of these technologies in the classroom and integrate them into their content curriculum.

EDUC41494: USING MICROSOFT WORD IN THE CLASSROOM - 1.50 Units

This course will focus on how to use Microsoft Word 2010 in the classroom for both the teaching and the learning process. You will learn how to create many useful documents for your students and classroom. You will have the opportunity to practice many useful strategies using Microsoft Word.

EDUC41496: Bridging the Hearts and Minds of Youth: Mindfulness in Clinical Practice, Education and Research - 2.50 Units

"This year's program will include presentations on recent research on mindfulness with youth, talks by people implementing a fascinating variety of innovative mindfulness-based programs with kids across the age spectrum, and optional workshops focused on learning specific programs and skills related to bringing mindfulness to youth in a variety of ways and settings. Additional keynote speakers will augment the conference with unique and inspiring viewpoints designed to further the field and contribute to its growth.

On Saturday, the program will include a 3-hour workshop on Mindful Parenting by Jon and his wife Myla, who are co-authors of the book on the same topic entitled Everyday Blessings.

The core focus of the Bridging conference is to connect people across disciplines, creating connections between the classroom, the laboratory, the therapy room and the living room, to support and foster the growth, study and dissemination of mindfulness for the good of the next generation. This conference is a wonderful opportunity to connect with the people doing the work of teaching mindfulness to our youngsters, to develop skills and competencies to do this work in your particular setting, and to learn what science has to say about this important work. All of this activity unfolds within a larger intention to build community and support those who are cultivating compassion, equanimity and inner wisdom in youth of all ages."

EDUC41497: BULLYING: AWARENESS, PREVENTION, AND INTERVENTION FOR GRADES 4-8 - 5.00 Units

This course will teach elementary and middle grade teachers (grades 4-8) about the myths, facts, research, and current events that surround bullying. Teachers will be introduced to the different types of bullying in addition to the various roles involved in bullying. Effective strategies will be covered to help teachers assess, prevent, and reduce bullying in the classroom and school. Teachers will understand how to properly intervene during incidents of bullying and learn how to use and develop activities that will help manage bullying in the classroom.

EDUC41498: INTEGRATING INTERACTIVE WHITEBOARDS INTO THE CURRICULUM - 5.00 Units

This course will focus on how to make the most out of an interactive whiteboard (IWB) such as, using premade templates and lessons, developing lessons, importing online resources, making the most of the assessment tools, and becoming familiar enough to utilize all the tools and resources available when developing lessons. The course will cover the different types of IWB's, their history, benefits, and the research that has been done rating their effectiveness on student learning. Multiple strategies, suggestions, samples, and descriptions are provided in this course to allow proficiency in the basics of using an IWB in the classroom, to help with integrating its use with the existing technology, and to maximize their use for creating dynamic interactive lessons.

EDUC41499: Introduction to Online Learning for Teachers - 2.00 Units

This course is designed to orient teachers to online learning for K-12, introduce them to online learning models, expectations for virtual teachers and students, and, in an online environment, differentiating instruction, practicing time management, implementing best practices, providing effective feedback, implementing of the Common Core standards, and utilizing effective communication.

EDUC41500: Introduction to Online Learning for Administrators - 2.50 Units

This course is designed to orient administrators to online learning for K-12, introduce them to online learning models, expectations for virtual administrator, teachers and students, and, in an online environment, building stakeholder buy-in and involvement, building a school community, differentiating instruction, practicing time management, implementing best practices, providing effective feedback, implementing of the Common Core standards, hiring and managing virtual teachers, utilizing program evaluation to measure success, leading a virtual professional learning community, and utilizing effective communication.

EDUC41501: ANTI-BULLYING STRATEGIES FOR PRIMARY GRADES - 5.00 Units

This course will inform classroom teachers about bullying at the K-3 grade levels. Teachers will learn about the myths, facts, research, and current events

that surround bullying. Teachers will be introduced to the different types of bullying and the various roles involved in bullying. Effective strategies will be covered to help teachers assess, prevent, and reduce bullying in the classroom and school. Such strategies include creating positive relationships with students and integrating cooperative learning and character education into the curriculum. Teachers will understand how to properly intervene during incidents of bullying and learn how to create a safe learning environment for students.

EDUC41508: Reading and Writing Through Common Core Standards - 4.50 Units

This course is designed to give teachers the opportunity to review, analyze and integrate the Common Core Standards into their teaching practices. It shows how Common Core Standards can be impetus for whole-school reform, moving all students in every classroom to become better readers and writers. Candidates will become familiar with the Common Core in both reading and writing, view how Common Core is different from the current state standards, and how to adapt to reach Common Core. Candidates will learn how to create both lessons and authentic assessments that can be formative. This class will help develop teachers with a greater understanding of how Reading and Writing go hand in hand to reach high level thinking in students.

EDUC41509: GOOGLE AS A CLASSROOM TOOL FOR LEARNING - 5.00 Units

This course will teach educators how to effectively use Google products and services for educational purposes. Teachers will learn how to create a Google account and learn its many benefits for the classroom. Teachers will practice navigating through the general interface of Google products. The searching, organizational, communication, and collaboration components of Google products will be highlighted to help teachers develop a deeper understanding of how Google can enhance learning among and between students. Teachers will learn to utilize the basic tools of many educationally-relevant Google products and, with the use of such products, will become skilled in creating curriculum standards-based lessons that will help students learn in an efficient, effective, and engaged manner.

EDUC41512: MATH SOLUTIONS-IMPLEMENTING THE KINDERGARTEN COMMON CORE STANDARDS - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core State Standards for Mathematics, including both content and practice standards, at the kindergarten level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific standards as well as strategies and activities specific to supporting the standards at the kindergarten level. Teachers will also have gained valuable recommended resources that coincide with and will support implementation of the standards in the classroom. Teachers will be prepared to immediately begin to teaching to the new standards and preparing students for assessment.

EDUC41515: INTRODUCTION TO THE COMMON CORE STATE STANDARDS - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core State Standards for English Language Arts & Literacy and the Common Core State Standards for Mathematics. By the end of this course, teachers will fully understand the scope of the Common Core State Standards and have an in-depth knowledge of what each standards means. Teachers will also have gained valuable guidance and procedures for implementing the Common Core State Standards in their classrooms.

EDUC41517: EFFECTIVELY USING IPADS TO TRANSFORM THE CLASSROOM - 5.00 Units

In this course, teachers will learn how to successfully use iPads in the K-12 classroom. Teachers are taught the importance of using the iPad to reach

educational objectives and teach real-world technology skills to students. A plethora of apps are introduced that align with curriculum standards. The apps outlined in the course can be used to teach English language arts, mathematics, science, social studies, health, and the arts. Additionally, teachers learn about apps that can be used as classroom tools for instruction and assessment, as well as, those that can serve as platforms for the creation of multimedia components and projects.

EDUC41518: Practicum in Gifted and Talented Education - 4.50 Units

The Practicum in Gifted and Talented Education is an optional course for candidates requiring at least 45 hours of documented teaching of gifted and talented pupils in an educational setting. Candidates enrolled in this course will undertake supervised practice in a classroom that provides effective, balanced and comprehensive instruction with gifted and talented learners. During his/her tenure in the course, the candidate will provide regular updates on the experience and solicit feedback from an on-site mentor and the course instructor.

EDUC41521: USING MICROSOFT POWERPOINT IN THE CLASSROOM - 1.50 Units

This course will focus on how to use Microsoft PowerPoint 2010 in the classroom for instructional purposes. The course teaches educators how to use various functions in the ribbon to create effective presentations and classroom activities. The functions include inserting graphics, animation, audio, and video. Additionally, strategies on how to design and manage student multimedia projects are discussed.

EDUC41522: Math and the Common Core - 4.50 Units

This course is designed to give teachers the opportunity to unpack the math Common Core standards and analyze the domains in order to obtain a deeper understanding of the expectations of the standards. Teachers will explore a variety of ways to incorporate new strategies into their teaching practice in order to develop interactive lessons that meet the Common Core standards.

EDUC41524: Math Solutions: Second Grade Common Core Math Standards - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core State Standards for Mathematics, including both content and practice standards, at the second grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific standards as well as strategies and activities specific to supporting the standards at the second grade level. Teachers will also have gained valuable recommended resources that coincide with and will support implementation of the standards in the classroom. Teachers will be prepared to immediately begin teaching the new standards and preparing students for assessment.

EDUC41526: Technology Tools and the Common Core - 4.50 Units

Common Core State Standards (CCSS) include basic technology skills to help students succeed; but located throughout the standards is an understanding for students to use technology to help them learn in all areas. Whether it is using tools to solve math problems, to access information, or to promote literacy and communication skills; technology is part of the learning solution. Technology is an integral part in supporting these Standards. This interactive course will instruct participants on ways to integrate technology in classrooms with clear linkages to the Common Core Standards. Participants in this course will also collaborate to find pathways to digital age teaching and learning as they unpack the Common Core to discover the connections between these new standards and opportunities to redefine instruction. This course aligns with 21st century curriculum requirements and integrates new and relevant technologies that support high order thinking skills as well as providing resources that support technology integration.

EDUC41528: Teaching Students with Special Needs in the Mainstream Classroom - 5.00 Units

This course teaches K-6 teachers how to address students with special needs in the general classroom. The course provides information about teacher involvement in the special education process in terms of assessment, intervention, and collaboration. The most prevalent disabilities are covered in addition to students with other special needs such as ELLs, at-risk, and gifted students. Each special need is defined and common causes and characteristics are identified along with suggested instructional strategies. Intervention strategies and classroom adaptations are also provided to help teachers accommodate students with special needs in an inclusive classroom.

EDUC41529: Math Solutions: Third Grade Common Core Math Standards - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core State Standards for Mathematics, including both content and practice standards, at the third grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific standards as well as strategies and activities specific to supporting the standards at the third grade level. Teachers will also have gained valuable recommended resources that coincide with and will support implementation of the standards in the classroom. Teachers will be prepared to immediately begin teaching the new standards and preparing students for assessment.

EDUC41530: Write On! Understanding the Kindergarten Common Core Writing Standards - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core Writing Standards at the kindergarten level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific Writing Standards at the kindergarten level. Teachers will also have gained valuable classroom ideas including using writer's workshop, the writing process, technology that promotes writing, and appropriate writing assessment.

EDUC41531: WRITE ON! UNDERSTANDING THE FIRST GRADE COMMON CORE WRITING STANDARDS - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core Writing Standards at the first grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific Writing Standards at the first grade level. Teachers will also have gained valuable classroom ideas including using writer's workshop, the writing process, technology that promotes writing, and appropriate writing assessment.

EDUC41532: Professional Mentorship Clinic for Educators - 4.50 Units

Professional Mentorship Clinic for Educators is specifically designed to provide experienced teachers with robust online mentor training, including an overview and history of mentorship, both generally and contextually grounded in education; practical understanding of andragogical principles and strategies; working knowledge of policies impacting mentorship in education, including reforms; legal aspects of mentorship; technology and mentorship; and informal/formal assessment strategies used to evaluate protégés and programs. Participants will be provided with guidance; expectations; requirements; standards; competencies; and procedures for observing protégés in the field.

EDUC41535: PREPARING STUDENTS FOR THE COMMON CORE ASSESSMENTS - 5.00 Units

This course is designed for teachers who want to understand the Common Core Assessments. By the end of this course, teachers will understand the

impact of the Common Core Assessments and how they influence teaching strategies, curriculum design, and non-summative assessment methods. The course also provides detailed information on important shifts from standardized testing to the new assessments that impact the way lessons are developed and taught. Detail about the state consortia involved in the administration, delivery, and support of the Common Core Assessments, along with technology requirements for testing are included in the course. Teachers also gain important strategies for helping students prepare for the Common Core Assessments, including study and test-taking tips. A multitude of resources, including sample test items, are included as well to ensure the teacher has the tools and information necessary to prepare and help students prepare for the Common Core Assessments.

EDUC41536: Understanding College Affordability and Financial Aid - 6.00 Units

This course covers the college financial aid process in a more in-depth manner. Topics include assessing financial need, components of a financial aid award, process of applying for financial aid, net cost of college, loans, case studies, while looking at strategies and approaches for working with families through the financial aid process.

EDUC41538: High School Common Core ELA - 3.00 Units

This course is designed to give teachers a better understanding of the Common Core Literacy standards for high school students. During this course students will gain a deep understanding of the common core standards, explore the Smarter Balanced Assessments, learn how to develop text dependent questions and performance tasks as well as create a digital text book chapter.

EDUC41541: Write On! Understanding the Second Grade Common Core Writing Standards - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core Writing Standards at the second grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific Writing Standards at the second grade level. Teachers will also have gained valuable classroom ideas including using writer's workshop, the writing process, technology that promotes writing, and appropriate writing assessment.

EDUC41542: Math Solutions: Fourth Grade Common Core Math Standards - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core State Standards for Mathematics, including both content and practice standards, at the fourth grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific standards as well as strategies and activities specific to supporting the standards at the fourth grade level. Teachers will also have gained valuable recommended resources that coincide with and will support implementation of the standards in the classroom. Teachers will be prepared to immediately begin teaching the new standards and preparing students for assessment.

EDUC41543: WRITE ON! UNDERSTANDING THE THIRD GRADE COMMON CORE WRITING STANDARDS - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core Writing Standards at the third grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific Writing Standards at the third grade level. Teachers will also have gained valuable classroom ideas including using writer's workshop, the writing process, technology that promotes writing, and appropriate writing assessment.

EDUC41544: WRITE ON! UNDERSTANDING THE FOURTH GRADE COMMON CORE WRITING STANDARDS - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core Writing Standards at the fourth grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific Writing Standards at the fourth grade level. Teachers will also have gained valuable classroom ideas including using writer's workshop, the writing process, technology that promotes writing, and appropriate writing assessment.

EDUC41546: WRITE ON! UNDERSTANDING THE FIFTH GRADE COMMON CORE WRITING STANDARDS - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core Writing Standards at the fifth grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific Writing Standards at the fifth grade level. Teachers will also have gained valuable classroom ideas including using writer's workshop, the writing process, technology that promotes writing, and appropriate writing assessment.

EDUC41548: U.S. College/University Application Process and the International Student - 3.00 Units

This class is intended to assist the International College Advisor regarding the process of applying to college in the United States. The course covers topics like what admissions officers look for in applications, strategies for self-assessment to find the right university and the logistics of planning and submitting all the necessary elements of an application.

EDUC41551: MATH SOLUTIONS! IMPLEMENTING THE FIFTH GRADE COMMON CORE MATH STANDARDS - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core State Standards for Mathematics, including both content and practice standards, at the fifth grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific standards as well as strategies and activities specific to supporting the standards at the fifth grade level. Teachers will also gain valuable recommended resources that support implementation of the standards in the classroom. Teachers will be prepared to immediately begin teaching the new standards and preparing students for assessment.

EDUC41567: The Flipped Classroom: An Interactive Approach to Student Engagement - 5.00 Units

In this course, teachers will learn how to effectively implement flipped learning in their classrooms. Based on the four pillars of the flipped learning model, teachers will learn how to create a learner-centered classroom by moving instruction to the home through the use of video, the Internet, etc. Teachers are provided with tips and strategies on how to create engaging instructional videos and develop interactive, collaborative, and hands-on classroom activities that foster self-directed learning skills. This course also offers specific information on how to flip each of the four main content areas, as well as, cooperative learning, grouping, and assessment strategies.

EDUC41570: Best Practices for a Successful Primary Classroom - 5.00 Units

This course is designed for primary teachers who are in need of best practices for creating and managing a successful primary classroom. This course covers strategies for implementing the new Common Core State Standards, while managing time so that all content is covered. Behavioral issues and overall classroom management techniques help teachers manage their classrooms more successfully so they have time for what is most important—meeting the needs of their students. Teachers learn how to maximize the resources they have available to them as well as find innovative ways to gain more resources at little to no cost. This course also provides successful strategies for gaining

students' attention and interest, and truly engaging them in lessons. Teachers will better understand what is needed from them to create a successful classroom, as well as gain a better understanding of their individual students' needs and how to differentiate instruction. Mainstreaming English language learners and students with special needs is also covered in depth. This course also includes ways to incorporate technology into lessons, and what to do when faced with a lack of technology. Teachers will be armed with effective tools for dealing and communicating with parents, as well as tips for gaining their involvement in their child's learning. The new Common Core Assessments will be covered as well.

EDUC41572: Best Practices for a Successful Middle School Classroom - 5.00 Units

This course is designed for teachers of grades six through eight who are interested in learning the best practices for developing and managing a successful junior high or middle school classroom. This course covers strategies for implementing the new Common Core State Standards, while managing time so that all content is covered. Behavioral issues common in grades six through eight are covered along with overall classroom management techniques. Teachers learn how to maximize the resources they have available to them as well as find innovative ways to gain more resources at little to no cost. This course also provides successful strategies for gaining students' attention and interest, and truly engaging them in lessons. Teachers also learn how to deal with challenges such as students with special needs and those who live in poverty. Mainstreaming English language learners and techniques for differentiating instruction to meet the needs of all students is covered as well.

EDUC41573: Best Practices for a Successful 4th – 6th Grade Classroom - 5.00 Units

This online course is designed for teachers of grades four through six who are interested in learning the best practices for developing and managing a successful classroom. This course covers strategies for implementing the new Common Core State Standards, while managing time so that all content is covered. Behavioral issues are covered along with overall classroom management techniques. This course also provides successful strategies for gaining students' attention and interest, and truly engaging them in lessons. Teachers also learn how to deal with challenges such as students with special needs and those who live in poverty. Techniques for differentiating instruction to meet the needs of all students are covered as well.

EDUC41574: Helping Middle Grade Struggling Writers Achieve Success - 5.00 Units

What's black and blue and red all over? A struggling writer's essay. Writing is hard work, especially for the student who struggles. This online course is designed for teachers in grades 3-6 who want to help their struggling students with key writing skills. Specific strategies will be introduced that improve student writing. Information on the writing process is shared together with specific suggestions for incorporating specific writing strategies such as the six traits, the use of literature in tandem with writing, and writing across the curriculum. By the end of this course, teachers will more fully understand how to best help their struggling writers and will have gained valuable classroom ideas including using writer's workshop, the writing process, technology that promotes writing, and appropriate writing assessment.

EDUC41578: Guiding Emergent and Early Struggling Writers to Success - 5.00 Units

How can you help your struggling writers become more successful with their writing? Children often begin school excited to learn how to write, but for those who struggle, the spark is quickly diminished. If you want to put the spark back into your students' writing, this course is meant for you! This online course is designed for teachers in grades K-2 who want to help their struggling

students with key writing skills. Specific strategies will be introduced that improve student writing. Information on the writing process is shared together with specific suggestions for incorporating specific writing strategies such as the six traits, the use of literature in tandem with writing, nonfiction writing, and writing across the curriculum. By the end of this course, teachers will more fully understand how to best help their struggling writers and will have gained valuable classroom ideas including using writer's workshop, the writing process, technology that promotes writing, and appropriate writing assessment.

EDUC41579: Science and the Common Core - 4.50 Units

The Common Core and Next Generation Science Standards (NGSS) are organized by grade level for kindergarten through grade eight and by grade span for high school. This course will include an overview for K-12 Educators to provide a better understanding of the science standards so they can implement Common Core and Next Generation Science Standards (NGSS) in the classroom. Teachers will explore a variety of ways to incorporate new strategies into their teaching practice in order to develop interactive lessons that meet the Common Core and Next Generation Science Standards (NGSS) standards.

EDUC41580: Best Practices for a Successful High School Classroom - 5.00 Units

Are you a high school teacher interested in improving instructional strategies and classroom management? This online course provides opportunities for teachers to learn strategies for improving differentiation in their instruction by scaffolding for a variety of learning abilities including gifted students, English language learners, and special needs students. Additionally, the course provides solutions for common obstacles at the high school level, including engagement strategies and time management. Throughout the course, teachers will find resources to use in the classroom, some for student management and others for instructional purposes. Teachers will also learn a variety of strategies for using technology to improve student learning and performance.

EDUC41588: Writing, Revision and Mentor Text (K-8) - 2.00 Units

This open institute program is for teachers who have participated in a previous SD Area Writing Project professional development experience or who have experience using mentor text in the classroom. Participants will use personal writing as a catalyst for understanding writing and revision. CA Standards based program.

EDUC41589: Common Core Portfolio - 1.50 Units

The Common Core Portfolio course captures learning & field experiences from each course & connects them together in a cohesive manner. Candidates will collaborate with instructors from each course on an individual basis to determine an appropriate field assignment based on academic and professional interests and to establish what types of material should be included in the Common Core Portfolio. Although field assignments will differ between candidates, everyone must complete and submit a Common Core Portfolio that documents their experiences, including organized reflections and evidence of knowledge, skills and abilities.

EDUC41594: Math Problem-Solving Strategies for Grades 3-6 - 5.00 Units

Why do students seem to have such a difficult time with the mathematical problem-solving process? The recent advent of the Common Core State Standards for Mathematics has shifted the focus from teaching problem solving to teaching via problem solving. This online course is designed for teachers in grades 3-6 who want to help their students become critical and logical mathematical thinkers. Specific strategies are introduced that improve the way students approach math problems. Information on the problem-solving process is shared together with distinct suggestions for incorporating

specific problem-solving strategies such as finding a pattern, working backwards, and logical reasoning. By the end of this course, teachers will more fully understand how to best help students apply their logic and reasoning to real-world mathematical examples and will have gained valuable classroom ideas including using manipulatives, grouping strategies, student-centered teaching, the use of literature in mathematics, as well as how to appropriately assess students in the problem-solving process.

EDUC41596: - 4.00 Units

EDUC41603: Mastering the Text Complexity Challenge in Grades 4-8 - 5.00 Units

Are you struggling to help your students master text complexity for your grade level? This online course is designed for teachers of grades four through eight who are interested in learning the best practices for helping their students master text complexity. This course covers strategies for implementing the Common Core State Standards in reading literature and informational texts. Course participants learn strategies for assessing text complexity, asking and answering text-dependent questions, using textual evidence, teaching important Common Core-related vocabulary building strategies, and helping students learn how to read closely.

EDUC41605: The 21st Century Career Counselor: Preparing Students for College and Career Readiness and Success - 6.00 Units

The potential of all students to achieve academic and career success is a fundamental precept of the 21st century career counselor. The 21st century career counselor is both advocate and leader.

This interactive course will engage participants with both research-proven best practices and practical hands-on curriculum. Participants will learn strategies to actively engage the students they counsel in the planning of college and career goals while also teaching them a learning a methodology on how to achieve those goals.

EDUC41609: Teaching Primary Grade Problem-Solving Skills - 5.00 Units

Do you have students who excel at math computation but get lost when it is time to problem solve with word problems? The recent advent of the Common Core State Standards for Mathematics has shifted the focus from simply teaching problem solving to teaching via problem solving. This online course is designed for teachers in grades K-2 who want to help their students become critical and logical mathematical thinkers. Specific strategies are introduced that improve the way students approach math problems. By the end of this course, teachers will more fully understand how to best help students apply their logic and reasoning to real-world mathematical examples, and will have gained valuable classroom ideas including using manipulatives, grouping strategies, student-centered teaching, quality literature, as well as how to appropriately assess students in the problem-solving process.

EDUC41612: Digital Storytelling: Using Technology to Write Stories - 5.00 Units

Are you interested in creative ways to integrate writing, technology, and content curriculum? Digital storytelling is an excellent way to engage students because it allows them to use their vast technology skills to tell a story. This online course takes you from start to finish for the entire digital storytelling process. Learn how to design digital storytelling projects for all content areas allowing you to incorporate writing throughout the curriculum. Strategies and ideas are shared for story content as well as technology that can be used to produce the stories. Appropriate ways to assess digital stories will also be shared.

EDUC41616: Learner-Centered Math Instruction Using Manipulatives (3-6) - 5.00 Units

Do your students seem to flounder in math because they just can't "see it" in their heads? In mathematics, manipulatives provide the perfect segue from the unfamiliar to the familiar. They help students transform their mathematical reasoning so that problems become less confusing and much more clear. This online course is designed for teachers in grades 3-6 who want to learn how to incorporate manipulatives such as fraction strips, algebra tiles, and geoboards into their everyday teaching in order to guide their students to take ownership of their learning so that they can become critical and logical mathematical thinkers. Information on the Common Core State Standards for Mathematics is shared together with distinct suggestions for how to incorporate specific manipulatives into your math instruction in order to improve the way students approach math problems.

EDUC41621: Conquering the Behavioral Challenges of Special Needs Students (K-2) - 5.00 Units

Are you struggling with behavioral issues for your special education students? This online course is designed for teachers in grades K-2 who want to learn how to incorporate behavior interventions for special education students who have been diagnosed with disorders such as autism spectrum disorders, emotional and behavioral disorders, and attention deficit hyperactivity disorder. Information on behavior management is shared with specific focus on a tiered system of behavioral support, implementing IEPs, functional behavior analysis, and behavior intervention plans. Specific strategies are introduced to help teachers support special education students who struggle behaviorally.

EDUC41671: Navigating College Admission Testing - 6.00 Units

College admissions tests are a rite of passage for students. Most four-year colleges and universities rely on standardized tests to determine how ready applicants are for college-level work. Navigating the college admissions testing requirements can assist in the understanding of options for schools. Colleges have adopted widely varying approaches to the tests, so it is important to recognize and learn what tests are required and how the results are weighed.

EDUC41672: Counseling Students on College Application Essays - 4.50 Units

A student essay in an application to a college or university is an opportunity to show they can write well and support ideas with logical arguments while revealing their best qualities. A student can demonstrate to the admission committee what makes them stand out from other applicants in a favorable light. As a college counselor, you can guide the writing of an exceptional essay by understanding their importance, what makes them remarkable, and how to edit without taking over. This class will cover the role of the essay in the college application, working with students, tools for counselors and guest lectures from experts in the field of college admission essays.

EDUC41673: Starting and Maintaining An Independent Educational Consulting Practice - 6.00 Units

If you are considering working as an independent educational consultant, understanding the complexities and requirements of a consultant are important. In this class you will utilize your background in college counseling and admission process while acquiring knowledge in the requirements of an independent educational consulting practice. Topics covered include foundational issues of starting a consulting practice, practical steps for launching your practice, working with clients, legal issues, professional development, and general business issues relevant for an independent educational consulting practice.

EDUC41675: Math Manipulatives in the Primary Classroom (K-2) - 5.00 Units

This online course is designed for teachers in grades K-2 who want to learn how to incorporate manipulatives such as pattern blocks, rekenreks, and geoboards into their everyday teaching in order to guide their students to

become critical and logical mathematical thinkers. Information on the Common Core State Standards for Mathematics is shared together with distinct suggestions for how to incorporate specific manipulatives into your math instruction in order to improve the way students approach complex mathematical topics. An overview of how to create a math workshop is also included in this course.

EDUC41676: Reading Foundations for Emergent and Early Readers (PreK-2) - 5.00 Units

This online course is designed for teachers in grades PreK-2 who want to build a solid foundation in reading from the very beginning. Information on the building blocks of reading is shared together with specific strategies for incorporating these foundational skills into their everyday practice. Teachers will gain a solid understanding of such concepts as phonics, decoding, sight words, vocabulary, and fluency, just to name a few. By the end of this course, teachers will more fully understand how to best help their K-2 students with learning how to read and will have gained valuable classroom ideas to incorporate these skills into their everyday teaching.

EDUC41685: Math Solutions: Implementing the Sixth Grade Common Core Math Standards - 5.00 Units

This course is designed for teachers who want to understand and implement the Common Core State Standards for Mathematics, including both content and practice standards, at the sixth grade level. By the end of this course, teachers will fully understand the scope of the Common Core Standards and have an in-depth knowledge of the specific standards as well as strategies and activities specific to supporting the standards at the sixth grade level. Teachers will also gain valuable recommended resources that support implementation of the standards in the classroom. Teachers will be prepared to immediately begin effectively teaching the standards and preparing students for assessment.

EDUC41793: Techniques of Educational Therapy II: Affective, Cognitive, and Perceptual Elements - 3.00 Units

The role of the educational therapist involves the remediation of client learning difficulties and the development of appropriate compensatory strategies to use in educational, vocational, or social settings. This course includes techniques for dealing with specific learning problems, such as attention deficit, distractibility, impulsivity, and poor organization as well as auditory, visual, and visual motor processing deficits. Participants learn strategies for dealing with motivational and behavioral difficulties relating to classroom and home. Special conditions, such as head injuries and neurological conditions, are also addressed.

EDUC80001: Designated Subjects Program Orientation - 0.00 Units

The Designated Subjects Program Orientation provides individuals interested in the Designated Subjects Credential Program with a clear understanding of the entire program, including its scope and goals, requirements, standards, the procedures that affect competencies, and field experience(s).

This course is part of the following California Commission on Teacher Credentialing program(s):

Designated Subjects

EDUC80003: Gifted & Talented Education Certification - 0.00 Units

This is a contract course in Gifted and Talented Education.

EDUC80006: GATE Cert. Contract Course Part 1 - 0.00 Units

This is part 1 of a 5 part Gifted and Talented Education Training offered to districts under a contract.

EDUC80007: GATE Cert. Contract Course Part 2 - 0.00 Units

This is part 2 of a 5 part Gifted and Talented Education Training offered to districts under a contract.

EDUC80012: Reading & Literacy Program Orientation - 0.00 Units

The Reading and Literacy Orientation provides candidates in the CCTC - Reading and Literacy Authorization and/or UCSD - Reading Instruction Certificate with an overview of the entire program, including its scope and goals, requirements, standards, the procedures that affect competencies, and field experience(s).

This course is part of the following California Commission on Teacher Credentialing program(s): Reading Instruction

EDUC80013: SAT: UCSD Intensive Test Prep Course - 0.00 Units

The University of California San Diego is offering an exclusive SAT® Prep Course. This innovative and sophisticated SAT® Prep Course is designed for the student whose busy lifestyle demands efficient prep in a condensed amount of time by focusing on the test topics that impact your score the most. Our UC San Diego team will help you score higher on the SAT® with exclusive test-taking tactics specifically designed to increase your score. Learn strategies and techniques based on actual test data geared towards your strengths and weaknesses. By the end of our UC San Diego Intensive SAT® Prep Course you will be able to test confidently. The class features 16 hours of instruction from experienced instructors, three full SAT practice tests with analysis results, small classes and additional tutoring as needed.

EDUC80014: ACT Test Prep - 0.00 Units

The University of California San Diego is offering an exclusive ACT® Prep Course. This innovative and sophisticated ACT® Prep Course is designed for the student whose busy lifestyle demands efficient prep in a condensed amount of time by focusing on the test topics that impact your score the most. Our UC San Diego team will help you score higher on the ACT® with exclusive test-taking tactics specifically designed to increase your score. Learn strategies and techniques based on actual test data geared towards your strengths and weaknesses. By the end of our UC San Diego Intensive ACT® Prep Course you will be able to test confidently.

EDUC80015: Award of Completion in Educational Technology - 0.00 Units

This course is designated for completers of the requirements for the Award of Completion in Educational Technology, in partnership with PDI-Irvine.

EDUC80016: Chemistry CSET Diagnostics - 0.00 Units

The Chemistry CSET Diagnostic course will provide participants with a self-paced exam covering the topics that are often included on the California Subject Examination for Teachers (CSET). Participants will be provided feedback on areas of content knowledge in which they have strengths and descriptive, hyperlinked feedback in areas that they show challenges.

EDUC80017: Physics CSET Diagnostics - 0.00 Units

The Physics CSET Diagnostic course will provide participants with a self-paced exam covering the topics that are often included on the California Subject Examination for Teachers (CSET). Participants will be provided feedback on areas of content knowledge in which they have strengths and descriptive, hyperlinked feedback in areas that they show challenges.

EDUC80018: Specialist in Common Core State Standards Award of Completion - 0.00 Units

This course is designated for completers of the requirements for the Award of Completion in Educational Technology, in partnership with PDI-Irvine.

EDUC80019: Common Core Orientation - 0.00 Units

The Common Core Program Orientation provides individuals interested in the Common Core Professional Certificate Program with a clear understanding of

the entire program, including its scope and goals, requirements, standards, the procedures that affect competencies, and field experience(s).

EDUC80020: Autism Spectrum Disorder (ASD) Orientation - 0.00 Units

The Autism Spectrum Disorder (ASD) Orientation provides individuals interested in the Autism Spectrum Disorder (ASD) Specialized Certificate Program or Added Authorization with a clear understanding of the entire program, including its scope and goals, requirements, standards, the procedures that affect competencies, and field experience(s).

EDUC80021: AoC GATE - 0.00 Units

This course is designated for completers of the requirements for the Award of Completion in Gifted and Talented Education, in partnership with Chula Vista Elementary School District for an in-service contract.

EDUC80023: Pre-Service Orientation for Extension Instructors - 0.00 Units

In this pre-service orientation, new UC San Diego Extension Instructors receive course development guidance and administrative support in advance of teaching their first Extension courses. Course development lessons focus on best practices for creating effective syllabi and designing lesson plans grounded in student-centered principles of active learning. Course development lessons also provide guidance in using UC San Diego Extension's Blackboard (LMS) to enhance instruction. Administrative support lessons provide a sequenced list of policies and procedures to be completed before an instructor can begin teaching. In addition, administrative support lessons provide detailed instructions for using InstructorLink features, including course rosters, grade sheets, textbook requests, and reporting functions for instructors.

EDUC80024: In-Service Training for Extension Instructors - 0.00 Units

This in-service training provides timely instructional support to UC San Diego Extension instructors who are either in their first quarter of teaching for UC San Diego Extension or who want to engage more deeply with their instructional practice while teaching new or familiar courses. The lessons in this course mimic a typical sequence of course delivery, from the first class meeting, to mid-term evaluation, to final assessments. All lessons will be available throughout the enrollment term, allowing individual instructors teaching any type of course schedule to access lesson content according to the scheduling of their courses ranging from the traditional 9-week course meeting 3 hours a week, to a 3-day boot camp starting and ending mid-quarter, to a one-day workshop offered near the end of a quarter. Each lesson will include elements of pedagogy, administrative items and reflection.

EDUC80025: Quarter Kick-Off Meeting for Extension Instructors - 0.00 Units

The Quarter Kick-Off meeting is a welcome to UC San Diego Extension's newest instructors. This meeting introduces members of UC San Diego Extension's instructional community of practice who support instructor success in teaching and learning in a variety of direct and indirect ways. This meeting also provides Extension's newest instructors with an opportunity to reflect on key elements of the courses they have designed for the upcoming quarter at Extension. Instructors will also be introduced to the online In-Service Training for Extension Instructors. Instructors should bring their syllabi, an outline of a lesson/class meeting, and your assessment ideas so that we can review your upcoming class in specific terms.

EDUC80026: Syllabus Tune-Up Workshop for Extension Instructors - 0.00 Units

This 2-hour workshop is designed for UC San Diego Extension instructors who want to review and update their course syllabi. This workshop will allow instructors to reimagine their course syllabi through the lens of creating active, student-centered learning experiences. Each required component of course syllabi will be examined beginning with clearly defined student learning

outcomes (SLOs) which drive assessment of learning (formal and informal) and the weighting of assignments and grading scales; and ending with topical outlines which integrate active learning tasks and interactions into the instructional content. Instructors will bring the syllabus and topical outline for one of the Extension courses they teach.

EDUC80030: - 0.00 Units

EDUC80061: TESOL Practicum - 0.00 Units

The final component of the Professional Certificate in Teaching English to Speakers of Other Languages is a 60 hour practicum that allows candidates to test their newly developed knowledge and skills by working with an experienced ESL professional in a classroom setting. Students will work with the coordinator and receive information detailing possible placement locations, evaluation procedures, forms, and requirements for completing the practicum.

EDUC80318: Clear Credential Site-Based Mentor Clinic - 0.00 Units

This course is designed for individuals that will work with Clear Credential program candidates as a site-based mentor to establish a professional educational community, ensuring structures that support the activities of the program and coordinating collaboration and support for all program candidates. Participants will be provided with guidance, expectations, requirements, standards, candidate competencies, and procedures for observations as a site-based mentor of a candidate in the Clear Credential program.

This course is part of the following California Commission on Teacher Credentialing program(s):
California Clear Credential

EDUC90008: GRE: Graduate Record Examination General Test Prep Sessions - 0.00 Units

This class focuses on identifying the different types of GRE questions and teaching the most effective approaches and strategies for each of the question types. A portion of the fundamental knowledge tested on the GRE will also be covered. The teaching methodology is mostly problem based and encourages participation in class and through email. The instructor also provides students with information about useful GRE resources, enabling students to build on the skills and information learned during the class, to put together an effective study plan, and to continue studying and improving outside of class.

EDUC90009: GMAT: Graduate Management Admissions Test Prep Sessions - 0.00 Units

This class focuses on identifying the different types of GMAT questions and teaching the most effective approaches and strategies for each of the question types. A portion of the fundamental knowledge tested on the GMAT will also be covered. The teaching methodology is mostly problem based and encourages participation in class and through email. The instructor also provides students with information about useful GMAT resources, enabling students to build on the skills and information learned during the class, to put together an effective study plan, and to continue studying and improving outside of class.

EDUC90010: LSAT: Law School Admissions Test Prep Sessions - 0.00 Units

Let our expert instructors give you important insights into the LSAT. The course and accompanying textbook emphasize careful analysis of each exam area and the review of both practice and actual LSAT exams. Question types include - analytical reasoning, logical reasoning, reading comprehension (including comparative reading), and the writing sample. Students will receive: 16 hours of instruction; Experienced instructors; full LSAT practice tests with analysis of results; Small classes and additional tutoring, as needed.

EDUC90011: MCAT: Medical College Admissions Test Prep Sessions - 0.00 Units

Effective preparation for the MCAT is important! This course provides you with expert instruction, introduces test-taking strategies, and offers timed-practice testing. Areas covered are: physics, general chemistry, organic chemistry, biology, and verbal reasoning. Students will receive: 16 hours of instruction; Experienced instructors; full MCAT practice tests with analysis of results; Small classes and additional tutoring, as needed.

EDUC90020: Global Perspectives for International Travelers 1 - 1.50 Units

In Global Perspectives for International Travelers, students will move from awareness of the global community in which we live, to an understanding of its richness and complexities, to an appreciation for the diverse contributions of each society in its fabric, and finally to sophisticated, mature interaction in the world as global leaders. We begin the course by 'taring' our thinking: by weighing our prejudices, stereotypes, and background knowledge. We then set the scale to zero with a renewed appreciation of our own shortcomings and strengths as global citizens. We enter the conversation about how to best understand, care for, and heal the global community.

In order to take this course, students must participate in an international educational program instructed by a certified tour director.

EDUC90021: Global Perspectives for International Travelers 3 - 4.50 Units

In Global Perspectives for International Travelers, students will move from awareness of the global community in which we live, to an understanding of its richness and complexities, to an appreciation for the diverse contributions of each society in its fabric, and finally to sophisticated, mature interaction in the world as global leaders. We begin the course by 'taring' our thinking: by weighing our prejudices, stereotypes, and background knowledge. We then set the scale to zero with a renewed appreciation of our own shortcomings and strengths as global citizens. We enter the conversation about how to best understand, care for, and heal the global community.

In order to take this course, students must participate in an international educational program instructed by a certified tour director.

EDUC90027: - 4.50 Units

EDUC90028: - 0.00 Units

EDUC90029: - 0.00 Units

EE40003: RF Circuit Design - 3.00 Units

RF technology is gaining more importance as we increase our engagement with wireless devices in our daily life. RF transceivers are one of the most important and essential part of mobile phones, WiFi routers, Bluetooth devices, radios and televisions.

Alongside with these, the wireless communication infrastructure is continuing expanding. These developments and its expansion require RF circuit design experts in the wireless communication technology. The RF Circuit design course teaches RF circuit design techniques to address this need. In this class students will learn how to design various blocks of the wireless transceivers.

Course Highlights:

- RF Introduction and Background
- Resonators
- Transmission Lines
- RF Parameters
- RF Passive and Active Devices
- Impedance Matching
- S-Parameters and Smith Chart
- RF Amplifier Design

Coupling Structures, Couplers, Dividers
 RF Filter Design
 Mixers
 Oscillators

Course Benefits:

By the end of this course, the student would be able to

Differentiate the Circuit Component Behavior at RF frequencies
 Identify the Design Constraints at RF frequencies
 Know RF Design Tools
 Be Able to Design RF Amplifiers, Mixers, Filters, Dividers, Combiners, Oscillators and other sub blocks

Course typically offered: Online in Spring

Software: Free online simulators are used in this class. Student may use the Advanced Design System (ADS) simulator from Keysight should you already have access to it.

Prerequisites: RF Principles and Applications (EE-40137) or familiarity with the electronics circuit analysis.

Next Steps: Upon completion of this course, consider taking RFIC Design, RF System Design for Wireless Communications, or courses in the RF Engineering Certificate

Contact: For more information about this program contact infotech@ucsd.edu

EE40034: Fundamentals of Digital Communication for Wireless Systems - 3.00 Units

The telecommunications sector is one that is constantly evolving. Companies such as Qualcomm, Broadcom, Intel, ViaSat and many others continue to innovate and develop new products. There is a demand for talented and qualified engineering professionals.

This course will cover the fundamental principles of telecommunication systems. You will be introduced to the basic design principles and analysis of modern wireless communication systems. The course will also review the techniques and technologies that are applicable to various systems.

Course Highlights:

Review of signals and systems
 Formatting signals
 Baseband and pass-band modulation techniques
 Receiver design and channel equalization
 Sampling theorem
 Introduction to wireless communications
 Evolution of wireless communications
 Cellular concept & system design fundamentals
 Mobile radio propagation & large scale path loss
 Mobile radio propagation & small scale fading and multipath
 Modulation techniques
 Diversity techniques
 Multiple access techniques for wireless communications
 Wireless standards

Course Benefits:

Understand the components of a telecom system
 Capability to choose an appropriate modulation system for a given application
 Perform comparative analysis of the noise performance of different modulation systems
 Design appropriate receiver structures to achieve given design goals

Comprehend a variety of techniques implemented in digital telecom systems

Gain the foundational knowledge needed to enter into additional training courses, such as 3G and OFDM

EE40060: Systems Hardware/Software Integration - 3.00 Units

The goal of this course is to learn the application of systems engineering processes to systems incorporating software and hardware. Through a class project, the development of requirements from a problem statement and the allocation of these requirements to hardware and software along with the development of both decomposed and derived requirements will be experienced.

Course Highlights

Familiarity with various modeling techniques
 Requirements modifications and how they affect the development process
 Implement trade offs from requirements, Quality Functional Description (House of Quality)
 Selecting appropriate hardware/software solutions
 Practical case studies demonstrating integration issues
 Importance of utilizing practical process templates and design checklists
 CMM-I for measuring the maturity of your activity
 Development of detail requirements and metrics

Course Benefits:

Ability to rapidly recognize impact of requirement changes
 Hardware and Software metrics, including testing specifications
 Hardware and Software life cycles
 Impact of security and protection
 Software process improvement
 Software planning and estimating
 Software and Hardware reuse

EE40098: RF System Design for Wireless Communications - 3.00 Units

The RF System Design for Wireless Communications course teaches you how to design the RF system for the wireless transceivers.

The course is also beneficial to design/test engineers, engineering/marketing manager and directors who would like to understand and learn RF system design principles, RF system impairments, RF system design limitations, and RF System design tools and techniques.

Course Highlights:

Introduction to RF System and RF System Review
 RF System Architectures
 RF Receivers and Transmitters
 RF System Blocks
 Block Specifications for a System
 System Characteristics and System Impairments
 Noise and Noise Figure
 Nonlinearity and Intermodulation Products
 Intercept Points
 Phase Noise and its Impacts
 IQ Amplitude and Phase Imbalances
 Other Impairments
 System Calculations
 Blocks Specifications Tradeoffs
 Statistical Analysis of a System

Frequency Planning
 Factors Affecting Systems
 CAD Packages

Course Benefits:

By the end of this course, the student would be able to:

- Differentiate the RF systems and their requirements
- Define main system blocks and their functions
- Identify the RF System impairments
- Be able to calculate and determine the main RF system characteristic

Course typically offered: Online in Winter and Summer

Prerequisites: RF Principles and Applications (EE-40137) or familiarity with the electronics circuit analysis.

Software: Free online simulators are used in this class. Student may use the Advanced Design System (ADS) simulator from Keysight should you already have access to it. Students will also need to have access to Microsoft Excel.

Next Steps: Upon completion of this course, consider taking RFIC Design, RF Circuit Design, or courses in the RF Engineering Certificate

Contact: For more information about this program contact infotech@ucsd.edu

EE40128: Software Defined Radios - 3.00 Units

Gain an introduction to Software Defined Radios (SDR) and their applications. The course will provide an overview of SDRs and use current developments and implementations to discuss the benefits and the unique challenges of SDR development and deployment. The software aspects of SDRs will be emphasized with a focus on military applications and developments.

EE40129: Antenna Theory and Design - 3.00 Units

Encompassing the principles of electromagnetic radiators, this course will review the general properties of the radiation fields of given sources and design them as required in order to achieve a given radiation field pattern. Topics covered include: wave equation and its solution; antenna fundamentals; various antennas (i.e. wire, loop, antenna, arrays, Yagi-Uda, horn, parabolic, patch and broadband antennas); application of antennas in communication links and radar; and Method of Moments (MOM).

Course Highlights:

- Fundamental Parameters
- Linear antennas
- Array antennas
- Integral Equations
- Broadband antennas
- Antenna Modelling
- Antenna Measurements

Prerequisites:

This is an advanced course in Electrical Engineering. Students are expected to have knowledge of Electromagnetics Theory, Vector Algebra, and Calculus. This class uses antenna software such as MATLAB and EZNEC for modelling and simulations.

EE40137: RF Principles and Applications - 3.00 Units

Learn the basics of RF devices and building blocks used in the design of RF communication systems. The course includes an engineering overview of RF communication link components and subsystems, illustrated by examples of mobile and satellite applications. Topics include: Antennas, transmission lines, scattering parameters, passive components, low noise and high power amplifiers, oscillators, modulation and demodulation techniques and circuits.

Examples of receiver/transmitter characteristics for wireless and microwave links will also be reviewed.

EE40148: RFID Design and Applications - 3.00 Units

Radio Frequency Identification has evolved greatly over the past decade in design and applications. It currently has entered all aspects of supply chain, monitoring, security and medical devices. You will study the design and operation of RFID circuits and systems, their types and various implications in the industry and life. Sensors will also be discussed.

EE40149: Microwave Test & Measurement - 3.00 Units

The course contains an introduction to RF/Microwave parameters, measurement principles and test techniques used in the industry. It provides detailed lectures on various RF/Microwave test and measurement methods and equipment specifications. Some software based tools used in engineering simulations, design and evaluation are discussed. Network and Spectrum analyses are demonstrated.

EE40153: Microwave Transmission Engineering - 3.00 Units

Receive an in-depth overview of microwave transmission network design, planning and implementation. Topics include: microwave link engineering, network performance and reliability issues, link protection and diversity, comparison of different design models, project management and logistics issues, deployment challenges, and regulatory and ethical issues. Designed for engineers, project managers and other personnel involved in planning and/or decision making process regarding real-life microwave network build-out.

EE40163: Introduction to OFDM/OFDMA and 4G/5G Systems - 3.00 Units

This course covers the foundational principles of OFDM/OFDMA and the underlying technologies of broadband wireless systems. It is intended for practicing engineers, researchers, and students. Wireless access has evolved rapidly in the last two decades and has become the dominant medium for network connectivity in fixed and mobile applications. It started with cellular (1990), followed by Wi-Fi (2000), and these systems are evolving into an ecosystem involving 4G/5G and Wi-Fi (802.11n/ac/ax). The first part of the course focuses on the principles of Orthogonal Frequency Division Multiplexing (OFDM), which forms the basis of 4G/5G/Wi-Fi systems. In addition to its benefits, key OFDM metrics are discussed. OFDM enhancements using multi-antenna MIMO and multi-user OFDMA are then described. An overview of LTE and Wi-Fi is provided next, together with a comparative assessment of the strengths and weaknesses of these systems. Additionally, the physical layers, MAC layers, and network architectures are studied and analyzed. The course concludes with some examples of real-world wireless deployments in indoor and outdoor settings. Upon completion of this course, the student will have acquired fundamental knowledge of OFDM and 4G/5G/Wi-Fi systems, including practical considerations in OFDM implementation and enhancement, and tools to apply OFDM in next-generation wireless networks

Course Highlights:

- Overview of 4G/5G and Wi-Fi systems evolution; radio spectrum and spectral efficiency
- Wireless signal propagation, impairments, and interference; mobility and hand off
- Channel assignment and aggregation: multiple access and duplexing
- Channel coding and digital modulation; link adaptation; channel estimation
- Fast Fourier Transform (FFT) and inverse FFT (IFFT); OFDM principles and analysis
- OFDM metrics: FFT size, power spectral density, cyclic prefix, peak-to-average power ratio

OFDM transceiver design, sub carrier synchronization, and error performance

OFDM performance enhancements using multi-antenna MIMO and multi-user OFDMA

LTE and Wi-Fi technologies, architectures, and standards
Wireless applications and next-generation systems

Course Benefits:

Understand the components of a broadband wireless system
Learn and design OFDM transceiver structures
Enhance OFDM performance using MIMO and OFDMA techniques
Gain fundamental knowledge of OFDM-based standards such as 4G LTE, 5G, and Wi-Fi

EE40171: Electrical Energy Storage - 3.00 Units

Methods in energy storage have continued to evolve to adapt to changing energy requirements and advances in technology. Designed for students who are interested in electrical energy storage, in conjunction with renewable energy such as solar photovoltaic (PV), wind and biomass. Learn the fundamentals of electrical energy technology, evaluation methods and how to prepare for future industry trends. Explore techniques in cost analysis, which is particularly important to the adoption of new storage technology and its growth in the next 10~30 years.

EE40172: Power Electronics - 3.00 Units

This course will cover the design and control of dc-dc converters, PWM rectifiers, single-phase and three-phase inverters, power management, and power electronics applications in renewable energy systems, motion control, and lighting will be presented. The intent of this course is to provide an adequate education for senior and graduate students on high-frequency power converters. Synthesis and analysis techniques will be developed through the study. Applications and advances of the high-frequency switching power converter in renewable energy and electric vehicles will be presented.

EE40173: Power System Analysis and Control - 3.00 Units

The objective of this course is to present methods that are commonly practiced in power system analysis and control, to give the student the basic understanding of the theories and methodologies involved. The approach is designed to develop students' thinking process, enabling them to reach sound understanding of a broad range of topics related to power system, particularly with the aid of numerical computing software, and motivating their interest in the electrical power industry. Topics covered include: using system modeling for large-scale power networks; network admittance and impedance matrix formation; power flow analysis; special power flow studies; symmetrical component modeling; balanced and unbalanced fault analysis; and transient stability studies.

Course Highlights:

Steady-State Analysis: Power Flow Methods – formulation, solution methods, computer analysis of power flow, power transfer capability, transmission losses, and voltage stability, symmetrical components and its application in fault analysis

Automatic Generation Control – static performance of speed governor modeled, conceptualize control area and multi-control-area systems

Examine various components of Area Control Error (ACE)

Power System Economic Dispatch – characteristics, operating in a deregulated environment, economic distribution of load within units of a plant and between plants

Course Benefits:

Learn methods commonly practiced in power systems analysis and control

Gain understanding of a broad range of topics related to power systems particularly with the aid of numerical computing software

Learn how power flow analysis is formulated and solved

Understand symmetrical component modeling and its application in balanced and unbalanced fault analysis

Learn transient stability concept and issues

EE40174: Fundamentals of Electric Power - 3.00 Units

This course is designed for those with a background in engineering, math or physics. Students will be introduced to the physics and math required to create a mathematical model of the electric power system. These models are used to study the behavior of the power system under numerous conditions. Power systems are used world-wide to move power from where power is created to the location where power is used. Students interested in understanding this phenomena will benefit from understanding the models which are used to study power system behavior.

Course Highlights

Single phase and three phase A.C. system analysis

High voltage transmission line modeling

Generator and transformer modeling for system studies

Creation of a complex system model that includes generators, transformers, transmission lines and loads

Creation of a matrix model to represent the system

Course Benefits:

Introduce students to the fundamental concepts of power systems engineering

Gain an understanding of how electric power is created and transmitted to urban centers where it is distributed to consumers

Learn how to create a mathematical model of a power system

Learn how to understand power system behavior using mathematical models

EE40176: - 3.00 Units

EE40177: - 3.00 Units

EE40178: - 3.00 Units

EE40179: - 3.00 Units

EE40180: - 3.00 Units

EE40181: - 3.00 Units

EE80000: - 0.00 Units

EE80001: - 0.00 Units

EE90000: Introduction to Electrical Engineering: Digital Signal Processing - 6.00 Units

The fundamental physics underlying ocean waves are the same ideas that help build cell phones. The music you listen to in your car is the same form and structure as the light from galaxies millions of light years away. But how can

we interpret these physical structures with the computing technology of today? In Introduction to Electrical Engineering: Digital Signal Processing, we will be exploring physical waves and their digital signal counterparts in a multidisciplinary setting. Across 6 units, education in both creative and engineering elements will help students understand how and why audio arts, like sound design and music, work the way they do and how they can be applied to ever growing technology of today. The combination of group and individual assignments is designed to teach students the value of collaboration as well as individual thinking.

ENG40021: Accelerated Lean Six Sigma Black Belt - 5.50 Units

This course is intended for those who have successfully completed training to receive a Lean Six Sigma (LSS) Green Belt. This intensive seven-session course will develop understanding and enable application of proven approaches to maximizing efficiency and effectiveness through understanding process requirements, identifying constraints, and creating flow and stability. Students will be provided with the established LSS body of knowledge, the experience to implement it in the workplace through a group project, and the credentials to be a LSS leader within their organizations. Classroom instruction and student projects are organized to allow structured implementation of LSS, resulting in annual projected ROI of \$100K per project.

Course Goals & Learning Objectives

- Learn the combined LSS tools at a Black Belt level
 - Acquire the ability to select projects, develop teams and deliver results
 - Develop skills utilizing LSS tools and implement for quantifiable results
 - Apply the concepts to a project impacting the bottom line
 - Prepare the practitioner to deploy LSS to other individuals in their organizations
 - Develop the ability to train other LSS White, Yellow, and Green Belts
- During the application process, a prospective student should consider possible projects from his or her current company or employer; the project will allow the student to apply learned tools and show quantifiable results. The instructor will mentor students from the start until completion of a successful project. In order to apply for the program please contact the Program Manager, Angela Miller at a9cook@ucsd.edu Course materials will be provided to students, including computer software (SPC XL and DOE PRO) which aids in mathematical computations.

ENG40022: - 3.00 Units

ENG90006: Introduction to Fluid Mechanics in Mechanical Engineering: From a Straw to an Airplane - 6.00 Units

This course introduces students to the world of engineering, in particular aspects involving fluid mechanics. Water covers around 70% of the Earth's surface, and we are surrounded by air every day. Good understanding of their properties allows engineers to manipulate these fluids to improve our lives, from drinking water through a straw to traveling up high in the air. Students will learn the fundamentals of fluid mechanics behind different engineering applications, and be able to explain interesting fluid phenomena in daily lives. They will apply creativity, scientific knowledge and hands-on experiments to solve different engineering problems. Students will also be exposed to state-of-the-art research in fluid mechanics to broaden their outlook and inspire motivated students to pursue a research career.

ENG90013: Introduction to Structural Engineering: From Pyramids to Modern Engineering Marvels - 6.00 Units

Structural Engineering is one of the oldest sciences dating back to 2700 B.C.E when Pyramids were built. This is a field of engineering dealing with the analysis and design of structures that support or resist loads. This course aims to deliver basic physics and tools that serve as fundamentals for all structural engineers. Students will begin to understand the cause and effect relationship. This includes a basic knowledge of engineering mechanics, strength of

materials and fluid mechanics. Various drafting and design software will be introduced to students. Students will tour UCSD structural engineering department research facilities, which will give them a broader view of advanced work in structural engineering. UCSD is the only University in the United States that offers a dedicated course for structural engineering with state-of-the-art facilities for research.

By exploring and linking concepts from basic Newtonian Physics to Structures, students will gain a deeper appreciation for the behavior of structure- The ability to visualize, imagine, understand and anticipate – they will see that common sense has all the answers.

ENG90014: - 3.00 Units

ENVR40000: Conservation Psychology - 3.00 Units

Programs to conserve water and energy, reduce our auto-dependency, recycle, and adapt to climate change have one thing in common: to be effective, they must consider the human behavioral dimension. In this course, participants will learn how to apply psychological principles, theories and methods to understand and solve environmental problems. Gain an overview of contemporary environmental issues, with a focus on the link with human behavior. Examine psychological foundations for conservation, including commons dilemma, connectedness with nature, rational choice, values, and incentives. Explore solutions and examine successful and unsuccessful interventions designed to change human behavior. Topics covered include water conservation, recycling and waste management, transportation, and energy conservation.

Learning Objectives:

- Gain an understanding of the field of Conservation Psychology
- Describe the behavioral causes of environmental problems
- Specify the psychological factors that lead people to engage in conservation behavior
- Identify the effective strategies used to promote conservation behavior

AICP Credit: AICP members can earn Certification Maintenance (CM) credits for this activity. For a list of additional UC San Diego Extension AICP CM Events go to American Planning Association.
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ENVR40002: Air Quality Compliance - 3.00 Units

This course examines how air pollution affects the environment. Students will learn about the regulation of air quality at the federal, state, and local levels. Topics include the federal and state Clean Air Acts, EPA's NextGen Compliance, agency compliance inspections and internal self-audits, e-reporting, regulation of greenhouse gases, AB2588 (toxic hot spots), and the roles of various agencies in regulating air quality. Participants will also learn about the permitting process, how air pollution laws and regulations are enforced, air pollution control and reduction measures, improvements in air quality in San Diego, and what is yet to be done. Case studies will be featured.

ENVR40003: Water Quality Monitoring - 2.00 Units

Water quality monitoring is an important tool for assessing and managing water resources. This multidisciplinary course examines the diverse and interrelated regulatory framework for water quality management in the United States, as well as scientific and analytical aspects of managing water quality. Students will receive important tools and resources to assist them with completing a water quality monitoring report.

ENVR40004: Getting to ZNE with Natural Ventilation: A Course for Architects - 2.00 Units

Learn how to maximize natural ventilation in the design process to reduce building energy use and meet 2030 energy goals. This hands-on, practical course is designed to train architects how to quickly simulate airflow early in the design process in order to evaluate design decisions and achieve a project's energy and sustainability goals. Topics covered include the basics of natural ventilation, climate analysis, air flow analysis, thermal mass, comfort, and considerations related to acoustic noise and outdoor air quality. Participants will also learn how to educate clients about expected comfort levels, and will be able to use the knowledge gained in this course to speak more fluidly with engineers about energy models and building comfort and performance. Participants may work on one of their own projects during this course to test design ideas.

ENVR40005: Community Engagement - 3.00 Units

This course provides practitioners with the strategies, knowledge, and skills needed to develop a communications strategy that activates behavior change at the community level. Participants will explore the range of engagement tools available to create behavior change, from quick communications to in-depth learning experiences. Topics include effective messaging, the use of social media and print media, mobile apps, the power of citizen science, and how to select the right mix of engagement tools. This course also covers effective learning methods to inspire behavior change in informal educational settings and strategies relevant to community-based social marketing campaigns and community-based conservation education programs. Students will develop the knowledge needed to design and evaluate a strategy that can reach multiple audiences with multiple engagement tools.

Learning Objectives:

- Learn the range of engagement tools to activate behavior change
- Know how to design an engagement strategy to make conservation salient to the public
- Understand strategies relevant to community based social marketing and conservation education programs
- Understand the challenges and opportunities of general informal education and project-specific efforts
- Learn how to evaluate the success of an engagement activity

ENVR40006: Behavior Change Strategies for Sustainability - 3.00 Units

This course focuses on the strategies and tools needed to change individual behavior and promote environmental protection. Students will learn how to assess needs, identify available resources, and design and evaluate a program for a behavior change intervention. Topics include identifying problems stemming from conventional behaviors; identifying market obstacles to behavior change; evaluating conventional practices (behavioral mapping); developing interventions to promote desired behaviors (best practices); designing a pilot program; and defining metrics for evaluating performance. Students will explore common strategies to promote behavior change, including community-based social marketing and other conceptual frameworks. Upon completion of this course, students will have the basic knowledge to design or redesign a behavioral change program, and to assess performance following implementation.

Learning Objectives:

- Identify and prioritize target behaviors related to a specific environmental problem
- Describe and segment a target audience
- Appropriately apply a range of behavior change tools and strategies
- Understand methods for pilot testing strategies
- Identify appropriate metrics for evaluating performance
- Develop a behavior change program implementation plan

ENVR40007: Behavior Change Capstone Project - 3.00 Units

Students will work on an applied behavior change project or program under the supervision of one or more instructors. Potential projects include: conceiving and designing a plan for a real-world behavior change intervention; developing a plan to evaluate the success or impact of an intervention; or auditing a previous process and recommending modifications using the cumulative knowledge and skills developed during this certificate. The Capstone course aims to produce a resume-ready product that can be showcased and shared with an employer, organization, or professional association.

Learning Objectives:

- Be able to design a realistic and manageable pilot behavior change
- Be able to design and evaluation plan to capture the outcomes of the pilot project
- Understand how to formatively evaluate a project in order to make revisions
- Be able to design and gather feedback and evaluation data from project participants
- Know how to design data collection protocols (surveys, interviews, etc) to capture project impact
- Know how to analyze the success and process of the project to generate recommendations for improvement

ENVR40008: Writing Effective CEQA Documents - 2.00 Units

Effective writing is one of the most highly cited and desirable skills in CEQA practice. Learn how to prepare technically compliant, legally defensible, and high quality environmental documents including Environmental Impact Reports (EIRs), Environmental Assessments (EAs), Initial Studies, Mitigated Negative Declarations (MNDs), and required CEQA findings. Strengthen writing skills needed for professional practice, including skills to enhance document effectiveness, clarity, and accuracy. This advanced course is designed to give students the practical training needed to produce high quality, legally defensible environmental documents.

Learning Objectives

- Understand application of different types of environmental documents and legal risk
- Write a defensible Project Description
- Establish appropriate Environmental Baselines
- Learn how to respond to comments on Draft EIRs
- Understand how case law continuously shapes CEQA practice

AICP Credit: AICP members can earn Certification Maintenance (CM) credits for this activity. For a list of additional AICP CM Events at UC San Diego Extension go to American Planning Association.

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ENVR40009: Advanced CEQA - 3.00 Units

CEQA professionals must have a strong understanding of CEQA, as well as the ability to critically assess information during the environmental review process. Students will work through a project, building upon the understanding and knowledge of the CEQA process acquired in the CEQA I course and will leave this course with a solid understanding of CEQA so that they are prepared to move to more advanced work.

Key topics include:

- Drafting defensible project descriptions and project objectives
- Identifying and drafting direct, indirect, and cumulative impact analyses, including the identification of the cumulative study area
- Establishing environmental baselines
- Determining applicable and relevant thresholds
- Identifying and drafting defensible mitigation measures
- Mitigation monitoring and adaptive management

- Identifying project alternatives
- Public review, comment, and participation strategies
- Preparing responses to comments in the final EIR process
- Preparing the administrative record

Practical work is emphasized. Students will evaluate an EIR and prepare public review letter commenting on the adequacy of an environmental document.

AICP Credit: AICP members can earn Certification Maintenance (CM) credits for this activity. For a list of additional AICP CM Events at UC San Diego Extension go to American Planning Association.

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Other Credits : UCSD certifies this activity is approved by the State Bar of California for 20 hours of MCLE credit.

ENVR40010: CEQA in Practice - 2.00 Units

This advanced course focuses on the practical application of CEQA requirements to a real-world scenario. In this simulation style course, students will explore a project from multiple stakeholder perspectives and will engage in hands-on activities designed to prepare them for entrance to professional practice. Students will sharpen their critical thinking and problem solving abilities as they relate to the environmental assessment analysis and strategy and will gain practical knowledge of the various tools used to evaluate environmental impacts such as the basics of air quality and traffic modeling. Course Goals/ Learning Objectives

- Learn about the various stakeholders and how they are involved and affected by the CEQA process

- Understand which local, state or federal agencies have jurisdiction over a project and when to engage them

- Gain the foundational skills needed to run projects through the CEQA process.

- Learn strategies for navigating multiple environmental review processes.

- Learn about the various technical resources that should be used when conducting analyses

- Understand when a project needs Amendment, Subsequent or Supplemental documents

AICP Credit: AICP members can earn Certification Maintenance (CM) credits for this activity. For a list of additional AICP CM Events at UC San Diego Extension go to American Planning Association.

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ENVR40011: CEQA Project Management - 3.00 Units

Many consulting and planning firms require employees who can oversee projects from start to finish and apply tools to minimize time and expense related to the environmental review process. Learn how to manage CEQA projects and multi-disciplinary teams, and develop plans and scopes of work, budgets, and schedules for complex environmental projects. Key course topics include:

- Preparing scopes of work and project plans
- Managing multi-disciplinary teams and multi-agency efforts
- Representing projects with communities, commissions, councils, and other stakeholders
- Business development and marketing
- Project scheduling and financial management
- Managing consultants and technical studies
- Managing multiple projects

This course focuses on real-world CEQA project management and best professional practices for project management, leadership, and delivery.

AICP Credit: AICP members can earn Certification Maintenance (CM) credits for this activity. For a list of additional AICP CM Events at UC San Diego Extension go to American Planning Association.

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ENVR40012: Behavioral Economics - 2.00 Units

ENVR40013: Economics and Life Cycle Cost Analysis - 3.00 Units

Sustainability professionals are frequently charged with defining the economic value of implementing environmental and social sustainability practices. In this course, students will be presented with key economic principles and identify long-term costs and benefits of sustainable practices through a variety of financial management tools, including the time value of money and Lifecycle Cost analysis. Students will explore value created for organizations through various social and environmental sustainable practices and will be able to calculate the financial benefit attributable to strategic sustainability initiatives.

Learning Objectives:

- Understand the fundamental concepts in economics and how they impact corporate decision making and environmental performance

- Understand and be able to calculate financial performance measures, such as the time value of money, Life Cycle Cost Analysis and Triple Bottom Line

- Gain a working understanding of the steps and elements in a Life Cycle Cost Analysis and its use in showing the value of sustainable practices

- Understand the financial benefits of more sustainable business practices

ENVR40014: Strategic Planning and Innovation - 3.00 Units

Strategic planning for sustainability is one of the most sought after hard skills by today's employers. In this course, students will gain the tools needed to identify and prioritize the issues and opportunities most relevant to their business or organization, set appropriate goals, and develop and integrate new strategies. Topics include risk assessment, materiality, stakeholder engagement, benchmarking, and metrics used to measure the success of sustainable initiatives. Students also explore strategies for working cross-functionally within an organization and with external stakeholders and partners and will develop a sustainability initiative for a specific business or organization.

Learning Objectives:

- Gain a working knowledge of the strategic planning process

- Be able to complete a materiality assessment for a company

- Know how to set goals and objectives that deliver impact for sustainable organizations

- Learn to identify appropriate metrics

- Understand the role of stakeholder engagement and how to build and manage internal and external stakeholder teams to own sustainability initiatives and meet sustainability targets

- Develop a sustainability initiative for a specific industry or business

ENVR40015: Measuring Sustainable Impact - 3.00 Units

Learn how to measure the impact of sustainability programs and create a plan for making changes for your business or organization. Students will learn how to set environmental baselines for energy, water, and waste to build a picture of an organization's impact and set organizational goals. Measuring sustainability impacts is important when gaining organization-wide buy-in and understanding the stakeholders involved is an essential process in sustainability planning. During the course, students will learn about large

organizations that have developed metrics, advanced methods to measure sustainability, strategically implemented sustainability plans, and the reporting processes involved. Get comfortable working with sustainability data and explore prevailing platforms and tools (standards, guidelines, analytic tools) and metrics for measuring sustainability performance. Assignments will give students the opportunity to use analytical skills critical to the sustainability profession.

Learning Objectives:

Gain and understanding of the role of internal and external stakeholder engagement in sustainability, and its correlation to sustainability data collection and reporting.

- Learn the tools that facilitate tracking sustainability performance
- Understand how metrics are tracked
- Learn how to leverage technology to facilitate tracking

ENVR40016: Sustainability Leadership - 3.00 Units

Sustainability professionals are frequently tasked with leading change within their organizations. Explore strategies and competencies needed to lead effective change towards sustainability, explore concepts of organizational behavior and culture, and skills that can be applied to a variety of organizational contexts. Practice soft skills such as consensus building, facilitation, communication, and influence within the context of sustainability. Learn project management skills needed to implement sustainability programs and initiatives from beginning to end. Students work through a variety of case studies from sustainable purchasing to sustainable products development, and will develop a leadership project of their choice.

ENVR40017: - 3.00 Units

ENVR40018: - 3.00 Units

ENVR80000: IGP QISP In-Person Training - 0.00 Units

This one-day classroom training course is for professionals seeking to complete their QISP certification. Participants will work on site scenarios, case studies, and quiz questions in a team environment and will sharpen the skills needed to pass the final QISP examination. The course includes a brief review of IGP requirements and QISP responsibilities before diving into technical instruction on receiving waters, ERA process and examples, monitoring and sampling, SMARTS, annual inspections, questions and issues identified during the state's online training, and questions that can be expected on the final QISP examination. This course is designed for students that have already taken the 2-day online IGP QISP training and passed the online mid-term exam, and for professional engineers (PE's) who wish to sharpen their competencies before assuming QISP responsibilities at Level 1 and Level 2 facilities.

Notes: This course will be team taught by Trainers of Record (ToR's) including Kelly Doyle, Matt Lentz, and Marvin Sachse.

Additionally, two RWQCB staff will be present at each workshop.

Photo identification is required and attendance will be checked at the beginning and end of each session. Course participants are expected to be familiar with the IGP and to bring their own copy of the IGP to the training session. It is highly recommended that you bring questions generated during your 2-day online training and exam to be discussed in this one-day in-person training.

ENVR80001: Changing Behavior for a Sustainable Future - 0.00 Units

Linking Behavioral Science to the Protection of Ocean and Coastal Resources and Ecosystems

Behavior change is an important part of achieving a sustainable future. However, research tells us that knowledge and awareness are generally not sufficient to inspire behavior change and other approaches are needed. This one-day short course provides a comprehensive overview for how

practitioners can incorporate the science of behavior change into the design of projects and programs to protect ocean and coastal resources and ecosystems. Students will receive instruction in conservation psychology and behavior change strategies and tools that can strengthen community programs, including community-based social marketing. Topics covered include behavior selection and prioritization, tools of behavior change, and choosing the right tool for the job. Participants will work on group exercises to understand how to apply behavior change strategies to actual programs and projects to address a wide variety of issues, from water quality to fish and wildlife habitat protection.

Who Should Attend:

- Non-profit organizations
- Foundations
- Natural Resource Managers
- Conservation Biologists
- Public officials
- Psychologists
- Students

ENVR80002: Emergency Preparedness for Healthcare Facilities - 0.00 Units

This Full Scale Exercise Design Training is designed for healthcare providers and suppliers impacted by the Centers for Medicare and Medicaid (CMS) Emergency Preparedness (EP) Requirements, such as hospitals, long term care, or primary care. All of the 17 CMS providers must comply with the EP Requirements by November 15, 2017.

Location: Meeting Rooms on Fifteen - The Village at Torrey Pines

2202 Scholars Drive North, Building 2, 15th floor - UC San Diego Main Campus

Date: Septemeber 26, 2017

Time: 8:00 am ‐ 5:00 pm

Contact Information: Fiona O'Donnell-Lawson, Fodonnell@ucsd.edu, 858-534-8139

Providers must be able to:

- Identify Hazard Risks and Vulnerabilities
- Develop Emergency Operations Plans (EOP)
- Develop internal and external Communication Plans
- Train staff annually on EOP elements
- Test plans with full scale, functional and tabletop drills & exercises

Please join your healthcare colleagues and emergency management experts for an in-person training and receive support and strategies on how to comply the CMS Emergency Preparedness Requirements.

During the workshop the audience will:

- Learn how each of the CMS 17 providers and suppliers must work towards CMS EP compliance
- Lean new tools and strategies to meet and maintain CMS EP Requirements
- Learn how to get into compliance with the CMS requirements as efficiently as possible
- Learn how to design CMS Compliant tabletop, functional, and full scale exercises

Speakers:

Patrick Buttron, EMS Coordinator, EMT, TLO, Public Health Preparedness and Response (PHPR) Branch, County of San Diego Health & Human Services Agency

Kristina Freas, RN, MHS, CEM is a former Director of Emergency Management for Dignity Health and CEO of DK Freas, LLC.

Austin Howe, MHS, CEM, Director of Business Continuity, Emergency Management and Security at Planned Parenthood of the Pacific Southwest

Nora O'Brien, MPH, CEM, Chief Executive Officer for Connect Consulting Services, Inc.

Lunch and course materials are included.

ENVR80003: Navigating SB 743 Implementation - 0.00 Units

The California Governor's Office of Planning and Research (OPR) has selected vehicle-miles-of-travel (VMT) as the preferred metric to comply with Senate Bill 743 (SB 743). Lead agencies will need to reconsider their CEQA transportation impact study procedures in light of new guidance from the State on how to conduct VMT impact analysis. Potential changes in current practice could extend to regional transportation plans and city/county general plans. This workshop will provide an overview of the SB 743 changes and explain the methodology and thresholds identified in the Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA and recent release of new SB 743 guidance from Caltrans entitled, Local Development & Intergovernmental Review Program Interim Guidance, November 9, 2016. The workshop will cover land use plans and projects, transportation projects, and regional transportation plans. Participants will learn about the variety of metrics, data, tools, and models that are available for VMT analysis and how tool and model selection in particular can have a substantial effect on analysis outcomes including legal defensibility.

Learning Objectives:

- SB 743 implementation timing
- VMT analysis methodology options
- Key choices related to VMT impact significance thresholds and mitigation feasibility
- Need for substantial evidence in developing local procedures

Instructors:

Ron Milam, Fehr & Peers

Ron currently works at Fehr & Peers and leads the company's research and development. Ron has an extensive background in travel demand model development and applications, transportation impact fee programs, traffic operations analysis, micro-simulation modeling, and transportation impact studies involving NEPA and CEQA, which are the main workshop topics. He has also published papers on a wide variety of transportation planning and traffic engineering topics and has received recognition for his work that includes the Institute of Transportation Engineers' (ITE) National Past President's Award and best paper honors at the Transportation Research Board (TRB) Conference on Planning Applications. He is currently focused on the use of big data in transportation planning and new performance measures such as VMT.

Katy Cole, Fehr & Peers

Katy has worked in the transportation engineering and planning industry for approximately 14 years. Katy is dedicated to working with communities to help evaluate and solve transportation issues. Her professional experience includes multi-modal corridor analysis, transportation master planning, travel demand management (TDM), parking studies, access and circulation studies, and transportation impact studies. Katy is currently performing VMT analysis for projects within the San Diego region and serves on the Institute of Transportation Engineers (ITE) San Diego Chapter's SB 743 Subcommittee. Katy received her BS in Civil Engineering from the University of California, Davis.

EXAM80000: United States Constitution Exam - 0.00 Units

An examination on the provisions and principles of the United States Constitution.

Such an examination is required covering the provisions and principles of the United States (US) Constitution for many teaching and services credentials. The California Education Code states this requirement may be met by satisfactory completion of a college-level examination completed at a regionally accredited university.

EXAM80002: Entrance Exam - 0.00 Units

Students must pass the entrance exam prior to enrolling in either certificate program. The exam is a written assessment of your language skills in English and Spanish. In particular, it tests your knowledge of vocabulary, reading comprehension, and spelling, including proper use of diacritics, e.g. accent marks in both languages, and assesses your ability to complete college-level coursework. Select courses may be taken prior to passing the entrance exam, however, admission to advanced courses and obtaining either certificate requires its successful completion.

EXAM80004: Spanish Proficiency Exam - 0.00 Units

Participants in the Professional Certificate in Spanish Language are required to take a Spanish language proficiency exam upon completion of all other coursework in the certificate program. The exam (OPIC) determines a student's oral proficiency level in Spanish. Students must obtain a rating on the OPIC of at least Intermediate-Mid to complete the UCSD Extension Spanish Language Certificate. Students who receive a rating lower than Intermediate-Mid will not meet the requirements to complete the certificate; should this happen the student will be encouraged to take an additional elective, practice, and retake the exam the following quarter. For additional information, please review the PDF titled "Spanish Language Certificate Proficiency Exam" on the Spanish Language Certificate webpage.

EXAM80006: CTLA Exam - 0.00 Units

Final exam for the CTLA certificate program.

FPM40054: Prevention and Public Consequences of Substance Abuse - 2.00 Units

This course presents the individual as well as the societal consequences of alcohol, tobacco, and other drugs through an exploration of contemporary patterns of legal and illegal consumption and their health, social, family, economic, legal, and political consequences. Participants analyze the prevalence and complexity of such problems as impaired driving, traumatic injury, alcohol-related birth defects, domestic violence, homelessness, and workplace issues. Participants also have opportunities to debate the treatment and prevention implications suggested by readings and class discussions, and prepare themselves to explore strategies for mitigation.

FPM40060: Laws and Regulations - 3.00 Units

This course includes a basic overview of Federal OSHA standards with main emphasis on Cal/OSHA standards. Students will be coached through a jobsite inspection process from the opening conference to the closing conference. Working group sessions will study actual court cases highlighting preparation for a hearing, burden of proof, affirmative defense and discovery. The overall objective of this course is to enable students to better prepare for workplace inspections conducted by OSHA.

Topics Include: Fed OSHA and Cal OSHA, Litigation, Injury Illness Prevention, Personal Protective Equipment, and Respiratory Protection.

FPM40173: CT: Drug Development Process - 3.00 Units

This keystone course examines the drug development process and history of clinical trials. Topics include sources of new drugs & devices; the process of discovery; how a discovery becomes a drug or device; the definition, phases, and purposes of both pharmacological and clinical development; the history

of drug/device regulation and effects of historical events on regulatory oversight; investigative new drug applications; and premarket approval applications.

FPM40179: CT: Setting Up a New Clinical Study - 2.00 Units

As new clinical studies are designed and managed, each study should begin in a well-organized, well-planned manner. This online course assists the clinical study site in preparation for a new clinical study. Topics include identifying the research team, roles and responsibilities of the study coordinator vs. investigators, preparing for a prestudy site visit, review of study protocol, preparing the IRB application, setting up study files and the regulatory binder, and site initiation.

FPM40187: CT: Nuts and Bolts of Monitoring Clinical Trials - 2.00 Units

See the Site from the Sponsor's perspective: important for both monitors and coordinators. Topics include responsibilities of sponsors and investigators; qualifying investigators; regulatory document review; study initiation; routine monitoring tools, documents, and techniques; closeout visits; site management; and handling difficult situations.

FPM40188: CT: Medical Writing: Protocols, Reports, Summaries, and Submissions - 2.00 Units

No clinical trial can begin until a protocol has been written, and no clinical trial is complete until the final report is assembled, signed, and submitted to the FDA. Good documentation for clinical trials must be clear and scientifically sound, and it must conform to instructions. In this course, participants will discuss and practice the basic principles of clear medical writing and study the rules governing effective clinical trial documentation. Prerequisites: Medical Terminology, Drug Development Process, and GCP courses, or proven mastery of content.

FPM40189: CT: Regulation of Drugs, Biologics, Devices, and Diagnostics - 3.00 Units

This course reviews the breadth of U.S. and international regulations associated with the development of drugs, biologics, medical devices, and diagnostics. Topics include a review of regulatory agencies and the role/responsibilities of each; pathways for regulatory applications; important differences between development processes in the U.S. and those of other countries; and the impact of regulatory approval processes on corporate strategy.

FPM40204: CT: Good Clinical Practices - 3.00 Units

Topics include the definition and identification of good clinical practices (GCPs); how GCPs affect the conduct of clinical trials; regulating agencies and applicable regulations from the Code of Federal Regulations and ICH guidelines; state regulations; obligations of investigators, sponsors, monitors, and IRBs; compliance and accountability during clinical trials; protocol violations and deviations; consequence of falsification of data and/or patient records; and the blacklist. Device regulations also covered.

FPM40205: CT: Science of Clinical Trials Design - 3.00 Units

This advanced-level course reviews the science that forms the basis for effective clinical trial design. Topics include classifying and describing trial design by stage in drug/device development; types of trial designs; defining the hypothesis and study objectives; safety information and DSMBs; determining the population and sample size; study procedures; identifying and selecting clinically meaningful endpoints; scientific/ethical considerations; and statistical validity of design, execution, analysis, and reporting.

FPM40206: CT: Drug Safety: Surveillance and Reporting - 2.00 Units

Common issues and concerns associated with drug safety surveillance within clinical trials are the focus of this course. Topics include the defining and

identifying of adverse experiences, verifying drug safety, regulations regarding surveillance of investigational and marketed products, safety reporting requirements, analyzing study results to determine safety, and required actions in the event of safety issues. Useful from both site and sponsor perspectives.

FPM40207: CT: Prospective Preparation for Internal and External Audits - 1.00 Units

This course provides a step-by-step outline of internal and external audits as well as ongoing actions that should be taken to prepare for an audit. Topics include types of audits; the audit process (sites, sponsors, CROs); planning/preparing for an audit; rules of behavior during and after the audit; and dealing with the results.

FPM40208: CT: Site and Investigator Recruitment - 1.00 Units

This course is intended to help a clinical study sponsor recruit the appropriate sites and investigators for the study. Topics include sources of information on sites and investigators; approaching and evaluating the potential investigator and the potential site; and understanding the application of good clinical practices.

FPM40209: CT: Pharmaco-Economics and Effectiveness Trials - 2.00 Units

This course examines the economic factors that must be considered when pursuing the development of a drug/device. Topics include the definition of health economics; points in the development process at which economics must be considered; alternative study designs; determining costs; choice of comparator therapy; and economic analysis procedures; and decision making.

FPM40218: CT: Data Management Systems for Sponsors of Clinical Trials - 2.00 Units

This course is designed to assist clinical trials sponsors to design data capture methods, and to organize and manage clinical trial data collected from one or more investigative sites. Topics include data flow from site to sponsor; case report form (CRF) design, database structures; database management systems including validation, backup, security and electronic data capture (EDC) systems; data capture techniques, data transfer and uploads; data quality methods including data entry, data review and programmatic checking, CRF-to-database audit procedures; analysis-ready database procedures; patient confidentiality; and ICH Guidelines (21 CFR part 11).

FPM40226: Case Management Intensive - 9.00 Units

Case managers are needed in all areas of healthcare delivery when meeting the needs of patients and families. Healthcare professionals (RNs, MDs, RT, LVN, social workers) are eligible to become certified Case Managers. This course delivers training to become a case manager. Some topics covered: Essentials of Case Management; Physical & Psychological Factors: Introduction to Clinical Pathways/Practice Guidelines; Insurance Lines & Health Benefits Plans; Legal Responsibilities; Disability Management; & Student Presentation of Case Studies. Course is 7 sessions; an 8th day is scheduled for presentations when class exceeds 15 students.

FPM40228: CT: Working with Clinical Research Organizations (CROs) - 1.00 Units

This course provides the clinical study sponsor strategies for working with a clinical research organization (CRO) to conduct the study. Topics include assessing internal capabilities and limitations, evaluating and selecting an appropriate CRO partner, transferring responsibilities to the CRO, costs and benefits of a CRO relationship, delineating expectations, and managing the relationship.

FPM40229: CT: Clinical Study Implementation and Management - 2.00

Units

Examine the elements involved in implementing and monitoring a clinical study from the sponsor's point of view. Topics include finalizing the study materials; site selection; staffing and training; strategies for communicating with sites, regulators, and others; cost management; site initiation; enrollment options; data management set-up and testing; monitoring procedures and training; auditing; safety monitoring; reports; and the Data and Safety Monitoring Board (DSMB).

FPM40230: CT: Preceptorship in Clinical Trials - 1.00 Units

The student consults with the instructional advisor to identify and secure an appropriate preceptorship assignment, fulfilling at least 20 hours of work associated with that assignment, writing a paper that summarizes their experience and learning, and reviewing their findings with both the instructor and the sponsor.

FPM40233: CT: Practical Clinical Statistics for the Non-Statistician - 2.00

Units

This course presents the statistics essentials for the non-statistician involved in clinical trials. Topics include study designs, hypothesis testing, sample size calculations, assumptions, controls, endpoints, data management principles, data presentations and analysis plans, methods for analysis, and conclusions.

FPM40240: CT: Advanced Monitoring and Management of Clinical Trials and Next Steps - 2.00 Units

This is a hands-on interactive live course, demystifies advanced site management and monitoring of clinical trials. Learn how to deal with difficult sites, problem solve and work with multiple priorities and projects, and identify and work with serious safety issues. Detecting fraudulent data is a strong focus, along with communication and time management exercises. Career opportunities in clinical research along with recommendations for drafting resumes and next steps will also be covered. Enroll in this course after completing all required courses plus 12 elective units, and be ready to start your career in clinical research.

FPM40272: Clinical Trials Administration Program - 7.00 Units

Prerequisite: Intensive Workshop, FPM 40273.

How the Program Works

While pursuing the Specialized Certificate in Clinical Trials Administration, you must successfully complete the following three sections:

Section One Clinical Trials Intensive Workshop (5 days, 40 hours, 4 units)

Section Two Required Courses Offered Online: Nuts & Bolts of Monitoring Clinical Trials (2 units) Setting Up a New Clinical Study (2 units) Working with Clinical Research Organizations (CROs) (1 unit)

Section Three Clinical Trials Follow-on Workshop. The Final Session (2 days, 16 hours, 2 units)

Participation in the Clinical Trials Follow-on Workshop will successfully complete the requirements for obtaining the UCSD Extension Specialized Certificate.

FPM40273: Clinical Trials Administration Intensive - 4.00 Units

This five day intensive course provides a solid foundation in the principles upon which clinical trials are based. Topics include: drug development process, device development, GCPs (ICH and FDA), Case Report Form design, investigator selection, IRBs/informed consent, trial design & protocol, site and study management, monitoring, regulatory issues, and data analysis. Light refreshments are provided daily, and on Monday only, a light luncheon is provided so students and instructors can get acquainted.

FPM40280: OSHA 500 - Trainer Course in Occupational Safety and Health Standards for the Construction Industry - 3.00 Units

The focus of this TRAINER course is to prepare students to teach the 10 and 30 Hour Outreach classes. Course time is spent learning and practicing adult training techniques. Students will participate in the development and delivery of lectures during class. Thorough knowledge of OSHA Construction Standards (CFR 1926) is required. Following successful completion of the written exam, students become authorized OSHA Trainers in the 10 and 30 Hour Outreach Programs. Laptop recommended.

FPM40281: OSHA 501 - Trainer Course in Occupational Safety and Health Standards for General Industry - 3.00 Units

The focus of this Trainer course is to prepare students to teach the 10 and 30 Hour Outreach classes. Course time is spent learning and practicing adult training techniques. Students will participate in the development and delivery of lectures during class. Thorough knowledge of OSHA General Industry Standards (CFR 1910) is required. Upon successful course completion, students become authorized OSHA Trainers in the 10 and 30 Hour Outreach Programs. Laptop recommended.

FPM40289: OSHA 2264 - Permit-Required Confined Space Entry - 2.50 Units

The danger of explosion, poisoning, and asphyxiation exists every time a worker enters a confined space. Learn the OSHA required confined space entry standard, hazards associated with entry procedures, Personal Protective Equipment, ventilation and purging requirements, calculations and techniques, and appropriate atmosphere testing equipment. Course features hands-on training with explosion meters, oxygen meters, and other test equipment.

FPM40291: Trainer Course - Confined Space - 1.50 Units

Gain the knowledge and skills to instruct a confined space entry class within your organization. The course will cover advanced confined space issues, teaching, resources, instructional methodology and points on how to jazz up your presentation. Students will be required to give a ten minute presentation for evaluation by other students.

FPM40295: OSHA 6005 - Collateral Duty Course for Other Federal Agencies - 3.00 Units

If you are a federal employee, learn to recognize basic safety and health hazards in the workplace and effectively assist agency safety and health officers in their inspection and abatement efforts. This course introduces federal agency collateral duty safety and health personnel to the OSH Act, Executive Order 12196, 29 CFR 1960, and 29 CFR 1910. A mock inspection of a government facility will provide hands on experience. Topics include Walking and Working Surfaces, Industrial Hygiene, Hazardous Materials, Personal Protective Equipment, and Lockout/Tagout.

FPM40296: OSHA 521 - OSHA Guide to Industrial Hygiene - 3.00 Units

According to the Archives of Internal Medicine (AIM), more than 60,300 fatalities result from occupational illnesses annually. Minimize the threat of illnesses by learning industrial hygiene practices and related OSHA regulations and procedures. Learn how to recognize potential health hazards in the workplace and define terms relating to OSHA health requirements. From workshops in health hazard recognition to air contaminant sampling, this course will give you the information you need to combat occupational illnesses. Topics include: Respiratory Protection, Hazard Communication, Confined Spaces, Ventilation, and Recordkeeping.

FPM40297: OSHA 2255 - Principles of Ergonomics - 3.00 Units
(formerly known as "OSHA 2250")

Get the information you need to combat musculoskeletal injuries. Course highlights include industrial case studies covering analysis and design of work stations and equipment, laboratory sessions in manual lifting and coverage of OSHA's proposed ergonomic protection standard. Topics Include: Repetitive

Injuries, Musculoskeletal Disorders, Video Displays, Workstation and Tool Design, and Seating.

FPM40298: OSHA 2045 - Machinery and Machine Guarding Standards - 3.00 Units

This course covers the various types of common machinery, machine safe guards, and related OSHA regulations and procedures. Guidance is provided on the hazards associated with various types of machinery and the determination of proper machine safe guards. Course topics include machinery processes, mechanical motions, points of operation, control of hazardous energy sources (lockout/tagout), guarding of portable powered tools, and common OSHA machine guarding violations. Program highlights include the ability to recognize hazards and provide options for control and hazard abatement through machine safeguarding inspection workshops. Upon course completion students will have the ability to describe common machine hazards and sources of energy, identify resources for assisting with machine guarding issues, and determine methods of control and hazard abatement, and selection of appropriate machine safe guards. A mock inspection of a local plant provides hands-on experience.

FPM40299: OSHA 510 - Occupational Safety and Health Standards for the Construction Industry - 3.00 Units

According to the Bureau of Labor Statistics, construction was the leading industry for injuries. Learn the 29 CFR 1926 standards, as well as construction safety and health principles to help prevent injury. Special emphasis is placed on those areas that are the most hazardous, using OSHA standards as a guide. Topics Include: OSH Act, Safety Programs, Fall Protection, Personal Protective Equipment, Stairs and Ladders.

FPM40300: OSHA 3095 - Electrical Standards (Low Voltage - Federal) - 3.00 Units

Learn OSHA's standards associated with electrical installations and equipment. Gain knowledge of single and three phase systems, cord and plug connected and fixed equipment, grounding, ground fault circuit interrupters, hazardous locations and safety related work practices. Special emphasis is placed on electrical hazard recognition and OSHA inspection procedures. Topics include: Personal Protective Equipment, Energized Parts, Grounding, Medical Services / First Aid, Hazardous Energy Control.

FPM40301: OSHA 3015 - Excavation, Trenching and Soil Mechanics - 2.50 Units

(formerly known as "OSHA 3010")

Construction trenching accidents claim the lives of 40 workers per year. Save lives by learning the OSHA standards and the safety aspects of excavation and trenching. Discover practical soil mechanics and its relationship to the stability of shored and unshored slopes and walls of excavations. Topics Include: Principles and Applications, Sloping, Benching, and Shoring.

FPM40302: OSHA 2015 - Hazardous Materials - 3.00 Units

Learn how to apply OSHA general industry standards and integrate materials from other safety standards that relate to hazardous materials. Related processes such as spraying and dipping are covered, as well as electrical equipment. Topics include: Flammable Liquids, Hazardous Waste Operations, Confined Space, Compressed Gases, Hazardous Locations.

FPM40303: OSHA 2225 - Respiratory Protection - 3.00 Units

Learn how to establish, maintain, and monitor a respirator program following the requirements in 29 CFR 1910.134. Discuss the technical aspects for the proper selection and use of respiratory protection. Evaluate compliance with OSHA's standard by using the compliance directive and the "Small Entity Compliance Guide." Topics include: Respiratory Protection Program, Fit Testing Demonstration, Selection of Respirators, Maintenance and Care.

FPM40307: Trainer Course - Forklift Safety - 1.50 Units

Participants will learn the OSHA requirements, how they affect companies and how to comply with the standards. This course is designed to give the tools and knowledge needed to return to work and teach forklift operators OSHA requirements. Trainers should have a basic understanding of forklift operations and procedures. Forklift operating experience is helpful but not needed for this course. An operational supervisor may be needed to assist you in training and evaluation of your facility. Topics Include: rough terrain, extendable boom and vertical mast.

FPM40308: Trainer Course - Trenching - 1.50 Units

This course reviews the Federal and State OSHA requirements for excavation and trenching activities. Emphasis will be placed on training techniques, prevention strategies and practices such as inspections, permitting procedures, soil analysis, and competent person responsibilities.

FPM40320: Anatomy & Physiology for Allied Health - 4.50 Units

This course is designed to develop an integrated understanding of human structure and function, and an appreciation for the close interrelationship between anatomy and physiology.

Clinical examples utilized in the course will assist students in learning that the disease process is a disruption of homeostasis and a breakdown of the normal integration of form and function, and that medical intervention may restore normal function. Health and wellness issues will be discussed to reinforce the basic concepts of human structure and function by applying them in practical ways to current problems in medicine, public health, athletics, fitness, and trends in research and technology.

FPM40338: CT: Financial Management of Clinical Trials - 1.00 Units

Designed to illuminate the financial management of a trial from the sponsor perspective, this survey course includes prioritization of spending, costs involved in conducting a clinical trial (costs incurred by the trial sponsor), how to set up a per-site budget, how to determine a total trial cost, and how to control & limit all of the above.

FPM40345: Crisis Intervention: Theory and Practical Skills - 2.00 Units

This course presents a basic crisis intervention model along with appropriate clinical presentations of persons in crisis in a variety of settings, e.g., loss, AIDS and HIV related, substance abuse, posttraumatic stress disorder (PTSD), and victimization. Topics include defining crisis, when crisis is a danger, ethical and professional considerations, and use of self in crisis counseling. Students learn about the theory and skills, mental health triage, cultural sensitivity, self-care, community resource information, referrals, and networking.

FPM40349: Trainer Course - Rigging Safety - 3.50 Units

This course covers advanced rigging principles, safety requirements, and key considerations for safe rigging. Students participating in this course will be able to identify appropriate rigging techniques; they will understand sling angles and the stresses imposed. They will go thru OSHA's new regulations on qualifications of riggers and the national consensus standards for rigging to include sling and hardware inspections and rejection criteria. An extensive use of hands-on practical techniques emphasizes the training and the course is completed with a tour of an active rigging shop.

FPM40366: OSHA 511 - Occupational Safety and Health Standards for General Industry - 3.00 Units

For students wanting to learn the 29 CFR 1910 standards, this course is a must. Learn crucial OSHA policies, procedures, and standards, as well as general industry safety and health principles as they relate to real world situations. Special emphasis is placed on those areas that are the most hazardous, using

OSHA standards as a guide. Topics Include: OSH Act, Safety and Health Management Systems, Personal Protective Equipment, Hazard Communication, and Electrical.

FPM40367: OSHA 7100 - Introduction to Machinery and Machine Safeguarding - 0.50 Units

Gain knowledge and skill in proper machine guarding techniques. It is the employer's responsibility to identify and select the safeguard necessary to protect employees and others in the work area, as well as provide appropriate training in safe work practices. Knowing when and how to properly safeguard machinery can reduce or eliminate the potential for accidents and injuries.

FPM40368: OSHA 7000 - OSHA Training Guidelines for Safe Patient Handling - 0.50 Units

FPM40379: OSHA 7500 - Introduction to Safety and Health Management - 0.50 Units

This introductory course addresses the four core elements of an effective safety and health program with strategies & techniques that are critical to each element's proper management. The course is designed for the small employer, business owner or manager designated with the responsibility to develop and manage a firm's safety and health program or system. The training is also suitable for employees and employee representatives responsible for improving safety and health in the workplace.

FPM40382: Pharmacology - 3.00 Units

This is an introductory-level course intended for the beginning student in both practical/vocational nursing and other allied health disciplines. This course covers the basic mathematics of drug dosage, the principles of pharmacology, major drug classifications by anatomic systems, and special situations in pharmacology.

FPM40388: CT: Human Subjects Protection and IRBs - 2.00 Units

This essential course offers an ethical framework for human subjects regulations, introduces regulatory issues in clinical trials, and reviews concern for human subjects protection in drug/device trials. A mock IRB meeting applies the principles learned.

FPM40392: OSHA 5600 - Disaster Site Worker Trainer Course - 3.00 Units

Experienced trainers will learn to present the OSHA 7600 - Disaster Site Worker Course. You will be able to apply elements of successful training programs and will practice knowledge, skills and attitudes through discussion, exercises and presentations. You will receive lesson plans, training materials and information on training techniques and resources. You will be expected to present a select portion of the Disaster Site Worker Course. Re-certification is required every four years.

FPM40397: OSHA 7300 - Understanding OSHA's Permit-Required Confined Space Standard - 0.50 Units

Do you need to develop a permit required confined space program? This course will increase your knowledge of OSHA's standard, 29 CFR 1910.146. Discover scope and definitions, general requirements, permit space programs, and rescue and training. This is an introductory course and does not fulfill the training requirements to certify the student as a "competent person". Topics Include: Definitions, Permit Space Program, General Requirements, Rescue Requirements.

FPM40403: OSHA 7205 - Health Hazard Awareness - 0.50 Units

This one-day course focuses on recognizing potential health hazards in the workplace, and avoiding, minimizing, controlling or eliminating them whenever possible. Exposure to health hazards continues to be common in spite of advances in control measures and techniques. This course will provide

This one day course uses OSHA's ergonomic guidelines to develop a process to protect workers. The course will focus on analyzing and identifying jobs from an ergonomic perspective and practical solutions to problems. Featured topics include: developing an ergonomic process, identifying problem jobs and implementing solutions. The intended audience is the individual responsible for development of an ergonomic process.

FPM40378: OSHA 7200 - Bloodborne Pathogens Exposure Control for Healthcare Facilities - 0.50 Units

Using a step by step approach, this one day workshop will develop a Bloodborne Pathogens Exposure Plan. The target audience is the program administrator, manager or other personnel designated with the responsibility of developing a Bloodborne Pathogens Exposure Control Plan. Topics Include: Bloodborne Pathogens Standard, Exposure Control Plan, Exposure Determination, Methods of Control, Vaccinations and Evaluations. information on health hazards and discuss ways to recognize, evaluate, and control them in the workplace.

FPM40405: OSHA 7005 - Public Warehousing and Storage - 0.50 Units

OSHA has identified Public Storage and Warehousing as one of seven industries with a high lost time claim rate. Injuries may occur from forklifts, material handling and lifting, exposure to hazardous substances, and slips, trips and falls. Public Warehousing and Storage is set up as a facilitated, interactive training session focusing on class discussion and group activities. It has been shown that warehouses have become an increasingly hazardous area in which to work. This one day course for warehouse workers will focus on many of the hazards and injuries that are likely to be encountered in warehouse operations.

FPM40410: OSHA 7105 - Introduction to Evacuation and Emergency Planning - 0.50 Units

Learn what you need to know about emergency planning and the features of good evacuation plans. The increased concern about terrorism and disasters has forced small business representatives to think seriously about the need to plan what they will do in the event of emergencies. The target audience is the small employer, business owner, or a representative designated with the responsibility to plan for emergencies and evacuation procedures.

FPM40413: OSHA 2055 - Cranes in Construction - 3.00 Units

This course covers the best practices in crane and derrick operation using the OSHA Cranes and Derricks in Construction Rule as a guide. Course topics include hazards associated with crane assembly and disassembly, types of cranes, lifting concepts, rigging and wire rope, signaling, employee qualifications and training, and maintenance, repair, and inspection requirements. Students will participate in workshops to reinforce concepts of safe crane operation. Upon course completion students will have the ability to identify the types of cranes and their components and attachments, determine safe operating conditions, and recognize common violations of OSHA Standards.

FPM40415: Overview of Medical Practice - 2.00 Units

A comprehensive overview of the clinical practice of medicine, this course is designed for those who would like to enhance their knowledge of the medical field and the health care system in the U.S. The course bridges the gap between industry practice, academic medicine, advanced research degree programs, & other health care clinical initiatives.

Topics include complexities related to multiple health care providers and sites of delivery, available health information in the digital age, payment for health care, consumer-driven utilization of health care, and the basis for health care reform. Lessons include Medical Anatomy & Physiology; Hospital Anatomy; Health Care Economics; Patient Privacy; Medical Errors

& Patient Safety; Evidence-Based Medicine; & Introduction to Medical Research.

FPM40419: Electrical High Voltage Standards - Federal - 3.00 Units

OSHA classifies any use of electrical service over 600 volts as high voltage. Regulations and accepted industry standards state that employers meet specific training requirements for their employees who work with high voltage electrical installations. These rules apply to commercial, industrial, and government sites as well as electric utility generation, transmission and distribution installations. This course provides information crucial to safely operate your facility. Along with advance knowledge of critical compliance issues, emphasis is placed on hazard awareness and abatement methods. Topics Include: Fundamentals, Definitions, Wiring Methods, Practices and Equipment, Lockout/Tagout. Recommended prerequisite: OSHA 3095.

FPM40437: Business Basics for the Personal Trainer - 1.00 Units

Being a successful personal trainer requires more than designing and implementing safe and effective exercise programs. You must also be knowledgeable about the business, legal, and interpersonal aspects of operating a fitness business. Whether you work as an employee, independent contractor, or are thinking about starting your own business, you will learn about legal guidelines, business structure, market research, creating a business plan, marketing strategies, bookkeeping, professional ethics, and image as well as client relations skills.

FPM40439: Fitness Internship-Commercial - 2.00 Units

This course provides candidates the opportunity to apply their knowledge in gaining vital, real life experience. It bridges the gap between classroom theory and real world practice by providing a setting where communication and technical skills are perfected before entering the job market.

FPM40441: Fitness Internship-Preventive/Wellness - 2.00 Units

This course provides candidates the opportunity to apply their knowledge in gaining vital, real life experience. It bridges the gap between classroom theory and real world practice by providing a setting where communication and technical skills are perfected before entering the job market.

FPM40442: Fitness Internship - 2.00 Units

The internship offers students the opportunity for growth and development of relevant skills in the fitness field. It encompasses the pertinent aspects of fitness testing, programming and training, wellness and health education, and management and administration of health clubs and wellness facilities. Three types are offered: commercial, corporate, and preventive/wellness. Enrollment in the internship is accepted by application only. Please download the documents below to submit your application and receive instructions for enrollment.

FPM40446: Electrical Low Voltage Standards - State - 1.50 Units

Get practical training so that your business can maintain a safe, hazard free workplace. This intensive two day training course is built around state requirements for employees working on electrical installations and equipment. Included are safety related information regarding state standards, equipment safety practices, dealing with hazards and the use of protective equipment. Topics include: Definitions, Wiring Methods, Practices and Equipment, Lockout/Tagout.

FPM40454: Electrical High Voltage Standards - State - 1.50 Units

For employees working on or near equipment energized above 600 volts, this intensive two day training course is built around state requirements. Learn how to maintain a safe, hazard free workplace by learning safety related information regarding state standards, equipment safety practices, dealing with hazards and the use of protective equipment. Topics include: Personal

Protective Equipment, Energized Parts, Grounding, Medical Services/First Aid, and Hazardous Energy Control.

FPM40471: OSHA 7405 - Fall Hazard Awareness for the Construction Industry - 0.50 Units

In 2004, the Bureau of Labor Statistics data showed that 36 percent of the 1,224 construction worker fatalities were attributed to falls. Designed for small construction employers and employees, this course is packed with information on fall hazards at work sites. Providing a focus on falls to a lower level rather than falls from slips and trips, Fall Arrest Awareness teaches you how to control or prevent these hazards whenever possible. Topics Include: Identification of Fall Hazards, Analyzing Fall Hazards, Preventing Fall Hazards, and OSHA Resources.

FPM40475: Electrical Safety Standards - NFPA 70E - 1 Day - 0.50 Units

If you work on or near energized electrical systems, have a safety role at these sites or are an emergency responder, this course is for you. The new electrical safety standards (NFPA 70E) are the next step to a safer electrical environment in the workplace. Anyone who deals with hazards such as electrocutions, fires and explosions should attend. Learn how to prevent serious disabling injuries, damage to equipment and work sites and most importantly, save lives.

FPM40481: OSHA 7410 - Managing Excavation Standards - 0.50 Units

Students will learn the role and responsibility of the employer to assign a competent person to the excavation site and arm that person with the knowledge to perform the work properly. Topics include the understanding and application of definitions relating to OSHA's Excavation Standard (Subpart P), excavation hazards and control measures, soil analysis techniques, protective system requirements and emergency response. Students will gain knowledge and skills that are required to perform the excavation duties.

FPM40484: OSHA 5400 - Trainer Course in Occupational Safety and Health Standards for the Maritime Industry - 3.00 Units

This is a Trainer Course for those interested in teaching the 10 and 30 Hour Maritime Outreach Program. Special emphasis is placed on required Outreach topics, using OSHA standards as a guide. Students are taught effective adult instructional techniques. This course authorizes students to become Maritime Outreach Trainers.

FPM40489: OSHA 3115 - Fall Protection - 3.00 Units

(formerly known as "OSHA 3110")

This 4-day course includes: encounter state-of-the-art technology for fall protection and current OSHA requirements. Topics include the principles of fall protection, the components of fall arrest systems, the limitations of fall arrest equipment, and OSHA policies regarding fall protections. Course features a one-day field exercise demonstrating fall protection equipment. Topics include: Conventional Systems, Body Holding Devices, Anchor Points, Harness, Vertical / Horizontal Traveling Systems.

FPM40490: Safety Inspection Techniques - 2.50 Units

Learn the most commonly used safety inspection standards, tools and techniques in this 3-day course. Experience an organized approach to inspecting and auditing projects to insure OSHA compliance and injury prevention. Visit both construction and general industry sites to perform an inspection and prepare a final report.

FPM40493: CT: Understanding Oncology - 3.00 Units

Concepts of cancer treatment and management will be communicated to the student through a series of web-based sessions, with a sharp focus on the terminology, pathology, diagnostics, disease management. Intended for individuals with educational backgrounds in biological sciences at the associates, bachelor or masters level. Nurses, research assistants, data

managers and others who are involved in oncology research or would like to become involved in this area of research and development would benefit from this course.

Included: an overview of cancer biology, diagnosis and specific types of cancer, as well as basic principles, treatment modalities and potential effect of those treatment modalities.

FPM40494: CT: Monitoring Oncology Trials - 3.00 Units

Monitoring oncology clinical trials requires advanced skills, including understanding and maintaining complete regulatory documents; protocol & data integrity; patient safety; and the successful completion of the clinical trial within the sponsor's/CRO's and medical site's goals, all within the framework of good clinical practices (GCPs). Students are exposed to key regulatory documents, IND safety reports, MedWatch reports, various IRB submissions/requirements, and federal guidelines. Also covered: responsibilities of clinical research personnel; correlation of concomitant medications; tumor assessments; assessing and grading toxicities; cancer-specific SAE; & SAE reporting.

FPM40496: CTLA: Introducción a la Investigación Clínica Internacional - 1.00 Units

Este curso es una introducción básica y visión general del proceso de investigación clínica y abarca la descripción de la industria; fases de los estudios/pruebas; terminología de investigación clínica; investigación translacional; y orientación al programa. El alumno aprenderá los aspectos fundamentales de la investigación clínica en sujetos humanos, y la necesidad de implementar actividades regulatorias para vigilar el proceso. Altamente recomendado y apropiado para los profesionales principiantes y expertos en el campo de estudios clínicos.

FPM40497: OSHA 7115 - Lockout/Tagout - 0.50 Units

In this course, students will learn about the role and responsibility of the employer to develop and implement an energy control program, or lock-out/tag-out (LOTO) for the protection of workers while performing servicing and maintenance activities on machines and equipment.

FPM40498: OSHA 5602 - Update for Disaster Site Worker Trainer Course - 0.50 Units

The OSHA 5602 - Disaster Site Worker Trainer Update is a course intended to update the Authorized Disaster Site Worker Trainer with new technical and regulatory information related to disaster response. In addition, participants will have the opportunity to share "lessons learned" and refresh their knowledge about various topics covered previously in the OSHA 5600 - Trainer Course - Disaster Site Worker. Outreach Trainers are required to attend OSHA 5602 at least every four years to maintain their trainer status.

FPM40499: CTLA: El Proceso de Desarrollo de Fármacos - 1.50 Units

Este curso clave revisa el proceso de desarrollo de fármacos e historia de los estudios clínicos. Los temas incluyen origen de fármacos y dispositivos nuevos; el proceso de descubrimiento; cómo un descubrimiento se convierte en un medicamento o dispositivo; la definición, fases y propósitos del desarrollo farmacológico y clínico; la historia de la regulación de fármacos/dispositivos y los efectos de eventos históricos en la vigilancia regulatoria; las solicitudes de autorización de nuevos fármacos y las solicitudes de autorización de pre-mercado. Este es un curso fundamental para aquellos interesados en aprender el proceso de estudios clínicos aplicado a los estudios farmacológicos y los dispositivos médicos en Latinoamérica.

FPM40500: CTLA: Buenas Prácticas Clínicas (BPC) - 1.50 Units

Este curso esencial cubre la definición e identificación de Buenas Prácticas Clínicas (BPC); cómo las BPC afectan la conducción de estudios clínicos; cuerpos reguladores y regulaciones pertinentes al Código de Regulación

Federal (EE.UU.) y los lineamientos de la Conferencia Internacional de Armonización; regulación regional e internacional; obligaciones de los investigadores, patrocinadores, monitores y Comités de Ética; cumplimiento y responsabilidad durante los estudios clínicos; violaciones y desviaciones al protocolo; y consecuencia de la falsificación de datos y/o registros de los pacientes.

También se revisa la regulación de dispositivos médicos. Esencial para todos los profesionales interesados en llevar a cabo estudios clínicos en Latinoamérica, y para los sitios clínicos interesados en llevar a cabo investigación clínica según la Food & Drug Administration (FDA).

FPM40501: CTLA: Monitorización de Estudios Clínicos - 2.00 Units

Este curso es importante para los monitores, coordinadores, investigadores principales y el personal que labora en el sitio clínico de investigación.

Los temas de esta clase incluyen responsabilidades de los patrocinadores e investigadores durante el estudio; investigadores calificados para el sitio de estudio; fase de viabilidad; revisión de documentos regulatorios; inicio del estudio; herramientas de monitorización, documentos y técnicas de rutina; visitas de cierre; y manejo del sitio.

Este curso es esencial para el interesado en mejorar sus aptitudes profesionales, ser más competitivo o aumentar los niveles de reclutamiento y productividad general en el sitio clínico.

FPM40502: CTLA: Comites de Etica/Proteccion de Sujetos Humanos - 1.00 Units

Este curso ofrece un marco histórico de los principios de ética más relevantes en la investigación clínica que involucra sujetos humanos. En el curso se estudian aspectos regulatorios comunes asociados con los estudios clínicos y se revisa el Código de Núremberg; el Reporte Belmont; la Declaración de Helsinki; y la estructura de la Conferencia Internacional de Armonización. Se analizan la función y estructura de los Comités de Ética; funciones y prácticas de los miembros del Comité de Ética; y su función en la expansión de estudios clínicos en Latinoamérica. Este curso es apropiado para los profesionales tanto principiantes como expertos en la industria de estudios clínicos.

FPM40504: CTLA: Preparación para un Nuevo Estudio Clínico - 2.00 Units

Conforme se diseñan y manejan nuevos estudios clínicos, cada estudio debe iniciarse en una forma muy bien planeada y organizada. Este curso ayuda al sitio clínico de estudio en la preparación para un nuevo estudio clínico.

Los temas incluyen identificación del equipo de investigación; funciones y responsabilidades del coordinador del estudio; preparación de la visita previa al inicio del estudio; revisión del protocolo de estudio; preparación de la solicitud del Comité de Ética; preparación de los archivos del estudio y el manual regulatorio; iniciación del sitio.

Este curso está diseñado para los profesionales que desean iniciar un sitio de investigación o están buscando formas de incrementar la productividad de su sitio.

FPM40505: CTLA: Estándares Profesionales en la Conducción de Estudios Clínicos - 1.00 Units

Este curso analiza los elementos esenciales que deben observarse para ejercer una conducta adecuada y profesional durante la conducción de estudios clínicos en sujetos humanos. Debido a que la investigación de nuevos fármacos y dispositivos médicos es una actividad profesional internacional altamente regulada, se requiere un claro entendimiento del manejo legal y ético de datos e información privada de sujetos humanos.

Algunos de los temas más destacados son el reconocimiento y prevención de fraudes; conducta ética personal; consejos de administración; y acreditación de organizaciones. También se incluyen reglas de acreditación y administración para organizaciones de investigación clínica y reclutamiento de pacientes. Esta clase se recomienda ampliamente a todo el personal involucrado en el manejo de la información del paciente en un estudio clínico.

FPM40506: CTLA: Organizaciones de Investigación Clínica por Contrato (CRO) - 1.00 Units

Este curso proporciona al patrocinador del estudio clínico o sitio de investigación varias estrategias para trabajar con una Organización de Investigación Clínica por Contrato que conducirá el estudio.

Dado que la negociación es una herramienta esencial durante la fase operacional de un estudio clínico de investigación, se presentan temas como el diagnóstico de las capacidades y limitaciones internas; los costos y beneficios de tener una Organización de Investigación Clínica por Contrato como socio; evaluación y selección adecuada de una CRO; viabilidad y transferencia de responsabilidades y delimitamiento de expectativas; y manejo continuo de la relación.

Esta clase es apropiada para todos los niveles con énfasis en aquellos profesionales o socios especializados en la administración de estudios clínicos.

FPM40507: EM385-1-1 40 Hour Safety - 4.00 Units

This course is for contractors, military and government employees who enforce or must comply to the EM385-1-1 US Army Corps of Engineers safety and health requirements. You will learn procedures of the Navy and US Army Corps of Engineers contracts, and the safety and health requirements of the US Army Corps of Engineers Safety and Health Requirements manual. Upon completion, students receive an official OSHA 30 Hour card for Construction. Topics include: Preparation of Site-Specific Accident Prevention Plan (APP), Intro to OSHA, Site Safety Health Officer's Qualifications & Responsibilities, Activity Hazard Analysis development, Site Personnel training, Incident Response, Job site Auditing, and Hazard Communication.

FPM40510: CTLA: Estudios Clínicos en Latinoamérica: Curso Intensivo - 2.00 Units

Latinoamérica se ha convertido en una de las regiones más atractivas para la industria farmacéutica internacional, y se requiere un alto nivel de entrenamiento especializado para el personal que participa en estudios clínicos farmacológicos. Este curso intensivo se ofrece en español para el personal interesado en adquirir las bases esenciales y principios legales para el desarrollo apropiado de estudios clínicos. Los temas incluyen: Buenas Prácticas Clínicas, monitorización, selección de investigadores, aspectos regulatorios, Comités de Ética, diseño del estudio y protocolo clínico, y análisis de datos.

FPM40511: OSHA 5109 - Cal/OSHA Standards for the Construction Industry - 3.00 Units

Developed in partnership with Cal/OSHA, this 4-day course emphasizes Title 8 Construction Industry standards and compliance. Topics include IIPP, Ergo, Electrical and many others.

The course also provides existing Fed OSHA trainers an endorsement authorizing them to teach 10 & 30 hr Federal- Cal/OSHA outreach courses. Resources and Cal/OSHA training guidelines will be covered.

Individuals who wish to be authorized by OSHA to teach the Cal/OSHA versions of the 10- and 30-hour Construction Outreach Training Program classes must fulfill the following requirements:

1. Be a current authorized OSHA Construction Outreach Training Program trainer OR become an authorized OSHA Construction Outreach Training Program trainer within six (6) months after completing OSHA 5109 class. Trainers should note that the Cal/OSHA Partnership endorsement expires on the same date as their authorized Outreach trainer card.
2. Have at least one year of verifiable safety and health experience with an organization governed by Cal/OSHA standards. Outreach Trainers will

be required to sign a "Statement of Eligibility" form, prior to, or in their Cal/OSHA Partnership authorization course.

3. Complete OSHA #5109 Cal/OSHA Standards for the Construction Industry. Outreach trainers are not required to take the Cal/OSHA Partnership Trainer course from the same OTI Education Center from which they took their Federal Construction Outreach Training Program trainer course. Trainer will receive a separate card indicating their trainer authorization.

Trainers who receive their OSHA Outreach Training Program trainer card after completing OSHA #5109 Cal/OSHA Standards for the Construction Industry class must contact the OTI Education Center which sponsored the Cal/OSHA Partnership class they participated in to sign a "Statement of Eligibility" form and receive their Cal/OSHA construction Outreach trainer card.

FPM40512: OSHA 5119 - Cal/OSHA Standards for General Industry - 3.00 Units

Developed in partnership with Cal/OSHA, this 4-day course emphasizes Title 8 General Industry standards and compliance. Topics include IIPP, Ergo, Electrical and many others.

The course also provides existing Fed OSHA trainers an endorsement authorizing them to teach 10 & 30 hr Cal/OSHA outreach courses. Resources and Cal/OSHA training guidelines will be covered.

Individuals who wish to be authorized by OSHA to teach the Cal/OSHA versions of the 10- and 30-hour General Outreach Training Program classes must fulfill the following requirements:

1. Be a current authorized OSHA General Industry Outreach Training Program trainer OR become an authorized OSHA General Industry Outreach Training Program trainer within six (6) months after completing OSHA 5119 class. Trainers should note that the Cal/OSHA Partnership endorsement expires on the same date as their authorized Outreach trainer card.
2. Have at least one year of verifiable safety and health experience with an organization governed by Cal/OSHA standards. Outreach Trainers will be required to sign a "Statement of Eligibility" form, prior to, or in their Cal/OSHA Partnership authorization course.
3. Complete OSHA #5119 Cal/OSHA Standards for General Industry. Outreach trainers are not required to take the Cal/OSHA Partnership Trainer course from the same OTI Education Center from which they took their Federal General Outreach Training Program trainer course. Trainer will receive a separate card indicating their trainer authorization.

Trainers who receive their OSHA Outreach Training Program trainer card after completing OSHA #5119 Cal/OSHA Standards for General Industry class must contact the OTI Education Center which sponsored the Cal/OSHA Partnership class they participated in to sign a "Statement of Eligibility" form and receive their Cal/OSHA General Industry Outreach trainer card.

FPM40514: 10-Hour Construction Outreach Course (Federal OSHA) - 1.00 Units

The Outreach Training Program is a voluntary program. Its purpose is to promote workplace safety and health and to make workers more knowledgeable about workplace hazards and their rights. Outreach training does not fulfill the training requirements found in OSHA standards. Employers are responsible for providing additional training for their workers on specific hazards of their job as noted in many OSHA standards.

The OSHA Outreach Training Program was initiated in 1971, and has grown significantly in recent years. The train-the-trainer format expands the reach of the program to increase training availability.

The OSHA Outreach Training Program provides training on the recognition, avoidance, abatement, and prevention of workplace hazards. Outreach classes also provide overview information regarding OSHA, including workers' rights, employer responsibilities, and how to file a complaint.

- Promotes safety culture through peer training
 - Outreach training content includes hazard recognition and avoidance, workers' rights, employer responsibilities, and how to file a complaint; it emphasizes the value of safety and health to workers, including young workers
- The 10-hour training program is primarily intended for entry level workers. All outreach training is intended to cover an overview of the hazards a worker may encounter on a job site. Training emphasizes hazard identification, avoidance, control and prevention, not OSHA standards.

FPM40515: OSHA 10-Hour General Industry Outreach Training Course - 1.00 Units

This training program is intended to provide entry level general industry workers information about their rights, employer responsibilities, and how to file a complaint as well as how to identify, abate, avoid and prevent job related hazards on a job site. The training covers a variety of general industry safety and health hazards which a worker may encounter. Training emphasizes hazard identification, avoidance, control and prevention, not OSHA standards.

FPM40524: OSHA 7120 - Introduction to Combustible Dust Hazards - 1.50 Units

This 2-day course is designed to provide private businesses within general industry an opportunity to enhance their awareness of the hazards posed by combustible dust.

FPM40525: OSHA 7125 - Seminar on Combustible Dust Hazards - 0.50 Units

This one-day seminar provides students with general industry knowledge to enhance their hazard recognition of combustible dust in the workplace.

FPM40528: Fire & Life Safety in the Workplace - 4.00 Units

Fire and explosions in the workplace can be dangerous for employees. Not just construction sites and industrial plants, but also office spaces, buildings and other general industry facilities. Any type of business could potentially catch fire. It is the responsibility of the employer to develop and implement fire and life safety programs for the protection of their workers through fire prevention measures, fire protection and fire suppression.

In this course, students will learn about the employer's roles & responsibilities as well as the codes and standards of fire and life safety in the workplace allowing them to implement industry best practices focused on the reduction of life loss due to fire and explosion. This includes fire prevention, protection and suppression as well as general life safety.

Target Audience

Any employer, manager, employee or employee representative who, as part of a safety and health program, would have responsibility for the development and/or maintenance of safety programs, emergency action plans, fire systems, inspection responsibilities or compliance responsibilities.

Top Takeaways

- After the course, students will be able to:
 - identify, interpret and follow regulations, codes and standards related to fire & life safety
 - relate NFPA 101 (Life Safety Code) to buildings and facilities
 - ensure adherence to code & regulatory requirements for fire detection, suppression systems, and portable fire extinguishers
 - create Emergency Action Plans, Fire Prevention Plans and Hazardous Materials Business Plans
 - identify fire protection features in buildings and facilities

FPM40535: Anatomy and Physiology - 5.00 Units

This course is designed to develop an integrated understanding of human structure and function, and an appreciation for the close interrelationship between anatomy and physiology. Clinical examples utilized in the course will assist students in learning that the disease process is a disruption of homeostasis and a breakdown of the normal integration of form and function, and that medical intervention may restore normal function. Health and wellness issues will be discussed to reinforce the basic concepts of human structure and function by applying them in practical ways to current problems in medicine, public health, athletics, fitness, and trends in research and technology.

FPM40536: Law and Ethics for Addiction Professionals - 1.00 Units

This course familiarizes students with both legal and ethical responsibilities associated with the practice of substance abuse disorder treatment. Students learn about appropriate roles and behavior to avoid liability and prevent harm to clients. Issues such as confidentiality, duty to treat, responsibility to third parties, ethical decision-making, and legal remedies for discrimination experienced by people in or in need of recovery from alcoholism and/or drug addiction are explored. This course meets the "legal and ethical responsibilities" provisions of all alcohol and drug counselor certification authorities in California.

FPM40537: OSHA 502 - Update for Construction Industry Outreach Trainers - 0.00 Units

Are you an active trainer in the Outreach Program? Have you completed the Trainer Course for the Construction Industry OSHA 500? You must be updated every four years on training techniques, OSHA construction industry standards, policies, and regulations. Once you successfully complete the course, you are authorized to train for an additional four year term. Bring current trainer card to class for verification of your status. Laptop recommended.

FPM40538: OSHA 503 - Update for General Industry Outreach Trainers - 0.00 Units

Are you an active trainer in the Outreach Program? Have you completed the OSHA 501 - Trainer Course for General Industry? You must be updated every 4 years on training techniques, OSHA general industry standards, policies, and regulations. Once you successfully complete the course, you are authorized to train for an additional four year term. Must bring current trainer card to class. Laptop recommended.

FPM40539: OSHA 5029 - Cal/OSHA Update for Construction Industry Outreach Trainers - 0.50 Units

This one day course updates the OSHA 5109 with new and current Cal/OSHA standards and continues the outreach trainer's authorization to teach both 10 and 30 hour Cal/OSHA Outreach courses.

Required Prerequisite: OSHA 5109 or OSHA 5029 within four years.

IMPORTANT - ONLINE ENROLLMENT IS NOT PERMITTED.

Prior to enrollment, students must provide the following:

1. Verification of Prerequisite Form (click on one of the 'Apply Now' buttons below)
 2. Proof of your trainer status. Acceptable forms of proof are: a copy of your OSHA 500/OSHA 502 Trainer card with Cal/OSHA sticker, Cal/OSHA Outreach Trainer Card (newest plastic version) or Certificates of Completion.
- Cal/OSHA Expiration: These cards expire on the same date as the Outreach Trainer card.

FPM40540: OSHA 5039 - Cal/OSHA Update for General Industry Outreach Trainers - 0.50 Units

This one day course updates the OSHA 5119 with new and current Cal/OSHA standards and continues the outreach trainer's authorization to teach both 10 and 30 hour Cal/OSHA Outreach courses.

Required Prerequisite: OSHA 5119 or OSHA 5039 within four years.

IMPORTANT - ONLINE ENROLLMENT IS NOT PERMITTED.

Prior to enrollment, students must provide the following:

1. Verification of Prerequisite Form (click on one of the 'Apply Now' buttons below)
 2. Proof of your trainer status. Acceptable forms of proof are: a copy of your OSHA 501/OSHA 503 Trainer card with Cal/OSHA sticker, Cal/OSHA Outreach Trainer Card (newest plastic version) or Certificates of Completion.
- Cal/OSHA Expiration: These cards expire on the same date as the Outreach Trainer card.

FPM40541: OSHA 7845 - Recordkeeping Rule Seminar - 0.50 Units

This half-day course will assist employers in identifying and fulfilling their responsibilities for posting certain records, maintaining records of illnesses and injuries, and reporting specific cases to OSHA. Several practice workshops are included. Employees of companies that have responsibilities under OSHA's revised recordkeeping Rule 29 CFR 1904 will benefit from this course.

FPM40552: Cultural, Social, and Historical Overview of Alcohol and Drug Related Problems - 3.00 Units

(Formerly "Introduction to Alcohol and Other Drug Studies") How history, culture, and context frame the social and policy response that enables substance abuse treatment is the focus of this course. The historical, political, economic, and cultural factors contributing to and defining substance abuse problems are examined. These factors are emphasized because they are important, critical, and supplemental contributors to the biological, medical, and disease model definitions of substance abuse. In particular, the differential impact of substance abuse problems in various communities and demographic groups is examined, e.g., African American, Asian, Latino, gender, age, LGBT, and socio-economic status.

FPM40554: Occupational Safety & Security for Health Professionals - 1.00 Units

This course is specifically designed for general healthcare personnel in healthcare or healthcare-related organizations. Students will receive a broad, comprehensive exposure to safety and health requirements in the healthcare setting. They will be introduced to general safety and health program requirements, the framework of an effective and comprehensive safety and health program, and receive an introduction to specific workplace hazards and methods of hazard control one may find in different healthcare occupations. Upon completion of this course students will be able to apply this knowledge to healthcare workplace settings they may encounter.

FPM40559: Lab: Anatomy & Physiology - 2.00 Units

This Lab is to accompany the Anatomy & Physiology course (FPM-40535) and should be taken together.

Lab Objectives:

Develop a visual knowledge of body structure at the cellular, tissue, organ, & system levels. Understand the gross & microscopic approach to Anatomy & Physiology. Provide the students with all necessary lab tools such as anatomical models, histology slides as well as experimental & physiological problems that promote the critical understanding of the human body. Familiarize the students with a variety of lab assignments, help visualize most of the anatomical models of all the body systems that have been covered in the Anatomy & Physiology course.

FPM40562: OSHA 5402 - Maritime Industry Trainer Update Course - 1.50 Units

Participants will update their maritime trainer status and be able to demonstrate continued development by applying effective adult learning principles and training techniques to identify and explain maritime industry hazards and corrective measures.

FPM40564: OSHA 7110- Introduction to Bolting Safety - 0.50 Units
Bolting Safety**FPM40565: OSHA 5410 - Occupational Safety and Health Standards for the Maritime Industry - 4.00 Units**

This course is the standards for the Maritime Industry. It is also a required Prerequisite for the OSHA 5400 - Trainer Course - Maritime Safety. Given OSHA standards and current industry information, students will be able to demonstrate ability to interpret federal standards for the maritime industry. Students will be able to identify the jurisdictional responsibilities of federal regulatory agencies in maritime industries, and able to identify how the hierarchy of rules applies to maritime industries covered by OSHA, Inspections, Citations, and Enforcement Policies.

FPM40566: Trainer Course - Fall Protection - 0.50 Units

Continuation of the OSHA 3115 course, this course teaches student how to apply the fall protection standards, and teaches training techniques that are effective and develops an effective training course for both classroom and hands-on in the field.

FPM40573: OSHA 5810 - Hazards Recognition and Standards for On-Shore Oil and Gas Exploration and Production - 3.00 Units

This course provides essential information for employees and employers to protect themselves by developing the knowledge and skills to anticipate, recognize, evaluate and control hazards common to the on-shore oil and gas exploration and production industry. This includes work sites associated with the on-shore exploration and production oil and gas industry including, but not limited to construction, drilling, completion, well servicing, production, product gathering and processing, and product transmission. This course is intended for employees and employers engaged in all phases of on-shore oil and gas exploration and production.

FPM40577: Fundamentals of Infection Prevention/Clinical Epidemiology - 1.00 Units

The concepts of Fundamentals of Infection Prevention and Clinical Epidemiology will be communicated through a series of web-based sessions, with each session building upon knowledge and principles communicated in previous session(s). Course content will be presented in a logical, engaging and step-wise manner with a sharp focus on the role of infection control Practitioners/Preventionist. The series of web-based sessions will begin with an overview of the epidemiological principles and Centers for Disease Control and Prevention (CDC) evidenced based methods and recommendations used in the development and practice of disease and infection surveillance, prevention and control for the General Acute Care Hospital (GACH).

FPM40580: Process Safety Management - 3.00 Units

Process safety management is a regulation, promulgated by the OSHA which covers any activity or combination of activities including any use, storage, manufacturing, handling or the on-site movement of highly hazardous chemicals (HHCs) as defined by OSHA and the EPA (Environmental Protection Agency). UCSD 3300 introduces managers and safety professionals to the standard (29 CFR 1910.119) and assists in understanding their responsibilities related to its implementation and management.

FPM40587: Behavior Change and Lifestyle Coaching - 1.00 Units

(Formerly Motivational and Adherence Strategies for Personal Training)
Success in personal training in today's sophisticated market necessitates the design of comprehensive programs that simultaneously attend to the psychological, emotional and physiological parameters surrounding training and lifestyle change. In this course, students will acquire the essential tools to effectively develop and maintain their professional relationship with their client. The course addresses rapport building, communication skills, behavioral change, motivational interviewing, goal-setting, and adherence strategies.

FPM40601: Curso Avanzado en Administración de Estudios Clínicos en Latinoamérica - 1.50 Units

Latinoamérica es una región de importancia para la industria farmacéutica internacional, y se requiere un alto nivel de entrenamiento especializado para el personal que participa en estudios clínicos farmacológicos. Este curso intensivo de dos días se ofrece en español para el personal interesado en la actualización de Buenas Prácticas Clínicas (BPC), monitorización basada en riesgo, actualización de aspectos regulatorios en Latinoamérica, ética en investigación, terceros autorizados, organizaciones de investigación clínica por contrato y actualización en estudios clínicos en Oncología. Este curso se ofrece en español a los profesionales interesados en aprender principios avanzados para conducir estudios clínicos adecuadamente en la dinámica región latinoamericana.

FPM40604: Integrative Nutrition: Natural Healing With Food - 2.00 Units

Learn to use the natural healing power of food to rejuvenate yourself from the inside-out. Lessons draw from nutrition science, epidemiology and time-tested principles (and cuisines) from around the world. Interactive classes follow a theme each week, and participants come away with an understanding of the effects of dietary patterns on health and illness, around the world and through the ages. At every class, you will also enjoy delicious, balanced, and easy-to-prepare whole-food, plant-based meals with organic ingredients, sourced locally.

FPM40607: Advanced Medical Writing & Editing - 4.00 Units

In this course, students will apply all previously learned concepts to work through one or more projects in one of the four pre-identified Medical Writing areas (Scientific Grants, Continuing Medical Education, Publication, or Regulatory). The purpose of the capstone course is to:

Gain hands on experience of researching information, and analyzing, interpreting, and communicating data as would be expected of a Medical Writer. The final project(s) will be submitted for critical review.

Have a clear sense of the critical behaviors and practical work practices that make the student a better Medical Writer.

Identify areas to continue working on moving forward to hone knowledge and skill in the profession.

To be eligible to take this course, you must have completed all of the other courses in the Medical Writing program with a B-/80% or higher. You must select from one of the four areas of specialization to fulfill this final required component of the certificate:

Capstone: Journal Article and Publication Development (FPM-40630)

Capstone: Medical Education Materials (FPM-40627)

Capstone: Regulatory Writing (FPM-40628)

Capstone: Scientific Grants (FPM-40629)

FPM40608: Designing Figures, Tables, & Graphs - 2.00 Units

This course focuses on how to construct effective, accurate and attractive figures, tables and graphs. Course content includes basic statistics, principals of the visual display of quantitative information, critique of selected medical graphics, and exercises to develop graphics which present values clearly, label

them appropriately, and provide sufficient context for readers, for a variety of formats.

FPM40609: Ethics for Medical Writers - 2.00 Units

This course covers the basic principles of medical ethics (autonomy, beneficence and justice) as they apply to the delivery of healthcare and to human subjects research, from a medical writing perspective. Ethical reasoning skills are developed using real life case studies through analysis of actual cases.

FPM40611: Ethics and Epidemiology - 3.00 Units

FPM40612: Epidemiology Methods and Ethics - 3.00 Units

FPM40613: Research Ethics - 3.00 Units

FPM40614: Drug Clinical Trials Research Methods and Ethics - 4.00 Units

FPM40616: OSHA 7225 Transitioning to Safer Chemicals - 0.50 Units

This course covers a proactive approach to reducing the use of hazardous chemicals in the workplace by transitioning to safer alternatives. Course topics include identification, evaluation, assessment, and implementation of safer chemical alternatives. In particular, participants will use OSHA's seven-step substitution planning process. The course features workshops and hands-on activities with the use of various online chemical databases and tools. The target audience is purchasing staff, maintenance supervisors, facility managers, and workers who utilize hazardous chemicals at their worksites, along with occupational safety and health professionals who provide technical assistance on the control of chemical hazards. Upon course completion participants will have the ability to recognize and evaluate hazardous chemicals in their workplace, assess safer alternatives, and implement those alternatives.

FPM40617: Pathophysiology of Human Disease - 5.00 Units

Upon completion of the course, students will be able to:

1. Explain each of the major body systems and their normal functions.
2. Describe common clinical disorders/diseases and pathologic mechanisms of each of those body systems.

FPM40618: Food as Medicine: The Art and Science of Food, Nutrition and Self-Healing - 1.00 Units

Learn the latest philosophy of Self-Healing with Food. Students are introduced to ancient wisdom and modern science of food as medicine; food and natural remedies for common health issues; and working with special populations. Students will also learn how to create delicious versions of core healing recipes and cooking techniques.

FPM40619: The Business of Integrative Nutrition - 1.00 Units

Learn the skills to convert your Integrative Nutrition knowledge into a viable business, including:

Overview of the Health Food Production and Personal Chef Industries

Look at the industry from a business perspective, with a particular emphasis on the San Diego region. This includes analysis of food production, delivery, and private/personal chef businesses.

Leadership Skills, Interpersonal Behavior and Effective Communications with Clients and Healthcare Providers

Through a variety of interactive elements, participants will gain self-awareness of their current level of proficiency in key skills and plan for continued development.

Operations Management

Ensuring operations are efficient in the use of material and resources and effective in quality control, participants will learn about meal planning, food

sourcing, inventory, recipe formulation, cost control, systems and productivity analysis and strategic planning.

Marketing and Distribution

A hands-on, practical experience in integrated marketing communications and strategic marketing plan development, participants will create a positioning statement and marketing strategy and plans.

Financial Management

Discover how to build all elements of a business plan; learning how basic accounting principles, marketing, operations and finance all connect.

FPM40620: Advanced Nutrition Topics - 2.00 Units

The course builds on the foundation, established in the course "Food as Medicine: The Art and Science of Self-Healing,” for a career-focused training program Certificate in Integrative Nutrition. Taught by leading national experts, it provides students with advanced theoretical perspectives and targeted applications of the use of food as medicine. These are applied to the prevention and management of several common, important health problems. It begins with an examination of nutritional strategies for clinical care, including the use of whole food, plant-based diets, medical foods, fasting, and functional medicine. It then proceeds to link diet to the development and treatment of several important issues in clinical medicine including heart disease, cancer, blinding eye disease, and women’s health. It then exposes students to differing viewpoints on and helps them to think critically about some of the hottest topics and deepest controversies in the field (such as the emerging understanding of the role of the human microbiome and the pros and cons of genetic engineering of foods). Finally, it offers new ways of conceptualizing how to apply and research the use of food as medicine. The course is taught through a series of online lectures, assigned readings, and online discussion.

At the end of this course, students will be able to:

- Describe the scientific relationship of food with the development, progression, and treatment of several common, important health concerns.
- Understand the rationale for and healing properties of a whole food, plant-based diet and its targeting toward specific health problems.
- Explain the uses of specific medical foods including their scientific basis, healing properties, and clinical applications.
- Discuss and provide an overview of Functional Medicine and how it may be used therapeutically to help ameliorate a variety of health problems.
- Explain different approaches to fasting and fast-mimicking diets and their clinical applications.
- Discuss the human microbiome and its scientific underpinnings, relationship with and modulation by food, and far-reaching health implications.
- Articulate and explain different perspectives on major controversies in the field of diet and nutrition.
- Conceptualize and provide an example of how individual data may be used to research and understand the impact of diet on disease.

FPM40621: EM385 Fall Protection for the Competent Person - 2.50 Units

The most current revision of EM-385-1-1, Section 21.C.04a mandates that starting in May 2016 the Competent Person for Fall Protection shall attend a minimum of 24 hours fall protection training with a combination of formal classroom training and practical applications. Falls are the leading cause of death in construction. Based on the seriousness of fall hazards this training exceeds EM-385-1-1 minimum requirements. This course consists of two days of classroom with one-day hands-on experience. Emphasis will be on current ANSI fall protection requirements and specifics from EM-385-1-1 fall protection standards to include both workshops and classroom discussions. This training fulfills the SSHO requirement to maintain his/her competency according to EM-385-1-1 Section 01.A.17d.

Students attending this course will be able to:

- Apply EM 385 1-1 Fall Protection Requirements and ANSI Z359 family of standards requirements to a written Fall Protection Program
- Identify responsible persons and their required duties within a Fall Protection Program
- Construct and evaluate Fall Protection Hazard Assessments
- Classify hazard controls applicable to construction process conducive to falling
- Identify processes and hazard controls regarding Work Platforms, Safe Access and Scaffolds
- Evaluate how to properly store and maintain Fall Protection equipment
- Organize and apply techniques to conduct an incident investigation
- Discuss and plan a sundry of basic rescue service operations
- Define and evaluate the effectiveness of a Fall Protection Program Evaluation

FPM40623: Natural Healing and Cooking - 2.50 Units

Are you ready to transform your body into its optimal state-of-being? Learn how to use the natural healing power of food to rejuvenate yourself from the inside-out. This interactive 4-day retreat teaches a proven, practical and delicious way to fight and protect against obesity, diabetes, heart disease, autoimmune disorders and cancer. Designed by nutrition researcher and preventive medicine physician Gordon Saxe, MD, PhD, lessons draw from nutrition science, epidemiology and time-tested principles (and delightful cuisines) from around the world.

Experience a cooking class series that teaches a proven, practical, and delicious way to renew the body from the inside-out, fight and protect against obesity, diabetes, heart disease, autoimmune disorders and cancer. Enjoy delicious, balanced, and easy-to-prepare whole-food, plant-based meals with organic ingredients sourced locally.

By enrolling in this 4-day retreat, students will:

- Understand the effects of dietary patterns on health and illness, and the common denominators of health around the world and throughout the ages
- Enjoy delicious, balanced, and easy-to-prepare whole-food, plant-based meals sourced locally with organic ingredients.
- Explore methods to get the best texture and flavor from more than twenty different types of grains and legumes.
- Learn the tricks to picking the perfect vegetables and fruits.
- Discover new food preparation skills and cooking techniques that draw out healing properties and most flavorful qualities of foods, herbs, and spices.
- Gain practical tips, customized tools, and menu plans to fit your unique lifestyle.

Access:

- Hundreds of free, health-promoting, quick-and-easy recipes.
- Course materials, handouts and worksheets.
- Ongoing support network and tools.

Location:

4110 Sorrento Valley Blvd, San Diego, CA 92121
 Enter through the Bastyr Clinic entrance and ask the front desk staff for directions to the class.
 To complete Part II of the Integrative Nutrition Certificate, you must also complete the Nutrition Practicum course.

FPM40624: Nutrition Practicum - 0.50 Units

To complete the program in Natural Healing and Cooking, students will also be required to demonstrate their skills by remotely hosting a mini-cooking class after the completion of the "Natural Healing & Cooking" course. Students will practice their cooking skills at home using the techniques learned in the in-person cooking course and submit a final video project.

**Students must have taken or are currently enrolled in Natural Healing and Cooking to complete Part II of the Integrative Nutrition Certificate.

FPM40625: Ethics Summer Practicum - 3.00 Units

FPM40627: Capstone: Medical Education Materials - 4.00 Units

FPM40628: Capstone: Regulatory Writing - 4.00 Units

FPM40629: Capstone: Scientific Grants - 4.00 Units

FPM40630: Capstone: Journal Article and Publication Development - 4.00 Units

FPM40631: Summer Practicum - 3.00 Units

MENA Research Ethics contract program.

FPM40632: Medical Terminology: An Anatomy and Physiology Approach - 1.50 Units

Using an anatomy and physiology systems approach, this course reviews common terms associated with medical practice, research, and different healthcare settings. The goal: to better prepare individuals to be productive in healthcare work environments. Students should be able to decipher an entry in a medical chart or record and know how to approach and read unfamiliar terms. Students complete the course within the 4 week section in which they are enrolled.

FPM40634: CT: Project Management in Clinical Trials - 2.00 Units

It has become increasingly more important to use solid project management principles when managing clinical trials. This course teaches the basic skills of project management derived from PMI principles but with focus on clinical trials. Plenty of situational examples will be provided in order to maximize understanding and clarity. Topics include a brief history of the Project Management Institute (PMI), key terms and definitions, project life cycle, introduction to Knowledge areas and their linkage to the Project Life Cycle, review of common tools, virtual project management, personality dynamics, program, portfolio and alliance management. At the end of this course, students will understand how the basic principles of project management derived from PMI principles can be applied in clinical trial execution.

FPM40636: Introduction to Fire and Life Safety in the Workplace - 1.50 Units

NEW ONLINE COURSE! This course is designed to provide students with the knowledge and understanding of fire and life safety requirements in the workplace including fire prevention, fire protection, and fire suppression methods. The class will familiarize students with the applicable codes, standards and regulations as well as the history leading to the fire and life safety requirements. Students will learn to apply the requirements to specific workplace situations. The class will cover systems and equipment used to provide Fire & Life Safety in the workplace and how to maintain/inspect them.

FPM40637: OSHA 7505 - Introduction to Incident (Accident) Investigation - 0.50 Units

This course covers an introduction to basic accident investigation procedures and describes accident analysis techniques. Course topics include reasons for conducting accident investigations, employer responsibilities related to

workplace accident investigations, and a six step accident investigation procedure. The target audience is the employer, manager, employee or employee representative who is involved in conducting accident and/or near-miss investigations. Upon course completion students will have the basic skills necessary to conduct an effective accident investigation at the workplace.

FPM40638: OSHA 3085 - Principles of Scaffolding - 2.50 Units

This course covers the requirements for construction and the safe construction and use of scaffolding using the OSHA construction scaffold standard as a guide. Course topics include hazards associated with scaffold design, assembly, disassembly and use, types of scaffolds, determining scaffold capacity, employee qualifications and training, and maintenance, repair, and inspection requirements. Students will participate in workshops to reinforce concepts of safe scaffolding. Upon course completion students will have the ability to identify the types of scaffolds and their components, determine safe assembly, use, and disassembly, and recognize common violations of OSHA Standards.

FPM40640: Workers Compensation for Safety Professionals - 0.50 Units

This course is expected to be available for enrollment in 2018.

All employers are required by law to cover their workers for damages that result from work related injuries or illnesses, or to compensate surviving spouses or minor children when a worker is killed at work. Knowledge of the workers compensation system should be understood by all safety professionals, and those that are relied upon by their employers to manage the system must be well aware of how to control the costs of the insurance premiums. This course will cover the fundamentals of the coverage requirements, options for obtaining the coverage, how premiums are calculated and how claims affect the cost and availability of continued coverage.

FPM40641: Safety Leadership I - 2.00 Units

This course is expected to be available for enrollment in 2018.

A manager has employees that report to him or her, but not all managers have good leadership skills. Leadership can be defined as the ability to compel and motivate others towards the leader's goals; a leader has followers and not simply reports. In safety, this translates into leaders that go beyond simply defining and implementing safety and health policies and procedures.

Through lectures, presentations and real-world simulations, students will cover topics including Alignment of values within an organization around safety Exhibiting visible leadership each day Identifying an organizations safety strengths and weaknesses and leading improvements Constructive intervention skills Fostering two-way dialogue between employees and leadership Setting and maintaining safety expectations

By the end of the course, safety professionals will have the skill sets necessary to transform into safety leaders.

FPM40642: Safety Leadership II - 2.00 Units

This course is expected to be available for enrollment in 2018. Safety culture can be summed up as the approach, acceptance, attention, awareness and attitude that an organization and its employees have regarding safety in the workplace. Safety culture is a part of the larger organizational culture, and can be summed up as "the way we do things around here."

When workplace illnesses, injuries and deaths occur they can often be traced back to a breakdown in communicating, understanding and adhering to the safety policies and procedures – and/or the inadequacy of the policies and procedures themselves.

This course will help students identify, create and improve an organizational safety culture by focusing on areas such as:

- Ensuring leadership commitment at all levels
- Making workplace safety the top priority in all instances
- Organization-wide safety communication

Discipline system for unsafe practices
 Employee empowerment to suggest improvements in safety practices
 Viewing safety as an investment and not a cost

FPM40644: - 0.50 Units

FPM40645: - 3.00 Units

FPM40646: - 3.00 Units

FPM40647: - 0.50 Units

FPM40648: - 1.00 Units

FPM40649: - 0.50 Units

FPM40650: - 0.50 Units

FPM40651: - 0.50 Units

FPM40652: - 3.00 Units

FPM40653: - 3.00 Units

FPM40654: - 1.00 Units

FPM40655: - 1.00 Units

FPM80011: Nuts and Bolts of Monitoring Clinical Trials--Cohort - 0.00 Units

Monitoring Clinical Trials

FPM80012: Working with CROs--Cohort - 0.00 Units

Working with Clinical Research Organizations

FPM80013: Setting Up a New Clinical Study--Cohort - 0.00 Units

Setting Up a New Clinical Study

FPM80020: Infection Prevention for Healthcare Epidemiology - 0.00 Units

This 8-hour series of web-based sessions meets the requirements outlined in the 2008 California senate bill requiring mandatory specialized Centers for Disease Control and Prevention (CDC) training. This training is not solely for California physicians and hospital epidemiologists, even though California legislation is included. Use of this course may be expanded outside the boundaries of California for other physicians and hospital epidemiologists responsible for infection prevention programs within their General Acute Care Hospitals (GACH).

FPM80054: EM-385-1-1 Refresher - 0.00 Units

This 2-day course is to update and aid any Site Safety and Health Officer and any student who has attended a past 40 Hour EM-385 course and familiar with the EM-385-1-1 manual. Special emphasis will be on the latest and the most current revision of the EM 385-1-1 to date. Incorporated will be some workshops and detailed discussions on all changes. This training fulfills the SSHO requirement to maintain his/her competency according to EM-385-1-1 Section 01.A.17d.

This course includes the following objectives:

- Discuss all recent revision changes of EM 385 1-1, 2014
- Explain why changes are required and how their application applies towards developing safe and healthful construction processes.
- Identify specific manual changes and suggested safety and health techniques to selected construction activities.

FPM80055: Regulación de Ensayos Clínicos en Colombia - 3.00 Units

Este curso se basa en el estándar internacional de las Buenas Prácticas Clínicas en la investigación clínica haciendo énfasis en la normatividad colombiana obligatoria para todos aquellos profesionales de la salud e investigadores que desean participar en estudios clínicos en Colombia. El curso abarca la estructura del Sector Salud en relación a la investigación clínica; marco normativo colombiano; requisitos y proceso de certificación en Buenas Prácticas Clínicas; centros de investigación; resoluciones y guías del INVIMA; evaluación y aprobación de enmiendas; Comités de Ética; reporte de eventos adversos; consentimiento informado; documentación y trámites; proceso de renovación de la certificación; y políticas interesectoriales.

FPM80058: Safety Adds Value to Your Business - 0.00 Units

NEW ONLINE COURSE! A sudden serious accident can wreak havoc in an organization, leading to injuries, costly repairs, insurance payments, lawsuits and more. Sometimes even forcing an entity to go out of business. Yet when organizational leadership thinks about workplace safety, often they think in terms of cost! What is the cost of safety? Leaders think in terms of how much safety equipment or practices may cost an organization. What will "more safety" do to production? Often deciding to try a different, less costly approach. This course is designed to illustrate the value that safety can bring to any organization. What improvements follow, when workplace safety is done correctly and consistently. This course will identify many issues that get overlooked when making the argument to drive safety to the next level.

FPM80059: - 0.00 Units

FPM80060: - 0.00 Units

FPM80061: - 0.00 Units

FPM80062: - 0.00 Units

FPM80063: - 0.00 Units

FPM80064: - 0.00 Units

FPM80065: - 0.00 Units

FPM90000: Disease Detectives: An Introduction to Epidemiology - 6.00 Units

What is epidemiology? Why does it matter? This course provides students with an exciting introduction to epidemiology. The course begins with a review of the history of epidemiology and key concepts in population health. Then, students will learn how to conduct epidemiologic research (identify health problems, develop hypotheses, design studies, analyze data, draw conclusions and present findings). Lastly, students explore real life applications of epidemiology and the diverse set of career paths that are available to epidemiologists. The course will engage students in collaborative learning through group discussion, case studies, in-class activities, a team project and a field trip to the San Diego County Department of Public Health.

GLBH40015: - 2.00 Units

GLBH40016: - 2.00 Units

GLBH40017: - 2.00 Units

GLBH40018: - 2.00 Units

GLBH40019: - 3.00 Units

GLBH40020: - 3.00 Units

GLBH40021: - 3.00 Units

GLBH40022: - 3.00 Units

GLBH40023: - 3.00 Units

GLBH40024: - 2.00 Units

GLBH40025: - 3.00 Units

HIST40073: Introduction to Cinema - 2.00 Units

Whether it's cinematography, directing, production design or sound, it takes a lot to make a great film and there are those who have pioneered and perfected their crafts. This class will look at films and filmmakers who made history with their vision, style, approach, and execution. This course will be an introduction to film history and film theory and will cover all major film movements from the beginning of film history to present. It will also cover all key aspects of filmmaking and theories behind them.

HLAW298: HLAW-298 Directed Studies in Health Law - 2.00 Units

A faculty member will direct a student's study in selected professional development topics in health law. Specific content will be tailored to the student's particular needs and area of interest. Students must make arrangements with the program and individual faculty member prior to enrolling in the course each time.

HUM90001: Innovative Writing Across Media: An Introduction to the College Workshop - English/Chinese - 6.00 Units

Students will explore a range of creative writing forms, styles and traditions. They will learn to become better critical writers and thinkers and find effective ways of expressing their creative vision/voice as we move over different genres and media. We will work within traditional forms (poetry and fiction), as well as multi- and new-media writing (screenplays, comics, site-specific works, and digital literature). Students will engage in the basic praxis of writing workshop: producing original writing, annotating classmate's work with comments, discussing original pieces and supplemental reading, revising, writing critically about presented work, and producing a "final" portfolio. Students will also have the opportunity to meet with a number of accomplished visiting speakers who will lecture on/discuss aspects of craft, give advice about publication, and outline opportunities to become involved in literary communities and industries. Visiting scholars will include editors, professors, and nationally prominent literary artists engaged in a variety of innovative practices. The course will culminate in students getting to publish their best work in either an online literary journal or a handmade chapbook.

HUM90002: Foundations of Creative Writing - 6.00 Units

Course Description

Through unique and challenging writing exercises, readings, field trips and lectures, this course will provide the beginning writer with a toolkit of essential skills. The contents of this toolkit: giving and receiving critical feedback, reading with a writer's eye, navigating professional and educational pathways as a writer and generating, revising and editing material that is strong, original and imaginative. Students will study literary technique within the four major genres, fiction, poetry, creative nonfiction and playwriting, as well as the subgenres of game design, graphic novels and screenwriting, culminating in a revised final project of their choice. Students will leave the course with a practical understanding of the creative process and will be prepared to critique and write literature at a university level.

HUM90003: Language and Identity for Bilingual Writers (English/Spanish) - 6.00 Units

Through the appreciation of contemporary bilingual works of literature and literary theory, conversational hikes through nature, and English/Spanish experimental writing exercises, this course will engage in the exploration of the identity concerns of bilingual contemporary student writers. This course will address the examination of identity as a question pertaining to all human beings, but specifically the peculiar challenges in identity development shaped by bilingualism/biculturalism. Student writers are encouraged to work with the lyrical aspects of any literary genre (fiction, poetry, creative non-fiction and playwriting) in any support or platform with an experimental approach on literature. Participants will experience the freedom of writing in a safe bilingual peer collaborative learning environment and will value the significance of the bilingual mind in the exploration of the possibilities of language, and in relation to Wittgenstein's well-known aphorism: "the limits of language mean the limits of my world".

HUM90005: Code Switching: Experimenting with Bilingual Creative Writing - 6.00 Units

This course examines what it means to write in more than one language, mode, or code. By analyzing contemporary writing that employs languages outside of English and experimenting with our own languages, we can get closer to understanding the politics and consequences of code switching in creative writing.

HUM90006: - 6.00 Units

HUM90007: - 6.00 Units

HUM90008: - 6.00 Units

LAAR40000: Arabic for Communication I - 3.00 Units

Various local dialects make up the spoken language of Arabic speakers. Differences between them, though, are slight, and generally speakers of different regional dialects are able to understand each other with little trouble. Because the majority of Arabic movies and songs are produced in Egypt, the most popular of these varied tongues might be colloquial Egyptian Arabic. Expand your worldview (or your career opportunities) by enrolling in this introduction to the Arabic alphabet and script, which focuses on developing basic communication skills in colloquial Egyptian Arabic. Topics include social customs such as greetings and hospitality, weather and seasons, colors and clothing, time and locations.

LAAR40001: Arabic for Communication II - 3.00 Units

This class focuses on colloquial Egyptian Arabic. Includes present, past and future tense and negation. Topics include money and the supermarket, buildings and stores, jobs and expressing likes and dislikes.

LAAR40002: Arabic for Communication III - 3.00 Units

Focuses on colloquial Egyptian Arabic. Topics include suggestions and invitations, adverbs of frequency, expressing necessities and obligations, imperative form, warnings and prohibitions, as well as making suggestions, apologizes and excuses.

LAAR40005: Arabic: Modern Standard Arabic I - 3.00 Units

Comprised of 22 countries stretching from the Atlantic Ocean to the Arabian Sea, the Arab world is vibrant, diverse and complex—a beautiful mosaic. A thread connecting this cosmopolitan landscape is Modern Standard Arabic, one of the most common written languages in the world. By learning Modern Standard Arabic, you can enrich your understanding of the Middle East, avail yourself of new career opportunities, and have fun taking on a new challenge. In this class, you will learn to write and read Arabic scripts. You will also learn

about grammar, including gender, forming questions, subject pronouns, plural, possessive pronouns, present tense and demonstrative pronouns. Listening and writing activities includes topics like family, housework, school, and personal daily schedule.

LAAR40006: Arabic: Modern Standard Arabic II - 3.00 Units

This class is a continuation of Modern Standard Arabic I. The focus is on the grammar of modern standard Arabic, including past tense, future tense, comparison and superlative. Listening and reading activities will include topics on the weather, at the restaurant, at the supermarket, jobs, the city, and expressions of like and dislike.

LAAR40007: Arabic: Modern Standard Arabic III - 3.00 Units

This class will focus on Modern standard Arabic. Students advance their abilities to write and read Arabic scripts. Grammar includes relative clauses, conditional, similarity, negation with nouns and adjectives, and verbal nouns. Listening and writing includes news articles, how to write a letter. Students continue their study of customs and traditions in the Middle East and will work on a cultural project with the help of the instructor.

LAAR40008: Arabic for Communication IV - 3.00 Units

This class focuses on colloquial Egyptian Arabic and is designed to help students perform linguistic tasks successfully, gain self-confidence, and expand their risk-taking in real-life communicative situations. Students will develop their vocabulary and basic skills such as verb conjugation and will be exposed to increasingly complex grammatical constructs including some complex verbs and new patterns. This course also focuses on developing the ability to construct Arabic sentences and simple Arabic texts. Students will learn more about Arab culture by studying Arab authors, geography, habits, and social customs.

LACH40000: Chinese for Communication I - 3.00 Units

The language of the ruling class during the waning days of the Ming Dynasty, Mandarin Chinese has evolved into the language of the future as China has emerged as a major economic power in the 21st century. Mandarin is the official tongue of mainland China and Taiwan and, with over 1 billion speakers, is the most widely spoken language in the world. Get a solid foundation in Mandarin—and deepen your understanding of China’s rich history—in this introductory level course. Instruction includes basic sentence patterns as well as an introduction to Pinyin, the system used to transcribe Chinese characters into the Roman alphabet. Students will learn how to use Chinese in real life as they discuss everyday topics such as greetings, family, dates and times, hobbies, and visiting friends. Textbook preliminary lesson and lessons 1-3.

LACH40001: Chinese for Communication II - 3.00 Units

Textbook lessons 4-7. With a focus on building oral communication in Mandarin Chinese, instruction includes compound sentences, future tense, auxiliary verbs, and a further introduction to Pinyin and Characters. Everyday topics covered include shopping, discussing the weather, and making appointments.

LACH40002: Chinese for Communication III - 3.00 Units

Textbook lessons 8-10. Higher-level communication skills are emphasized as participants increase their ability to speak, listen, and read in Mandarin. Everyday topics covered include transportation, dining, asking directions, and socializing.

LACH40006: Advanced Chinese, Part A - 5.00 Units

Closed contract course for ISI Japan.

LACH40007: Advanced Chinese, Part B - 5.00 Units

Closed contract course for ISI Japan.

LACH40008: Advanced Chinese, Part C - 5.00 Units

Closed contract course for ISI Japan.

LAFR40000: French for Communication I - 3.00 Units

The native tongue of Coco Chanel, Jacques Cousteau, and Voltaire, French is sophisticated, melodious, and popular. More than 200 million people speak French on five continents, and French is the second most taught language in the world after English. It is also the international language of fashion, cooking, and theatre. A great starting point to learn the other Romance languages, French develops critical thinking skills by exposing you to a new conceptual and linguistic framework. The course provides an introduction to French pronunciation and intonation and the basics of French grammar (the present tense, gender and the rules of agreement). Learn to describe yourself and others and engage in simple conversations. Textbook preliminary chapter and chapters 1-2.

LAFR40001: French for Communication II - 3.00 Units

Textbook chapters 3-5. Includes a further introduction into the present tense, the future, passé composé, and prepositions. Classes are conducted entirely in French and focus on all aspects of students' everyday life. Reading and writing exercises are added to complement in-class discussions.

LAFR40003: French for Communication III - 3.00 Units

Textbook chapters 6-8. Includes an in-depth study of French articles, continued work in the present tense, learning to describe one's memories and describe the way things used to be (imparfait), and an examination into the subtleties of the past tense (the passé composé vs. imparfait). Students will have ample time to practice their skills through discussions of topics, such as food, health and personal memories.

LAFR40004: French Refining Fluency, Part A - 3.00 Units

This three-course series is designed for those students who already know the basics of French but need to develop more fluency in the language. Instruction focuses on further developing speaking, listening, and reading skills through cultural discussions based on a variety of readings in French. Sessions are geared toward helping students expand their vocabulary, increase their grammatical accuracy and be able to make smoother transitions between sentences. This course is intended for participants who are at a strong intermediate to advanced level. Part A, B, and C cover different readings.

LAFR40007: French for Communication IV - 3.00 Units

Textbook chapters 9-11. Includes the study of pronouns, second future tense, and the subjunctive. Students continue to develop their communicative skills through in-class discussions of housing, work and fashion. Movie excerpts stimulate reflection on these issues from a cross-cultural perspective.

LAFR40010: French for Communication V - 3.00 Units

Textbook chapters 11-12. Includes a review of pronouns and the subjunctive, and an introduction to the future and conditional tenses. Newspaper and magazine articles, as well as film excerpts, increase students' familiarity with French culture and feed lively in-class discussions.

LAFR40034: French Refining Fluency, Part B - 3.00 Units

This three-course series is designed for those students who already know the basics of French but need to develop more fluency in the language. Instruction focuses on further developing speaking, listening, and reading skills through cultural discussions based on a variety of readings in French. Sessions are geared toward helping students expand their vocabulary, increase their grammatical accuracy and be able to make smoother transitions between sentences. This course is intended for participants who are at a strong intermediate to advanced level. Part A, B and C cover different readings.

LAFR40037: French Refining Fluency, Part C - 3.00 Units

Advanced students expand vocabulary and develop reading skills while engaging in lively discussions surrounding a French novel or translated American novel in its unabridged version. A translation and written explanations of idioms and unfamiliar conversational structures are included as well as questions to facilitate discussion and articulate understanding into written form. The story and what it suggests about the larger culture provide topics for in-class conversations. Film clips and short newspaper articles further explore relevant cultural issues. Students gain a “feel” for the culture and the cultural differences through the class’ unique combination of structured reading and open conversation.

LAFR40041: French Book Club - 3.00 Units

Refine your speaking skills and deepen your understanding of French language and culture in this regularly evolving course. Receive an introduction to a variable selection of original yet readable French novels. This offering of French Book Club is intended to be a 3-part series covering *Les Noels blancs* (2000) and *Les printemps de ce monde* (2001) by Christian Signol. The Fall quarter class will start with the first volume. Students are encouraged to attend all three classes in the series (Fall, Winter, and Spring), but are not required to.

LAFR40044: French: Introductory French Fluency - 3.00 Units

This course serves as a bridge between the French language sequence (French for Communication 1-5) and the Refining Fluency in French series. It is designed for students who have had an overview of French grammar and acquired some general vocabulary, but need additional practice in order to integrate what they have learned and build the confidence necessary for participating in higher-level conversation. An engaging selection of French films will serve as the basis for a wide variety of exercises. Students will be able to hone their language skills while getting exposure to a variety of linguistic contexts and slices of French life.

LAFR90000: - 1.00 Units**LAFR90001: - 2.00 Units****LAFR90002: - 2.00 Units****LAGM40000: German for Communication I - 3.00 Units**

Known as *Das Land der Dichter und Denker* (the land of poets and thinkers), Germany is the home of Bach and Beethoven, Kant and Goethe, Einstein and Gutenberg. Having made pivotal contributions to areas as diverse as literature, science, and classical music, many say German culture is one of the most impressive in the world. By learning German, the most widely spoken language in Europe, the fruits of this massive cultural heritage can be yours. In this introductory course, students will learn about the present tense, personal pronouns, possessive adjectives, the accusative case, and word order. Topics include family, weather, telling time, describing the home, and favorite pastimes. Textbook preliminary chapter and chapters 1-2.

LAGM40002: German for Communication II - 3.00 Units

Textbook chapters 3-5. Includes dates and numbers, personal pronouns, word order, and the perfect tense. Topics include personal responsibilities, aspirations, talents, daily routine, money, work, and homelife.

LAGM40004: German for Communication III - 3.00 Units

Textbook chapters 6-8. Includes dative verbs, making comparisons, the simple past tense, nominative and accusative cases, and talking about the future. Topics include living arrangements, geography and transportation, shopping, cooking and dining out.

LAGM40005: German for Communication IV - 3.00 Units

Textbook chapters 9-11.

Includes reflexive pronouns, the subjunctive, and the future tense. Topics include childhood and youth, health and sickness, and travel.

LAGM80000: - 0.00 Units**LAJA40000: Japanese for Communication I - 3.00 Units**

The geographically small island nation of Japan, once an isolated feudal country, has opened itself up to the world in recent years. The result has been a sophisticated fusion of East and West. A traveler will encounter corporate style high rises and temple shrines, Onsen (Japanese hot baths) and American burger joints—but a world still distinctly Japanese. Vital to understanding this fascinating, complicated terrain is the Japanese language. A tongue with a diverse array of influences, Japanese is at the same time, like the country itself, something uniquely its own. This course includes an introduction to action verbs and the phonetic syllabary called hiragana. It also focuses on greetings, numbers, dates, currency, and the fundamental structures using basic verbs. Textbook chapters 1-7 (plus a portion of chapter 10).

LAJA40001: Japanese for Communication II - 3.00 Units

Textbook chapters 8-16 (chapter 10 covered in Japanese for Communication I). Includes review of hiragana and an introduction to katakana. Focuses on the -masu form verbs and adjectives. Students learn to describe things and express feelings. Topics include describing places and locations, talking on the phone, having tea together, extending invitations, and ones daily schedule.

LAJA40003: Japanese for Communication III - 3.00 Units

Textbook chapters 17-25. Includes review of hiragana and katakana, and an introduction to basic kanji. Focuses on the -te form and -nai form verbs, and advanced particle studies. Topics include transportation, giving directions and making reservations, asking permission, and expressing preferences.

LAJA40005: Japanese for Communication IV - 3.00 Units

Textbook chapters 1-5. Mastery of hiragana and katakana and the introduction of new kanji. Focuses on the dictionary form of verbs, the plain form of verbs, the connective form of adjectives, and comparisons. Topics include shopping, searching for a lost article, an early morning activity, and invitation.

LAJA40011: Japanese for Communication VI - 3.00 Units

Textbook chapters 11-15. Review of previous kanji and new kanji. Focuses on the volitional form of verbs, expressing uncertainty, changes in state, conditional statements, and expressing necessity. Topics include a vacation plan, making a reservation, as well as talking about productivity and a computer problem.

LAJA40012: Japanese for Communication V - 3.00 Units

Textbook chapters 6-10. Includes review of previous kanji and new kanji. Focuses on the adverbial form of adjectives, verb tenses in complex sentences, modifying noun clauses, quoted sentences, and the potential form of verbs. Topics include giving advice, greeting a new employee, and asking for time off.

LAJA40013: Japanese for Communication VII - 3.00 Units

Textbook chapters 1-5. Includes all Japanese writing systems. Focuses on expressing suppositions and impressions, conveying information, describing change, and the use of nominalizing sentences. Topics include the pet industry and a visit to an organic farm.

LAJA40014: Japanese for Communication VIII - 3.00 Units

Textbook chapters 6-10. Includes all Japanese writing systems. Focuses on the passive (-areru/rareru), causative (-aseru/saseru), and causative-passive (-

asareru/saserareru) form verbs, and honorifics I, II, and III. Topics include the global warming, protecting one's children, and business greetings.

LAJA40020: Japanese for Communication IX - 3.00 Units

Textbook chapters 11-15. Includes all Japanese writing systems. Focuses on learning how to leave messages, understanding written and spoken styles, the plain imperatives, and the journal form verbs. Honorifics (IV) are continuously covered and the various speech levels are discussed. Topics include leaving and relaying messages, the story of Valentine's Day, and attending a reception.

LAJA40021: Refining Fluency in Japanese, Part A - 3.00 Units

Textbook chapters 1-5. This course is designed for those students who already know the basics of Japanese but need to develop more fluency in the language. Instruction focuses on further developing speaking, listening, and reading skills through cultural discussions based on readings in Japanese. Sessions are geared toward helping students expand their vocabulary, increase their grammatical accuracy and be able to make smoother transitions between sentences. This course is intended for participants who are at a strong intermediate level.

LAJA40022: Refining Fluency in Japanese, Part B - 3.00 Units

Textbook chapters 6-10. This course is designed for those students who already know the basics of Japanese but need to further develop more fluency in the language. Instruction focuses on developing speaking, listening, and reading skills through cultural discussions based on readings in Japanese. Sessions are geared toward helping students expand their vocabulary, increase their grammatical accuracy and be able to make smoother transitions between sentences. This course is intended for participants who are at a strong intermediate level.

LAJA40027: Japanese Conversations - 3.00 Units

Through the use of discussions, role play, and presentations, students will be immersed in all aspects of the Japanese-speaking world and made to feel confident and at ease discussing cultural and current issues. An emphasis on learning conversation skills, brief review of grammar and kanji development is included. Class is designed to be challenging, stimulating and structured as students master conversational strategies, build language competency, refine speaking ability, improve listening comprehension, and build vocabulary.

LASP40001: Spanish for Communication I - 3.00 Units

As the first in a six-level language series, Level I is aimed at total beginners. In a highly interactive, lively classroom environment, students learn to perform simple tasks in the present tense, such as making greetings and introductions, describing basic characteristics, asking questions, telling time, and using numbers. Participants actively engage in role playing, share information with each other, and write simple compositions using the Spanish language. Correct pronunciation and use of basic, common phrases are emphasized as learners gain cultural insights into the Spanish-speaking world. Textbook chapters 1-3 are covered.

LASP40002: Spanish for Communication II - 3.00 Units

Level II is designed for beginner students who have had some basic exposure to Spanish. Conversations include describing people, professions, places and events using a variety of regular and irregular verbs in the present tense. Students continue to expand their cultural awareness in a lively, interactive learning environment. Textbook chapters 4-6 are covered.

LASP40003: Spanish for Communication III - 3.00 Units

Designed for those who have familiarity with the basic structures of Spanish, Level III students learn to discuss many aspects of home life, types of hobbies, and how to express their opinions and reactions. Conversational skills improve through a variety of small group activities, while practicing the use of direct

and indirect object pronouns, the present progressive and the preterite tenses. Textbook chapters 7-9 are covered.

LASP40004: Spanish for Communication IV - 3.00 Units

In a highly interactive, lively classroom environment, Level IV students will continue to develop their comfort in speaking and understanding Spanish while learning to discuss many aspects of Hispanic pastimes, household chores, health and illnesses, accidents and the pressures of student life. The student's knowledge of Spanish culture continues to grow while learning about countries like Colombia, Venezuela, and Puerto Rico. The imperfect tense, the superlatives, relative pronouns and the expression of reciprocal actions are among the grammar topics covered in the course. Textbook chapters 10-12 are covered.

LASP40005: Spanish for Communication V - 3.00 Units

Level V focuses on learning beyond basic communication know-how. Participants progress to a higher comfort level of speaking Spanish as they begin to use the subjunctive mood in order to express emotions, persuade, and debate points, as well as use the present perfect and pluperfect verb tenses. Conversation topics include technology and things we own, arts and entertainment, the environment, to name a few. Actively using Spanish in a learner-centered environment, participants not only improve their communication skills, but also expand their cultural understanding of the Spanish-speaking world learning about countries like Perú, Argentina, Bolivia, and Ecuador. Textbook chapters 13-15 are covered.

LASP40006: Spanish for Communication VI - 3.00 Units

At this level, participants strengthen their competency in Spanish while building considerable confidence in using the language in diverse situations. Conversation topics include relationships, professions, the working world, news, government, shopping abroad, etc. Students use the subjunctive (adjective clauses, adverbial clauses), the future, the past subjunctive, the conditional tenses for making effective arguments, expressing how to stall for time, and speculating on past and future events. Students also review and practice verb tenses and further enrich their understanding of the Hispanic world learning about countries like Uruguay, Spain, and Chile. Textbook chapters 16-18 are covered.

LASP40011: Spanish for Healthcare Professionals II - 3.00 Units

This course is appropriate for advanced beginner-level Spanish learners in the medical health profession who wish to increase their effectiveness in communicating with Spanish speaking clients. Topics include anatomy, common diseases, protocol for obtaining a medical history, and patient cultural belief systems as related to illness and health. The student will be introduced to grammar concepts such as: direct and indirect object pronouns, stem-changing verbs, affirmative and negative expressions, uses of por and para, command forms, and more. This course is of interest to a wide range of health professionals such as nurses, physicians, psychologists, counselors, and administrative staff. Textbook chapters 6-12 are covered.

LASP40012: Spanish Conversations: Practical Dialogues - 3.00 Units

Students select eight conversational topics which become class discussions. Instructor provides vocabulary, idioms and special expressions, and students build dialogues in small groups. Cultural, historical and literary topics highlighted along with current news. Class is designed to be challenging, stimulating and unstructured as students master conversational strategies, build language competency, refine speaking abilities, improve listening comprehension, and build vocabulary (including idioms and slang). This course is meant to be taken after completing Spanish for Communication VI and at least one Refining Fluency in Spanish course or having the equivalent proficiency level.

LASP40053: Weeklong Spanish Immersion Program in Ensenada, Mexico - Elementary level - 3.00 Units

Take advantage of the opportunity to spend a week studying Spanish language and culture in Ensenada, Mexico. Each week, students attend 30 hours of classroom instruction at the Center of Languages, a well-established Mexican language school, in Ensenada. Students who have completed the program are eligible for UCSD Extension credit on a pass/no pass basis as long as they have attended 100% of classroom instruction.

Upon arrival at the Center of Languages, each student's language level is evaluated and elementary level students are placed in language level 3. Instructors combine a variety of language training techniques in the classroom, such as structure drills, intensive dialogue practice and role-playing. With classes limited to six students, the environment is highly interactive and students receive concentrated support according to their own learning preferences. Students learn specific grammatical topics and skills, strengthen their conversational skills, and participate in an hourlong afternoon minicourse that examines Mexican cultural topics. In addition to classroom hours, students have the opportunity to live with a Mexican host family and join school-sponsored activities. For more information, visit extension.ucsd.edu/travelstudy.

LASP40054: Weeklong Spanish Immersion program in Ensenada, Mexico - Intermediate level - 3.00 Units

Take advantage of the opportunity to spend a week studying Spanish language and culture in Ensenada, Mexico. Each week, students attend 30 hours of classroom instruction at the Center of Languages, a well-established Mexican language school, in Ensenada. Students who have completed the program are eligible for UCSD Extension credit on a pass/no pass basis as long as they have attended 100% of classroom instruction.

Upon arrival at the Center of Languages, each student's language level is evaluated and intermediate students are placed in language levels 4-6. Instructors combine a variety of language training techniques in the classroom, such as structure drills, intensive dialogue practice and role-playing. With classes limited to six students, the environment is highly interactive and students receive concentrated support according to their own learning preferences. Students learn specific grammatical topics and skills, strengthen their conversational skills, and participate in an hourlong afternoon minicourse that examines Mexican cultural topics. In addition to classroom hours, students have the opportunity to live with a Mexican host family and join school-sponsored activities. For more information, visit extension.ucsd.edu/travelstudy.

LASP40055: Weeklong Spanish Immersion Program in Ensenada, Mexico - Advanced level - 3.00 Units

Take advantage of the opportunity to spend a week studying Spanish language and culture in Ensenada, Mexico. Each week, students attend 30 hours of classroom instruction at the Center of Languages, a

well-established Mexican language school, in Ensenada. Students who have completed the program are eligible for UCSD Extension credit on a pass/no pass basis as long as they have attended 100% of classroom instruction.

Upon arrival at the Center of Languages, each student's language level is evaluated and advanced students are placed in language levels 7-12. Instructors combine a variety of language training techniques in the classroom, such as structure drills, intensive dialogue practice and role-playing. With classes limited to six students, the environment is highly interactive and students receive concentrated support according to their own learning preferences. Students learn specific grammatical topics and skills, strengthen their conversational skills, and participate in an hourlong afternoon minicourse that examines Mexican cultural topics. In addition to classroom hours, students have the opportunity to live with a Mexican host family and join school-sponsored activities. For more information, visit extension.ucsd.edu/travelstudy.

LASP40056: Spanish Conversations: News and World Issues - 3.00 Units

Through the use of discussions, role-play, interviews, presentations and other hands-on learning techniques, you are immersed in all aspects of the Spanish-speaking world and made to feel confident and at ease discussing current events and everyday life in Spanish. News topics and current world issues are discussed. Class is designed to be challenging, stimulating and unstructured as you master conversational strategies, build language competency, refine speaking abilities, improve listening comprehension, and build vocabulary (including idioms and slang). This course is meant to be taken after completing Spanish for Communication VI and at least one Refining Fluency in Spanish course or having the equivalent proficiency level.

LASP40060: Spanish Refining Fluency: Spain & the Caribbean - 3.00 Units

Designed for intermediate Spanish speakers, instruction focuses on developing greater fluency. Utilizing the communicative approach, you will refine your ability to describe, compare, react and recommend through more advanced interactive practice and review of key grammatical points and vocabulary. By structuring lessons around these functional areas and the culture and history of Spain and the countries of the Caribbean, you learn to communicate in Spanish in real-world scenarios. Chapters 1-2 of Punto y Aparte Expanded Edition are covered.

LASP40061: Spanish Refining Fluency: Mexico & the Southern Cone - 3.00 Units

Designed for intermediate Spanish speakers, instruction focuses on developing greater fluency. Utilizing the communicative approach, you will refine your ability to narrate events that occurred in the past and express preferences through more advanced interactive practice and review of key grammatical points and vocabulary. By structuring lessons around these functional areas and the culture and history of Mexico and the countries of the Southern Cone (Argentina, Chile and Uruguay), you learn to communicate in Spanish in real-world scenarios. Chapters 3-4 of Punto y Aparte Expanded Edition are covered.

LASP40062: Spanish Refining Fluency: Andean region and Central America - 3.00 Units

Designed for intermediate Spanish speakers, instruction focuses on developing greater fluency. Utilizing the communicative approach, you will refine your ability to hypothesize and talk about the future through more advanced interactive practice and review of key grammatical points and

vocabulary. By structuring lessons around these functional areas and the culture and history of the Andean region and Central America, you learn to communicate in Spanish in real-world scenarios. Chapters 5-6 of *Punto y Aparte* Expanded Edition are covered.

LASP40081: Weekend Spanish Immersion program in Ensenada, Mexico - 1.00 Units

Spend the weekend in Ensenada studying Spanish language and culture in Ensenada, Mexico. Students attend eight hours of classroom instruction at the Center of Languages, a well-established Mexican language school, in Ensenada. Students who have completed the program are eligible for UCSD Extension credit on a pass/no pass basis as long as they have attended 100% of classroom instruction. Upon arrival at the Center of Languages, each student's language level is evaluated and students are placed in the appropriate class level. Instructors combine a variety of language training techniques in the classroom, such as structure drills, intensive dialogue practice and role-playing. The classroom environment is highly interactive and students receive concentrated support according to their own learning preferences. Students learn specific grammatical topics and skills to help strengthen their conversational skills. In addition to classroom hours, students have the opportunity to stay with a Mexican host family and practice what they've learned in a more informal setting. More information is available at extension.ucsd.edu/travelstudy.

LASP40145: Spanish for Medical Professionals in Ensenada, Mexico - 3.00 Units

Spend a week in Ensenada, Mexico learning Spanish and increasing your cultural competency at the Center of Languages, a well-established language school in Ensenada. This program is ideal for all language learners who would like to increase their effectiveness in communicating with Spanish-speaking patients and their families. Students who have completed the weeklong program are eligible to receive UCSD Extension credit on a pass/no pass basis and 30 CEUs of nurse relicensure credit as long as they have attended 100% of classroom instruction. Students wanting 30 CEUs of nurse relicensure credit must submit their application to UCSD Extension before the weeklong program starts in Mexico. Upon arrival at the Center of Languages, each student's language level is evaluated and students are placed in the appropriate class level. Instructors combine a variety of language training techniques in the classroom, such as structure drills, intensive dialogue practice and role-playing. With classes limited to six students, the environment is highly interactive and students receive concentrated support according to their own learning preferences. Students learn specific grammatical topics and skills, strengthen their conversational skills, and participate in afternoon lectures that examine various aspects of the Mexican medical system and present medical terminology. During the annual program in the Fall, students gain a first-hand view of the healthcare system in Mexico with visits to local hospitals and clinics and meetings with local nurses. In addition to classroom hours, students have the opportunity to live with a Mexican host family and join school-sponsored activities. For more information, visit extension.ucsd.edu/travelstudy.

LASP40147: Weeklong Spanish Immersion Program in Ensenada, Mexico - Beginner level - 3.00 Units

Take advantage of the opportunity to spend a week studying Spanish language and culture in Ensenada, Mexico. Each week, students attend 30 hours of classroom instruction at the Center of Languages, a well-established Mexican language school, in Ensenada. Students who have completed the program are eligible for UCSD Extension credit on a pass/no pass basis as long as they have attended 100% of classroom instruction. Upon arrival at the Center of Languages, each student's language level is evaluated and beginner students are placed in language levels 1-2. Instructors combine a variety of language training techniques in the classroom, such as structure drills, intensive dialogue practice and role-playing. With classes limited to six students, the environment is highly interactive and students receive concentrated support according to their own learning preferences. Students learn specific grammatical topics and skills, strengthen their conversational skills, and participate in an hourlong afternoon minicourse that examines Mexican cultural topics. In addition to classroom hours, students have the opportunity to live with a Mexican host family and join school-sponsored activities. For more information, visit extension.ucsd.edu/travelstudy.

LASP40150: Spanish for Healthcare Professionals I - 3.00 Units

This course is appropriate for beginning-level Spanish learners in the medical health profession who wish to increase their effectiveness in communicating with Spanish speaking clients. Topics include how to greet patients, brief conversations, preliminary patient information, checking into the hospital, at the pediatrician office, at the gynecologist office, and other general health subjects. The first five chapters of the book are covered and include: medical terminology, grammar lessons that include gender and numbers, articles, subject pronouns, present indicative of the verbs *ser* and *estar*, present indicative of regular -ar, -er and -ir verbs, adjectives, and more. This course is of interest to a wide range of health professionals such as nurses, physicians, psychologists, counselors, and administrative staff.

LASP40151: Spanish Conversations: Film - 3.00 Units

Broaden your cultural horizons and gain a unique insight into Hispanic culture through film. A wide selection of Spanish movies that vary in content and genre will be presented with a focus on the cultural aspects of each movie. This class is an opportunity for students to expand their knowledge and understanding of Hispanic culture as well as engage in lively conversations on a broad array of topics. Different films and topics are addressed with each course offering. This course is meant to be taken after completing Spanish for Communication VI and at least one Refining Fluency in Spanish course or having the equivalent proficiency level.

LASP40152: Spanish for Healthcare Professionals III - 3.00 Units

This course is appropriate for intermediate-level Spanish learners in the medical health profession who wish to increase their effectiveness in communicating with Spanish speaking clients. Topics include: as a patient in the hospital, diagnostic evaluations, venereal diseases, dealing with high blood pressure, consulting a doctor about common ailments, and discussing drugs and drug addiction. The students will be introduced to grammar topics such as: verbs *conocer*, *saber*, uses of *se*, uses of *¿qué* and *cuál*, the past participle, the present perfect tense, the past perfect tense, the future tense, and more. This course is of interest to a wide range of health professionals

such as nurses, physicians, psychologists, counselors, and administrative staff. Textbook chapters 13-18 are covered.

LASP40153: Spanish: Advanced-Beginner Conversations - 3.00 Units

This advanced-beginner course engages participants in an animated learning environment, geared toward those who desire to more effectively and confidently express themselves in Spanish by improving their conversational skills. The course focuses on refining speaking and listening skills and reading comprehension. Students participate in cultural discussions based on a selection of Spanish language materials, which may include news articles, literature, essays, websites and visual media. While focusing on developing their communicative skills and building oral fluency, participants also increase vocabulary, strengthen reading comprehension, and broaden awareness of contemporary Hispanic culture. Although this highly interactive course is mainly conversational, a brief review of grammar structures is also covered. Conducted entirely in Spanish, the course is intended for students with an advanced-beginner or low-intermediate proficiency level in Spanish.

LASP80005: Spanish Language and Culture through Film - 0.00 Units

This workshop is a part of UC San Diego Extension's UCSDnEXT event. Get an inside look at Spanish language cinema and deepen your understanding of Latin and Hispanic cultures as portrayed in film. A relaxed and informal course format provides ample opportunity for conversation about language choices, cultural traditions, customs, and ways of life. The first half of the film is shown, breaks for an instructor-led discussion, then resumes for the second half of the film and a wrap-up conversation. Spanish expressions, idioms and slang are observed and talked about in context of the film.

*Geared towards students who have at least completed Spanish for Communication VI.

LAW40000: Introduction to the Legal System - 1.00 Units

Be introduced to sources of American law and the systems by which the law is administered and enforced. Review the origins of law through the study of the U.S. Constitution and its development and adaptation into today's legal systems. Gain practical knowledge of the courts and their impact on everyday life.

LAW40001: Business Law - 3.00 Units

Review the basic legal practice as it applies to business dealings. Topics include formation and interpretation of business organizations including corporations, exposure to commercial law, general and limited partnerships, and general concepts of transactional law and real estate practice. The material presented acquaints students with the logical thought process required to understand and work with the law.

LAW40003: Legal Research and Analysis - 3.00 Units

Learn the fundamental tools and skills involved in legal research and analysis. This course outlines the steps necessary to solve problems in California and Federal law through research. These steps include locating legal authority, reading and comprehending statutes and court decisions, interpreting legal authority and applying it to factual situations, and presenting the results in a memorandum of law.

LAW40006: Domestic Relations Law - 3.00 Units

The Family Law Act of 1970 and the Family Code of 1994 have produced major changes in California domestic relations law and practice. This course covers theoretical and practical issues in family law, providing the necessary tools to analyze and resolve these issues. Beginning with commencement proceedings, instruction progresses through preliminary relief, child custody, support, visitation, division of marital property, trial preparation, trial, marital termination agreements, non-marital cohabitation, paternity, and other areas related to the overall concept of domestic relations.

LAW40015: Legal Communications - 2.00 Units

Understand the written and oral communication skills utilized in the law office environment. Also learn the practical skills necessary to begin solving a legal problem. Legal writing skills, client interviewing techniques and the dynamics of verbal communication are emphasized.

LAW40016: Bankruptcy Law - 3.00 Units

The rapid growth of bankruptcies, coupled with the revisions of the Bankruptcy Act, demands the availability of effective legal services in this dynamic and ever-expanding area of law. The course covers theoretical and procedural aspects of bankruptcy law and equips the paralegal with the necessary tools for processing a bankruptcy case. Topics include the role of the paralegal in a bankruptcy practice, bankruptcy court, various types of chapter proceedings, adversary proceedings, relief from stay proceedings, contested matters, and other areas relating to bankruptcy law.

LAW40017: Estate Planning and Administration - 3.00 Units

Do you want to contribute productively to an attorney's practice in estate planning, estate administration, and conservatorships? This course presents the substantive background and problem-spotting skills necessary to enable a paralegal to do just that. Topics include wills, trusts, durable power of attorney, life insurance, joint tenancy, retirement benefits, summary administration, probate administration, trust administration, conservatorships, and applicable tax laws.

LAW40018: Civil Litigation I - 3.00 Units

Receive a thorough overview of the civil litigation process. The first of a two course series, instruction will cover the procedures for preparing a case for trial, from prelawsuit investigation through trial. The focus is on procedures within state courts with some discussion of federal court procedure also. The course describes the paralegal's function during the litigation process and ways in which paralegals can expand their level of responsibility.

LAW40019: Contract Law - 2.00 Units

Contract law permeates the entire field of civil practice. This course provides the student with both the theory of contracts and the practical skills needed in contract law. Instruction presents interesting and significant court cases for discussion, emphasizing a practical approach to understanding contracts. Topics include all major areas of contracts, including offer, acceptance, consideration, statute of frauds, third-party beneficiaries, performance, breach of contract and damages.

LAW40021: Civil Litigation II - 3.00 Units

Learn the specific tools a litigation paralegal is required to master. As a follow-up to "Civil Litigation I", in this course you will take a case study and plan it, from filing a complaint to preparing it for trial. Participants will also organize a case for trial, learning how to summarize depositions, prepare joint disposition conference reports and organize information and documents. Additional topics include arbitration, settlement and mediation, as well as the litigation paralegal's role in pre-trial case preparation, trial and post-trial activities.

LAW40022: Real Property Law - 3.00 Units

Discover the most commonly encountered problems when preparing and drafting documents for real estate transactions and learn how to solve them. Fundamental principles of real estate law, including ownership, sale, leasing, financing, & government regulation are surveyed. Instruction covers practical and procedural tasks involved in California real property law, including drafting and reviewing basic documents such as deeds, promissory notes, deeds of trust, purchase and sale agreements, and residential and commercial leases. Remedies available to secured parties in real estate financing transactions,

title insurance, escrow, foreclosure, and landlord-tenant relationships are also covered.

LAW40027: Computers for the Legal Professional - 2.00 Units

This course is designed to provide you with an overview of computer use in the law office. The benefits of Computer-Assisted Research are reviewed as well as Legal Research Databases. Legal research through LEXIS is explained and demonstrated. Selected legal software programs and databases are reviewed and discussed.

LAW40028: Ethics for the Legal Professional - 1.00 Units

Legal professionals are required to know and follow the ethical standards and rules of professional conduct in order to stay current with their profession. You will learn day-to-day application of these important standards and rules.

LAW40030: Employment Law for the Paralegal - 3.00 Units

This 10 week course will cover all aspects of employment law and related litigation including basic employment law, discrimination law, wage and hour law, union and collective rights, employee privacy rights, wrongful termination, a brief description of employee benefit provisions, and employee investigations. The course will include some practical exercises illustrating techniques for investigation and other special tasks unique to employment law.

LAW40035: Evidence Law - 2.00 Units

Be introduced to the study of the law of evidence. The material covered in the class presents practical applications of the rules of evidence, primarily referring to the California Evidence Code and the Federal Rules of Evidence. Instruction highlights areas that are especially relevant to the paralegal practice.

LAW40037: Tort Law - 2.00 Units

A tort is a civil wrong which is remedied by compensation to the injured party. You will learn what constitutes a tort in this course, including intentional acts and negligent acts such as personal injury and what is the appropriate course of action when someone has been harmed.

LAW40038: Immigration Law - 2.00 Units

Students will be introduced to the basic legal principles relating to immigration into the U.S., learning how to analyze immigration options for intending immigrants, and acquiring a working knowledge of the use of immigration forms in an immigration law practice. Topics to be covered include non-immigrant visitor, student and business visa options, immigrant business visa options, family immigration, asylum, criminal aspects of immigration law, and employer sanctions (form I-9 compliance).

LAW40041: Directed Studies for Paralegal and IP - 2.00 Units

Designed for directed studies in specific legal and intellectual property subjects. Student required to prove by internship or research project, specification in a substantive legal subject.

LAW40042: CLA/CP (Certified Paralegal) Exam Preparation and Review - 3.00 Units

Certified Legal Assistant/Paralegal (CLA/CP) examination preparatory course is designed to review the key topics tested in the two day exam for certification of paralegals. The following areas and skills are covered: Communications, Judgment and Analytical Ability, Legal Research, Legal Terminology, and Ethics. Additionally, the Substantive Law section of the exam consists of the American Legal System and three specific areas: Civil Litigation; Business Organizations; and Contract Law. The CLA/CP credential has been recognized by the American Bar Association as a designation, which marks a high level of professional achievement.

LAW40044: Corporate Law - 3.00 Units

Business entities are formed, operated and dissolved. This course identifies the fundamental differences and characteristics of major business organizations such as sole proprietorships, partnerships (general, limited and professional) and corporations. Students will gain an understanding of and ability to apply the basic principles of agency law. By the end of the course, each participant will have prepared an example of corporate formation and minute book including stock ledger and important government filed papers.

LAW40047: Administrative Law and Procedure - 3.00 Units

This course presents basic concepts of administrative law and procedure for federal and state agencies, with emphasis on the paralegal's role in the administrative process. Students will learn both formal and informal advocacy techniques, including representing clients before administrative bodies. Topics include administrative delegation of power, rule making, agency discretionary powers, adjudication, and judicial review.

LAW40049: Criminal Law and Procedure - 3.00 Units

Criminal Law and Procedure is a survey course covering the elements of many typical offenses in California and in other states. Some of these offenses include drug offenses, robbery, rape (and other sex offenses), burglary, murder, arson, and driving under the influence. You will be introduced to concepts in criminal law that will be illustrated with examples from actual cases. In addition, criminal procedure will be covered including: the prohibition against unreasonable searches; interrogation and confession; the right to counsel and confront witnesses; and the right to be free from cruel and unusual punishment.

LAW40058: Environmental Law - 3.00 Units

Environmental laws govern air and water pollution, managing and cleaning up hazardous and toxic waste, protecting endangered species and sensitive habitats, and the environmental impact that results from various transactions. With this course, you will learn the basic framework of environmental law and gain a broad understanding of the vast array of sources of environmental law through research and application of environmental law concepts in a business or law firm setting. This course outlines the agencies and courts that resolve environmental law matters, as well describes the role of the executive branch in environmental law. Additional topics include local land use and tribal environmental planning concepts, and environmental compliance in land use transactions. This course is designed to provide a practical approach and variety of tools to address environmental regulatory matters.

LAW40059: Paralegal Career Development - 2.00 Units

Learn the practical skills and experiences that are critical to be an excellent paralegal. The course will center on launching a successful job search campaign. Best practices in career development and job search strategies will be covered, including resume preparation, self-marketing principles, networking, interviewing skills and career enhancement resources. Topics will also include principles of law firm profitability and the paralegal's role in the profit formula, and current licensing and ethical issues. Instruction includes client interviewing and interpersonal skills.

LAW40061: Discovery Principles - 2.00 Units

This course is designed to provide the paralegal with mastery of the fundamental tools and skills involved in discovery practice in both California and federal courts. You will explore the role of discovery in litigation, as well as understand the statutes governing discovery practice. In this course, you will be provided with a case study from which you will prepare for a deposition, as well as prepare for and respond to requests for admission, interrogatories, and requests for inspection of documents.

LAW40066: Software for Managing and Using Databases - 2.00 Units

This course will focus on the use of technology used throughout the Litigation Support role. This course will be hands-on using the latest technology in the industry. The course will cover load file formats, importing and exporting documents into databases, creating databases, troubleshooting database files, and converting load file formats. Students will also learn the concepts behind managing hosted document review of large data productions and techniques for gathering key evidence for use in depositions, hearing, and at trial.

LAW40068: Understanding E-Discovery and Litigation Technology - 5.00 Units

Understanding E-Discovery and Litigation Technology, the first of two cohorts in the E-Discovery Certificate, introduces litigators and litigation staff to the rules and technology associated with the dynamic legal area of eDiscovery. This course presents each stage of the Electronic Discovery Reference Model (EDRM) from Information Governance to Production of Documents, and provides opportunities to apply these stages to well-defined case scenarios. In addition, this course emphasizes the importance of records preservation and the necessary technical tools for relevance-based document review in preparation for a Meet and Confer with opposing counsel and records requests. Selecting an eDiscovery vendor and calculating project costs associated with all aspects of collection, processing, and production will be the final components of eDiscovery covered by this course. Successful completion of this cohort will prepare the student to the advanced application of E-discovery skills in the next cohort - Applying E-Discovery and Litigation Technology (LAW40069)

LAW40069: Applying E-Discovery and Litigation Technology - 6.00 Units

Applying E-Discovery and Litigation Technology, the second of two parts in the E-Discovery and Litigation Technology Certificate, delves deeper into applying technology to a client's specific legal position and the ability to make persuasive trial presentations using trial graphics and data visualization, on behalf of the client. Beginning with the necessity to scope the legal project in deciding on the best course of representation of the client, students are introduced to legal project management tools and strategies which necessitates understanding technology and the ability to identify data relevant to a client's case. Students will submit an effective legal presentation to the court based on a diverse and complex data-set from the client's perspective. Successful completion of this course along with the first Understanding E-Discovery and Litigation Technology course (LAW40068), completes the specialized E-Discovery and Litigation Technology Certificate.

LAW40070: - 3.00 Units**LAW40071: - 1.00 Units****LAW40384: Alternative Dispute Resolution - 3.00 Units**

Disputes ranging from interpersonal conflicts to serious legal issues can be quickly and amicably resolved, without the expense and delay of a lawsuit, using the latest techniques of negotiation and dispute resolution. On an increasing basis, private individuals and businesses are using alternative dispute resolution because it is fast, economical and private. This course will provide an overview of the alternative dispute resolution processes, with a special focus on mediation and arbitration.

LAW80000: Project Management for Legal Professionals - 0.00 Units

According to many business leaders, project management improves the ability to plan, implement, and manage activities to accomplish specific organizational objectives. So why isn't project management a clear defined role in the legal industry? Adopting project management techniques can be a very helpful approach for paralegals, attorneys, and managing partners who learn the need to deliver quality legal services within limited budgets. Through

this workshop seminar, you will be introduced to a project management approach, body of knowledge standards, how to define scope, manage resources, use of estimating techniques, good communications planning, managing change and risks, enabling good team dynamics, and even suggested project closure procedures for the legal professional.

LAW80004: MCLE - Technology Licensing Workshop - 0.00 Units

Technologies are an important asset for any industry or academic organization. Proficient licensing knowledge is an integral part of being able to use such intellectual properties in order to drive commercialization. The Technology Licensing Workshop will focus on the practical skills required to conduct licensing, as well as provide a foundational knowledge of business development essentials that are used throughout institutes and companies alike. Coursework will feature everything from how to disclose inventions to intellectual property management and then delve deeper into topics surrounding the assessment of new inventions, market research, charting marketing summaries and contract drafting. Opportunities will include mock negotiation exercises and techniques that will detail methods to carry out successful due diligence practices.

LAW80005: - 0.00 Units**LAW80006: - 0.00 Units****LAW81275: Ethics Seminar - 0.00 Units**

Designed for attorneys and paralegals, this course will provide you with the latest case law and information on the hottest topics in the ethics arena. Seminar subjects covered will include confidentiality, conflicts, the unauthorized practice of law, and major pitfalls for attorneys and paralegals. This seminar is not to be missed!

LING40000: Linguistics for Language Teachers - 3.00 Units

An important part of successful language teaching is understanding the principles of linguistics and how they relate to the production and comprehension of language. This course introduces important concepts in linguistics, particularly as they relate to English, while examining how to use these concepts and specific techniques for developing oral and written skills. Topics include phonetics, phonology, morphology, the lexicon, syntax, and conversational usage. Participants will use these principles to investigate new strategies for the actual process of teaching.

LING40004: Theory and Practice of Translation - 3.00 Units

This course introduces the basic theory and strategies for written translation. Students translate texts from various categories including literary, technical, business and advertising. Through hands-on practice and exercises, participants develop the fundamental analytical, cognitive, and linguistic skills that are essential for professional written as well as sight translations.

LING40005: The Role of Grammar in Teaching a Second Language - 3.00 Units

ESL teachers must frequently explain complex English grammar to their students to help them speak and write. This course covers basic grammatical concepts and exercises for ESL instruction. Ideas are presented to help educators make grammar manageable for students; include grammar in their teaching of written and spoken language; testing grammatical knowledge; and development of materials that promote language fluency as well as accuracy.

LING40011: Spanish to English Translation II - 3.00 Units

This course covers the latest techniques and strategies in Spanish to English translation and is appropriate for beginning translators as well as experienced professionals who wish to refine their skills. The acquisition of appropriate vocabulary and practice in solving problems of contrastive syntax is

emphasized. Included is a brief review of English grammar and orthography when relevant, along with tips on how to find and obtain resources that save time when researching hard-to-find words or expressions.

LING40020: Medical English I - 1.50 Units

LING40025: Business Translation - 3.00 Units

Learn specific skills to translate a variety of texts found in a business environment. Learn about different types of business organizations, understand the language of contracts and gain vocabulary used in economics and international commerce. Solutions to typical business translation hurdles and the development of subject-specific glossaries are addressed. Practice techniques and concepts learned in a hands-on classroom environment.

LING40027: English to Spanish Translation II - 3.00 Units

This course covers the basic techniques and strategies for English to Spanish translation. It analyzes common English to Spanish translation pitfalls and the differences between these languages' written styles. The course is appropriate for beginning translators as well as experienced professionals who wish to refine their skills. Participants will practice translating a wide variety of texts into Spanish, work with different formats, review several tools, and discuss practical related articles and examples.

LING40031: Theories of Second-Language Acquisition and Application to Teaching - 3.00 Units

This course explores a variety of theories about second and foreign-language learning, and investigates the teaching methodologies that grow out of their application. Instruction focuses on several key principles that are fundamental to the teaching and learning of a second language. Course topics include the relationship between first and second language learning, the role of affective factors, order of acquisition, the concept of interlanguage, comprehending vs. producing the second language, and the role of error correction. Various methods will be demonstrated, and participants will select one as a basis for developing a lesson plan.

LING40035: Legal Translation - 3.00 Units

Through hands-on practice, exercises, and the study of legal concepts in our language/legal system combination, students apply translation techniques to render a product with the same legal effect it is meant to have in its source legal system and language. A translation method is implemented through research and discussion of sample legal texts and course materials. Course focus is on criminal law and procedure as applied in the U.S. courts. Each lesson includes a parallel study of criminal law and procedure in a model Civil Law country to that of the U.S. model.

LING40037: Consecutive Interpretation: Theory & Practice - 3.00 Units

This course offers students the opportunity to apply consecutive interpretation techniques in a variety of topics and settings. Topics are generalized and emphasis is placed on enhancing listening performance and note-taking skills.

LING40038: Simultaneous Interpretation: Theory & Practice - 3.00 Units

This course offers students the opportunity to learn and apply simultaneous interpretation techniques to a variety of topics and settings. Students interpret conference speeches dealing with politics, current affairs, medicine, international news and motivational topics.

LING40039: English to Spanish Translation I - 3.00 Units

This course consists of an intensive review of the general rules of Spanish written language and its present modifications. It is taught entirely in Spanish and will cover the Spanish written fundamentals necessary for writing error-free Spanish translations. Instruction will focus on the latest revision of

regulations by the Real Academia Española, as well as the most common problems translators face in the areas of spelling, punctuation, word usage, and grammar.

LING40040: Spanish to English Translation I - 3.00 Units

This course is designed to improve the writing skills of translators working from Spanish into English. Students will review the fundamentals of written English grammar and will make contrastive analyses between Spanish and English writing styles, so that their translations are written in error-free English.

LING40041: Grammar and Editing I - 3.00 Units

Are you an advanced ESL speaker needing to refine your knowledge of English grammar in written and spoken communications?

In this course, you will review the grammar points necessary to correct the most common problems in writing by non-native speakers of English, such as knowing the appropriate usage of:

Learn how to recognize and correct your grammar errors and learn how to find the right answers to specific, recurring grammar questions.

LING40044: Teaching Writing for Academic and Professional Purposes - 3.00 Units

This TEFL certificate course will treat in-depth the discourse features of successful writing in English, in particular for academic and professional communication in the U.S. and around the world.

The following are specific to good written English and are often not found in the same ways in the writing of other languages:

This class will instruct you on the rhetorical and formal conventions of good writing, and the most effective ways to share that knowledge with your ESL and EFL students in helping them develop successful writing skills and rhetoric.

LING40045: Advanced Analysis of English Sentence Structure I - 3.00 Units

Explore the complexities of English structures and how and when they are used (pragmatics) in this TEFL certificate course. Special emphasis is on areas of syntax unique to English and most difficult to non-native speakers, both prescriptive and descriptive forms.

You will study highly specialized features of English grammar and learn how best to teach and integrate the practice of these features in all types of ESL and EFL lessons.

Areas covered:

- syntactic variations related to gender, age, socio-economics, and other factors

- important connection between syntax, morphology, and semantics

- how best to teach and integrate grammar instruction in all types of EFL lessons

LING40046: Theory and Methods of Reading Instruction - 3.00 Units

In this TEFL certificate course, you will receive an overview of various theoretical approaches as they apply to:

- reading in the ESL and EFL classroom

- relevant areas of research in foreign language reading

connection of theory and research to the teaching and learning of reading

You will be provided with a thorough understanding of the reading process and the ways in which to build and assess reading skills, particularly academic and professional material.

There will be an emphasis in how to best teach vocabulary and idioms through reading in an ESL and EFL context.

LING40047: Best Methods in Teaching Pronunciation and Fluency - 3.00 Units

Features of English phonetics, phonology, stress, and intonation will be drawn on to enrich training in best practices for teaching and learning pronunciation in this TEFL certificate course.

Going beyond discrete sounds, this class will focus on the suprasegmental aspects of English pronunciation such as:

Specific techniques for accent reduction, plus important information on body language for clear communication in English, will be presented.

This course will emphasize the integration of pronunciation instruction and practice in all types of ESL and EFL lessons.

LING40048: Best Methods in Teaching Listening Skills - 3.00 Units

Become familiar with the different types of listening needs and tasks, as well as the best techniques and methods for helping your ESL and EFL students become more skillful listeners in English in this TEFL certificate course.

Essentials of successful listening comprehension:

LING40050: Best Methods in Teaching Speaking Skills - 3.00 Units

Learn the best methods for getting ESL and EFL students to speak English and tasks that encourage meaningful interaction in this TEFL certificate course.

This class will address types and idiosyncrasies of the spoken language, and micro skills of speaking that are factors in the oral code.

Review current issues in teaching oral communication by analyzing:

This course will suggest fluency and accuracy activities that can be used in and out of the classroom.

Learn factors that hamper improved speaking skills for ESL and ESL learners including:

LING40063: Games for the EFL Classroom - 1.00 Units

Designed to provide opportunities for English learners from all levels of proficiency to learn and practice English, this TEFL certificate course instructs teachers on how to encourage student interaction through a variety of fun ESL games and activities.

Games can be as short as 2-5 minute activities to long-term, multiple-part tasks.

You will learn how to increase language practice in large classrooms, with ideas on how to integrate communicative activities within a prescribed curriculum.

LING40065: Advanced Grammar Seminar - 3.00 Units

This course is designed for advanced non-native English speakers who need to do in-depth studies in the areas of grammar that are commonly tested on English proficiency exams or required in formal writing and speaking. The focus of the course is primarily on structures not adequately addressed in most popular grammar books. It will deal with various important low-frequency

structures and patterns which signal both advanced proficiency and perfection in matching meaning to form.

LING40067: Music in the EFL Classroom - 1.00 Units

Designed to provide opportunities for English learners from all levels of proficiency to learn and practice English, this TEFL certificate course instructs teachers on how to encourage students to analyze lyrics for useful vocabulary and idioms in the ESL classroom.

Emphasis is given to improving pronunciation and fluency through the use of music-based activities.

You will learn how to increase language practice in large classrooms, with ideas on how to integrate communicative activities within a prescribed curriculum.

LING40068: Teaching TOEFL Prep Classes: Paper and Internet - 1.00 Units

Learn the format of the 2 TOEFL tests in this TEFL certificate course.

Two TOEFL test formats:

Analyze how these tests differ and what preparation materials and teaching techniques have proven most successful in preparing students to obtain optimal scores.

LING40069: Workplace EFL: Teaching English in International Business and Industry - 1.00 Units

This workshop is designed for instructors who want to expand their employment possibilities to include the private sector. Participants will explore how to market English for Specific Purposes (ESP) to businesses and managers whose employees need to improve both their spoken and written communication. Practical ideas for spoken and written ESP activities will be provided, as well as useful tips on designing needs assessments, setting tangible and attainable learner goals, dealing with scheduling issues, and setting tuition.

LING40071: Introduction to Court Interpretation - 3.00 Units

This course provides an overview of the court system and related proceedings and the registers of speech typically encountered in legal proceedings. The court interpreter's role and code of ethics are emphasized. A study of legal terminology and comparative law is included.

LING40072: Legal Interpretation in Criminal Proceedings - 3.00 Units

This advanced course covers the different court proceedings that take place in the course of the prosecution of a criminal case. Criminal cases will be followed through the State and Federal Systems from the arraignment process through the sentencing hearing. Students will perform role-playing exercises in simultaneous, consecutive and sight translation as appropriate and based on the type of interpretation required in court.

LING40075: Advanced Analysis of English Sentence Structure II - 3.00 Units

Explore the complexities of English language structures and how and when they are used (pragmatics) in this TEFL certificate course.

You will learn how best to teach and integrate the practice of various highly specialized features of English grammar in all types of ESL and EFL lessons. Syntactic variations related to gender, age, socio-economics, and other factors will be examined.

Focus on the following structures:

- noun phrase in detail, quantifiers, count and non-count distinctions and plurals: regular and irregular
- adjectives and adjective clauses
- modals and conditional clauses

clauses, conjunctions, and sentence parameters
collocations and cognates

magazines
books
newspapers
internet pages

LING40076: Pronunciation and Fluency - 3.00 Units

Are you an ESL speaker needing to improve your English pronunciation and wanting to be more easily understood in everyday conversation and workplace situations? If so, this course is perfect for you.

The instructor will identify each student's particular pronunciation difficulties and provide extensive exercises that target your needs.

Learn to pronounce words in a manner that is easier for native speakers to understand.

By the end of the class, you will have :

- earned an awareness of your problem sounds
- learned how to produce those sounds accurately and clearly
- learned how to continue refining your speech while strengthening overall confidence in speaking

LING40081: Effective Oral Presentation - 3.00 Units

Need to improve your English presentation skills?

This course addresses oral communication problems encountered by ESL speakers in such formal academic and professional settings as conferences, seminars, meetings, and classrooms.

Extensive pronunciation exercises, along with many opportunities for you to practice your public speaking skills will be provided.

LING40082: Grammar and Vocabulary Building - 3.00 Units

Are you a high-intermediate to advanced ESL speaker wanting to improve your knowledge of English grammar and increase your vocabulary?

In this course, you will build grammatical competence through extensive contextualized practice at the sentence level.

Increase your vocabulary and vocabulary retention through various exercises.

LING40083: Advanced Pronunciation and Fluency - 3.00 Units

Do you want to "sound American"?

This course is designed for ESL speakers who are familiar with the English sound system and their own pronunciation problems.

Expand your skills in correctly applying English patterns of:

- stress
- intonation
- linking
- reductions

Pronunciation of problematic sounds will also be integrated into class exercises and activities.

LING40086: Sight Translation: Theory & Practice - 3.00 Units

Learn the basic concepts and techniques of sight translation. Through text analysis, identify units of meaning, and the similarities and differences in English and Spanish grammar and writing styles. Each class includes theory and practical exercises to ensure that students can produce accurate, natural, and smooth sight translations into the target texts.

LING40087: Visual Media in the EFL Classroom - 1.00 Units

This TEFL certificate course gives aspiring English language teachers ideas and methods on how to use various media as an enhancement to the ESL classroom environment.

Print materials:

Media:

- TV shows
- films
- documentaries

LING40092: Medical Translation: Internal Medicine - 3.00 Units

This specialized course examines technical terminology and scientific writing style required in medical translation. Emphasis is on developing a conceptual framework and cogent bicultural approach to the translation of medical literature. Gain a basic understanding of medical concepts and terminology in cardiology, pulmonology, and internal medicine through lecture and practical exercises.

LING40093: Medical Translation: Specialty Areas - 3.00 Units

This specialized course examines technical terminology and scientific writing style required in medical translation. Emphasis is on developing a conceptual framework and cogent bicultural approach to the translation of medical literature. Gain a basic understanding of medical concepts and terminology in neurology, nephrology, obstetrics and gynecology through lecture and practical exercises.

LING40096: Introduction to Teaching English as a Foreign Language (TEFL) - 3.00 Units

Prospective or novice English teachers who are not yet familiar with the basic theories, methods, and practices of TEFL or for those experienced teachers needing a further grounding in the most current, up-to-date methods and practices to be more successful in their current teaching will find this TEFL certificate course useful.

Explore skills, language, and the learning process while introducing practical applications to your ESL and EFL classroom.

Introduction of issues in methodology as well as the basic skills:

- listening
- speaking
- reading
- writing

Introduction to the teaching of the micro-skills:

- pronunciation
- vocabulary
- grammar
- discourse

Other issues covered:

- learning styles and strategies
- learner autonomy
- content-based instruction
- assessment

LING40097: Introduction to Teaching Writing - 3.00 Units

This TEFL certificate course will prepare prospective, novice, or experienced ESL and EFL teachers with a foundation of writing skills in English.

You will be introduced into the discourse features which distinguish writing in English from the languages of the classroom participants so that they will understand the very different ways that English organizes information in the written form. You will also learn how to build writing instruction into your classes as well as learn a variety of writing assessment options.

Learn basic techniques of the process approach such as:

- quickwriting
- brainstorming
- semantic mapping
- drafting
- peer review

LING40098: Introduction to Pronunciation and Fluency for Language Teachers - 3.00 Units

This TEFL certificate course will prepare prospective, novice, or experienced teachers with a basic foundation in phonetics necessary in being an effective English teacher in an ESL or EFL classroom environment.

You will learn the phonetic alphabet and how best to incorporate it in explaining basic pronunciation patterns in English.

Introduction to the suprasegmentals of the English phonological system including:

Each segment of the course will also provide easy to use activities that teachers can readily adapt to their classrooms.

LING40099: Oral Presentations for Language Teachers - 3.00 Units

If you are a prospective, novice, or experienced English teacher, this TEFL certificate course will provide you with the skills necessary in speaking to small, medium, or large groups, while maintaining control over student interactions in the ESL or EFL classroom.

Learn how to analyze teacher speaking and presentations as you learn how to present.

Focus on tips on how to speak in front of an audience using effective:

- voice volume
- rate
- pitch
- rhythm patterns

Learn the skills necessary to prepare and deliver lessons to a group, focusing on:

- body language
- selection of speech content
- visual aids
- delivery

LING40100: TEYL Classroom Management - 3.00 Units

Focus on establishing the optimal classroom learning environment for foreign language acquisition in the young learner classroom in this TEFL certificate course.

You will learn to use key teaching strategies and reflective teaching techniques to foster positive classroom dynamics that motivate young language learners socially and emotionally.

Topics include designing and revising language learning activities to access various:

This class also involves an on-site visit to a local elementary school.

LING40101: Grammar and Editing II - 3.00 Units

This course is designed for advanced ESL speakers who must demonstrate excellent English grammar in formal written and spoken communications and thus need to improve their knowledge and skills in grammar.

Review the grammar points necessary to identify and correct the most common problems in writing, such as the correct usage of:

Learn how to recognize and correct your own grammar errors and learn how to find the right answers to specific, recurring grammar questions.

LING40102: Interpretation and Translation in Education - 3.00 Units

Translators and interpreters have a wide variety of roles in education settings, including working with school/district documents, in special education, facilitating appointments with students and parents, as well as bridging the communication divide between the community and officials at state, local board, and community meetings. Learn the education-specific vocabulary and acronyms you need to know to excel as a translator and interpreter in the education environment.

LING40104: Medical Interpretation - 3.00 Units

This course addresses patient/provider communication, cultural interference, interpreter code of ethics, and the role of the interpreter in the healthcare setting and industry. Online exercises familiarize the student with medical terminology and scenarios that an interpreter encounters while on the job. Hands-on practice with specialized, medical-focused material builds the necessary sight, consecutive, and simultaneous interpreting skills.

LING40106: Introduction to Translation - 1.50 Units

Discover how to turn your language skills into a new career in translation. Get a practical introduction to the field of translation in this hands-on course. Vocabulary studies and problem solving techniques associated with translation are highlighted. Translation methods and career options are also addressed.

LING40107: Tools and Technology in Translation - 3.00 Units

Learn about on- and off-line resources to increase productivity, refine researching skills and assure a top-quality translation work. Feel comfortable showcasing your talent and networking with clients and colleagues through a professional site, web profiles and social networking outlets. Build teamwork and organizational skills and get ready to manage large translation projects. Become familiar with the Computer-Assisted Translation Tool (CAT) environment and some industry-specific jargon to communicate better with project managers and other players in the translation industry worldwide.

LING40109: Introduction to Interpretation - 1.50 Units

This course examines the profession of interpreting, including employment opportunities, the role of the interpreter, administrative matters, and ethical considerations. In addition, an overview will be given of the three modes of interpretation (sight, consecutive and simultaneous), as well as the different areas of interpretation, such as legal, medical, business, community and conference interpretation.

LING40110: Theories and Methods of Language Teaching and Learning - 3.00 Units

Become acquainted with the most generally accepted theoretical and methodological models of English language teaching and learning in this TEFL certificate course.

This practical class offers you pedagogical ideas on how to meet the specific needs of various:

You will build a repertoire of ESL and EFL classroom activities firmly embedded with well-established principles of language acquisition in a step-by-step approach to interactive language teaching.

LING40111: TEFL Practicum: Best Methods in Developing and Delivering Lesson Plans - 3.00 Units

Learn how to be in control and maintain an effective learning pace when teaching English as a foreign language in this practical TEFL certificate course. You will review techniques of teaching the basic ESL and EFL skills and pronunciation and grammar. You will then apply these techniques in organizing activities and practice & teaching them to partners and groups through simulated teaching opportunities and experiences.

At the end of the course, you will feel confident and knowledgeable in:

- developing teaching activities and lessons for the different skill areas
- providing effective error correction during teaching
- applying useful classroom management skills in a simulated classroom situation

LING40113: Strategic Marketing & Branding for Translators & Interpreters - 3.00 Units

Acquire the marketing and personal branding tools needed for career success as a freelance or in-house professional in the language industry, including professional selling, image building, and other essential marketing and business etiquette tools. This course is intended for advanced-level students who are ready to enter the job market and for professionals already working in the field.

LING40115: Topics in Advanced English Structure - 1.00 Units

This grammar course will focus on complex structures in idiomatic written English which, when mastered, will greatly help ESL speakers in acquiring a clearer, more sophisticated writing style.

Topics offered may include:

- noun complements
- relative clauses
- adverb clauses
- adjective clauses
- causative clauses
- hyphenated adjectives
- possessives and compound nouns
- subjunctive structures
- "it"; clefts

LING40116: Advanced Topics in Academic Writing - 1.00 Units

This short course will train ESL speakers in the most important techniques in improving and producing successful writing for academic English purposes. Focus on the essential characteristics of a concise, coherent writing style in academic English writing such as:

- strong controlling idea
- unity of thought
- clear, relevant support
- fluid transitions

LING40117: Topics in Writing Mechanics - 1.00 Units

Intended for ESL speakers who would benefit from review of some of the most frequent errors in English punctuation and mechanics, this course will focus on correcting the most common punctuation errors in English writing.

Learn the correct usage of:

- commas
- semi-colons
- apostrophes
- hyphens
- dashes
- capital letters
- and more

LING40118: Introduction to Swordfish - 2.00 Units

Learn to use Swordfish, a cross-platform Computer-Assisted Translation (CAT) tool and create and maintain translation memory files and glossaries that will greatly assist you in your translation work. Become skilled at program installation, use a license in different computers, set up databases to record your progress while performing translation projects and keep a glossary with preferred terminology, convert files into different formats to meet the demand of clients and collaborate with colleagues using other CAT tools, cooperate with classmates to complete translation assignments, and use the industry jargon during negotiation with clients.

LING40119: Academic Competence in the U.S University I - 1.00 Units

Are you an international student who wants to learn tips on how to be successful at a U.S university?

This course is designed to orient ESL speakers and international students to the competitive university system in the United States.

Topics include:

- common formats for source citation
- typical question types on exams and other tools for continuous assessments
- protocols for interacting with professors during office hours

LING40120: Teaching Language through Art - 1.00 Units

Learn how to incorporate basic art-making techniques to teach English learners of all ages in this hands-on TEFL certificate course. You will explore a variety of fun art projects to motivate ESL and EFL students with varying learning styles.

Projects include:

- book construction
- collage
- illustration
- dioramas
- drawing exercises

Discussion includes:

- materials management
- designing projects to ensure student engagement and success
- strategies to use art projects as a language assessment tool

LING40121: Medical English II - 1.50 Units

LING40122: Medical English III - 1.50 Units

LING40123: - 1.00 Units

LING40124: - 3.00 Units

LING40125: - 3.00 Units

LING40127: - 1.00 Units

LING40128: - 2.00 Units

LING40129: - 2.00 Units

LING90001: Introduction to Logic - 6.00 Units

Deductive reasoning leads to a rich formal system of both theoretical and practical importance: Logic. Topics include argument validity, tautologies and logical truths, fallacies, symbolization, connectives, truth tables, and completeness. We will explore two formal languages—propositional logic and first-order (predicate) logic—that represent certain aspects of how we think and speak. We will study the techniques of building formal proofs in these languages and for determining whether proofs are valid or non-valid. This course welcomes students of all disciplines and requires no prior knowledge of formal logic. In fact, anyone interested in computer science, economics, law, linguistics, mathematics, medicine, philosophy, psychology and indeed any discipline can benefit from learning about logical reasoning.

LIPO40000: Portuguese for Communication I - 3.00 Units

A country of great natural splendor, Brazil is the only Portuguese speaking nation in the Americas. It is also a very large and diverse country with Brasileiros—or Brazilians—having ancestors spread out all across the world. Unique in its customs and colors, Brazilian culture is united by its fresh and lively language, Brazilian Portuguese, which, over time, has evolved to encompass the country's vast, heterogeneous soul. With a heavy focus on oral communication, beginner students can immerse themselves in the sounds and rhythms of Brazilian Portuguese by taking this introductory course. Lessons in this class are paced to ensure that you will be comfortable in the present, past and immediate future tenses. Correct pronunciation and the use of basic, common phrases are emphasized. Textbook preliminary chapter and chapters 1-4 are covered.

LIPO40001: Portuguese for Communication II - 3.00 Units

Level II is designed for beginner students who have a working knowledge of the grammar covered in the first level course and continues to focus on improving your oral communication skills. While using a variety of regular and irregular verbs in the various tenses, including the introduction of the imperfect tense, you will practice describing yourself, others, and how you feel; discuss aspects of daily life; and make comparisons. Delving deeper into the nuances of Brazilian Portuguese, you will learn idiomatic expressions and the difference between formal and informal speech. Songs and short passages on the country's geographic regions and customs will help round out your understanding of the Brazilian culture. Textbook chapters 5-8 are covered.

LIPO40002: Portuguese for Communication III - 3.00 Units

Textbook chapters 9-12. Includes the perfect and imperfect tenses, superlative, and the subjunctive. Emphasis is on oral language development through narrative texts, popular and folkloric songs, and the discussion of Brazilian historical topics.

LIPO40004: Portuguese for Communication IV - 3.00 Units

Textbook chapters 13-15. Includes a review of present subjunctive, use of conjunctions, adverbs, imperfect subjunctive, expressions with verb "dar", future of preterite, conditional, some irregular verbs, review of imperative.

Emphasis on developing conversational skills through the reading of Brazilian literary and historical texts.

LIPO40010: Portuguese for Communication V - 3.00 Units

Textbook chapters 16-18. Includes future subjunctive, use of pronouns, prepositions, and adverbial expressions, composed tenses indicative and subjunctive, reported speech, passive voice, use of the infinitive, two-word verbs, proverbs, and similes. Focus will be on developing conversational skills through the study of grammar and the reading of literary texts.

LIPO80000: Portuguese for Travelers - 0.00 Units

In a lively, relaxed environment, learn key expressions, vocabulary words, and idioms necessary for having a great experience on your travels. Our two-day course equips students with a basic set of handy communicative tools for comfortable interaction with the locals. Travel tips, cultural aspects, regional characteristics, and social protocol and customs are also presented. Courses are all taught in English, and no previous knowledge of Portuguese is required to participate. A phrasebook is provided that acts as a word two-way dictionary and a pocket guide to the business, customs and etiquette for the country of Brazil.

LIT40022: American Literature: Stories of Immigration - 2.00 Units

Immigration has once again taken center stage in the national spotlight, giving artists, writers and thinkers another opportunity to consider and help reimagine the complex possibilities and outcomes of intermingling human perspectives from a creative standpoint. It is often said that the U.S. is a nation of immigrants, whose various cultural backgrounds have helped shape what America is. This course centers thematically around the immigration stations of Ellis Island on the East Coast and Angel Island on the West Coast. We will explore the ways that acclaimed authors, including Maxine Hong Kingston and Piri Thomas, have used literature to express what it means to be an immigrant, or a child of immigrants, in America. We will read narratives now considered classics in the literature of immigration, as well as contemporary pieces, portraying immigrant experiences from China, Japan, Russian Poland, and Puerto Rico elsewhere. Through these texts we will investigate the ways that immigrant identity influences both the lives of those who made the journey and the lives of their descendants. Topics include diaspora, the "Other," assimilation, compliance and resistance to institutions, love, family, and the American Dream.

LIT40064: Ernest Hemingway: Titan of American Literature - 2.00 Units

Ernest Hemingway wrote "All good books are alike in that they are truer than if they had really happened and after you are finished reading one you will feel that all that happened to you and afterwards it all belongs to you; the good and the bad, the ecstasy, the remorse." One of the most influential writers of the 20th century, he has given us just that: A front-row seat at his musings on war, love, masculinity, morality, alcoholism, the American abroad, and the aimlessness of the lost generation. Through round-table discussions of *The Sun Also Rises*, *A Movable Feast*, and the short stories, we will investigate Hemingway's spare, elegant, and emotionally ferocious stories. Whether you are discovering his works for the first time, or revisiting his brilliance, the works of Hemingway are likely to make a profound and lasting impression.

LIT40069: Women and Madness - 2.00 Units

In the 19th century, a strange marriage of art, literature, science, and psychology catapulted society's obsession with the archetypal madwoman into the mainstream. Pathologies that had once been used to portray the outré now came to be seen as essential characteristics of all women, casting ideological shadows well into the 21st century. Students will go beyond the confines of literature alone to investigate this unique commingling of ingredients—the fictional madwoman, the pictorial madwoman, scientific theories concerning gender, medical documents, written testimonies of

asylum inmates, etc. Themes of identity, guilt, self-persecution, innocence, redemption, disease and violence will be examined. Literary works will include fiction, poetry and essays by Kate Chopin, Christina Rossetti, Virginia Woolf, Sylvia Plath and others.

LIT40071: Gender Identity and Literature: Him, Her, Us - 2.00 Units

Gender is infinitely more intricate than the biological question of sex. Uncover the cultural, social and political implications of gender identity in three powerful works. *Kiss of the Spider Woman*, by Argentine writer Manuel Puig, delves into themes of sexuality, morality, constructs of beauty and escapism while readers follow the discussions and discoveries between a Marxist revolutionary and a homosexual window-dresser as they share a prison cell for six months. Discover the gender-bending, century-crossing Orlando, by Virginia Woolf, and navigate the age-old question as to whether gender identity is innate or created and the consequences of conformity. And explore issues of masculinity, sexuality, desire, concealment versus truth, and familial and societal expectations in Tennessee Williams' *Cat on a Hot Tin Roof*.

LIT40093: History of Children's Literature - 3.00 Units

Through a close reading of classics of post-enlightenment writing for children, this course provides children's book writers and illustrators an essential understanding of the development of children's literature, and benchmarks for critiquing one's own work. Reading will include several masterpieces in the genre.

LIT40099: Glittering Wit: Three Works by Oscar Wilde - 2.00 Units

Famous, and infamous, for his brilliant turn of phrase, seething social commentary and flamboyant personality, Oscar Wilde was the toast of the literary world throughout the 1880's and 1890's. Join us for an in-depth exploration of three of his most popular works. Laugh out loud at his farcical comedy, *The Importance of Being Ernest*, a play about superficial love, mistaken identities and cucumber sandwiches. Investigate such concepts as extravagance, beauty-as-commodity, morality, and the difference between art and culture in *The Picture of Dorian Grey*, Wilde's late-Victorian Gothic novel. Explore themes of political corruption, public and private life, love and reputation in *An Ideal Husband*. Indeed, enjoy works so brilliant that Wilde himself famously quipped, "I am so clever that sometimes I don't understand a single word of what I am saying."

LIT80005: Echoes of Alice: Beyond Wonderland - 0.00 Units

For the last 150 years, readers, writers, dancers and artists have been fascinated by Alice. This course will investigate this obsession. Beginning with the original Alice's *Adventures in Wonderland*, we will investigate historical context, including the real Alice - Alice Liddle, why hatters are mad, and how Victorian culture believed it could tame nature. *Alice in Bed*, a play by Susan Sontag, takes us through a fictional account of Alice James, Henry James' invalid sister, as her reality collides with wonderland. *White Stone*, a series of poems by Stephanie Bolster, explores the relationship between Carroll the writer and Carroll the photographer with Alice the girl and Alice the character. Additionally, we will look at samples of some of the many ways artists have chosen to make Alice their own.

LIT90008: Writing Enrichment Field Study - 2.00 Units

The summer writing course will serve as an academic anchor to the InterTribal Youth/UCSD Summer

Residential Program for Native high school students from across California.

The proposed two--?week curriculum will emphasize:

- Informative/Explanatory Writing
- Argumentative Writing
- Creative Writing

We propose a two--?hour block of daily instructional time (including a 10 min. break) with a Course

Instructor and T.A. and an intensive daily one--?hour "Writing Lab" session with a Course

Scholar/Seminar Leader for one--?

on--?one attention and moderated peer review.

LIT90010: Science of Science Fiction - 0.00 Units

In this course, students will blend knowledge with creativity in order to construct rich, innovative science fiction stories. We will explore how many classic science fiction works – from literature to film – found their beginnings in scientific thought. Then, using the craft elements of fiction writing, we will write our own science fiction stories and, just maybe, influence the science world! No prior experience necessary.

LIT90011: - 6.00 Units

LTIT40000: Italian for Communication I - 3.00 Units

Whether you want to prepare for an exciting trip or deepen your appreciation of a fantastic culture, Italian is the language to learn. Fun and expressive, this is a language where people really do talk with their hands—dozens of gestures have clear-cut meanings—but it is also the language of great literature going back to Dante. If you take this introductory course, you will see that Italian is enjoyable, illuminating, and beautiful, a system of communication worth studying. Beginners will learn basic Italian communication skills in an interactive and engaging classroom environment. With a strong foundation in the present tense, you will learn to express preferences, ask questions, make greetings and introductions, tell time, and discuss leisure activities.

LTIT40002: Italian for Communication II - 3.00 Units

Level II is designed for beginner students who have had some basic exposure to Italian. Building on your prior knowledge of the present tense, you will begin to learn how to describe events that occur in the past, make basic commands, give orders and advice, and express wants and obligations. Lively discussions about daily routines, the family, food preferences, and vacation plans will help increase cultural awareness and improve your vocabulary and confidence in the language. Textbook chapters 5-8 are covered.

LTIT40003: Italian for Communication III - 3.00 Units

Students in level III continue to develop their Italian proficiency by learning to express their likes and dislikes, make comparisons, and narrate and describe events in the past and future. The Italian culture remains an important theme, and topics related to recreation and sports, socializing, and fashion will anchor class discussions. Textbook chapters 9-12 are covered.

LTIT80000: Italian for Travelers - 0.00 Units

Planning a trip to Italy? This two-day course equips students with a basic set of handy communicative tools for comfortable interaction with the Italian people. In a lively, relaxed environment, participants learn key expressions, vocabulary words, and idioms necessary for the traveler. Travel tips, cultural aspects, regional characteristics, and social protocol and customs will also be presented.

LTSP40004: Spanish Conversations: Literary Café - 3.00 Units

Explore the rich and wide-ranging worlds of contemporary Latin America and Spain through the works of their most talented authors. A relaxed and inviting atmosphere allows you to have fun while you increase your reading, writing, and speaking skills and explore the nuances and subtleties of the Spanish language and culture. An emphasis on vocabulary development and brief reviews of grammar and mechanics are included. The work of writers such as Gabriel García Márquez, Jorge Luis Borges, Horacio Quiroga, Isabel Allende, Pablo Neruda, Juan Rulfo, and Emilia de Pardo Bazán are included. Different

readings and genres are addressed with each course offering. This course is meant to be taken after completing Spanish for Communication VI and at least one Refining Fluency in Spanish course or having the equivalent proficiency level.

MAE40004: Lean Six Sigma Black Belt - 9.00 Units

Lean Six Sigma is a set of tools, techniques and operating principles that represents the best of practices in quality and process improvement resulting in improved performance and reduced costs.

Course Benefits

The 12-session program will help you develop an understanding and learn the applications of proven approaches to maximize productivity through process requirements, constraints and flow.

Learn the established Lean Six Sigma body of knowledge and understand how to implement it directly into your workplace through a project.

Earn the credentials to be a Lean Six Sigma leader within your organization.

Classroom instruction and practical hands-on projects, allow direct application of Lean Six Sigma, resulting in a projected ROI of \$100K.

Program curriculum is based on the American Society for Quality's (ASQ's) Body of Knowledge, providing the education needed to prepare for the Six Sigma Black Belt Certification (CSSBB) exam. Training will also cover areas of competency in portions of ASQ's Manager of Quality (CMQ), Certified Quality Engineer (CQE), and Quality Auditor (CQA) certifications.

Receive a Specialized Certificate in Lean Six Sigma (LSS) Black Belt, and complete the educational training necessary to add LSS Black Belt to your resume. To obtain formal credentials, you must take an exam offered through a certifying body, such as ASQ.

Achieve one of the projects required to be eligible to sit for the certification exam.

Program Fee

The total cost of training is \$5,295, and this includes all course materials:

- Computer Software (SPC XL & DOE PRO)
- Course binder
- Textbooks
- Certificate Processing Fee
- Catered Lunch (no parking fee)

Want to learn more? Click here to join our free one-hour information session.

MAE40013: Lean Six Sigma Green Belt - 4.00 Units

Lean Six Sigma (LSS) provides a systematic method to improve performance and reduce variation in business operations to achieve productivity and profitability gains. Students earn various colors of Belts which indicate their levels of mastery of LSS expertise. A person who has earned the designation of Lean Six Sigma Green Belt often plays a key role in the success of an organization's process improvement initiatives.

As a member or leader of a high-performing LSS project team, the Green Belt is involved in selecting or defining projects, setting project objectives, data gathering, statistical analysis, and change implementation. To function effectively, Green Belts need to understand and apply the basic LSS concepts, tools and methodologies in a variety of situations. This course is designed to educate those who wish to attain the level of Green Belt.

Program Benefits

Immediately apply the established LSS principles and the Define, Measure, Analyze, Improve, Control (DMAIC) methodology to a case study or real-life project.

Receive guided mentorship from a Master Black Belt and understand how to implement LSS directly into your workplace.

Program curriculum is also aligned with the American Society for Quality's (ASQ's) Body of Knowledge.

Build your problem-solving muscles utilizing Lean Six Sigma in your organization.

Project Management Professional's are eligible to earn 45 PDU's through the Project Management Institute (PMI), in order to maintain your PMP certification.

Graduates of the in-class program are prepared to progress into the seven-session Lean Six Sigma Black Belt Practicum course.

Who Should Attend?

Any team or individual responsible for managing or participating significantly in any business process activities including managers, professionals and line staff in:

- manufacturing and quality engineers
- finance and business administration
- healthcare administration and practitioners
- product design and development
- sales and marketing professionals
- manufacturing or service operations
- supply chain management
- human resources

Program Format

You can complete the program either in the classroom or fully online. The benefits of the different formats include:

In-class:

Network and interact with fellow students over six full-days within a four-month period. Click on the "In Class" section below to view location, dates, and times.

Receive guided mentorship from a Master Black Belt, and work effectively in teams on a real-life project brought in from your or another student's organization. Project must result in a projected ROI of \$40k.

Progress into the seven-session Accelerated Lean Six Sigma Black Belt program.

Online:

Instructor-led training on your schedule.

Webinars and live office hours provide opportunities to collaborate and network with instructors and peers. Enrich your experience with meaningful feedback.

Weekly discussion board topics provide an additional opportunity to engage with the content and your peers.

Complete an authentic case study, under the mentorship of a Master Black Belt. Apply the tools and techniques provided by GoLeanSixSigma.com, globally leading experts in LSS.

In addition to UC San Diego Extension's Award of Completion, you will earn a globally recognized Lean Six Sigma Green Belt Certification from GoLeanSixSigma.com, and can add a Green Belt to your LinkedIn profile.

Please reach out to ProcessPrograms@ucsd.edu if you would like to request a no-interest payment plan.

MAE40017: Introduction to Systems Thinking - 3.00 Units

A "Systems Thinking" methodology adds a new and powerful set of analysis tools to the systems engineer's product development toolkit. Looking at a system as the sum of its parts working together, as opposed to a typical linear process, best describes the core principle of

Systems Thinking. Understanding the relationship between “Events, Patterns and Structures” provides the systems engineer with an approach that improves and expands the product development and problem solution arena. You will learn the significance of systems thinking through lecture and “hands-on”; assignments designed to reinforce the core set of analysis tools provided in this course.

Course Highlights:

- Definition and application of the systems thinking process
- Understanding the application of a systemic solution space
- Developing and applying customer requirements to your solution space
- Understanding the relationship between growth and balancing structures
- Understanding the relationship between competitive and cooperative structures
- Learn the process of identifying and using a system’s high leverage point
- Understanding the relationship with classical control theory methodology
- Understanding how today’s solutions become tomorrow’s problems
- Learn how to recognize problems before they become problems

Course Benefits:

- The Systems Thinking tools will significantly improve your ability to identify, analyze and determine system solutions that satisfy program objectives
- Your improved understanding of system components working together will expand your solution space beyond the standard linear systems engineering approach
- You will learn a powerful critical thinking methodology that can be applied equally to technical, political, social, and global systems

MAE40025: Reliability Centered Maintenance & FMEA - 3.00 Units

The engineering student will gain understanding of “Consequence of Failure Analysis (COFA)”, previously known as the “Failure Modes and Effects Analysis (FMEA)”, as part of the process used to develop a Premier Reliability Program. Those in management will be required to increase efficiencies as much as possible while decreasing lost time due to maintaining the entity. This includes the adoption of reliability-centered maintenance techniques for any entity where it is unacceptable to incur an unplanned shutdown, a loss of production or generation capability, a regulatory violation, environmental hazards, or any safety hazards such as fires, explosions, or personnel injuries especially when applied to preventive maintenance. In essence, it is any entity that manufactures a product or produces an output where it is unacceptable to incur unplanned interruptions of the operation or worse yet an unwanted disaster. (i.e. includes any type of manufacturing or production facility, any type of aircraft, military equipment or military installation, any type of power plant, i.e., fossil, hydro, or nuclear, a cruise ship, an oil refinery, a paper mill, a major assembly line, etc.

MAE40026: Introduction to System Safety - 3.00 Units

Discover the theories, concepts, applications, and practices of the field of system safety. The course emphasizes the specialized integration of safety skills and resources into all phases of a system’s life cycle. Topics include tools and techniques for system safety analysis and design influence. You will review problems facing today’s safety program manager and learn how to deal with basic safety and risk management concepts, as well as analyze program elements typically found in a safety program. You will also

partake in classroom exercises based on real world experiences to learn how to use additional tools and techniques to promote safety management in their organization.

Course Highlights:

- System Safety defined
- History of systems safety and its relevance to systems engineering
- Hazards, mishaps and risks - differences, types, and analysis
- Applying systems safety principles
- Systems safety products and differences between them
- Mitigating risks
- Common barriers to system safety programs

Course Benefits:

- Identify impacts of implementing system safety early
- Develop a greater knowledge of hazards and mitigations
- Cultivate a broader understanding of risks
- Acquire skills and tools that will increase safety in systems

MAE40028: SolidWorks - 3.00 Units

Receive a hands-on approach to learning the Computer Aided Design and Analysis software SolidWorks; used in a wide cross section of manufacturing market segments. Learn the basics of 3D modeling including; building parts, assemblies, technical drawings, Finite Element Analysis, Motion Analysis, and Fluid analysis. In addition to learning how to use the software, you will also receive instruction on design best practices. 3D printing may be employed.

For more information about this course, please contact infotech@ucsd.edu

MAE40030: Mechanical Design with MATLAB - 3.00 Units

Mechanical Design with MATLAB
Review the basic MATLAB environment (matrices, input/output, graphics, functions) and specific Mechanical and Aerospace Engineering Design and Analysis applications. The goal of the course is to enable practicing engineers to immediately apply the course material in their workplace and achieve more accurate and faster design and analysis processes.

Topics Include:

- Dynamics and Vibration using as an example single degree vibratory systems
- Control Systems are introduced using the example of a PID Controller of a Magnetic Suspension System
- Hydrostatics in Fluid Mechanics
- Heat Transfer
- Optimization using Nonlinear Programming

Software: Students will be required to bring a laptop with the latest version of Matlab installed. You can purchase a student version for \$99.00 by following this [LINK](#).

Course typically offered: In-Class in Winter and Summer
Prerequisites: Prior exposure to MATLAB and experience with Engineering
Next Steps: Upon completion of this class, consider enrolling in other coursework in the Mechanical Analysis Design Certificate Program.
More Information: For more information about this course, please contact unexengr@ucsd.edu.

MAE40031: Geometric Dimensioning & Tolerancing (GD&T) - 3.00 Units

This workshop provides insight into a function-based design approach, using GD&T and other established tools and methods. Emphasis will be placed on the importance of "tolerancing for producibility" to ensure design intent and optimized manufacturing are achieved.

Course Topics include:

- Practical application of GD&T per ASME Y14.5M-1994 (and ASME Y14.5-2009) for engineering drawings/model based product definition
- Impact of GD&T controls on manufacturing; insights into inspection criteria; and benefits of function based design to improve producibility and design optimization

- Explain the benefits of geometric tolerancing
- Identify datum features and determine their order of precedence
- Identify and interpret each of the characteristic symbols
- Describe the material condition modifiers and how "bonus" tolerance occurs
- Correctly interpret GD&T feature control frames, and explain the impact on manufacturing and inspection

MAE40032: Intro to FEMAP and ANSYS Finite Element Modeling - 3.00 Units

Practical hands on learning experience and instructions using FEMAP and ANSYS finite element modeling programs to analyze and substantiate design and to correct design flaws if needed in the digital world.

The Finite Element Method (FEM) has proved to be an extremely powerful technique for numerically solving a broad scope of physical problems, ranging from classical structural problems to biomedical blood flow within the heart. Participants will have access to FEMAP and ANSYS, a highly functional finite element software program used in a large numbers of engineering disciplines such as civil, aerodynamic, computational fluid dynamic, mechanical, nuclear, biomedical, hydrodynamics, heat conduction, fluid and geo-mechanics to name a few.

Topics this course will focus on:

- FEM techniques
- Analyze and substantiate design
- Importing loads
- Applying loads and boundary conditions
- Extracting and analyzing loads
- Creating reports for various designs

Course Benefits:

Provide working professionals with basic to advanced principles upon which the Finite Element Method is based upon and various nuances of the technique to arrive at physically acceptable models.

Apply FEM to a broad host of physical problems that illustrate its principles and are not complicated by the geometry of a problem under consideration.

Participants will create their own or bring existing design in a class project that involves creating, running, analyzing, and writing a report on the results of the modeling effort, which could ideally serve as a work-related project.

MAE40033: Plastic Part Design for Injection Molding - 3.00 Units

Optimal part design has always been a challenge for plastic part designers. This difficulty mainly stems from the fact that with the exception of a few basic rules in designing plastic parts, the design criteria change from material to material as well as from application to application.

Today, designers are challenged with multiple requirements while designing plastic parts. Major emphasis is on economics, functionality, manufacturability, and aesthetic appeal. Some compromise during the design

process is inevitable; in some cases, trade-offs like these lead to pre-mature failures. The most common mistakes made by designers when working in plastics are related to wall thickness, sharp corners, creep, draft, environmental compatibility, and placement of ribs.

This part design course will discuss how to avoid performance and process related issues by citing examples of actual parts that were designed and put into service. The focus will be on how a good design enhances the performance and processability, conversely how a less than optimal design can create premature failures and processing nightmare.

This course will cover the fundamentals of part design for the injection molding process. Topics such as materials selection, mold design, optimum molding, effects of stress-strain and creep on part design as well as assembly techniques with working examples will be thoroughly discussed in class. The objective of this course is to provide the student an overview of basic part design considerations for products molded with thermoplastic resins. It will help educate the student a proper way of material selection, develop a functional design and work within the limitations of the injection molding process.

Learning Outcomes:

Students will develop a good working knowledge in plastic part design that can be applied to improve product quality as well as productivity.

Understanding plastic behavior over time (creep, relaxation) and environmental effects on plastics (humidity, temperature, chemicals, etc.) and establish end-use product specifications.

MAE40034: Introduction to Reverse Engineering with SolidWorks - 3.00 Units

Practical hands on learning experience and instructions using Solidworks and Reverse Engineering programs to reverse engineer and bridge the physical to digital world through 3D scanning. Reverse Engineering has proved to be an extremely powerful technique for solving a broad scope of NAPKIN to PROTOTYPE physical problems, ranging from Olympic athlete equipment, Disney theme park rides, Penske race cars, special effects for the movie TITANIC, X-38 astronaut recovery vehicle, NFL football helmets, to reverse engineering the human heart. Participants will have access to 3D scanners, ReverseEngineering.com HIPP tools (Solidworks Certified Gold partner product) and an industry standard 3D point cloud processing software program used in a large numbers of engineering disciplines such as health care, entertainment, civil, aerospace, military, pump engineering, mechanical, nuclear, biomedical, to name a few.

Course Topics:

- Instructions using Solidworks ScanTo3D and ReverseEngineering.com HIPP modeling programs
- ReverseEngineering techniques calipers vs Hard probe vs scanning 3D scanning with Faro scan Arm , Blue Light scanner, white light scanner
- Point cloud processing
- 3D complex surface modeling
- Mesh to Surface deviation, GD&T, Go-No-Go inspection
- Creating reports for various designs

Learning Outcomes:

Provide working professionals with basic to advanced principles upon which the Reverse Engineering workflow method is applied to arrive at wire frame, solids or complex surfaces of 3D scanned models.

Apply Reverse Engineering methods to problems that illustrate its principles and workflow against physical geometry under 3D scanning consideration.

Participants will 3D scan their own or bring existing design(Scan data set / point cloud) in a class project that involves 3D Scanning, creating, running, analyzing, and writing a report on the results of the Reverse Engineering modeling effort, which could ideally serve as a work-related project.

MAE40035: - 4.00 Units

MAE40036: - 3.00 Units

MAE40037: - 4.00 Units

MAE80002: Lean Six Sigma LearnAbout Tour - 0.00 Units

In this one-day workshop, we will ride together to visit two outstanding workplaces. We will learn best practices from Process Improvement leaders at:

Costco Wholesale

Costco Wholesale is a membership warehouse club, dedicated to bringing their members the best possible prices on quality, brand-name merchandise.

Taylor Guitars

Taylor Guitars is an American guitar manufacturer based in El Cajon, California and is the #1 manufacturer of acoustic guitars in the United States.

Workshop Benefits

Witness Process Improvement first-hand from skilled practitioners.

Ask questions and learn from subject matter experts and organizational leaders.

Learn strategies that can be applied immediately.

Network with local Process Improvement leaders

Learn how to create a culture of "Good Change"

Participants will meet in the lobby at our University City Center, which is conveniently located off of Interstate 805. For a map and directions click here. Free parking is available in an adjacent parking structure.

Participants will board the bus at 8am to leave for the first location. Snacks and lunch will be provided.

Tour Duration: 7:45am - 4pm (click on the blue bar below to see further details and register)

Space is limited! For information, contact Angela Millerat (858) 534-8133

MAE90000: - 0.00 Units

MAE90007: Introduction to Mechanical Engineering and Materials Science - 6.00 Units

MAE90013: Robot Ruminations: Building and Programming Fundamentals - 6.00 Units

MARI90002: Global Environment Leadership Hawaii - 6.00 Units

MARI90004: Scripps Institution of Oceanography: Marine Invertebrates - 6.00 Units

MARI90007: An Introduction to Marine and Terrestrial Ecology - 6.00 Units

"An Introduction to Marine and Terrestrial Ecology" is a scientific course designed for students to gain an appreciation for the study of the interaction between organisms and their environment. The course begins by explaining what biology is and what it is not, the scientific method and its importance in science, then moves into the nitty-gritty topics of ecology including animal mating systems and their influence on population structure, biodiversity, animal behavior and communication, sexual dimorphism, evolutionary ecology, and conservation.

Since the instructor heavily believes in hands-on learning, the class will include field-work, in-class exercises, and group discussions followed by class discussions in order for students to express their views on the topics being studied.

MARI90009: Scripps Institution of Oceanography: Microbial Oceanography - 6.00 Units

MARI90012: Scripps Institution of Oceanography: The Physics of the Ocean World - 6.00 Units

The course will introduce students to physical oceanography and the relevance of ocean processes to the Earth's climate. The course will focus on the ways that oceans and atmosphere affect each other as a couple system and on the ways that human impact on the oceans impacts our climate which in turn impacts the quality of human life. Students will be required to write a short research paper on one of the topics presented in class. During the final week of class, students will have the opportunity to participate in a mock "scientific conference," where they will present the content of their papers to the class and engage in a question and answer period.

MARI90015: Global Environmental Leadership and Sustainability - Biosphere 2 - 6.00 Units

This exciting course is offered in partnership with Biosphere 2 and the University of Arizona. By being immersed in true scientific processes and learning to model the Social Change Model of Leadership, students will learn how to take the lead in helping sustain the earth and regain what has been lost. By applying what is learned in this course, students will be well on their way to becoming a "Leader in Caring for the Earth."

MARI90016: Global Environmental Leadership and Sustainability - Los Alamos - 6.00 Units

This exciting course is offered in partnership with Los Alamos National Laboratories and the University of New Mexico. By being immersed in true scientific processes and learning to model the Social Change Model of Leadership, students will learn how to take the lead in helping sustain the earth and regain what has been lost. By applying what is learned in this course, students will be well on their way to becoming a "Leader in Caring for the Earth."

MARI90017: Global Environmental Leadership and Sustainability - San Diego and Washington, DC - 6.00 Units

MARI90018: Scripps Institution of Oceanography: Introduction to Marine Biology - 6.00 Units

This course is designed to take high school students and give them an appreciation and understanding of marine biology. Students will learn about the diverse groups of marine organisms, variety of ecosystems and habitats, and current events in today's oceans such as overfishing, ocean acidification, restoration and marine protected areas. Through lecture, readings, projects, field trips and discussions students will learn about the diversity of ocean environments and how the creatures that live there are adapted to best survive. Students will learn theories pertinent to ecology as a whole as well as the specifics to the ocean. Students will also have the opportunity to explore areas that interest them, to become experts on a topic and teach each other.

The class will stress hands on learning with mini experiments, field trips and demonstrations.

MARI90023: SIO: The Invisible Life in the Oceans: Introduction to Marine Microbiology - 6.00 Units

This course explores an unfamiliar aspect of ocean life: the millions of microbes that can be found within a single drop of seawater. We will cover introductory topics such as proper sterile technique when dealing with microbes, the preparation of culture media, and using DNA sequencing to identify as many microbial species as possible within a marine environment. Students will investigate microbes, including bacteria and algae, from a variety of different marine samples. Studying the microbiology within their surrounding environments will engage students and expand their conceptual understanding of the important role of microbes in all environments. Students will learn laboratory techniques that marine scientists and microbiologists use on a daily basis to explore and characterize microbial diversity from field samples. This course will immerse students in the scientific process as they formulate questions, collect data, and write up their findings.

MARI90024: Global Environmental Leadership and Sustainability - Arizona - 3.00 Units

This course provides high achieving high school students the opportunity to work hand-in-hand with prominent faculty researchers and grad students in the biomes and labs of the Biosphere 2 complex, exploring causes and effects of climate change on earth's systems. Throughout the program scientific research is connected with leadership training and personal growth, which students experience as the program unfolds. Students collaborate, reflect and engage in leadership activities from a value-based process resulting in positive social change, emphasizing the Social Change Model of Leadership. Students begin to understand the magnitude of the changes in their future world, and learn steps to becoming competent stewards. Students are given time to journal their daily experiences, and learn more about themselves as individuals and group members.

MARI90025: Global Environmental Leadership and Sustainability - Hawai'i - 3.00 Units

This course provides high achieving high school students the opportunity to work hand-in-hand with prominent faculty researchers and grad students around the Big Island of Hawai'i, exploring the causes and effects of climate change on earth's systems. Throughout the program scientific research is connected with leadership training and personal growth, which students experience as the program unfolds. Students collaborate, reflect and engage in leadership activities from a value-based process resulting in positive social change, emphasizing the Social Change Model of Leadership. Students begin to understand the magnitude of the changes in their future world, and learn steps to becoming competent stewards. Students are given time to journal their daily experiences, and learn more about themselves as individuals and group members.

MARI90026: Global Environmental Leadership and Sustainability Program - Catalina Island - 3.00 Units

This course provides middle school students the opportunity to work with marine biologists in learning about marine fishes and invertebrates on Catalina Island and how scientists study the ocean. They are also exposed to Native American culture and language of the Kumeyaay nation, as well as how Native Americans who lived on Catalina used its land and resources.

MARI90027: - 6.00 Units

MATH#20C: Calculus for Science and Engineering - 4.00 Units

This course will cover vector geometry, vector functions and their derivatives along with partial differentiation, maxima and minima, and double integration.

MATH#20F: Linear Algebra - 4.00 Units

This is now Math 18

Matrix algebra, Gaussian elimination, determinants, Linear and affine subspaces, bases of Euclidean spaces. Eigenvalues and eigenvectors, quadratic forms, orthogonal matrices, diagonalization of symmetric matrices. Applications. Computing symbolic and graphical solutions using Matlab. Prerequisite - a C or better in any one of the following Math courses: Math 3C, Math 4C, Math 10A or Math 20A.

MATH31339: Project Prime Mathematics Content Institute Imperial County - 4.00 Units

This course will enhance the content knowledge and teaching skills of mathematics teachers (grades, 5, 6, 7 and 8), through professional development activities. Mathematics content in the 40 hour institute will address basic operations, specifically, fluency with whole numbers, fractions and decimals. This will include the understanding of fractions as measures, different representations of fractions, different operations of fractions, and fractions as ratios and percents as well as word problems. In addition the course will focus on the specific needs of English learners in mathematics classrooms and address the role of academic language in content knowledge learning and the role of graphic organizers, cooperative and communal learning and instructional conversations in supporting academic language development in mathematics classrooms.

MATH40016: Math for Management - 3.00 Units

MATH40017: Introduction to Calculus - 3.00 Units

MATH40018: Precalculus - 3.00 Units

MATHX10A: Calculus I - 4.00 Units

Differential calculus of functions of one variable, with applications. Functions, graphs, continuity, limits, derivatives, tangent lines, optimization problems. (No credit given if taken after or concurrent with Math 20A.)

MATHX18: Linear Algebra - 4.00 Units

Math 18 Matrix algebra, Gaussian elimination, determinants, Linear and affine subspaces, bases of Euclidean spaces. Eigenvalues and eigenvectors, quadratic forms, orthogonal matrices, diagonalization of symmetric matrices. Applications. Computing symbolic and graphical solutions using Matlab.

Prerequisite: a C or better in any one of the following Math courses: Math 3C, Math 4C, Math 10A or Math 20A.

MATHX3C: Precalculus - 4.00 Units

Functions and their graphs. Linear and polynomial functions, zeroes, inverse functions, exponential and logarithmic, trigonometric functions and their inverses. Emphasis on understanding algebraic, numerical and graphical approaches making use of graphing calculators. (no credit given if taken after Math 4C, 1A/10A, or 2A/20A.) three or more years of high school mathematics or equivalent recommended.

MEDC40000: Coding III - 6.00 Units

Focus is on advanced coding principles including: the prospective payment system and decision-making leading to optimal DRG assignment, regulatory agency coding requirements at the state and national level, coding assessment by peer review organizations, coding quality assurance, CPT for inpatient and outpatient settings, physician-based CPT coding, and APC's. Concentration on

application of disease management concepts to the medical record coding process, i.e., physician query with regard to documentation requirements.

MEDC40003: Coding II - 6.00 Units

Continues coding techniques by body system and disease process: genitourinary, neoplasms, mental disorders, skin and subcutaneous tissue, musculoskeletal, connective tissue, congenital anomalies, injuries, poisonings, and complications of pregnancy and childbirth. Pathology concepts will be emphasized as they relate to these body systems. Laboratory continues with an introduction to actual medical record examples. (ICD-10-PCS)

MEDC40005: Coding I - 6.00 Units

Principles and conventions for covering ICD-10-CM Coding techniques by body system and disease process including endocrine, nutritional, metabolic, blood, parasitic diseases, immunity disorders, respiratory, digestive, sense organs, nervous system, and infectious diseases. Pathology concepts will be emphasized as they relate to these body systems. Laboratory includes introduction to actual medical record examples.

MEDC40015: ICD-10 CM & PCS Coding - 3.00 Units

This course provides ICD-10 CM & PCS coding exercises at the basic, intermediate and advanced level as well beginner, intermediate, and advanced coding exercises. These coding exercises emphasize all aspects of the coding classification system so students can apply their knowledge of coding principles and definitions.

This course is an ideal vehicle to expand educational opportunities for the individual currently employed in medicine who wishes to attain additional marketable skills or advancement within the current area of employment. Also, this includes the interested individual employed outside of Medicine who wishes to make a complete career change.

MEDC40018: ICD-10-CM - 4.00 Units

This comprehensive online course will train students in the ICD-10-CM coding system (International Classification of Disease, Version 10, Clinical Modification) for outpatient medical coding and reporting. Class participants will use the ICD-10-CM code book, coding guidelines and coding conventions to apply health care documentation policies and procedures that ensure the highest quality of healthcare delivery through diagnosis code assignment.

MEDC40019: ICD-10-PCS - 4.00 Units

The first offering of this new course will be Winter 2017. Please check back for the updated course description coming soon!

Upon completion of the course, students will be able to:

1. Find and accurately construct diagnosis codes using the Alphabetic Index to Diseases, the Tabular List, the Table of Drugs and Chemicals, and the Alphabetic Index of External Causes.
2. Implement the chapter-specific coding guidelines for chapters 11-19 of the ICD-10-CM codebook.
3. Accurately assign Present on Admission (POA) indicators to ICD-10-CM diagnosis codes reported in the inpatient setting.
4. Accurately construct and assign procedure codes by using the Alphabetic Index of Procedures and the Tabular List of Procedures.

MEDC40020: CPT/HCPCS Coding - 4.00 Units

This online course prepares students for the American Academy of Professional Coders (AAPC) coding accreditation examinations, as well as the American Health Information Management Associate (AHIMA) coding accreditation examinations. Students will learn how to read and interpret clinical documentation, apply coding guidelines and use their medical knowledge to assign CPT codes appropriately.

Note: This course is intended for individuals pursuing the Medical Coding Certificate Program and requires previous Coding knowledge in order to enroll.

Upon completion of the course, students will be able to:

- Navigate the CPT codebook and identify the uses of the conventions, index, numeric section, and appendices.
- Recognize modifiers that can be appended to CPT procedure codes, as well as identify when their use is appropriate.
- Calculate and assign CPT Evaluation and Management codes.
- Identify the meaning and purposes of procedural code audits and how to apply them.
- Apply the guidelines for the six main sections of the CPT.
- Assign codes from each of the six main sections of the CPT.
- Identify the uses of CPT Category II and Category III codes.
- Navigate the HCPCS Level II codebook and apply its contents, including the conventions, index, tabular list, levels of use, Table of Drugs and Biologicals, and appendices.
- Describe the use of coding guidelines and reporting requirements.
- Practice case studies and more complex code assignments using CPT and HCPCS Level II codes.
- Review examples of RBRVS, APCs, ASCs, and E/M services.

MEDC40021: Reimbursement Methodologies & Compliance - 2.00 Units

This course was developed to provide students with an in-depth understanding of the structure and function of the US Healthcare Reimbursement system, including the various types of payors, payment methodologies and compliance strategies. By the end of this course, students will be able to 1) define commercial, federal and managed care insurance plans, and describe the differences between the three types of payors, 2) describe payment methodologies associated with each type of payor, 3) describe each step in the insurance billing process, from claims submission to payment determination, 4) define the legislation created to regulate claims compliance and the agencies responsible that ensuring that these laws are followed.

MEDC40022: Legal & Ethical Issues in Coding - 2.00 Units

This is an online course where students will learn about legal and ethical issues in Coding, HIPAA, and Health Information privacy. Class participants will use the text HIPAA by Example, Case Studies, and Regulatory websites to prepare for this course which will prepare them for medical coding certification.

Upon completion of the course, students will be able to:

1. Explain the legislative and regulatory processes in the United States.
2. Describe the laws and regulations pertaining to health information.
3. Define Health Insurance Portability and Accountability Act (HIPAA).
4. Adhere to privacy and security policies.
5. Identify the components of the Code of Ethics and Standards of Ethical Coding.

MEDC40023: Coding Practicum - 3.00 Units

The first offering of this new course will be Summer 2017. Please check back for the updated course description coming soon!

As a result of the Coding Practicum, students will be able to:

1. Apply knowledge of coding to a variety of authentic coding scenarios to build speed and accuracy.
 2. Demonstrate hands-on encoder use.
 3. Assign diagnostic groupings.
 4. Practice the use of official coding guidelines and reporting requirements.
 5. Practice case mix analysis.
 6. Apply codes to many types of records including inpatient, outpatient, physician, emergency room, long term care, and home health.
- Test Prep

1. Identify the steps they need to take to be eligible for and effectively prepare for and access their final exam.
2. Identify the format, restrictions, and policies of final exams, including scoring, retakes, allowed resources, and time limits.

MEDC40024: Introduction to Medical Coding - 2.00 Units

This course is the introductory foundation of the coding industry. The fundamentals of coding will be communicated by building upon the knowledge, principals and guidelines required in order to be successful in the medical coding field. A series of web-based sessions will provide an overview of medical coding, medical billing, coding terminology/nomenclature, medical record documentation and review the different coding work environments.

MEDC40251: Medical Procedural Coding - 10.00 Units

Join the healthcare profession in a high-demand field. This course offers career opportunities in a medical office, hospital or insurance company. Learn current information relating to CPT and ICD-10-CM procedural and diagnostic coding. The curriculum includes: medical terminology section introductions, anatomy overviews, and CPT and ICD-10 CM coding issues utilizing the American Medical Association's Physician's Current Procedural Terminology.

MEDC80000: CCS Test Preparation - 0.00 Units

This test review course represents a renewed effort to provide test-taking strategies for AHIMA CCS students. Questions and cases have been selected to cover the broad topic categories necessary in sitting for the CCS Certification Examination. Researching the questions and cases will increase knowledge such that, when you encounter similar questions and cases, you will arrive at the correct answer.

MUS40006: Beginning Piano, Level I - 2.00 Units

Have you always wanted to learn to play the piano? This exciting and rewarding beginning piano course is designed for students with little or no keyboard experience. Develop basic keyboard skills and technique through the use of popular songs and appropriate-level piano literature. Gain a strong understanding of the rudimentary elements of music—melody, rhythm, harmony, and timbre—through electronic keyboard practice. Simple unison and part-singing are encouraged in this highly interactive course.

MUS40009: Beginning Piano, Level II - 2.00 Units

This second-level beginning piano course is designed for students who have had some piano experience. We'll build upon the five-finger patterns taught in Piano I, and you'll learn the keys of D, A and E and their relative minor keys. You will develop skills through the use of keyboard exercises, popular songs and appropriate-level piano literature of all genres, and will develop an understanding of melody, rhythm, harmony and timbre. Music notation, reading, scales, chords, transposition and sight-reading will be explored in more detail.

MUS40021: Singing I - 2.00 Units

Singing is one of the greatest expressions of joy human beings can share. Learn the fundamentals of good singing—including posture, breath control and voice production—in a friendly, supportive and fun environment. Develop basic skills in diction, reading music, projection, and stage presence alongside the more practical issues related to singing. Emphasis will be placed on the practical application of exercises and songs of various styles in both group and solo settings. Topics to be covered include posture, breathing, production and articulation of tone. As your confidence grows you will sing solos and ensemble pieces with your classmates, and will prepare a solo song for the final concert.

MUS40032: Guitar I - 2.00 Units

Have you ever wanted to play the guitar, but don't know where to begin? Guitar class is a great way to learn and have fun at the same time. You don't need any musical training, or even know how to read music, to begin learning to play the classical guitar with ease, control and musicality. In this easy step by step approach, designed for adult beginners but appropriate for students of all ages, you will acquire a basic, solid technique that will provide the foundation for your future progress and continued enjoyment in both acoustic and electric guitar. We focus on learning basic skills and techniques for playing the guitar, but you will also learn how to read music, guitar history, and styles and approaches to playing.

MUS40035: Singing II - 2.00 Units

In this course singers will explore more sophisticated technical issues while continuing to work on the fundamental aspects of good singing: posture, breath control, and expressive articulation. Continue to build musicianship skills such as note reading, rhythm, phrasing, harmony and dynamics and will focus more on developing the skills necessary to perform as a soloist. Emphasis will be placed on the practical application of exercises and songs of various styles in both group and solo settings. Topics to be covered include sight-reading, basic harmonizing, how to practice, and song and performance analysis. Participants will work on solos, duets and small ensemble pieces, and will prepare a selection of these for the final concert.

MUS40036: Guitar II - 2.00 Units

Continue to develop your skills and build a firm technical and musical foundation on the guitar. Learn the relaxed right- and left-hand technique that can take your performance to the next level. Practice finger-gymnastic exercises for both hands to build hand strength and agility. Study an array of chords in every major and minor key, and learn note reading in the higher positions on the guitar neck, as well as some basic figurations and arpeggios. Take part in simple duets and ensemble pieces with your fellow classmates. Designed for students who already have guitar skills and can read simple music.

MUS40040: Jazz Camp - 3.00 Units

A five-day summer program for intermediate to advanced level musicians ages 14 to Adult UCSD Jazz Camp offers a diverse, one-of-a-kind journey into the world of jazz with group courses and workshops in Jazz History and Theory, Improvisation, Ensemble Performance, Composition and Arranging, and Instrumental Master classes, plus private lessons, jam sessions, and exciting faculty concerts. Our extraordinary faculty of leading jazz improvisers and educators breaks down the boundaries between "inside" and "outside," sharpening your performance skills and enriching your experience of jazz as a broad spectrum of options for musical expression. See the Jazz Camp website for additional information on the program.

MUS40048: Intermediate Piano - 2.00 Units

Learn to play with a beautiful and warm tone across a range of styles and genres, including traditional classical literature, standard pop songs, blues, and light jazz. Focus on appropriate-level repertoire, scales, chord progressions, harmonization, modulation, and sight-reading in more complex key relationships, and on improvisation and transposition between keys. Receive individualized coaching on compositions chosen by you and the instructor within your own level and preferred style. Follows Piano I-III sequence: appropriate for players with some skill with musical notation, scales, transposition, and simple sight-reading.

MUS40054: Music Theory 101 - 2.00 Units

A basic knowledge of music theory is one of the most important tools a musician can have, whether you play an instrument or want to compose your own music. This class for beginners will provide an introduction to the

fundamentals of music. Using a series of simple exercises, we'll begin with how to read music, note values, pitch, melody, rhythm (simple and complex), and major and minor scales, and progress to more complex subjects, such as clefs, intervals, keys and key signatures, chords and chord progression, phrases, harmony, accompaniments, counterpoint, forms of composition, and ear-training.

MUS90000: Sonic Arts: Building Musical Instruments (Real and Imaginary) - 6.00 Units

This is a course that will focus on the creation of novel musical instruments, both hardware and software (real and imaginary). To this end, we will investigate the use of audio-oriented programming languages (notably Pure Data, developed here at UCSD) and the repurposing of familiar input devices to develop new modes of musical expression. Topics will range from the technical (sound synthesis and sampling, circuitbending, controllers) to the conceptual (design thinking, musical information, interaction design). A particular emphasis will be placed on the intersection of art and technology and the use of each to inform the other. Small daily projects will lead up to a larger final work and concert.

MUS90006: Audiovisual: Music's Place in Film, Television and Art - 6.00 Units

How are we to make sense of a world that surrounds us with lights, images, sounds and music? From YouTube to electronic billboards, music and image are an increasingly important part of our lives. AUDIOVISUAL: Music's Place in Film, Television and Art helps us make sense of that world by examining how music functions in significant films and artworks from the 20th Century. Across eight units, each with unique focuses such as Classical Music in Film and Music and Television, students will develop listening skills and be introduced to foundational musical concepts such as form, orchestration and texture. By considering how an increasingly visual world affects music, students will develop critical-thinking skills while practicing college-level writing via five writing assignments.

MUS90008: Music and Your Brain: A Cogitative look at the Interconnections - 0.00 Units

Join us to explore how music affects your brain and body in physical, cognitive, and emotional ways. Each of us has our own unique connections with music, yet there are many reactions and interactions to music that we all share. We will discover how music relates to topics like cultural identity, history, math and science. The focus of this class will be built around musical activities and group work as students discover new ways to "think musically."

This course is designed for students entering the 7th through 12th grades who have little to no experience with music.

MUS90009: - 6.00 Units

NURS40002: Emergency Department Nursing, Part II - 3.50 Units

This course focuses on the medical and psychological emergencies that are frequently found in the emergency department. Topics include violence as it relates to the emergency department (staff and patients), substance abuse, toxicological emergencies, environmental emergencies, and disaster nursing. General medical emergencies, obstetrical emergencies, pediatric emergencies, and psychiatric emergencies are areas that will also be covered.

NURS40003: Emergency Department Nursing Basic Preceptorship - 2.00 Units

*****IMPORTANT: THIS COURSE IS FOR EMERGENCY DEPARTMENT NURSING CERTIFICATE STUDENTS ONLY**

*****AFTER COMPLETING PARTS I & II YOU NEED TO OBTAIN EXPLICIT PERMISSION FROM INSTRUCTOR TO ARRANGE PRECEPTORSHIP**

*****ONCE YOU HAVE INSTRUCTOR APPROVAL, CONTACT S4GRIFFITH@UCSD.EDU FOR ENROLLMENT INSTRUCTIONS**

Demonstrate your familiarity with the equipment and monitoring devices used in an Emergency Department. Complete this course in your own workplace or in another facility under the guidance of a mentor. In addition to a preceptorship checklist, students must possess a current Advanced Cardiac Life Support (ACLS) Certificate and Hepatitis B vaccine to enroll in the preceptorship. Participants learn splinting, using auto-transfusing equipment and experience being an integral part of an emergency team. Interested students should email unexhealthcare@ucsd.edu or call 858-534-9262 for information on required paperwork. Requirement for Specialized Certificate in Emergency Department Nursing.

Note prerequisite: completion of Emergency Department Nursing Part I and II and permission of instructor.

NURS40005: Emergency Department Nursing, Part I - 3.50 Units

This course focuses on determining priorities of care in the assessment of ill or injured emergency patients. Topics include triage, assessment, and management of shock; fluid resuscitation; and stabilization of respiratory, neurologic, thoracic, and abdominal injuries. The class emphasizes instruction in initial assessment and baseline data gathering for nurses with little experience in an emergency department setting.

PATH40009: Advanced Topics - 2.00 Units

PATH40010: Chemistry/Urinalysis - 10.00 Units

PATH40011: Hematology/Coagulation - 6.00 Units

PATH40012: Immunology/Serology - 2.00 Units

PATH40013: Laboratory Operations - 1.00 Units

PATH40014: Microbiology/Parasitology - 8.00 Units

PATH40015: Transfusion Medicine - 4.00 Units

PHIL90000: Introduction to Philosophical Ethics - 6.00 Units

Ethics, at the most basic level, is the study of moral right and wrong. Since the modern period, there has been a push toward treating the concepts "morally right" and "morally wrong" as culturally relative, meaning that they are inapplicable outside of particular cultural contexts. Since "different cultures have different moral codes," it is often thought that there is therefore no universal truth in ethics. This course will focus on the question of moral relativism, so understood. The guiding questions of the course will be: Is morality relative, and if so, to what? When, if ever, is it appropriate to judge the cultural practices of others? What does our awareness of differences between cultures imply about our political institutions? Are some ways of forming moral beliefs better than others?

PHIL90001: Critical Thinking - 6.00 Units

"A course in critical thinking is a course in self-improvement. It is a chance to look inside yourself and examine your own ability to think. It is a place where you can learn about the difference between good thinking and bad thinking. It is an opportunity to acquire reasoning skills that should serve you well in whatever pursuit you engage in." (Michael O'Rourke) In this course we will study good thinking and bad thinking from the perspectives of both psychology and philosophy. We will learn about (1) our brains and the psychology of reasoning and decision making, (2) how identify, analyze, and evaluate arguments by other people (including politicians, used car salesmen, and teachers), and (3) how to construct arguments in order to decide what to

believe or what to do. The instructional format will be exercise-centered, with interactive lectures, discussion, and group activities.

PHIL90002: The Philosophy of Addiction and Responsibility - 6.00 Units

This course will focus on addiction and its implications for moral and legal responsibility. Though this course is above all a course in philosophy, the topic lies at the intersection of science, bio-ethics, and the law, and students will get an understanding of all of these fields as they bear on questions about addiction. Students will first learn about current findings and methods in scientific research relevant to understanding addiction. Second, students will learn about current theories of moral and legal responsibility. Finally, drawing from the theories of addiction and responsibility, students will consider and assess current policies in place related to addiction. This course does not require students to have prior experience in any of the fields of study covered in the course.

PHIL90003: - 6.00 Units

PHIL90004: - 6.00 Units

PHIL90006: - 6.00 Units

PHILX10: Introduction to Logic - 4.00 Units

This course is intended to introduce students to logic. It is difficult to overemphasize the importance of logic. Everyone thinks. Everyone reasons. We are also all subjected to the thinking and reasoning of others from many sources: books, radio, speeches, TV, newspapers, employers, friends, and family. The study of logic is one of the best ways to refine one's natural ability to reason and argue. Through the study of logic, one learns strategies for thinking well, common errors in reasoning to avoid, and effective techniques for evaluating arguments. In this course, we will introduce formal symbolic logic, focusing on argument structure, syllogisms, propositional logic, and elementary quantificational logic. From time to time, we will also use an educational computer program designed to teach students logic.

PHYS90001: Space Out! - 0.00 Units

Buckle your seatbelts and get ready to blast off as you plan your own mission to space! Design and build a miniature spacecraft that will be presented and launched on the last day of class at a rocket-launch celebration. Explore our Earth and then move on to other planets, solar systems, and faraway galaxies. Join us to learn about past and current space missions, different kinds of stars, habitable planets, black holes, and even Einstein's theory of relativity.

PHYS90003: The Mathematics of Fidget Spinners - 0.00 Units

Ever wonder why your friends fidget spinner spins longer than yours? Why some spinners are louder than others? In this workshop, the physics of fidget spinners become tangible, unlocking a world of intuition! Join us to explore a fantastic phenomenon where energy is conserved, and entropy is increasing. Witness, first hand, the transitions from chemistry, to motion to heat. See the forces of tension and gravity. Learn how a fidget spinner is a ticket to exploring the laws that shape our universe. In this workshop class you can rest assured that the teacher will not confiscate your fidget spinner. NOTE: Fidget spinners will be provided for the students to use during the class. Alternatively, if they like, students can opt to bring and use their own fidget spinner. At the end of class a drawing will be held where one lucky student will win a free fidget spinner!

PHYS90004: - 6.00 Units

POLI90000: American and Chinese Future Leaders Summer Program - 1.00 Units

Chinese and American high school students will participate in a binational interactive cultural experience through a game based role-play simulation focused on global concerns that relate to science and technology. Through team negotiations they will produce an Action Plan for the way forward that emphasizes common ground partnerships that can develop between China and the United States to meet the challenges ahead. In their work, students will be supported by an education technology platform designed specifically for game play and speakers and institutes at the University of California San Diego.

POLI90001: - 2.00 Units

POLI90002: - 3.00 Units

PSY40070: Applied Skills for Group Dynamics and Facilitation - 3.00 Units

Counseling is a relationship in which the counselor helps the client mobilize resources to resolve problems or modify attitudes and values. Group counseling is an integral part of that process. This course is presented as a comparative study of counseling theories and practices as applied to groups, introducing major approaches, strategies, and applied skills in group counseling and examining the purpose and function of different types of counseling groups. To gain experience students will participate in several group counseling sessions in the classroom setting. Students gain awareness of their own personal philosophy of the group process and which approaches are most appropriate to particular situations.

PSY40156: Toys and Their Uses - 0.50 Units

This course will help the play therapist match play materials with treatment objectives. Imaginative play and art materials meet the child's need for symbolic expression of his/her representational world, strengthening of sense of self, catharsis, resolution of internal conflicts, and mastery of external challenges. Structured play materials, tasks, and therapeutic games can be used to achieve specific goals, such as awareness of emotion, self-regulation, and increasing self-esteem and social skills. These principles are conveyed with didactic, case discussion, and experiential methods.

PSY40158: Legal and Ethical Issues in Child Treatment with Emphasis on Play Therapy and Assessment - 0.50 Units

This class addresses how legal and ethical issues relate to child therapy, to the use of play in therapy and assessment, and to conflicts that exist between psychotherapy and legal processes. Topics include reducing the risk of contamination of evidence, use of open-ended and leading questions, forensic interviewing, child memory issues, preparing children for legal proceedings, court testimony, child abuse assessment and reporting, child custody evaluation and child placement, child client confidentiality, holder of privileged communication, informed consent, and legal rights and advocacy for children in the school setting.

PSY40167: Play Therapy with Attention Deficit and Disruptive Behavior Disorders - 0.50 Units

This course focuses on using play therapy with children who are diagnosed with Attention Deficit Hyperactivity Disorder and Disruptive Behavior Disorders such as Oppositional Defiant Disorder and Impulse Control Disorder NOS. Emphasis will be placed on learning play therapy techniques that target the primary symptoms of these diagnoses. In addition, differential diagnosis and comorbidity will also be addressed. Adjunctive resources and concrete methods for working with parents and school personnel in a manner that assists in the generalization of skills learned through play therapy will also be explored.

PSY40171: Play Therapy Across Cultural and Ethnic Groups - 0.50 Units

This course challenges students to critically examine applications and barriers of predominant play therapy training models to effective treatment with youths of diverse cultural backgrounds. A broadened paradigm for assessment, treatment planning, and intervention is provided, integrating a multitude of socio-cultural variables impacting children.

PSY40213: Advanced Intervention - 2.00 Units

Professionals and volunteers who work in settings where drug-affected human behavior can be monitored for corrective healthcare should understand the advanced methods for intervention. This course builds upon the basic understanding of chemical dependency intervention through learning applied methods. Methods can then be put into practice by a professionally orchestrated intervention in order to assist the addict/alcoholic to accept treatment. Topics covered include the history, functions, and approaches of intervention; the family as a system; enabling behavior of all persons involved with the addict/alcoholic; and various modalities of treatment.

PSY40214: Chemical Dependency I: Disease, Symptoms, Diagnosis, Pharmacology, Recovery - 3.00 Units

This course focuses on the disease of chemical dependency and corresponding symptoms. By the end of the course, students will be able to understand the disease concept of chemical dependency and drugs used to treat it; identify symptoms of different types of chemical dependency; classify and identify major drugs; describe the development and use of psychoactive drugs throughout history; recognize signs of cross-tolerant, addictive, and synergistic effects of drugs; and identify signs of drug toxicity.

PSY40215: Chemical Dependency II: Intervention, Treatment, Management, Patient Health Promotion, and Recovery - 3.00 Units

In this course students learn to assess the physiological effects of alcohol and other drugs; tailor withdrawal plans to each patient's alcohol/drug-use history; recognize signs and symptoms of toxicity, withdrawal, and overdose; identify principles of detoxification and withdrawal from each major drug group (including multiple dependencies); be made aware of ethical considerations; and treat special populations (women, seniors, adolescents, and ethnic groups) and chemically dependent people and alcoholics.

PSY40218: Play Diagnosis and Assessment: Play Assessment of Ego Functions and Object Relations - 0.50 Units

Observation of a young child's play is a powerful projective tool for assessing a child's psychological functioning and progress in therapy. This course provides a model for play assessment of a child's ego functioning and object relations, including affect tolerance and modulation, conflict resolution, ego defenses, object relationships, self and object representations, identificatory processes, and superego development. Also covered are the development of adaptive vs. maladaptive play, posttraumatic play, and use of play assessment in diagnosis and treatment planning.

PSY40219: The Therapeutic Powers of Play - 0.50 Units

This course explores the many therapeutic elements of play, across the developmental stages from early toddlerhood through latency. Definitions of pathology--that is, what it is that play must address--will be discussed as a basis to understand the healing attributes of play. This is done both developmentally and through the prism of Piagetian and Psychoanalytic/Object Relations theories. Lecture material, case presentations, role playing, and a videotape of a play session are used to provide both a theoretical and pragmatic context by which to root and expand skills in working with children. The course is designed for mental health professionals who have a solid background in theories of development, psychopathology and psychotherapy, and are working directly with children.

PSY40221: Dual Diagnosis: The Synergism of Chemical Dependency and Psychiatric Illness - 2.00 Units

This course provides a basic differential diagnosis framework for counselors working with a chemically dependent population. It introduces the major psychiatric disorders and how they mirror/interact with substance abuse disorders. Through methods such as case histories and role-playing, participants learn about prevalence, symptoms, assessment, treatment planning, and interventions.

PSY40226: Families Fighting and Changing: Play Therapy with Children of Divorce and Remarriage - 0.50 Units

A review of recent literature suggests that family violence and divorce have become widespread and increasingly evident in societal attitudes and value systems. Children experiencing divorce and adjusting to blended families have unique therapeutic issues. Participants increase their understanding of the issues and treatment implications, as well as learn specific techniques and conflict resolution skills and interventions. These can be applied in a family systems model of treatment, which is developmentally sensitive and allows for release and safe expression of emotions, processing of traumatic experiences and to adjusting and forming healthy relationships in the family system.

PSY40234: Play Therapy, Art Therapy, and Assessment of Abused Children and Adolescents - 1.00 Units

This is a course in the treatment of abuse, emphasizing child physical and sexual abuse, and including witnessing domestic violence and traumatic illness or injury to self and loved ones. A treatment model is provided, including a theoretical framework for the effects of trauma on children and adolescents, a review of specialized assessment tools, and adaptive resolutions of trauma. This model is applied to an array of treatment tools, including play therapy, art therapy, psychodrama, writing, story-telling, cognitive-behavioral interventions, and trauma-focused work.

PSY40235: Child-Centered Play Therapy - 0.50 Units

Child-Centered Play Therapy (CCPT) is a systematic treatment approach to child-generated play. This course is a combination of didactic presentations and experiential activities that detail the four major elements of CCPT technique: structuring, reflective listening, fantasy play, and limit setting. Also included are the history and theory of CCPT, selection of toys, types of play, assessment for termination, combining CCPT with other models of child therapy, and the benefits and limitations of the CCPT model.

PSY40237: Psychoanalytic Play Therapy - 0.50 Units

This course provides an introduction to psychoanalytic play therapy, an ambitious treatment that helps alleviate troubling childhood behaviors and symptoms, and strives to address their underlying causes. Class participants will explore the following areas: 1) Current status of the field, 2) Key concepts, 3) Distinctive features, 4) Child development, 5) Theory of play, 6) Evaluation process, 7) Treatment recommendations, 8) The framework of treatment, 9) Children's modes of communication, and 10) Phases of therapy, objectives, & psychoanalytic technique. Case presentation will be given with a special emphasis on clinical process.

PSY40238: Structured Play Therapy: Cognitive-Behavioral Play Therapy, Pre-Set Play, Introduction of Resolutions - 0.50 Units

A wide-range of structured play therapy techniques and their theoretical underpinnings are presented, including pre-set and prearranged play, therapist-staged dramas, facilitation of adaptive resolutions in child-generated play, contingency play, redirection, distancing, limit-setting, time-limited play therapy, and cognitive-behavioral play therapy techniques. They include the use of the Socratic method, modeling, correction of cognitive distorts, perspective-taking, and behavioral rehearsal.

PSY40239: Gestalt Play Therapy, Role-play, and Psychodrama - 0.50 Units

Building upon the theoretical foundations of Gestalt therapy, this course emphasizes the methods of Gestalt play therapy, role-play, and psychodrama by using puppet play, dramatic enactment, art, floor play, sand tray, and stories. The course also covers the Gestalt approach to assessment, limit-setting, goal-setting, the developing sense of self, and the therapeutic environment.

PSY40240: Sandplay: A Therapeutic Process - 0.50 Units

Sandplay is a nonverbal therapeutic process developed by Dora Kalff, a psychologist and close collaborator of C.G. Jung. Its powerful healing attributes help clients bring into consciousness that which was previously hidden. This course explores the practicalities of sandplay therapy as a treatment modality and demonstrates how it is used with children and adults. The historical development of this international technique in addition to its theoretical foundations and research documentation will also be included.

PSY40303: Experiential Play Therapy - 0.50 Units

This course introduces experiential play therapy, a developmentally based theoretical model that extends the basic principles of child-centered play therapy and relationship play therapy, reaching children through interactive play with depth and meaning. New and unique interactive play therapy techniques effective in treating childhood disorders, including child neglect and abuse trauma, are taught. Students learn to better understand play themes and to match therapeutic responses to the experiential and developmental level of the child. Evidence-based methods of guided interaction to integrate parents in play therapy are also introduced in lecture, experiential exercises, and video case studies.

PSY40321: Practicum for the Alcohol and Drug Abuse Counselor - 5.00 Units

A field-based, practical experience for the counseling student, who has completed required coursework. Participants work with a chemical dependency or similar agency under the direct supervision of the practicum coordinator or approved supervisor. Students are responsible for obtaining a practicum site with the guidance of the practicum supervisor. Students gain experience and supervision in the core areas required by CCAPP.

PSY40322: Play Therapy for Attachment Disorders - 0.50 Units

In recent years, numerous advancements have been made in the treatment of children with attachment disorders. The limitations of the DSM-IV TR in the diagnosis of attachment disorders are well known in the research and treatment community. This course will cover research-based signs and symptoms of attachment disorders in order to facilitate the participants' ability to conceptualize their cases. The close link between PTSD and disrupted attachment will be addressed. Uses of play therapy in treating these children and their families will be explored. A critical evaluation of the major schools of therapy for this population will be examined.

PSY40328: Introduction to Parent-Child Interaction Therapy - 0.50 Units

Parent-Child Interaction Therapy (PCIT) is an intensive treatment program that relies heavily on play to improve the quality of the parent-child relationship and teaches parents the necessary skills for managing children's behavioral problems. In PCIT, parents are taught and "coached" on how to decrease negative aspects of relationship patterns, utilize child-centered play therapy techniques, develop consistently positive and supportive communication, and apply effective discipline and child management skills. Parents receive live coaching until mastery is acquired and the child's behavior is improved. These techniques can be applied to general practice with children and families.

PSY40336: Developmental Play Therapy - 0.50 Units

Child-parent interactions are rich in sensory stimulation and essential in social-emotional development. Neurobiological research shows that these interactions are critical for the development of the central nervous system and brain. They promote sensory integration and self-regulation of affect and behavior and facilitate healing from earlier neglect and trauma. Developmental Play Therapy theory and application methods are taught that provide children with developmental experiences essential to physical and social-emotional growth and secure attachment in the child-parent relationship. Guided Interaction, a play therapy model to instruct parents in the process, will be introduced, and methods to assist parents in shifting parenting responses and developing nurturing skills will be taught.

PSY40337: Child-Parent Relationship Therapy-CPRT (Filial Therapy) - 0.50 Units

Child and Parent Relationship Therapy (CPRT) is a model of filial therapy founded upon the child-centered play therapy philosophy. It is an evidence-based parent-training intervention for treating children experiencing a wide range of social, emotional, and behavioral difficulties. This unique approach involves parents by teaching them how to use play therapeutically so that the communication gap between parent and child can be diminished and their relationship enhanced. Therapists use both didactic and process oriented approaches in order to facilitate the creation of a relational conduit between the parent and child. This workshop focuses on principles, goals, specific methods, and skills utilized in CPRT. An existing knowledge of child-centered play therapy is highly recommended.

PSY40346: Introduction to Counseling Models - 3.00 Units

This introductory course covers the theory and philosophy of counseling, the distinction between counseling and psychotherapy, personality types and development, learning theory, and trait theory. Students become involved in the counseling experience and investigate the variables of client, counselor, setting, methods, and expectations, as well as basic theories of client-centered counseling, behavioral counseling, and counseling based on the theory of individual differences. Students learn to handle real-life situations with confidence.

PSY40374: Basic and Advanced Counseling Skills and Characteristics - 1.00 Units

Use of effective counseling skills enables counselors to communicate with clients effectively, deal with client resistance, and develop enhanced therapeutic relationships. The focus of this three-day workshop is on building productive and results-oriented counseling skills. Participants gain an understanding of the terms associated with basic and advanced counseling characteristics and the components of each, the phases of a counseling session, the limits of confidentiality, and the types of feedback and application of each. In addition, participants have the opportunity to practice counseling at both levels.

PSY40377: Case Management: Assessment, Orientation, and Treatment - 3.00 Units

Focusing on the chemically dependent person, this course covers initial intake, assessment of the problem, orientation of the patient to a specific program, treatment planning, reports and record keeping, recovery planning for the patient and family, and aftercare and follow-up. By the end of the course, students will understand and be able to demonstrate case management skills from initial intake to continued recovery, as well as skills needed in any treatment setting, including inpatient or outpatient hospitalization, social model programs, and publicly funded treatment models.

PSY40382: Play Therapy to Help Children Cope with Grief and Loss - 0.50 Units

Children face many losses as they grow up, and cope with the resulting grief without the life experience, support systems, or strategies of adults. Many children experience the illness or death of a loved one. In recent years, more children are experiencing decreased life consistency and stability from parental unemployment, home loss/relocation, military parent deployments, and family separations. All of these losses involve a similar grief process and are influenced by development, family dynamics, and psychological, physiological, social, and cultural factors. This course will help therapists increase sensitivity to the phenomenon of loss and grief in children and develop effective play therapy treatment plans for grieving children.

PSY40386: Play Therapy for Children Affected by Illness and Injury - 0.50 Units

Illness, Injury, and medical procedures can be experienced as traumatic events by both children and adults. This course explores the impact of these types of events on children. Participants will gain theoretical basis for interventions that are developed from developmental needs and psychological/neurobiological perspectives. A brief overview of the Somatic Experiencing Model will be provided. Students will learn specific play therapy techniques for working with this population in the playroom. Additionally, students will learn how to support parents and teach children ways to deal with traumatic events. Lecture, discussion, and case examples will be used to illustrate the effective use of play therapy with children with acute and chronic illness, traumatic injuries, and hospitalization.

PSY40388: Supervision and Instruction of Play Therapy - 0.50 Units

This course imparts methods of supervision and instruction that develop in others the capacity to think as play therapists. Modified Socratic methods, exercises, and "compassionate communication" are used to teach participants to apply such methods to the supervision and instruction of others. Participants learn how to help supervisees and students develop treatment goals, match therapy interventions to these goals, integrate ongoing assessment of play into treatment planning, and recognize and work with induced and personal countertransference

PSY40391: History of Play Therapy - 0.50 Units

The first part of the course focuses on the evolution of the field of play therapy, from its origins in the early works of main figures in the psychoanalytic movement, including Hermine Hug-Hellmuth, Anna Freud, Melanie Klein, and D.W. Winnicott through the contributions of scholars from other orientations, including David Levy, Virginia Axline, Clark Moustakas, and others. Convergences and divergences in theory and practice are examined to understand the evolution of the modern practice of play therapy. In the second part, the chief controversies that remain today are discussed, such as directive vs. non-directive approaches, together with recent and anticipated future developments in the field associated with rapid changes in technology and social structure.

PSY40397: Play Therapy and Art Therapy with Adolescents - 0.50 Units

Working with adolescents in therapy presents unique challenges and rewards. Creative and playful approaches provide an avenue for engaging with teens in a meaningful way. This workshop will explore the use of play and art therapy interventions to address common issues impacting the adolescent client, including identity development and relationships with peers and family. Focus areas include strategies for tapping into the strengths of an individual teen's mode of self-expression, such as electronic media and popular music and imagery. Participants will experience play and art therapy techniques first-hand; and how to adapt them for work with teens in individual, family and group sessions. Case materials presented will emphasize adolescent self-expression in the treatment of mood disorders, eating disorders, trauma and substance abuse.

PSY40398: Play Therapy in Schools - 0.50 Units

This course focuses on providing play therapy services at school sites and examines the benefits as well as the many challenges in working in school settings. It will include: learning how to form collaborative relationships with school principals, developing agreements for protocols and referral procedures, and identifying a space/location to provide play therapy sessions and activities at school sites. Identification of students in need of mental health services and parent consent and confidentiality will be reviewed. Additionally, effective strategies for engaging teachers and parents in the play therapy process, play therapy methods to strengthen attachment in the teacher-child dyad, managing mandated reporting, crisis intervention, and working with school counselors and school psychologists will be taught.

PSY40399: Introduction to Theraplay - 0.50 Units

This course will introduce students to Theraplay, a short-term, therapist-guided dyadic psychotherapy that focuses on improving the child's behavioral and emotional challenges through the parent-child relationship. Students will be introduced to session videos that show how the therapist guides the parent and child through playful games, challenging activities and nurturing interactions. While other therapies may work primarily with the child alone or work with parents on managing the child's behaviors, Theraplay is based upon the premise that the parent-child relationship is the most powerful and influential element for change.

Students will practice activities from each of the four dimensions of Theraplay: Structure, Engagement, Nurture and Challenge. They will learn how Theraplay can be used to treat trauma, adoption and attachment issues, withdrawn or overly aggressive behavior, in different settings. This course assumes a basic knowledge of childhood development.

PSY40401: Integrative Play therapy - 0.50 Units

Integrative Play Therapy is a systematic integration of various play therapy theories and techniques used in assessment, case conceptualization, and treatment of children and adolescents. This approach emphasizes that integrating multiple theories provide clinicians greater effectiveness at addressing a range of multi-layered presenting problems. Students will learn how to weave play therapy theories with intention and flexibility from concepts taught in Play Therapy Dimensions Model: A Decision-Making Guide for Integrative Play Therapists by Lorri Yasenik and Ken Gardner (2012). Selected video clips and facilitated experiential exercises will give students a deeper understanding of Integrative Play Therapy principles and their application.

PSY40402: Play Therapy and Art Therapy Supervision to Transform Compassion Fatigue and Vicarious Trauma - 0.50 Units

Even the most seasoned therapists experience compassion fatigue, vicarious trauma, and burn-out in the provision of psychotherapy, particularly with children impacted by complex trauma, multiple forms of adversity, and developmental delays. The instructor of this class, a Registered Play Therapist Supervisor and Board Certified Art Therapist incorporates play and art therapy theory and technique into Françoise Mathieu's compassion fatigue workshop model to help clinical supervisors build therapist resiliency in supervision and training, to include practical strategies that draw on knowledge of trauma-informed services, mindfulness practice, modulation of empathy, development of compassion satisfaction, and self-care.

PSY90001: Introduction to Psychology - 6.00 Units

PSY90004: Introduction to Psychology: Emotions and Interculturality - 6.00 Units

Why should we study emotions in intercultural contexts? What makes emotions so powerful in intercultural communication, or in any

communication? How to recognise and study emotions in intercultural encounters?

This course examines emotions from a multidisciplinary perspective, making use of anthropology, sociology, psychology, gender studies, postcolonial studies, linguistics and philosophy.

Students will be introduced to key concepts of interculturality such as otherness, subjectivity and individualism, which they can then apply to a real case study. The course will highlight different psychosocial dynamics and processes of exclusion and inclusion and ways of accessing symbolic and economic capital in a society.

PSYC40025: Psychological, Social, and Biological Foundations of Behavior - 4.00 Units

This course will introduce students to theories related to human behavior. Students will learn about the biological and psychological underpinnings of individual behavior as well as the social dynamics that are produced during human interactions and that are embedded in broader institutional relations. This course will place an emphasis upon philosophic notions of the 'self,' social psychology, and institution inequalities.

PSYC90002: - 3.00 Units

PSYCX1: Introduction to Psychology - 4.00 Units

People often say psychology is a young science. Actually, psychology is not so much a young science (thinkers have pondered psychological issues for millennia) as it is a broad and often difficult science. Psychological investigation requires statistical analysis, careful experimentation, advanced technology, and most importantly, cleverness. This class will focus on a wide range of sub-fields in psychology, providing something like a "trailer" for each, in order to introduce students to the variety of topics included under the umbrella of psychology.

RELE40006: Real Estate Property Management - 5.00 Units

Property managers play an important role as liaisons between landlords and tenants. However, their jobs may include a much more diverse set of functions. Find out all about this incredible variety of responsibilities—from tenant law and contracts to repair and facilities management. Gain the practical tools and know-how to take on all types of management including apartment, condominium, office, industrial, retail and residential housing. Learn to prepare management documents, budgets, marketing, leasing, tenant administration, maintenance, and how to set up a management office. Also get expert tips on how to manage and maximize the potential of investment-oriented real estate.

RELE40036: Real Estate Fraud & Ethics - 2.00 Units

Get an overview of frauds involved in real estate. Real estate frauds can be brazen, sophisticated and involve significant losses. This course will introduce the principles of a real estate transaction and topics such as: illegal property flipping, fraudulent qualifications, mortgage fraud, elder financial fraud, fraudulent short sales, equity skimming, and fraudulent loan origination. When unraveled these scams have active and sometimes unwitting players such as buyers, sellers, loan officers, bookkeepers, investors, title companies, attorneys and real estate agent/brokers.

Upon completing this course you will have a basic understanding of the various types of real estate frauds and be able to identify the participants and victims.

RMED40006: Lactation Educator Counselor Training Program - 4.00 Units

This program prepares health professionals and other interested individuals to become lactation educators. It furnishes the basic information necessary to promote breastfeeding and to interact in the breastfeeding situation by assisting and encouraging the breastfeeding triad of mother, baby, and support person. Topics include basic anatomy and physiology of lactation,

early attachment of the baby, hospital care, support during the postpartum stage, common concerns and solutions, and appliances and apparatuses used in breastfeeding. At completion of the course students are "Certificated Lactation Educator Counselors". The Certification is valid for 5 years from the date printed on the certificate. To renew your certificate you will need to complete the Refresher:Lactation Educator Counselor Training (Course# RMED-40026).

RMED40010: Lactation Specialist - 1.50 Units

This 18 hour course meets the academic training requirement of Step 2 of the Baby Friendly Hospital Initiative for staff. There is an additional BFHI requirement of 3 hours of clinical that would be provided by the hospital or facility.

Lactation Specialist is cutting edge information and practical techniques and tools for the bedside staff to assist moms and babies with breastfeeding.

Subjects covered:

Understanding the Baby Friendly Hospital Initiative; Guilt and Support; Hazards of Not Breastfeeding; Contraindications; Support and Barriers; Anatomy, Physiology and hormones; Infant instincts and organization; Positioning and Latch; Getting Enough breast milk; Common Concerns; Jaundice Management; Supplementation; Breast Pumps and Equipment; and Lactation as a profession.

RMED40018: Certificated Lactation Specialist - 2.00 Units

This 20 hour course meets the academic training requirement of Step 2 of the Baby Friendly Hospital Initiative for staff.

Lactation Specialist is cutting edge information and practical techniques and tools for the bedside staff to assist moms and babies with breastfeeding.

Subjects covered:

Understanding the Baby Friendly Hospital Initiative; Guilt and Support; Hazards of Not Breastfeeding; Contraindications; Support and Barriers; Anatomy, Physiology and hormones; Infant instincts and organization; and Lactation as a profession.

This course is offered every quarter.

RMED40019: Pathway 1: Lactation Consultant Education - 12.00 Units

An advanced and comprehensive educational course as mandated by the IBLCE for certification as a Lactation Consultant. This information will allow graduates to have the educational background necessary to practice the IBCLC profession; to utilize research based clinical information & techniques to promote breastfeeding as the normal process of feeding infants; to prepare lactation consultants to triage & formulate plans of care for difficult breastfeeding situation; & to prepare students to pass the educational components of the IBLCE exam for certification as a IBCLC. Upon successful completion of this course, participants will be able to apply advanced knowledge to the triage & problem management of the breastfeeding situation to meet the needs of the newborn & the family. This course is entirely online. It consists of lectures by Gini Baker, RN, MPH, IBCLC & lectures by world renown experts. The course runs over 2 quarters & can be accessed 24/7 online. This program is by application only and candidates must meet the IBLCE pathway 1 requirements to be eligible to apply.

RMED40024: Pathway 2: Hybrid Lactation Consultant - 12.00 Units

An advanced and comprehensive educational and clinical course as mandated by the IBLCE for certification as a Lactation Consultant. This information will allow graduates to have the educational background necessary to practice the IBCLC profession; to utilize research based clinical information and techniques to promote breastfeeding as the normal process of feeding infants; to prepare lactation consultants to triage & formulate plans of care for difficult breastfeeding situation; to give the clinical basics for the profession; & to prepare students to pass the IBLCE exam for certification as a IBCLC. Upon successful completion of this course, participants will be able to apply

advanced knowledge to the triage & problem management of the breastfeeding situation to meet the needs of the newborn & the family. This course is a Hybrid online course. It consists of online lectures by Gini Baker, RN, MPH, IBCLC and lectures by world renown experts; homework submitted online; clinical of 300 hours completed in person where you live; & monthly live webinars with students and instructor. This program is by application only and candidates must meet the IBLCE pathway 2 college requirements plus the UCSD Extension requirements in order to apply.

RMED40026: Refresher:Lactation Educator Counselor Training - 1.00 Units

A periodic review and highlight of changes in lactation to include political application; current strategies for problem management; review of the literature; and development of specific plans of care and case management. This course is intended to update the base information and education of the UCSD 45 hour certificated lactation educator course offering on an every 5 year basis. A periodic update of education is essential to best practice and required by several certification agencies like Magnet Hospital Accreditation and The Joint Commission. The Renewal Certification is valid for 5 years from the date printed on the certificate.

RMED40027: - 22.00 Units

RMED40028: - 2.00 Units

RMED80000: Lactation Medical Documentation - 0.00 Units

Effective Medical Documentation requires an understanding of the basic principles and formats of medical charts. Learn the several charting formats including Narrative, Problem Oriented, ADIME and computerized charting. This course will review documenting and charting as well as vocabulary used in the Lactation practice. Included will also be a review of important components of the Lactation Consultant process, as well as charting practice from case scenarios.

RMED80001: LCERP: Anatomy and Physiology for the Lactation Consultant - 0.00 Units

This course is designed for the practicing lactation consultant and gives an overview of breast development, stages of lactation, the hormones of lactation, breast surgeries, and stages of breast milk production. This vital information often is the key to understanding the breast mechanisms and points of intervention that may cause significant delay in milk production and glandular response. The information is the fundamentals often missing in the understanding of cause and effect in a lactation case. Additionally the information is great for prenatal education and could be incorporated into a breastfeeding class.

These courses are intended for existing International Board Certified Lactation Consultants (IBCLC's) looking for Lactation Continuing Education Recognition Points (LCERP's) towards re-certification by the International Board of Lactation Consultant Examiners (IBLCE).

RMED80002: LCERP: Biochemical Properties of Human Milk - 0.00 Units

A brief yet comprehensive and understandable overview of the biochemical properties of human milk, components of human milk, enteromammary pathway, and vaccines in the breastfed infant. This course investigates how all of this works together to get milk specific to the individual infant.

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RMED80003: LCERP: Essence of Being a Lactation Consultant - 0.00 Units

As described in "Case Studies in Breastfeeding" by Cadwell and Turner-Maffei, there are specific steps to progress thru a lactation consultation that will result

in a comprehensive and time efficient consultation with the client. This course looks at these steps, links them together with examples, and discusses variations and alternative approaches. There are examples of different types of cases and how points of information change the plan of care and outcomes. These courses are intended for existing International Board Certified Lactation Consultants (IBCLC's) looking for Lactation Continuing Education Recognition Points (LCERP's) towards re-certification by the International Board of Lactation Consultant Examiners (IBLCE).

RMED80004: LCERP: Common Concerns in Breastfeeding - 0.00 Units

This course looks at the different approaches to sore nipples, engorgement, plugged ducts, mastitis, abscesses, and other common concerns. It considers the physiologic base for each of these concerns and asks basic triage questions that lead from simple to complex. The lecture gives an organized approach to the often chaotic problem, allowing a logical plan of care that increases positive outcomes for the client.

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RMED80005: LCERP: Jaundice - 0.00 Units

This course takes the mystery and confusion out of the understanding and plan of care for the jaundice infant. First there is an organized and practical discussion about the types of jaundice with suggested protocols for practice. Then jaundice expert, Dr. Lawrence Gartner reviews the advanced physiology of jaundice and guidelines for management of neonatal jaundice. The charts and diagrams in the presentation help the practicing lactation consultant clearly understand and communicate to the client the reasons behind the jaundice and the treatment plan of care.

These courses are intended for existing International Board Certified Lactation Consultants (IBCLC's) looking for Lactation Continuing Education Recognition Points (LCERP's) towards re-certification by the International Board of Lactation Consultant Examiners (IBLCE).

RMED80006: LCERP: Newborn Instincts Relation to Breastfeeding - 0.00 Units

Normal instincts in a baby can and are highly influenced by their story of their delivery. This course looks at those instincts and the role of the birth journey in the newborns feeding behaviors. Understanding and appreciating this vital role of birth will help each of us have an empathy for the newborn that will influence and change our practice. With this understanding we can have a more case sensitive approach to our plan of care. When we as practitioners have the rationale for behaviors we can be more complementary in our own care approach.

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RMED80007: LCERP: Positioning and Latching - 0.00 Units

This course contains a series of lectures and video's collected over a time period of 10 years. The course starts with an overview of Biological or "laid Back" breastfeeding with discussion of why this is physiologically correct for the infant. The balloon latching, is useful when teaching staff about the techniques for a deeper latch and prevention of sore nipples. Special considerations show problem management for the client with anatomical considerations. The Role Play Demonstrations are a walk thru of a case with correct and incorrect responses and are great for those new to the field. The video, Helping a Mother to Breastfeed lets us see an infant in shut down, placing a baby on its back, and lack of more current techniques.

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RMED80008: LCERP: Science of Suck - 0.00 Units

In this course the head and neck anatomy of the infant is discussed and compared to adult oral anatomy. Sucking patterns are investigated and related to the transfer of milk during a feeding session. Both normal and abnormal development are looked at and that information is applied to the lactation consultation and lactation concerns. This review of the structures of the newborn and their relationship to feeding patterns will increase the assessment and triage skills of the lactation consultant.

These courses are intended for existing International Board Certified Lactation Consultants (IBCLC's) looking for Lactation Continuing Education Recognition Points (LCERP's) towards re-certification by the International Board of Lactation Consultant Examiners (IBLCE).

RMED80009: LCERP: Tongue Tie Discussion - 0.00 Units

Dr. James Murphy is a pioneer in the refinement of the diagnosis of types of tongue tie or Ankyloglossia and the procedures to reduce the restriction of the tongue. In this course Dr. Murphy reviews the types of tongue tie and the approach to the resolution of the concern for the mother and nursing infant. The course includes visual assessment as well as intellectual triaging. The course of action for the practicing lactation consultant is discussed and mapped. At the end of the presentation there is a review and application of information for two case presentations.

These courses are intended for existing International Board Certified Lactation Consultants (IBCLC's) looking for Lactation Continuing Education Recognition Points (LCERP's) towards re-certification by the International Board of Lactation Consultant Examiners (IBLCE).

RMED80010: LCERP: Risks of Not Breastfeeding - 0.00 Units

Explore the categories of risk factors for not breastfeeding, the trend to "risk based education" and its impact, the definition of guilt, and the ever expanding evidence that supports the theory of Risks of Not Breastfeeding. Research is discussed and practical application to practice is offered. This course increases awareness of the impact of informed choice and decision making process.

These courses are intended for existing International Board Certified Lactation Consultants (IBCLC's) looking for Lactation Continuing Education Recognition Points (LCERP's) towards re-certification by the International Board of Lactation Consultant Examiners (IBLCE).

RMED80011: LCERP: Putting the Puzzle Together for Case Management - 0.00 Units

In this course we will investigate some approaches to case management that include the "perfect consultation" or how not to be the lactation consultant that adds to the "train wreck" that may be happening with the case. This course shows the integration of the maternal and infant feeding histories in the development of a plan of care. The presentation works off the precepts laid out by Cadwell and Maffei-Turner in Case Studies in Breastfeeding and complements the continuing education course entitled "Essence of Being a Lactation Consultant". There is a comparison of 2 cases and a discussion of knowing when "enough is enough" and when for the professional to "let go".

These courses are intended for existing International Board Certified Lactation Consultants (IBCLC's) looking for Lactation Continuing Education Recognition Points (LCERP's) towards re-certification by the International Board of Lactation Consultant Examiners (IBLCE).

RMED80012: - 0.00 Units

RMED80013: - 0.00 Units

SCI90000: Introduction to Science and Technology in Society - 6.00 Units

This class introduces students to practices of reading, writing, investigating, critiquing, and communicating about science and technology. Approaching science and technology from a social science and humanities perspective entails asking questions such as: How do scientists know what they know? What is objectivity? Do technologies have politics? Who benefits from particular technologies? What are the nature of scientific controversies?

We will engage topics such as solar energy, nanotechnology, biotechnology, DIY movements, and new media and privacy, and work together in small groups to produce multimedia presentations on the societal dimensions of our chosen topics. Additionally, we will take advantage of the UCSD campus to engage in field trips, such as a tour of the Salk Institute and a nanotechnology laboratory.

SIO90003: The Music of Earthquakes: Shake, Rattle and Roll - 0.00 Units

Explore the interplay between music and earthquakes. Is a Taylor Swift song similar to the ping-ping-ping of an earthquake aftershock sequence? Are One Direction songs akin to earthquake tremors in terms of the tempo and dynamic range? Work in groups to compose a musical representation of a seismogram (a data recording of an earthquake) using musical instruments of your choice—anything from a tuba to a pot drum with a spoon mallet. This is an introductory class. No prior musical experience is required.

SIO90005: Introduction to Digital 3D Modeling using Maya - 0.00 Units

How do technicians create amazing digital movie environments, realistic looking objects in video games, and cool 3D graphics for TV commercials? The power of 3D visual effects surrounds us. Explore how this popular 3D art form touches our lives and how 3D modeling can be used beyond the entertainment industry. Explore 3D computer modeling, animation, texturing, character rigging, animation and rendering using Maya software. Create your own 3D models and include them in a course-compilation movie or import them into a videogame as a 3D asset. No prior programming experience is required.

SIO90006: Intermediate Programming Geoscience Data Visualization - 6.00 Units

Data visualization allows scientists to better understand their data, convey key concepts to their colleagues, and better test their hypotheses to form more robust conclusions. In this introductory programming class, students will learn the basics of computer programming while focusing on data visualization. This class will use the C# scripting language (or C++ programming language) and Unity (OpenGL) to render the 2D/3D data. Class topics include code structure and syntax, basic loops, functions, and simple computer scripts. Data used in the class will come from scientists at the Scripps Institution of Oceanography. Designed for students with little to no prior programming experience, students will simultaneously learn the basics of programming while also learning about the importance of data visualization and how it is used in current science projects at Scripps Institution of Oceanography.

SIO90007: Marine Technology Robotics: Journey Beneath the Surface - 6.00 Units

Since the start of the 21st century, robotics has been used in numerous fields of study. In this class, students will learn basic concepts of marine robotics technology and how robotics is being used in research at Scripps Institution of Oceanography. Students will first be introduced to a LEGO MINDSTORMS EV3 robotics kit where students will work with basic motors and graphical based computer coding. Next, they will be introduced to Arduino kits to build more complex robots and acquire a solid understanding of electric circuits and engineering physics. Using an external circuit board students will also use a remote control to re-program commercial robotic toys. As a final project,

students will be divided into groups and collaborate to build and design a remotely operated vehicle (ROV).

No prior experience with robotics is required.

SIO90009: Introduction to Robotics with LEGO MINDSTORMS EV3 - 0.00 Units

Learn basic concepts of robotics and then build robots using the LEGO MINDSTORMS EV3 kit. Use basic flowchart programming to allow your robot to operate autonomously. Working in groups, compete deploy science instruments using multiple sensors on the robots. No prior experience with robotics or programming is required.

SIO90012: Messy Science: Exploring our Planet on a Tabletop - 0.00 Units

Boom, crash, zip, slide! Participate in hands-on learning activities that let you design things, throw things, test things and stomp on things. Learn about the scientific processes behind volcanoes, earthquakes, tsunamis, landslides, permafrost, glaciers and sea-level rise while adding your own artistic flair to each design.

SIO90013: How to Make a disaster Movie Based on Real Science - 1.00 Units

The threats seen in most disaster films are silly, overblown and just plain wrong! We break new ground by developing a movie concept based on real science that is more riveting than fiction. Students choose their topic, then create and star in their own film trailer. The instructor is a marine scientist and documentary filmmaker who has sailed around the globe on research expeditions to film sharks, whales and coral reefs in trouble. Join us for light, cameras . . . science!

SIO90014: Scripps Institution of Oceanography: Ocean Acidification: Coping with Excess Carbon Dioxide - 6.00 Units

Ocean acidification (OA) is a global environmental issue caused by the continuing release of carbon dioxide into the atmosphere. In this course, students will learn the ocean's role in the global carbon cycle, basic chemistry needed to understand the process of OA, causes of changes in oceanic carbon dioxide levels, response of marine animals and ecosystems to OA, and potential mitigation efforts. Students will also conduct their own short-term field study to apply the scientific process and current experimental methods to OA research. In addition, students will visit Scripps Pier, experimental aquaria and labs at the Scripps Institution of Oceanography, and Birch Aquarium for hands-on learning.

SIO90016: Slimy Sea Creatures - 0.00 Units

Learn about slimy sea creatures like octopuses, sea stars, sand dollars and moon snails, to name a few. Observe a squid dissection and write your name in squid-ink while learning about anatomical structures of sea creatures. Discover the secret of how octopus change color and what makes pearls. Become a marine biologist and imagine what kind of invertebrate you would like to be. Create artwork to take home using different types of seashells and other materials from Mother Earth.

SIO90017: A Treasure Chest of Experiences: Deep Sea Exploration - 0.00 Units

This virtual exploration of the deep sea looks into the bizarre creatures that dwell in the abyss, from the dumbo octopus to the newly discovered ninja lanternshark. Explorers virtually pilot an underwater vehicle using the Scripps Institution of Oceanography DEEP Xbox game and learn firsthand about a recent expedition to the deepest ocean trench in the world—the Mariana Trench. From dive suits to landers and submarines, students learn about pressure/density relationships as they explore what makes research in these realms so challenging. Students create scientific journals to keep notes and drawings of creatures they encounter. Learning comes to life as students

create treasure chest multimedia boxes to hold their handcrafted creatures from the deep.

SIO90018: Reel Disasters: How To Make a Disaster Movie Based on Real Science - 0.00 Units

The threats seen in most disaster films are silly, overblown and just plain wrong! We break new ground by developing a movie concept based on real science that is more riveting than fiction. Students choose their topic, then create and star in their own film trailer. The instructor is a marine scientist and documentary filmmaker who has sailed around the globe on research expeditions to film sharks, whales and coral reefs in trouble. Join us for light, cameras . . . science!

SIO90019: Arctic Mammals: Science, Culture + Art - 0.00 Units

This course is a blend of marine biology, cultural anthropology, climate science and mixed media art - all rolled into one. The Arctic Ocean is home to many mammals that have fascinating adaptations to living in extreme conditions. Unusual marine species such as Narwhals, Belugas and walrus thrive in this harsh and ever-changing ecosystem. Students learn the unique biology and ecology of various marine mammals, and how they interact with one another. Humans have existed in this frigid Land of the Sea region for thousands of years. To survive, the Circumpolar peoples fostered kinship, lived in villages, created tools, and developed cultural knowledge and wisdom based on reading the elements and animal behaviors. Students get to glimpse a day in the life of teenage Arctic Dwellers from the past as well as the present.

SIO90020: Messy Science: Earth (NExT) - 0.00 Units

SIO90021: Discovering Kelp Forests - 0.00 Units

SIO90022: Squid Dissection - 0.00 Units

In this workshop format class we explore and dive into the wonders of animals that live in our oceans! We will focus on "cephalopods", which are the most intelligent, most mobile, and the largest of all mollusks. We will discuss which marine organisms are members of the class Cephalopoda and discuss their types, species, ecology, habitat, and anatomy. This class will be largely focused on the science of dissection. The students gain hands on experience learning what it is like to study and prepare for a dissection, learn about performing a dissection, and understanding the anatomy of a squid, a model organism for the cephalopods. Using what we learn in the squid dissection exercise, we will discuss and grow our understanding of basic scientific research skills and apply what we learn to our overall understanding of the many critters that fill our oceans. Students will work in pairs to study first-hand the anatomy of a marine organism and practice teamwork and communication. Gaining a better understanding of the organisms that occupy our oceans, we can build a broader understanding of the oceans themselves and how to best take care of our world.

Promotional blurb to promote the class: Squid. It's not just what's for dinner. In this hands-on class each student will get to help dissect a squid and learn all about their insides. They may even get to write their name in squid ink! This class will improve the students understanding of how to build their basic scientific research skills and how to apply these skills to their overall understanding of the many critters that fill our oceans. By gaining a better understanding of the organisms that occupy our oceans, we can build a deeper understanding of the oceans themselves and how to best take care of our world.

SIO90023: Slimy Sea Creatures (NExT) - 0.00 Units

Learn about slimy sea creatures like octopus, sea stars, sand dollars and moon snails, to name a few. Discover the secret of how octopus change color and how oysters make pearls. Become a marine biologist and investigate what kind of invertebrate you would like to be! Create artwork to take home using different types of materials from Mother Earth.

SIO90024: - 6.00 Units

SIOX3: Life In The Ocean - 4.00 Units

This course is designed to take high school students and give them an appreciation and understanding of marine biology. Students will learn about the diverse groups of marine organisms, variety of ecosystems and habitats, and current events in today's oceans such as overfishing, ocean acidification, restoration and protected areas. Through lecture, readings, projects, field trips and discussions students will learn about the diversity of ocean environments and how the creatures who live there are adapted to best survive. Students will learn theories pertinent to ecology as a whole as well as the specifics to the ocean. Students will also have the opportunity to explore areas that interest them, to become experts on a topic and teach each other.

SOC90002: Exploring Youth Subculture: A Sociological Perspective - 6.00 Units

SOC90007: Media Matters: Stereotypes and Social Change in Popular Media - 6.00 Units

We all consume popular media, yet we can often overlook how they depict a biased view of social reality. This course will introduce students to how popular media portray particular social groups. The course will familiarize students with these issues while providing the analytical tools to critically interpret media representations. We will investigate how television, films, music videos, and magazines depict and recreate stereotypes based on socioeconomic class, race, and gender. We will discuss why the media sells these kinds of representations, the effect these representations have on us, the role of the media in reinforcing inequality, and how the media can be used for positive social change. The course is designed for young learners with little to no experience in sociology or media studies.

SOC90009: A Migrant Metropolis: A History of Immigration, Race and Space in Southern California - 6.00 Units

In this course we will think about the historical forces that have shaped cities in Southern California. We will pay special attention to the ways immigration, race, and urban space constitute each other by examining Spanish colonization of the Southwest in the 17th century. Settler-colonial ideologies and practices have influenced the organization of race and urban space immensely. We will trace settler-colonial legacies and their influence in the production of cities. Additionally, we will use this knowledge to think about the structures that organize our own life in the city.

We will focus primarily on urban growth in Southern California upon Mexican Annexation in 1848. We look at official and unofficial state policies that have shaped urban racial divisions and inequities. By exploring how industry, real estate, and the state have consistently collaborated to displace and/or exclude non-white groups, we will come to see how this pattern continues into the twenty-first century. To illustrate the concepts learned in class, we will take field trips to visit sites in Balboa Park, North Park, Chicano Park, and the Borderlands State Park. This course draws primarily on material from history, critical race studies, and ethnic studies. This course will improve our analytical and writing skills. By engaging in critical analysis of the city, we will come to understand how race and immigration are fundamental to understanding the production of space.

SOC90010: - 6.00 Units

SOC90011: - 6.00 Units

SOC90014: Social Problems, Critical Thinking and College Writing - 6.00 Units

SOCLX1: Introduction to Sociology - 4.00 Units

The class offers an Introduction to the basic nature of society and the relationship between society and the individual. This course focuses on how society functions and is organized, and how society impacts and influences individual motivation, understanding, action, and well-being. Basic sociological ideas regarding social relations, social interaction, social structure, and social change are examined. Students are introduced to key issues addressed by contemporary sociologists; class, race, gender, sexuality, religion, globalization, education, health care, crime, the media, and the environment. The knowledge gained in this course will aid students in future studies within a variety of fields and careers, and encourage the development of critical thinking about important issues.

THEA40006: La Jolla Playhouse Conservatory - 4.00 Units

This five-week summer program for students in high school offers intensive training in acting, speech, singing, improvisation, movement, and text analysis for actors. Students attend master classes with Playhouse artists and staff. Students also attend Playhouse rehearsals and performances. The program culminates in a final presentation of the Conservatory students' work. The Conservatory is excellent preparation for students who are considering college theatre programs of careers in professional theatre.

THEA40007: Acting I: Introduction - 3.00 Units

Have you wondered if you might enjoy acting? Whether you want to start an acting career or just improve your communication skills, this fun and enjoyable class, in a uniquely supportive environment, will introduce you to the basic tricks and techniques of the craft, as well as giving you an appreciation for this complex and exciting art form. You'll learn techniques that will help you improve your memory, concentration, discipline, freedom of expression, risk-taking, and the building of an ensemble. You'll learn body motion, speaking skills, character development, and expressiveness, useful skills you can apply in many non-theatrical situations and that will enhance your abilities in personal expression and public communication.

THEA40013: Acting II: Intermediate - 3.00 Units

Continue to build your acting skills and develop your own unique creative process for interpreting and rehearsing scenes. Take the opportunity to explore the work of many different playwrights, such as Ibsen and Mamet, through script analysis, class discussion and scene work. Discover how to develop the moment-to-moment concentration so vital to the actor and how to create a supportive and satisfying ensemble. Learn basic approaches to realistic acting, including the Stanislavski "method" and the acting technique of Sanford Meisner. Learn techniques actors use to overcome stage fright, improve relaxation and focus, build trust and foster teamwork, all while finding your true voice as an actor.

THEA40029: Improv 101 - 2.00 Units

Ever watch *Whose Line Is It Anyway?* and want to learn how to be that clever, that funny? This class is a fun introduction to the joys and thrills of comedy-sports improvisation. Students are introduced to the basics of improvisation through a variety of fun games and exercises in a safe, friendly atmosphere. Learn to be more relaxed and spontaneous while also improving your skills at listening, storytelling and teamwork. This is a great playground in which to

work on improving your public speaking skills and developing your auditioning skills, or just learning how to relax and let more fun into your life. You might even conquer your fears, learn to free up your creativity everywhere in your life, become more spontaneous and authentic, and meet some of the coolest people in San Diego! No prior experience is necessary.

THEA40039: Storytelling with Impact - 2.00 Units

THEA90002: Theatre Performance and Reflection at Festival Fringe 3 - 4.50 Units

This undergraduate level course is designed to help students explore their appreciation and understanding of theatre arts through the lens of their participation in the Festival Fringe. Students will develop a deeper understanding of their individual experience and a broader worldview through the dramatic process (creating, performing, analyzing). Assignments are designed to help students discover and reflect upon their contribution to their festival production and to the overall journey, both physical and figurative, of the student troupe.

Travel at the college level can be eye-opening and transformative. Alongside engaging with analysis of their art, students will interact with their awareness of the global community. They will be challenged to think in comparative ways about their everyday lifestyles and the differences they encountered while performing and traveling. Photos and videos taken during the program will be instrumental as evidence in responding to the course assignments. In the final assessment, students are asked to create a self-designed project to capture and reflect upon the 'mark' they left on the festival and consider how the experience will inform future personal outlooks and endeavors. They explore ways in which their work supports the continued development of creative artistic thinking and cross-cultural experiences.

VIS90002: Borderland Reporters: An Investigation & Book Publication with Actual Hot Air Balloon Instruction - 6.00 Units

What defines our notion of 'border' and what dissolves it? How are borders acknowledged, ignored or understood? How does one negotiate and transcend national and territorial boundaries? How can spaces for dialogue be opened in the liminal spaces that comprise a 'border'? Informed by Mexican traditions of hot air balloon making, Studs Terkel's interviews of ordinary Americans and a curated series of film and audio, visual artists of Collective Magpie will take students on a 3-week ethnographic journey through the U.S./Mexico border. The class will conduct a series of research informed conversations that will culminate in the collective publication of a book of interviews.

VIS90011: Photo Essay: Seeing San Diego Through Image and Text - 6.00 Units

WCWP40000: Academic Writing - 3.00 Units

Are you an advanced international student, researcher, or ESL speaker who is proficient in English, but need to upgrade your academic writing skills? This course will improve your accuracy in:

- writing mechanics
- all areas of grammar
- the essentials of effective writing style and organization

Lectures and workshops provide assistance in writing:

- summaries
- abstracts
- technical reports
- academic papers

WCWP40045: Scientific and Technical Writing for Non-native English Speakers - 3.00 Units

Designed for advanced ESL speakers, this course covers essential skills for writing well in English in scientific or technical settings. The specific styles and usage conventions of various scientific fields will be covered.

Focus on: :

- clarity and strength of expression
- idea development
- editing to eliminate problems with grammar and usage

WCWP40048: Writing Short Fiction - 3.00 Units

This course in writing the short story combines brief lectures on craft with skill-building exercises and supportive workshop critiques. Students will be encouraged to complete a short story during the class, plus various other writing assignments to build their skills. Discussion topics include narrative structure and technique, the time frame in short fiction, point-of-view, character-based plotting, character development, conflict and complication, thematic elements, and effective dialogue. Instruction emphasizes shaping and revising short fiction, achieving economy and focus, developing voice, and controlling tone and diction. There will be some discussion of how to build discipline as a writer, and about the basics of submitting short fiction for publication. Open to writers at all levels.

WCWP40105: Science Writing I - 3.00 Units

This course provides an introduction to most forms of science communication intended for non-scientific audiences, including print, online and broadcast journalism, university communications, industry public relations, science policy writing, and social media. We will introduce various careers and considerations in science communications, as well as provide the tools and techniques needed to accurately convey complicated subjects in an engaging way to a variety of audiences.

Note: This course is about communicating scientific topics to non-scientific audiences, not about writing scientific journal articles or grants.

WCWP40107: The Art and Craft of Creative Writing - 3.00 Units

Creative writing begins when the spark of an idea ignites the fuel of language. The writer picks up pen or presses fingers to keyboard and transforms the idea into a story or any of a dozen other shapes. For those who would travel the road of creative writing, this class offers a map for the journey. Through lively discussion, examples, in-class exercises, and assignments, participants learn the how and where of finding ideas, the elements of style, voice, and dramatic structure, and finally, rewriting, editing, and submitting the work for publication. Material produced through exercises and assignments will be workshoped in read and critique sessions.

WCWP40110: Introduction to Screenwriting - 3.00 Units

There is no single right way to write a screenplay, only an infinite number of wrong ways. This course addresses how to avoid them by ensuring your screenplay's ability to communicate the potential and clarity of your cinematic ideas to the reader (agent/producer/actor/etc.). Through weekly exercises and evaluation, we will troubleshoot the most problematic aspects of script execution to increase your chances of being regarded as a quality screenwriter, deserving of professional consideration. Whether you wish to sell your screenplays outright, secure other writing assignments, or hook needed talent that can enable you to produce your work independently, in this course you will learn the rules of writing for the screen and how to break them successfully.

WCWP40123: The Writer's Art of Interviewing - 2.00 Units

Effective interviewing techniques translate to writing that is clear, lively, and – depending on the writer's mission – instructive or entertaining. This course will encompass all the integral components of the interviewing process, including preparation, one-on-one dynamics, comparing interview styles, how to take useful notes, asking the right questions, coaxing interesting quotes from interviewees and using quotes effectively in a feature story. Students will participate in interviewing and writing exercises in class and complete a major interview/writing assignment out of class.

WCWP40142: Finding Our Voices, Telling Our Stories - 3.00 Units

Within you there dwells an innate sense of storytelling and a unique voice with which to tell your stories. In this course you will experiment with writing techniques to help you locate and refine the "natural music" of your own voice. You will also explore writing genres that make good story vehicles: personal narrative, fiction, memoir, creative nonfiction, monologue, and poetry. Through in-class exercises you will learn how to unearth the stories that want to be told, how to go beyond the facts to the truth, and how to turn real life into fiction. Later sessions include read and critique. Expect to fill pages and pages in your writer's notebook with poetic uprisings, story seedlings, character sketches, monologues and dialogues, and the frames and foundations for personal narratives.

WCWP40150: Information Design for Technical Communicators - 2.00 Units

Professionals who produce technical communications--whether they are technical writers, web and graphic designers, trainers, or engineers--can benefit from knowledge of information design. In broad terms, information design is the integration of words and pictures to help readers meet their goals for using the communication piece. We will study how to use clear writing, analysis of the audience's needs, legibility of typography, design of spatial cues, and the interplay of words and pictures to create documents, printed or electronic, that readers understand and respond to aesthetically and emotionally.

WCWP40151: Technical Communication I - 3.00 Units

This is a practical, hands-on technical writing course for beginning to intermediate technical communicators. We will cover a broad range of topics, including audience analysis, usability considerations, electronic forms of communication, page layout, and ethical issues facing technical communicators. You will complete a final project, one that is worthy of showing current or prospective employers.

WCWP40154: Technical Communication II - 3.00 Units

This capstone course draws on the knowledge and skills you acquired in the core courses. You will work on one big project the entire quarter, which will involve project estimating and scheduling, project management, information gathering, audience analysis, writing, editing, and more. There will be lectures and assignments to deepen your understanding of critical concepts as well as discussions of workplace issues and portfolio review. Have an idea for a portfolio-worthy project for the first week.

WCWP40158: Writing Online Documentation - 3.00 Units

As more print publications and manuals go online, it's vital to understand the similarities and differences between writing for print and writing for online delivery. Explore theories and practices for creating online documentation and learn how to structure and write material to be viewed online. This includes information and project design, differences between print and online delivery, and selecting the appropriate format and media. You will have ample opportunity to practice writing for online delivery and to work with some of the tools used for this purpose. We will write a variety of online documentation, which may include HTML, PDF, and online help.

WCWP40184: Screenwriting I - 3.00 Units

Get an insider's understanding of the dynamics of screenwriting, exploring both the creative and business aspects. Learn how to write for your audience, engineer interesting plots, and develop believable characters. Work on a script in any genre you choose, identify the best market for your particular skills, and practice the art of pitching. Other topics to be explored include formats (for TV movies, half-hour episodes, one-hour episodes, and feature films), common pitfalls, and how to avoid the producer's trash can. Examples from new and classic films will be used. This course will also help writers in other media, including journalism, fiction, and nonfiction writing. More advanced screenwriters will also benefit from a lively workshop environment.

WCWP40186: Writing for Children I: Introduction - 3.00 Units

Have you ever told yourself that someday you will write a children's book? Now's your chance! Join us as we demystify the writing process and examine the wide variety of books offered to children: picture books, easy readers, early chapter books, middle grade novels, young adult novels, children's magazines, fiction and nonfiction. If you want to write for children but don't know where to start, this course is for you. It reveals the best way to choose an idea, how to benefit from critique to improve your revisions, and how to write a catchy query letter or intriguing cover letter to capture an editor's attention. Tips for marketing your work, when it's ready, will also be offered.

WCWP40187: Novel Writing I - 3.00 Units

The greatest challenge to writing a first novel may be deciding where to start. This course will help you write an engaging first paragraph and a draft of at least the first chapter. You may also work on an outline. You will also learn how to use the elements of fiction--characterization, setting, dialogue, perspective, and plot--to set up your story. There will be some lecture, but basically this is a seminar course, focusing on read-and-critique sessions. All students are expected to participate in discussion.

WCWP40189: Forms of Fiction - 3.00 Units

This class is for writers interested in exploring a variety of genres and approaches to the writing of fiction. From literary to science fiction, horror to historical, the short story to the novella, and the graphic novel to poetry, this class will provide an overview of a variety of genres and forms for the fiction writer. The course is built around analytical readings and writing exercises with the ultimate goal of exposing the writer to a multitude of potential fictional forms. The class will also introduce and discuss the basic elements of fiction (plot, structure, dialogue, description, etc.) which are further explored in other classes.

WCWP40197: Screenwriting II - 3.00 Units

This course is designed for those who are serious about writing screenplays. In this fast track class you will rewrite your current script or start your next one. We will discuss the internal and external structure of screenplays; character growth and plot development; exciting second acts, and great movie endings. Learn how to get a point across without putting in everything but the kitchen sink, as well as other ways to keep the story flowing. We will discuss the current Hollywood market for screenplays. In addition to lecture and video presentations, participants will read and critique one another's scripts.

WCWP40200: Memoir Writing - 3.00 Units

Many of us have had fascinating lives, whether lived inwardly or outwardly, during childhood long ago or in the past decade. But when it comes to writing a memoir, where do we begin? The day of our birth? The day we left home? The beginning or end of a marriage? Memoir is most successful when it is not the "story of a life" but a focused part of that life: a dozen summers spent working on a grandfather's farm; a long relationship with a dying relative; the first year of law school. In this course, students will explore

methods for planning and focusing on what their memoirs should be. Use of a plotting tool to create structure will be covered. In this course, students will complete the first 20-30 pages of a book-length memoir.

WCWP40219: Business Writing for Non-Native English Speakers - 3.00 Units

Do you need to develop and improve your ESL business writing skills to perform more effectively in the workplace? If so, this course is for you.

Acquire writing competency for technical, managerial, and marketing purposes. On-the-job examples will be used to build your writing skills and professional abilities.

WCWP40230: Science Writing II - 3.00 Units

This is an advanced writing course designed to build upon and hone skills learned in Science Writing I, and is the capstone course for the Science Communication certificate. Students will work on a writing project of their choice while learning about the steps involved for publication or broadcast. Course involves extensive writing, peer critique, and in-depth reading and discussion. Topics include finding and pitching story ideas, research and reporting, outlining and structuring the story, fact checking, and how to go beyond news reporting to the larger context of science in society.

WCWP40234: Grammar Lab - 3.00 Units

In this course you will take a diagnostic test to determine basic strengths and weaknesses in your knowledge of grammar and usage. You will complete 10-20 exercises online each week which are electronically scored to give you immediate feedback. Also, you will complete several challenging assessments. Topics covered include parts of speech, clauses, phrases, verb tenses, punctuation, and mechanics. The instructor will provide structured lessons and feedback, but you will have the option to spend more time on topics you need to review and less on those already mastered. Copyediting I, II, III and Grammar Lab are offered every quarter. Please check the Enrollment Available Online date on the Extension Calendar to find out the next date that classes will publish to the web.

WCWP40236: Copyediting I - 3.00 Units

Turn your talents for recognizing and correcting grammatical errors into a full-time or freelance career as a copy editor. The first step is to learn light copyediting, which involves the correction of indisputable errors in spelling, grammar, punctuation, syntax, and usage. In this online course you will explore the tools and techniques the professionals use. You will practice editing with standard editing marks and with Microsoft Word, and you will learn to communicate with authors and editors via queries and to record changes via style sheets.

Copyediting I, II, III and Grammar Lab are offered every quarter. Please check the Enrollment Available Online date on the Extension Calendar to find out the next date that classes will publish to the web.

WCWP40237: Copyediting II - 3.00 Units

To thrive as a copy editor you must practice judicious and defensible editing. In this course you will be continually challenged to maintain the author's voice and meaning while correcting subjective errors that result in convoluted writing. You will tear apart and rebuild sentences, build a case for why your revision is the best one, and practice communicating with the author and editor through sensitive and appropriate queries. You will get additional practice with style sheets and electronic editing, delve deeper into Chicago, and continue to explore varying editorial practices.

Copyediting I, II, III and Grammar Lab are offered every quarter. Please check the Enrollment Available Online date on the Extension Calendar to find out the next date that classes will publish to the web.

WCWP40238: Copyediting III - 3.00 Units

Are you ready for your first editing assignment? In this course, you will work on deadline to perform a heavy edit on all elements of a long manuscript. Examine complex problems in English usage, review topics introduced in earlier classes, and explore new topics. Although this class builds on the material taught in the prerequisite courses, it is a significant step up from Copyediting II. You will immediately use what you've learned to complete the course project: an original manuscript that you can edit to perfection.

Copyediting I, II, III and Grammar Lab are offered every quarter. Please check the Enrollment Available Online date on the Extension Calendar to find out the next date that classes will publish to the web.

WCWP40245: Developing Unforgettable Characters - 2.00 Units

Whether you are writing short fiction, a novel, or memoir, characters are what draw your reader in and make them care enough to read on. This course offers methods for creating three-dimensional characters that your readers will react to, relate to and remember. You will acquire a toolkit of exercises to help you develop or more clearly define both primary and secondary characters. Exercises and assignments will help you fill a notebook with character sketches and scenes, and help you start a chapter or short story featuring your most unforgettable character.

WCWP40252: Writers Workshop: Read and Critique - 3.00 Units

Read and critique is a way – possibly the only way – for writers to hear how their writing sounds to others. The thoughtful, objective and constructive feedback you receive will tell you how your writing is being perceived, what is working and what needs additional work. Read and critique also enables writers to learn more about the craft through the careful reading of others' work. In addition to the weekly review of manuscripts, mini-lessons inspired by the work at hand will be given by the instructor. Participants will be required to bring copies of manuscript pages of work-in-progress.

WCWP40254: Novel Writing III - 3.00 Units

This class will prepare you for the big picture review of your novel. With the use of contemporary and classic novels as examples, you will evaluate the progress on the plot arc and character development within your story. Other parts of craft will be reviewed as well, including point of view, conflict, and subplots to determine where the story as a whole is working or needs revision. For the workshop portion of the course we will focus on endings. This does not mean you have to have completed your novel, but we will begin the work to develop a last chapter, an essential way to determine what should really be in the middle. We'll explore the world of publishing and create query letters and synopses that will help you focus the revision that will give rise to your second draft.

WCWP40259: How to Start a Novel - 1.00 Units

Do you have an idea for a novel swimming around in your head but can't seem to put the first word down? Does procrastination keep you from starting, or do you have so many ideas you don't know which one to choose? Maybe you want to write a novel but don't have an idea of what it would be about. This class will teach you how to get past all these barricades. We will discuss how to get started on your writing project and will put pen to paper. By the end of the second class you will know how to keep going and what to expect along the way.

WCWP40261: Writing Children's Picture Books - 3.00 Units

Let the wild rumpus begin! Do you dream of imaginary lands and mythical creatures? Learn how to inspire a child's imagination by giving them the tools necessary to explore the world around them. The well-written picture book entertains the child while developing their reading skills. In this course you'll learn about writing for children and you'll be asked to write and revise five or

six picture book manuscripts. There will be an opportunity to read your work in class and to discuss and critique the work of other students. We will discuss the needs of the illustrator, how to approach potential publishers and the adventure of the manuscript once it's been accepted for publication.

WCWP40264: Applied Design for Technical Communicators - 2.00 Units

Gain the hands-on experience needed to visually communicate a wide range of technical information in print and digital media. The course moves beyond the basics of information architecture to study the strategies used in layout and design. You will learn how to integrate design into the technical document planning process, and create documents for readability and usability. You will determine the best artifacts (charts, graphs, images, animation, etc.) to visually express a variety of technical ideas. The course also explores the basics of online design.

WCWP40265: Critical Thinking for Communicators - 3.00 Units

This course explores how decisions made before the writing process begins can have unexpected ramifications. Students will examine their thinking processes--how they use reason to solve problems, form opinions, and make decisions--in order to improve them. They will practice identifying key questions and assumptions, assessing interpretations and conclusions, and applying criteria and standards to analysis. The course will be taught through lectures, discussions, and technical writing exercises and projects.

WCWP40266: Tools for Technical Communicators - 3.00 Units

Technical communicators use a variety of tools to create and present information. We will review and discuss such tools as word processors, text editors, HTML editors, desktop publishing software, and graphics programs. You will develop an analytical approach for selecting the right tools for various types of projects and will apply what you learn to a writing project.

WCWP40269: Writing Narrative Non-Fiction - 3.00 Units

Do you have a true story to tell but don't know where to start? By "showing" rather than "telling" a story, your scenes will come alive with action and emotion, but good research is also needed to add the factual details that make the most compelling tales. Whether it be a biography, political expose or memoir, writing non-fiction using fiction techniques is harder than it looks, but this course will help break the craft into its basic elements. Through trigger exercises and read-and-critique workshop sessions, students will explore plot, point of view, voice, characters, setting, description and dialogue. We will also discuss research and interviewing techniques, and how to approach the overall narrative structure of a short or book-length work.

WCWP40274: Writing for the Middle Grade/YA Reader - 3.00 Units

Discover how successful middle grade and young adult books are crafted, and begin to plot out and write a tale of your own. In this course, we will consider how a plot works, what makes a compelling character, and what drives a reader forward. Students will participate in an online critique group and have an opportunity to get their first five pages reviewed.

WCWP40276: News and Feature Writing - 3.00 Units

Learn the fundamentals of news and feature writing, from developing story ideas to cultivating sources and crafting and structuring compelling news and feature stories. This course introduces students to the history, ethics and elements of journalism and feature writing. You will explore and begin to use emerging web tools used for writing and reporting online and will also explore principles relating to libel and journalistic ethics.

WCWP40282: Digital Skills for Editors - 2.00 Units

Learn to write and edit for the thriving medium of our time. As more and more print publications go online, it's vital to understand the ins and outs of emerging media and technology. Learn how to edit for the particular needs of

web development and design. Go beyond the basics to learn the relationship between text and search engine optimization, interactivity, meta tags and social media. Explore recent trends in Web 2.0, crowd sourcing and copyright. Your editing education is not complete until you have discovered the power of digital media.

WCWP40297: Novel Writing II - 3.00 Units

Are you ready to develop a significant portion of your novel? This workshop will bring you valuable feedback on your work, including suggestions for revision. Class discussion will focus on the structure of the novel in its entirety. Participants will submit portions of their novels to be read and discussed in class. They will explore issues of craft as they arise, drawing on their previous knowledge, experience, and suggested readings. The course may be repeated for credit.

WCWP40305: The Art and Business of Blogging - 2.00 Units

Want to write a blog but you're not sure where to start? Whether you want to become a blogger to build your platform as a writer, to earn additional income and blogging perks, or just to have fun – this class will teach you the skills you need. Learn the art of writing for an online audience, how to edit and insert blog photos, and how to use social media to draw readers to your blog. By the end of this course, participants will choose a blog niche and name, create a WordPress blog, and write four blog posts. Beginner and advanced writers are welcome. Participants should have basic computer software knowledge and Internet access. Bringing a laptop to class is helpful but not required.

WCWP40307: Basics of Technical Editing - 3.00 Units

Learn the tools and techniques of technical editing and practice marking indisputable errors in spelling, grammar, punctuation, syntax, and usage in technical documentation. Edit technical writing using MS Word and Adobe Acrobat (Reader or Professional), learn to communicate with authors and editors, and practice writing queries and creating style sheets. Get a perspective on the field. Whether new or seasoned, students completing this course are equipped to use and implement technical editing skills and tools in a variety of work situations.

WCWP40308: Forms of Poetry - 2.00 Units

Amy Lowell wrote, "No one expects a man to make a chair without first learning how, but there is a popular impression that the poet is born, not made, and that his verses burst from his overflowing heart of themselves. As a matter of fact, the poet must learn his trade in the same manner, and with the same painstaking care, as the cabinet-maker."

Let's look at poetry from a designer's perspective. As a designer of poetry, we are charged with creating works of beauty that sometimes fall within certain parameters such as: What does this "space" need? What do I want to "say" here? What are my materials? In this course, students will address the design qualities of a poem by experimenting with forms like the sonnet, ballad, ode, cento, chant, elegia, haiku, and villanelle.

WCWP40313: Self-Editing and Publishing for the Web - 3.00 Units

The ability to edit your own written work is a skill that's highly valued by employers and publishers. Whether your job or hobby is to create blog content, feature articles, or marketing copy, it is essential that you be able to organize your thoughts in logical, clear, and engaging ways. Upon completion of this course, students will be able to recognize good writing, critique their own work, write clean copy, and edit content for optimal readability. Students will create a portfolio site as part of this course.

WCWP40315: Writing for Children II: Intermediate - 3.00 Units

Revision is the key to improving your work to reach the next level - publication. But often the hardest thing to figure out is which words to cut, which to leave

in, and how to tighten up the rest. This writing workshop will concentrate on revision through sharing your work - picture books, easy readers, nonfiction books, and novels - for constructive feedback from classmates and the instructor. Tips on writing techniques, the submission process, and in-class exercises will also be offered.

WCWP40317: Scientific and Technical Writing Lab for Non-native English Speakers - 1.00 Units

Designed for advanced ESL speakers, this writing lab provides intensive practice in developing the essential skills taught in the course Scientific and Technical Writing for Non-native English Speakers.

Major focus on:

clarity and strength of expression and idea development
editing to eliminate problems with grammar and usage

WCWP40320: Editing as a Business: How to Succeed on Your Own - 0.00 Units

What does it take to be a freelance editor? This course tells you how to start, run, and succeed in your own editing business. Topics include launching a business, keeping financial records, marketing your services, setting fees, writing contracts, dealing with clients, and more. We will have online discussions and live chats to share experiences, network, review assignments, and answer questions.

WCWP40321: Building a Business around Writing - 1.00 Units

There are many avenues to building a business around writing. In this short course we will briefly discuss various possibilities including becoming a book author, "freelance" writer for hire, or journalist/article writer. You will learn how to develop a business mindset, determine the best writing path for you, and create a sustainable business.

WCWP40323: Options for Publishing - 1.00 Units

There are many different options for publishing your work. In this short course we will touch on options such as writing contests, chap books, self-publishing, finding a publisher, and serial publishing.

WCWP40326: Building your Screenwriting Career - 1.00 Units

In this class we will briefly touch on the various aspects of building your screenwriting career and the business of film and production. We will explore the different types of careers the film industry offers and how best to get on track to get into those positions. Should you write and submit to agents, managers, or should you set out to co-produce your own writing? Do short films help your chances of getting the right attention from Hollywood? This class will answer these questions and give case studies of how other writers have gotten their scripts bought, developed and even made.

WCWP40327: Writing Non-Fiction and Informational Books for Children - 3.00 Units

The market for children's nonfiction and informational books and articles has never been better. In this course, which can be taken by those familiar with writing for children and those just beginning, students will learn about the many markets for nonfiction work for children – magazines, trade books, school-library publishers, and book packagers. Students will gain practice researching nonfiction topics and writing for the various markets, as well as examining the variety of writing styles that can be used to write about individual topics. Topics covered in the course include:

Straight Nonfiction and the School-Library Market – subjects, elements and design,
Easy Reader Nonfiction,
Narrative Nonfiction,

Lyrical Nonfiction,
Biography,
Fictional Informational Books – Fictional books that provide information and elements of nonfiction;
The children's magazine market, and
Common Core State Standards and how these affect the nonfiction market.

WCWP40329: - 2.00 Units

WCWP40330: - 3.00 Units

WCWP40331: - 2.00 Units

WCWP40332: - 2.00 Units

WCWP80031: Marketing for Copyeditors: How to Get the Word Out - 0.00 Units

You've perfected your editing skills, taken out your business license, and printed business cards. Now what? You've got to get the word out! Our marketing for copyeditors course will teach you to identify your area of expertise, determine niche markets, and investigate ways to market your services through online and offline strategies. Develop your marketing message and create promotional materials and presentations that relay your message. At the end of the course, you will have a 3-month marketing plan and schedule to get you into action. Build in support, accountability, follow up, and monitoring to help stay on track. As you work through assignments, you will see results and soon be a marketing pro - designed for all copyeditors!

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 315
Instructor: Dunham, Ann **Status:** Active
Instructional Method: InClass **Start Date:** 10/8/2019 | **End Date:** 12/10/2019

ART40166: Drawing: Focus on Perception Section ID: 143233
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 295
Instructor: Khommarath, Wattana **Status:** Active
Instructional Method: InClass **Start Date:** 10/8/2019 | **End Date:** 12/10/2019

ART40166: Drawing: Focus on Perception Section ID: 143235
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 295
Instructor: McCunney, Michelle **Status:** Active
Instructional Method: InClass **Start Date:** 10/9/2019 | **End Date:** 12/11/2019

ART40183: Creative Process III Section ID: 143240
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 295
Instructor: HAEGER, FRANCE MARIE **Status:** Active
Instructional Method: InClass **Start Date:** 10/3/2019 | **End Date:** 11/21/2019

ART40194: Abstract Painting Section ID: 143242
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 295
Instructor: Stern, Pia **Status:** Active
Instructional Method: InClass **Start Date:** 10/9/2019 | **End Date:** 12/11/2019

ART40229: Family Pictures Section ID: 143170
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 295
Instructor: Johnston, Bernadette **Status:** Active
Instructional Method: InClass **Start Date:** 11/13/2019 | **End Date:** 12/11/2019

ART40311: Adobe Photoshop I Section ID: 143246
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 495
Instructor: Dowden, George **Status:** Active
Instructional Method: Blended **Start Date:** 10/7/2019 | **End Date:** 12/9/2019

ART40311: Adobe Photoshop I Section ID: 143256

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Lynch, Michael **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 12/14/2019

ART40360: Visual Communication III (DAC) Section ID: 140215
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 1208.34
Instructor: Steckclair, Weston **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 12/3/2019

ART40426: Western Art: Part II Section ID: 143098
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 95
Instructor: Sizonenko, Tatiana **Status:** Active
Instructional Method: Blended **Start Date:** 10/26/2019 | **End Date:** 11/23/2019

ART40455: Visual Communication I (DAC) Section ID: 140213
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 1208.33
Instructor: Swett, Macoe **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/5/2019

ART40456: Visual Communication II (DAC) Section ID: 140214
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 1208.33
Instructor: Sandsmark, Donna M **Status:** Active
Instructional Method: InClass **Start Date:** 9/25/2019 | **End Date:** 12/5/2019

ART40483: Plein Air- Working Method Section ID: 143243
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 195
Instructor: Griego, Danny **Status:** Active
Instructional Method: InClass **Start Date:** 9/28/2019 | **End Date:** 11/2/2019

ART40507: Documentary Photography Section ID: 143822
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 295
Instructor: Johnston, Bernadette **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 11/21/2019

ART40527: Illustrator **Section ID: 143247**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 495
Instructor: Swett, Macoe **Status:** Active
Instructional Method: InClass **Start Date:** 10/8/2019 | **End Date:** 12/10/2019

ART40527: Illustrator **Section ID: 143257**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Hernandez, Lorna **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 12/14/2019

ART40533: InDesign I **Section ID: 143258**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Bennett, Kelly J **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 12/14/2019

ART40535: User Interface Design **Section ID: 143261**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 695
Instructor: Secor, Kristian **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 12/14/2019

ART40587: Adobe AfterEffects **Section ID: 143174**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 495
Instructor: Radiul, Genadi **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

ART40612: Business of Digital Media **Section ID: 143268**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Walpole, Andrew **Status:** Active
Instructional Method: OnLine **Start Date:** 10/1/2019 | **End Date:** 12/14/2019

ART40613: Digital Media Portfolio **Section ID: 143269**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 195
Instructor: Bennett, Kelly J **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 12/14/2019

ART40625: Watercolor I **Section ID: 143232**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 295
Instructor: McCunney, Michelle **Status:** Active
Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 12/9/2019

ART40629: Photo I **Section ID: 143166**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 325
Instructor: Norris, Ellyn **Status:** Active
Instructional Method: OnLine **Start Date:** 10/1/2019 | **End Date:** 11/30/2019

ART40629: Photo I **Section ID: 143167**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 325
Instructor: Cummings, Ian D **Status:** Active
Instructional Method: InClass **Start Date:** 9/25/2019 | **End Date:** 11/20/2019

ART40632: Photo III **Section ID: 143168**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 325
Instructor: Norris, Ellyn **Status:** Active
Instructional Method: OnLine **Start Date:** 10/1/2019 | **End Date:** 11/30/2019

ART40635: Child Book Illustration II **Section ID: 143107**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 395
Instructor: Hewitson, Jennifer **Status:** Active
Instructional Method: InClass **Start Date:** 9/25/2019 | **End Date:** 11/20/2019

ART40638: Principles User Exp (UX) **Section ID: 143264**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 795
Instructor: Secor, Kristian **Status:** Active
Instructional Method: OnLine **Start Date:** 10/1/2019 | **End Date:** 12/14/2019

ART40639: User Exp (UX) Design I **Section ID: 143265**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 795
Instructor: Secor, Kristian **Status:** Active
Instructional Method: OnLine **Start Date:** 10/1/2019 | **End Date:** 12/14/2019

ART40640: Resp Design and User Exp (UX) Section ID: 143267

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 795
Instructor: Chen, Nathaniel **Status:** Active
Instructional Method: OnLine **Start Date:** 10/1/2019 | **End Date:** 12/14/2019

ART40641: User Exp (UX) Portfolio Section ID: 143270

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 795
Instructor: Sandsmark, Donna M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/1/2019 | **End Date:** 12/14/2019

ART40642: User Exp (UX) Design II Section ID: 143266

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 795
Instructor: Sandsmark, Donna M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/1/2019 | **End Date:** 12/14/2019

ART40665: Intro to Adobe CC Section ID: 143255

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Bennett, Kelly J **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 12/14/2019

ART40667: Fundamentals of Graphic Design Section ID: 143249

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Dowden, George **Status:** Active
Instructional Method: Blended **Start Date:** 10/9/2019 | **End Date:** 12/11/2019

ART40668: Typography I Section ID: 143259

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Bennett, Kelly J **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 12/14/2019

ART40675: Intro to Video Editing Section ID: 143923

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 495
Instructor: Byrd, Stefani **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

ART40677: Web Dsgn I: Prnp & Tech Section ID: 143260

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Sandsmark, Donna M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 12/14/2019

ART40692: Hist of Photo Portraiture Section ID: 143171

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 195
Instructor: Anderson, Shane **Status:** Active
Instructional Method: OnLine **Start Date:** 10/15/2019 | **End Date:** 11/23/2019

ART40697: Color Theory for Fine Artists Section ID: 143239

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 295
Instructor: Dunham, Ann **Status:** Active
Instructional Method: InClass **Start Date:** 10/10/2019 | **End Date:** 12/12/2019

ART40705: Digital Photo Workflow Section ID: 143169

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 325
Instructor: Karakaidos, Effi **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

ART40710: Fundamentals of Podcasting Section ID: 143177

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 395
Instructor: Radiul, Genadi **Status:** Active
Instructional Method: Blended **Start Date:** 10/1/2019 | **End Date:** 11/5/2019

ART40712: Brand & Storytelling/Content Section ID: 143273

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Bennett, Kelly J **Status:** Active
Instructional Method: OnLine **Start Date:** 10/1/2019 | **End Date:** 12/14/2019

ART80010: Intro Calligraphy- Round Hand Section ID: 143241

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 225
Instructor: Kibildis, Victoria **Status:** Active
Instructional Method: InClass **Start Date:** 9/28/2019 | **End Date:** 10/26/2019

ART80011: Web Design Portfolio **Section ID: 143271**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 0
Instructor: Sandsmark, Donna M **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

ART80012: Graphic Design Portfolio **Section ID: 143272**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 0
Instructor: Ehrlich, Deny **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/14/2019

ART80015: Advanced Calligraphy **Section ID: 143274**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 225
Instructor: Kibildis, Victoria **Status:** Active
Instructional Method: InClass **Start Date:** 11/2/2019 | **End Date:** 12/14/2019

ART81315: Cntmpry Floral Dsgn Fall Flwr **Section ID: 143230**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 195
Instructor: Root, David C **Status:** Active
Instructional Method: InClass **Start Date:** 10/21/2019 | **End Date:** 11/25/2019

BIBC102: Metabolic Biochemistry **Section ID: 145307**

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BIBC102: Metabolic Biochemistry **Section ID: 145308**

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BIBC102: Metabolic Biochemistry **Section ID: 145327**

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BICD100: Genetics **Section ID: 145317**

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BICD100: Genetics **Section ID: 145318**

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BICD140: Immunology **Section ID: 145305**

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BILD10: Fund Concepts of Mod Bio **Section ID: 143788**

Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Butler, Shannon Rhey **Status:** Active
Instructional Method: InClass **Start Date:** 7/29/2019 | **End Date:** 12/20/2019

BILD3: Organismic & Evol Biology **Section ID: 143789**

Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Reuther, Keefe David **Status:** Active
Instructional Method: Blended **Start Date:** 8/26/2019 | **End Date:** 1/24/2020

BILD3: Organismic & Evol Biology **Section ID: 143790**

Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Reuther, Keefe David **Status:** Active
Instructional Method: Blended **Start Date:** 8/26/2019 | **End Date:** 1/24/2020

BIMM100: Molecular Biology **Section ID: 145319**

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BIMM100: Molecular Biology **Section ID: 145320**

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BIMM116: Circadian Rhythms-Bio Clocks **Section ID: 145311**

Department: **Course Fees:** \$
Instructor: **Status:** Active

BIOL40201: Good Documentation Practices **Section ID: 143732**

Department: Science & Technology **Course Fees:** \$ 675
Instructor: TABANI, SHAMAMA S **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

BIOL40219: Prdctng/Slctng PrmsngDrug Cmpd **Section ID: 143736**

Department: Science & Technology **Course Fees:** \$ 595
Instructor: Madan, Ajay **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/25/2019

BIOL40236: Bioinformatics **Section ID: 143391**

Department: Science & Technology **Course Fees:** \$ 675
Instructor: Koehler, Ryan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

BIOL40274: Cultural Foods **Section ID: 141735**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 375
Instructor: Ferraro, Katie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

BIOL40275: Nutrition: The Lifecycle **Section ID: 141700**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 225
Instructor: Ferraro, Katie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

BIOL40280: Genetics **Section ID: 143396**

Department: Science & Technology **Course Fees:** \$ 675
Instructor: O'Keefe, David **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

BIOL40280: Genetics **Section ID: 143739**

Department: Science & Technology **Course Fees:** \$ 675
Instructor: Kleinstein, Sarah **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

BIOL40294: Applications to Bio and Med I **Section ID: 143145**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 0

Instructor: Schneid, Stephen **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

BIOL40315: Biostatistical Methods I **Section ID: 143720**

Department: Science & Technology **Course Fees:** \$ 725
Instructor: Li, Arthur **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

BIOL40317: Clinical Data CDISC Stds **Section ID: 143738**

Department: Science & Technology **Course Fees:** \$ 725
Instructor: Gupta, Sunil K **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

BIOL40320: Foundations Nutrition I **Section ID: 141732**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 375
Instructor: Ferraro, Katie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

BIOL40321: Foundations Nutrition II **Section ID: 141733**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 375
Instructor: Ferraro, Katie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

BIOL40322: Overview RA Med Dev **Section ID: 143728**

Department: Science & Technology **Course Fees:** \$ 675
Instructor: Pokrop, Frank **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

BIOL40327: Process Data Genomics **Section ID: 143392**

Department: Science & Technology **Course Fees:** \$ 675
Instructor: Carland, Tristan M **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/2/2019

BIOL40329: Introductory Pharmacology **Section ID: 143737**

Department: Science & Technology **Course Fees:** \$ 675
Instructor: Duan Hagler, Wei **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

BIOL40335: Microbiology with Lab **Section ID: 143393**

Department: Science & Technology **Course Fees:** \$ 845
Instructor: Fernandez Ochoa, Maria Wendy **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/9/2019

BIOL40336: Microbiology **Section ID:** 143387
Department: Science & Technology **Course Fees:** \$ 745
Instructor: Fernandez Ochoa, Maria Wendy **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/9/2019

BIOL40348: General Biology I with Lab **Section ID:** 143642
Department: Science & Technology **Course Fees:** \$ 845
Instructor: Ahuja, Nidhi **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/9/2019

BIOL40349: Mammal Cell Culture Bioprocess **Section ID:** 142987
Department: Science & Technology **Course Fees:** \$ 3450
Instructor: Opel, Cary **Status:** Active
Instructional Method: Blended **Start Date:** 9/16/2019 | **End Date:** 9/20/2019

BIOL40350: Cell Cult Bioprocess: Upstream **Section ID:** 142989
Department: Science & Technology **Course Fees:** \$ 1995
Instructor: Opel, Cary **Status:** Active
Instructional Method: Blended **Start Date:** 9/16/2019 | **End Date:** 9/18/2019

BIOL40351: Cell Cult Bioprocess Downstream **Section ID:** 142988
Department: Science & Technology **Course Fees:** \$ 1995
Instructor: Opel, Cary **Status:** Active
Instructional Method: Blended **Start Date:** 9/18/2019 | **End Date:** 9/20/2019

BIOL40352: Human Physiology **Section ID:** 143402
Department: Science & Technology **Course Fees:** \$ 745
Instructor: Ahuja, Nidhi **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/9/2019

BIOL90026: FTRS: Cellular Physiology **Section ID:** 143191
Department: Pre-College Programs **Course Fees:** \$ 2250
Instructor: Bozinovic, Kesten **Status:** Active
Instructional Method: Blended **Start Date:** 9/30/2019 | **End Date:** 12/11/2019

BIOL90026: FTRS: Cellular Physiology **Section ID:** 143865
Department: Pre-College Programs **Course Fees:** \$ 2250
Instructor: Bozinovic, Kesten **Status:** Active
Instructional Method: Blended **Start Date:** 10/1/2019 | **End Date:** 12/12/2019

BIPN100: Human Physiology I **Section ID:** 145306
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BIPN100: Human Physiology I **Section ID:** 145309
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BIPN100: Human Physiology I **Section ID:** 145310
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BIPN100: Human Physiology I **Section ID:** 145313
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BIPN100: Human Physiology I **Section ID:** 145321
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BIPN102: Human Physiology II **Section ID:** 145314
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BIPN102: Human Physiology II **Section ID:** 145315
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BNFO299: Graduate Research **Section ID: 145588**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

BREW40000: Overview of Brewing Sci & Tech **Section ID: 141569**
Department: Science & Technology **Course Fees:** \$ 295
Instructor: Cherney, Yuseff A. **Status:** Active
Instructional Method: Hybrid **Start Date:** 9/23/2019 | **End Date:** 10/9/2019

BREW40003: Yeast & Fermentation **Section ID: 141570**
Department: Science & Technology **Course Fees:** \$ 495
Instructor: White, Christopher **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

BREW40004: Finishing Practices **Section ID: 141571**
Department: Science & Technology **Course Fees:** \$ 495
Instructor: Hotz, Christopher Charles **Status:** Active
Instructional Method: Blended **Start Date:** 10/8/2019 | **End Date:** 12/10/2019

BREW40013: Food Pairings and Beer Dinners **Section ID: 143612**
Department: Science & Technology **Course Fees:** \$ 295
Instructor: Conley, Gwen **Status:** Active
Instructional Method: InClass **Start Date:** 10/12/2019 | **End Date:** 10/26/2019

BREW40018: Brewing Recipe Formulation **Section ID: 141566**
Department: Science & Technology **Course Fees:** \$ 395
Instructor: Constantiner, Doug **Status:** Active
Instructional Method: InClass **Start Date:** 10/9/2019 | **End Date:** 11/13/2019

BREW40019: Draught Beer Systems **Section ID: 141567**
Department: Science & Technology **Course Fees:** \$ 395
Instructor: Peacock, Michael **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 11/7/2019

BREW40021: Brewing Internship **Section ID: 141565**
Department: Science & Technology **Course Fees:** \$ 595
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

BUSA40009: Financial Acctg/Non Accountant **Section ID: 142433**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 600
Instructor: HALOULAKOS, GEORGE A **Status:** Active
Instructional Method: Blended **Start Date:** 9/24/2019 | **End Date:** 11/26/2019

BUSA40009: Financial Acctg/Non Accountant **Section ID: 143343**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 630
Instructor: HALOULAKOS, GEORGE A **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

BUSA40009: Financial Acctg/Non Accountant **Section ID: 143344**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 600
Instructor: PERSON, CANDACE **Status:** Active
Instructional Method: Blended **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

BUSA40010: Managing HR: An Overview **Section ID: 143355**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 630
Instructor: Norton, Tara L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/7/2019

BUSA40010: Managing HR: An Overview **Section ID: 143356**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 600
Instructor: Martella, Laura **Status:** Active
Instructional Method: Blended **Start Date:** 9/25/2019 | **End Date:** 12/11/2019

BUSA40017: Employee and Labor Relations **Section ID: 143360**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Schor, Renee S **Status:** Active
Instructional Method: Blended **Start Date:** 10/2/2019 | **End Date:** 12/4/2019

BUSA40020: Training & Development **Section ID: 143365**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: McGinnis, Michael J. **Status:** Active
Instructional Method: Blended **Start Date:** 9/26/2019 | **End Date:** 11/21/2019

BUSA40034: Accounting-Adv **Section ID: 142063**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 725
Instructor: VOYLES, AUDREY B **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

BUSA40035: Accounting-II/Int **Section ID: 142058**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 725
Instructor: VOYLES, AUDREY B **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

BUSA40036: Accounting I-Elementary **Section ID: 142051**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 700
Instructor: Heinisch, Birgit **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

BUSA40036: Accounting I-Elementary **Section ID: 142052**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 700
Instructor: Hansen, Julie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

BUSA40036: Accounting I-Elementary **Section ID: 142053**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 700
Instructor: Howard, Michael J **Status:** Active
Instructional Method: Blended **Start Date:** 9/25/2019 | **End Date:** 12/4/2019

BUSA40037: Accounting-II/Elem **Section ID: 142054**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 700
Instructor: Hansen, Julie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

BUSA40047: Fed Individual Income Taxatn **Section ID: 142061**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 725
Instructor: Chemello, Akore **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

BUSA40048: Auditing **Section ID: 143858**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 750
Instructor: Latham, Scott **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

BUSA40049: Cost Accounting **Section ID: 142059**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 725
Instructor: Dennis, Suzan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

BUSA40063: Principles of Facilities Mgt **Section ID: 141961**
Department: Science & Technology **Course Fees:** \$ 595
Instructor: TIMBER, DAVID **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/7/2019

BUSA40064: Project Management Essentials **Section ID: 140209**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 625
Instructor: Rushton, Mark **Status:** Active
Instructional Method: Hybrid **Start Date:** 10/14/2019 | **End Date:** 11/23/2019

BUSA40064: Project Management Essentials **Section ID: 142348**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 625
Instructor: Baker, Pamela Marie **Status:** Active
Instructional Method: Blended **Start Date:** 10/3/2019 | **End Date:** 12/5/2019

BUSA40064: Project Management Essentials **Section ID: 142349**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 625
Instructor: Hosch, Alex **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/23/2019

BUSA40066: Systems Engineering Management Section ID: 142626

Department: Science & Technology **Course Fees:** \$ 775
Instructor: Muehlbach, Donald S **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/23/2019

BUSA40094: Accounting-I/Int Section ID: 142056

Department: Business, Professional & Legal Programs **Course Fees:** \$ 725
Instructor: VOYLES, AUDREY B **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

BUSA40094: Accounting-I/Int Section ID: 142057

Department: Business, Professional & Legal Programs **Course Fees:** \$ 725
Instructor: Quintana, Pablo A. **Status:** Active
Instructional Method: Hybrid **Start Date:** 9/23/2019 | **End Date:** 12/9/2019

BUSA40109: Work Team Concepts/Skills Section ID: 142379

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Gunning, Barbara **Status:** Active
Instructional Method: Blended **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

BUSA40109: Work Team Concepts/Skills Section ID: 142380

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Thurman, Peter **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 12/14/2019

BUSA40128: Interest-Based Negotiations Section ID: 142356

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: HANCHETT, BYRON L **Status:** Active
Instructional Method: Hybrid **Start Date:** 10/7/2019 | **End Date:** 12/2/2019

BUSA40130: Financial Statement Analysis Section ID: 143347

Department: Business, Professional & Legal Programs **Course Fees:** \$ 650
Instructor: Howard, Michael J **Status:** Active

Instructional Method: Blended **Start Date:** 9/24/2019 | **End Date:** 12/3/2019

BUSA40131: Directed Studies/Contemp Mktng Section ID: 142437

Department: International Programs - Bldg. E **Course Fees:** \$ 700
Instructor: Bean, Jeofrey S. **Status:** Active
Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 12/2/2019

BUSA40162: Intl Finance/Capital Markets Section ID: 143348

Department: Business, Professional & Legal Programs **Course Fees:** \$ 515
Instructor: Massrouf, Bijan **Status:** Active
Instructional Method: Blended **Start Date:** 10/10/2019 | **End Date:** 12/12/2019

BUSA40257: DS - Internship Preparation Section ID: 142407

Department: International Programs - Bldg. E **Course Fees:** \$ 700
Instructor: Kaye, George **Status:** Active
Instructional Method: InClass **Start Date:** 9/19/2019 | **End Date:** 3/20/2020

BUSA40263: Intellectual Property Law Section ID: 142422

Department: Business, Professional & Legal Programs **Course Fees:** \$ 395
Instructor: Law, Peter **Status:** Active
Instructional Method: InClass **Start Date:** 11/5/2019 | **End Date:** 12/10/2019

BUSA40263: Intellectual Property Law Section ID: 142925

Department: Business, Professional & Legal Programs **Course Fees:** \$ 395
Instructor: GREENSPAN, BERNARD J **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/25/2019

BUSA40301: Business Law for Managers Section ID: 142406

Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Sgubini, Alessandra **Status:** Active
Instructional Method: Blended **Start Date:** 10/3/2019 | **End Date:** 11/7/2019

BUSA40341: Intro to Fundraising & Devo Section ID: 142965

Department: Business, Professional & Legal Programs **Course Fees:** \$ 495

Instructor: CROSKREY, KATHRYN L **Status:** Active
Instructional Method: Blended **Start Date:** 9/30/2019 | **End Date:** 12/2/2019

BUSA40342: Introduction to Business **Section ID: 142401**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595

Instructor: Rudick, Dan **Status:** Active
Instructional Method: Blended **Start Date:** 10/1/2019 | **End Date:** 11/26/2019

BUSA40348: Project Procurement Mgt **Section ID: 142357**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595

Instructor: Sahota, Neil **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 12/14/2019

BUSA40368: Business Communications Skills **Section ID: 142400**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595

Instructor: MILLSAP, PATRICK **Status:** Active
Instructional Method: Blended **Start Date:** 9/26/2019 | **End Date:** 11/21/2019

BUSA40368: Business Communications Skills **Section ID: 143982**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595

Instructor: MILLSAP, PATRICK **Status:** Active
Instructional Method: Blended **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

BUSA40391: Computer and Software Law **Section ID: 143508**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 395

Instructor: Reichenenthal, Mark **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/13/2019

BUSA40394: Supply Management III **Section ID: 143867**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595

Instructor: Hill, Stephen Keith **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/6/2019

BUSA40396: The Leadership Toolkit **Section ID: 143799**

Department: Executive Programs and Corporate Education **Course Fees:** \$ 1615

Instructor: Mayhew, Rich **Status:** Active
Instructional Method: InClass **Start Date:** 9/4/2019 | **End Date:** 11/20/2019

BUSA40396: The Leadership Toolkit **Section ID: 145476**

Department: Executive Programs and Corporate Education **Course Fees:** \$ 1995

Instructor: Mayhew, Rich **Status:** Active
Instructional Method: InClass **Start Date:** 10/11/2019 | **End Date:** 3/6/2020

BUSA40410: Fundraising & Dev Project **Section ID: 142967**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 395

Instructor: Willard, Timothy J. **Status:** Active
Instructional Method: InClass **Start Date:** 10/15/2019 | **End Date:** 12/3/2019

BUSA40435: Financial Decision Making **Section ID: 142944**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 515

Instructor: HALOULAKOS, GEORGE A **Status:** Active
Instructional Method: Hybrid **Start Date:** 9/26/2019 | **End Date:** 11/23/2019

BUSA40439: Financial Management **Section ID: 143346**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 650

Instructor: Ershadi, Dariush N. **Status:** Active
Instructional Method: Blended **Start Date:** 9/23/2019 | **End Date:** 12/9/2019

BUSA40441: Business Decision Making **Section ID: 142265**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595

Instructor: Rudick, Dan **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 12/14/2019

BUSA40441: Business Decision Making **Section ID: 142435**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595

Instructor: Rudick, Dan **Status:** Active
Instructional Method: Blended **Start Date:** 10/2/2019 | **End Date:** 11/27/2019

BUSA40442: Market Research and Analytics **Section ID: 142442**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 695
Instructor: Whitman, Sashi **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 12/14/2019

BUSA40451: Brand Strategy and Positioning **Section ID: 142536**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Foster, Christopher K **Status:** Active
Instructional Method: Blended **Start Date:** 10/3/2019 | **End Date:** 12/12/2019

BUSA40477: Business Valuation **Section ID: 142582**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 515
Instructor: HALOULAKOS, GEORGE A **Status:** Active
Instructional Method: Hybrid **Start Date:** 10/9/2019 | **End Date:** 12/7/2019

BUSA40529: Taxation of the Business Entity **Section ID: 142062**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 725
Instructor: Chemello, Akore **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

BUSA40531: Workplace Ethics **Section ID: 143364**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 415
Instructor: Iste, Catherine **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 11/16/2019

BUSA40537: Principles of Patents **Section ID: 143504**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Abumeri, Mark **Status:** Active
Instructional Method: OnLine **Start Date:** 10/2/2019 | **End Date:** 12/4/2019

BUSA40540: Patent Prosecution **Section ID: 143506**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Arno, Thomas **Status:** Active

Instructional Method: OnLine **Start Date:** 10/1/2019 | **End Date:** 12/6/2019

BUSA40542: Adv Issues/Intellectual Property **Section ID: 143505**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Hanscom, Eric **Status:** Active
Instructional Method: OnLine **Start Date:** 10/2/2019 | **End Date:** 12/3/2019

BUSA40620: Systems Engineering Toolkit **Section ID: 141641**

Department: Executive Programs and Corporate Education **Course Fees:** \$ 1625
Instructor: Genna, Anthony **Status:** Active
Instructional Method: Blended **Start Date:** 9/5/2019 | **End Date:** 11/7/2019

BUSA40643: EPSE M-I Ldng Knwldg Based Org **Section ID: 142584**

Department: Executive Programs and Corporate Education **Course Fees:** \$ 0
Instructor: Dorosewicz, Thomas **Status:** Active
Instructional Method: InClass **Start Date:** 9/9/2019 | **End Date:** 11/4/2019

BUSA40673: Managing f/Maximum Performance **Section ID: 142985**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Eppel, Richard **Status:** Active
Instructional Method: Blended **Start Date:** 10/15/2019 | **End Date:** 12/10/2019

BUSA40681: Facil Operations&Maintenance **Section ID: 141962**

Department: Science & Technology **Course Fees:** \$ 595
Instructor: Meng, Phyllis **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/7/2019

BUSA40682: Patent Drafting **Section ID: 143507**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 395
Instructor: Sherin, Mridula **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

BUSA40693: Proj Mgt/Scientific/Rsrch Envr **Section ID: 141745**

Department: Science & Technology **Course Fees:** \$ 975
Instructor: Theriault, Yves **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/13/2019

BUSA40700: Social Media Marketing **Section ID:** 142443
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Nouraini, Shahrzad (Sherry) **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/7/2019

BUSA40715: Project Planning & Scheduling **Section ID:** 142353
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Franklin, James J **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 12/14/2019

BUSA40715: Project Planning & Scheduling **Section ID:** 142389
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Calderon, Julio **Status:** Active
Instructional Method: Blended **Start Date:** 10/10/2019 | **End Date:** 12/12/2019

BUSA40729: Intro to Sustainability **Section ID:** 142378
Department: Science & Technology **Course Fees:** \$ 495
Instructor: Carey, Timothy J **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/7/2019

BUSA40737: Envr Sustainability Assessment **Section ID:** 142602
Department: Science & Technology **Course Fees:** \$ 495
Instructor: Chirazi, Jacques E **Status:** Active
Instructional Method: Blended **Start Date:** 9/30/2019 | **End Date:** 12/6/2019

BUSA40739: CA Environmental Quality Act **Section ID:** 142372
Department: Science & Technology **Course Fees:** \$ 425
Instructor: Blackson, Kristin **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/2/2019

BUSA40739: CA Environmental Quality Act **Section ID:** 142373
Department: Science & Technology **Course Fees:** \$ 425
Instructor: Blackson, Kristin **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/14/2019

BUSA40739: CA Environmental Quality Act **Section ID:** 145591
Department: Science & Technology **Course Fees:** \$ 490
Instructor: Blackson, Kristin **Status:** Active
Instructional Method: Blended **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

BUSA40791: FinancialMgmnt f/NonprofitOrgs **Section ID:** 142969
Department: Business, Professional & Legal Programs **Course Fees:** \$ 395
Instructor: Ray, Jerry **Status:** Active
Instructional Method: Blended **Start Date:** 11/6/2019 | **End Date:** 12/11/2019

BUSA40800: Dirctd Stds-Career Prep Strat **Section ID:** 142404
Department: International Programs - Bldg. E **Course Fees:** \$ 700
Instructor: Kaye, George **Status:** Active
Instructional Method: Blended **Start Date:** 10/23/2019 | **End Date:** 11/27/2019

BUSA40801: Foundation Principles **Section ID:** 139209
Department: Executive Programs and Corporate Education **Course Fees:** \$ 895
Instructor: EDWARDS, DIANE **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

BUSA40803: Transformational Leadership **Section ID:** 142270
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: GOATES, GREG B **Status:** Active
Instructional Method: Blended **Start Date:** 9/30/2019 | **End Date:** 12/9/2019

BUSA40822: Real Estate Tax & Accounting **Section ID:** 142060
Department: Business, Professional & Legal Programs **Course Fees:** \$ 400
Instructor: Chemello, Akore **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/22/2019

BUSA40859: Leading from the Middle Section ID: 142358

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Orey, Maureen **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 12/14/2019

BUSA40859: Leading from the Middle Section ID: 142381

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Gunning, Barbara **Status:** Active
Instructional Method: Blended **Start Date:** 10/10/2019 | **End Date:** 12/12/2019

BUSA40860: Agile Power Practices Section ID: 142355

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Rushton, Mark **Status:** Active
Instructional Method: Hybrid **Start Date:** 10/14/2019 | **End Date:** 12/14/2019

BUSA40862: PM EssentialScience&Technology Section ID: 142350

Department: Business, Professional & Legal Programs **Course Fees:** \$ 625
Instructor: Hosch, Alex **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/7/2019

BUSA40864: Fraud and Forensic Accounting Section ID: 142065

Department: Business, Professional & Legal Programs **Course Fees:** \$ 695
Instructor: Dennis, Suzan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

BUSA40869: TaxationPracticeProced&Ethics Section ID: 142386

Department: Business, Professional & Legal Programs **Course Fees:** \$ 385
Instructor: Diep, Chandara **Status:** Active
Instructional Method: Blended **Start Date:** 9/26/2019 | **End Date:** 11/21/2019

BUSA40872: Components of Compensation Section ID: 143361

Department: Business, Professional & Legal Programs **Course Fees:** \$ 515

Instructor: Burchill, Roy J **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/7/2019

BUSA40874: Strategic Talent Acquisition Section ID: 143357

Department: Business, Professional & Legal Programs **Course Fees:** \$ 515
Instructor: Gering, Kurt **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 12/7/2019

BUSA40874: Strategic Talent Acquisition Section ID: 143358

Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Gamble-Wong, Angelica **Status:** Active
Instructional Method: Blended **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

BUSA40875: Fund of Employee Benefits Section ID: 143362

Department: Business, Professional & Legal Programs **Course Fees:** \$ 515
Instructor: Klein, Nancy D. **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 12/7/2019

BUSA40877: Performance Management Section ID: 143363

Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Lewis, Cynthia J. **Status:** Active
Instructional Method: Blended **Start Date:** 10/8/2019 | **End Date:** 12/10/2019

BUSA40878: Customer Experience (CX) Section ID: 142520

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Bean, Jeffrey S. **Status:** Active
Instructional Method: Blended **Start Date:** 10/9/2019 | **End Date:** 12/11/2019

BUSA40879: Digital Marketing Section ID: 142521

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Chao, Caleb **Status:** Active
Instructional Method: Blended **Start Date:** 10/7/2019 | **End Date:** 12/9/2019

BUSA40879: Digital Marketing Section ID: 142523

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Neeley, Jennifer **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/7/2019

BUSA40880: Content Marketing **Section ID: 142444**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 900
Instructor: Kimberling, Stephanie J. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/30/2019

BUSA40880: Content Marketing **Section ID: 142519**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Weber, Ron M. **Status:** Active
Instructional Method: Blended **Start Date:** 10/1/2019 | **End Date:** 11/26/2019

BUSA40882: EssentialsofBusAnalysis **Section ID: 142067**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 540
Instructor: Frohnhoefer, Ray **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 12/2/2019

BUSA40886: Ldrshp & Tmwrk in Wrkplc **Section ID: 143933**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 100
Instructor: Mayhew, Rich **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/3/2019

BUSA40888: DS - International Business **Section ID: 142436**
Department: International Programs - Bldg. E **Course Fees:** \$ 700
Instructor: Destro, Lawrence P **Status:** Active
Instructional Method: Blended **Start Date:** 9/25/2019 | **End Date:** 12/4/2019

BUSA40892: Business Process Modeling **Section ID: 142066**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 540
Instructor: HALOULAKOS, GEORGE A **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 12/2/2019

BUSA40893: Solution Assessment **Section ID: 142068**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 395
Instructor: Frohnhoefer, Ray **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/23/2019

BUSA40903: EffectiveOnboardingPracts **Section ID: 143349**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 375
Instructor: McGinnis, Michael J. **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 11/16/2019

BUSA40909: Accounting Ethics **Section ID: 141706**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 700
Instructor: Dennis, Suzan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

BUSA40909: Accounting Ethics **Section ID: 142050**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 700
Instructor: Dennis, Suzan **Status:** Active
Instructional Method: OnLine **Start Date:** 10/4/2019 | **End Date:** 12/6/2019

BUSA40910: FinModelingwithExcel **Section ID: 142590**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 415
Instructor: HALOULAKOS, GEORGE A **Status:** Active
Instructional Method: OnLine **Start Date:** 10/29/2019 | **End Date:** 12/7/2019

BUSA40922: Organizational Behavior **Section ID: 142268**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: HALL, LOIS **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 12/14/2019

BUSA40922: Organizational Behavior **Section ID: 142434**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Howard, Kristie **Status:** Active
Instructional Method: Blended **Start Date:** 9/23/2019 | **End Date:** 12/2/2019

BUSA40923: Business Presentations **Section ID: 142269**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: MILLSAP, PATRICK **Status:** Active
Instructional Method: Blended **Start Date:** 10/1/2019 | **End Date:** 11/26/2019

BUSA40924: Digital Marketing Analytics **Section ID:** 142524
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Salcido, David J. **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/7/2019

BUSA40924: Digital Marketing Analytics **Section ID:** 142525
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Salcido, David J. **Status:** Active
Instructional Method: Blended **Start Date:** 10/3/2019 | **End Date:** 12/12/2019

BUSA40926: Project Cost and Risk Mgmt **Section ID:** 142354
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Frohnhoefer, Ray **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 12/14/2019

BUSA40926: Project Cost and Risk Mgmt **Section ID:** 142390
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Melendez, Lou **Status:** Active
Instructional Method: Blended **Start Date:** 10/9/2019 | **End Date:** 12/11/2019

BUSA40927: Microsoft Project **Section ID:** 142392
Department: Business, Professional & Legal Programs **Course Fees:** \$ 695
Instructor: Seneviratne, Asitha R. **Status:** Active
Instructional Method: Blended **Start Date:** 10/26/2019 | **End Date:** 11/16/2019

BUSA40932: Logistics I: Overview **Section ID:** 142629
Department: Science & Technology **Course Fees:** \$ 775
Instructor: MILLER, HARRY JIM **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

BUSA40935: Influencer Marketing **Section ID:** 143964

Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Neeley, Jennifer **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/16/2019

BUSA40940: Elements of Marketing **Section ID:** 142405
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Baehr, Michael J. **Status:** Active
Instructional Method: Blended **Start Date:** 9/30/2019 | **End Date:** 12/2/2019

BUSA40940: Elements of Marketing **Section ID:** 142537
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Pike, Parker **Status:** Active
Instructional Method: Blended **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

BUSA40940: Elements of Marketing **Section ID:** 143896
Department: Business, Professional & Legal Programs **Course Fees:** \$ 595
Instructor: Baehr, Michael J. **Status:** Active
Instructional Method: Blended **Start Date:** 10/2/2019 | **End Date:** 11/27/2019

BUSA40942: Intro to Institutional Rsrch **Section ID:** 143284
Department: Education **Course Fees:** \$ 975
Instructor: Hasson, Cathy L **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/13/2019

BUSA40948: Housing:DevelopMarkets&Finan **Section ID:** 144076
Department: Business, Professional & Legal Programs **Course Fees:** \$ 950
Instructor: Hong, Haney D. **Status:** Active
Instructional Method: Hybrid **Start Date:** 10/7/2019 | **End Date:** 11/4/2019

BUSA40949: American Workplace Exp **Section ID:** 142402
Department: International Programs - Bldg. E **Course Fees:** \$ 700
Instructor: Destro, Lawrence P **Status:** Active
Instructional Method: Blended **Start Date:** 9/26/2019 | **End Date:** 11/14/2019

BUSA40949: American Workplace Exp **Section ID:** 143898

Department: International Programs - Bldg. E **Course Fees:** \$ 700

Instructor: Destro, Lawrence P **Status:** Active
Instructional Method: Blended **Start Date:** 9/27/2019 | **End Date:** 11/15/2019

BUSA40950: Project Management Boot Camp **Section ID:** 142351

Department: Business, Professional & Legal Programs **Course Fees:** \$ 795

Instructor: Craciun, Dragos **Status:** Active
Instructional Method: Blended **Start Date:** 10/19/2019 | **End Date:** 11/16/2019

BUSA40950: Project Management Boot Camp **Section ID:** 142352

Department: Business, Professional & Legal Programs **Course Fees:** \$ 795

Instructor: DRAMMISSI, JOSEPH T **Status:** Active
Instructional Method: Blended **Start Date:** 10/30/2019 | **End Date:** 11/2/2019

BUSA40950: Project Management Boot Camp **Section ID:** 143762

Department: Business, Professional & Legal Programs **Course Fees:** \$ 825

Instructor: Coit, Cynthia Elese **Status:** Active
Instructional Method: Blended **Start Date:** 9/26/2019 | **End Date:** 10/16/2019

BUSA40951: Market Research **Section ID:** 143897

Department: International Programs - Bldg. E **Course Fees:** \$ 200

Instructor: Whitman, Sashi **Status:** Active
Instructional Method: Blended **Start Date:** 10/19/2019 | **End Date:** 10/19/2019

BUSA40952: SEO Tools and Analytics **Section ID:** 143670

Department: Business, Professional & Legal Programs **Course Fees:** \$ 695

Instructor: Bush, Alan **Status:** Active
Instructional Method: Blended **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

BUSA40956: Healthcare FinAnalysis Tableau **Section ID:** 144121

Department: Business, Professional & Legal Programs **Course Fees:** \$ 515

Instructor: Votaw, Jason **Status:** Active

Instructional Method: Blended **Start Date:** 10/30/2019 | **End Date:** 12/11/2019

BUSA40957: Grant Writing for Nonprofits **Section ID:** 144762

Department: Business, Professional & Legal Programs **Course Fees:** \$ 395

Instructor: Merriam, Steve **Status:** Active
Instructional Method: Blended **Start Date:** 9/25/2019 | **End Date:** 10/30/2019

BUSA70006: SHRM Prep **Section ID:** 142963

Department: Business, Professional & Legal Programs **Course Fees:** \$ 0

Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/4/2019 | **End Date:** 11/20/2019

BUSA70007: CPAExamReviewCourse **Section ID:** 142385

Department: Business, Professional & Legal Programs **Course Fees:** \$ 1290

Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 9/8/2019 | **End Date:** 12/14/2019

BUSA80020: HRAnalyticsWorkshop **Section ID:** 143350

Department: Business, Professional & Legal Programs **Course Fees:** \$ 450

Instructor: De La Rosa, Gabriel M. **Status:** Active
Instructional Method: InClass **Start Date:** 10/12/2019 | **End Date:** 10/26/2019

BUSA80025: Exp America: Make a Difference **Section ID:** 144054

Department: Business, Professional & Legal Programs **Course Fees:** \$ 0

Instructor: Kaye, Alicia **Status:** Active
Instructional Method: InClass **Start Date:** 11/8/2019 | **End Date:** 11/11/2019

BUSA80026: Ex America: Discover San Diego **Section ID:** 144053

Department: Business, Professional & Legal Programs **Course Fees:** \$ 0

Instructor: Kaye, Alicia **Status:** Active
Instructional Method: InClass **Start Date:** 11/8/2019 | **End Date:** 11/11/2019

BUSA80034: College Debt Mgt **Section ID:** 144122

Department: Business, Professional & Legal Programs **Course Fees:** \$ 50
Instructor: Kamien, Nannette **Status:** Active
Instructional Method: Blended **Start Date:** 11/2/2019 | **End Date:** 11/2/2019

BUSA80035: Pre-College Fin Mgt **Section ID: 144123**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 50
Instructor: Kamien, Nannette **Status:** Active
Instructional Method: Blended **Start Date:** 10/26/2019 | **End Date:** 10/26/2019

BUSA80039: Lead Generation Fundamentals **Section ID: 143963**
Department: Executive Programs and Corporate Education **Course Fees:** \$ 95
Instructor: Neeley, Jennifer **Status:** Active
Instructional Method: InClass **Start Date:** 9/27/2019 | **End Date:** 9/27/2019

BUSA80040: Develop Your Business: Scaling **Section ID: 145074**
Department: Executive Programs and Corporate Education **Course Fees:** \$ 95
Instructor: Lynam, Shawn J. **Status:** Active
Instructional Method: InClass **Start Date:** 10/25/2019 | **End Date:** 10/25/2019

BUSA90018: FTRS Elements of Marketing **Section ID: 143775**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Quattrocchi, Frank **Status:** Active
Instructional Method: Blended **Start Date:** 8/26/2019 | **End Date:** 12/20/2019

BUSA90019: FTRS Organizational Behavior **Section ID: 143150**
Department: Pre-College Programs **Course Fees:** \$ 395
Instructor: HALL, LOIS **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CHEM40004: Analytical Chemistry **Section ID: 141701**
Department: Science & Technology **Course Fees:** \$ 725
Instructor: Rodriguez, Andrew Allen **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/2/2019

CHEM6A: General Chemistry I **Section ID: 145443**

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CHEM6A: General Chemistry I **Section ID: 145444**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CLRE232: Qualitative Research **Section ID: 142569**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 600
Instructor: Hurst, Samantha **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE232: Qualitative Research **Section ID: 142570**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 1600
Instructor: Hurst, Samantha **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE238: Applied Translational Research **Section ID: 142574**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 600
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE238: Applied Translational Research **Section ID: 142575**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 800
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE238: Applied Translational Research **Section ID: 142576**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 1600
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE254: Biostatistics II **Section ID: 142554**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 600

Instructor: VAIDA, FLORIN **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE254: Biostatistics II **Section ID: 142555**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 800
Instructor: VAIDA, FLORIN **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE254: Biostatistics II **Section ID: 142556**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 1600
Instructor: VAIDA, FLORIN **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE255: Data Management & Informatics **Section ID: 142560**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 600
Instructor: Hogarth, Michael **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE255: Data Management & Informatics **Section ID: 142561**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 800
Instructor: Hogarth, Michael **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE255: Data Management & Informatics **Section ID: 142562**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 1600
Instructor: Hogarth, Michael **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE256: Patient-Oriented Research II **Section ID: 142551**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 600
Instructor: McCutchan, Allen **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE256: Patient-Oriented Research II **Section ID: 142552**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 800
Instructor: McCutchan, Allen **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE256: Patient-Oriented Research II **Section ID: 142553**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 1600
Instructor: McCutchan, Allen **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE257: Epidemiology II **Section ID: 142557**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 600
Instructor: Cameron, Ashley **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE257: Epidemiology II **Section ID: 142558**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 800
Instructor: Cameron, Ashley **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE257: Epidemiology II **Section ID: 142559**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 1600
Instructor: Cameron, Ashley **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE258: Prof Developmnt/Clinical Resrch **Section ID: 142566**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 600
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE258: Prof Developmnt/Clinical Resrch **Section ID: 142567**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 800
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE258: Prof Developmnt/Clinical Resrch Section ID: 142568

Department: Office of Adv Prof Education & Development
Course Fees: \$ 1600
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE262: Analyzing Medical Data using R Section ID: 142563

Department: Office of Adv Prof Education & Development
Course Fees: \$ 600
Instructor: VAIDA, FLORIN **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE262: Analyzing Medical Data using R Section ID: 142564

Department: Office of Adv Prof Education & Development
Course Fees: \$ 800
Instructor: VAIDA, FLORIN **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE262: Analyzing Medical Data using R Section ID: 142565

Department: Office of Adv Prof Education & Development
Course Fees: \$ 1600
Instructor: VAIDA, FLORIN **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE264: Clinical Decision Analysis Section ID: 142571

Department: Office of Adv Prof Education & Development
Course Fees: \$ 600
Instructor: Murphy, James D **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE264: Clinical Decision Analysis Section ID: 142572

Department: Office of Adv Prof Education & Development
Course Fees: \$ 800
Instructor: Murphy, James D **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE264: Clinical Decision Analysis Section ID: 142573

Department: Office of Adv Prof Education & Development
Course Fees: \$ 1600
Instructor: Murphy, James D **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CLRE295A: ISP Seminar Series A Section ID: 142577

Department: Office of Adv Prof Education & Development
Course Fees: \$ 1600
Instructor: Cameron, Ashley **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

COGS10: Cognitv Consequence/Technology Section ID: 145539

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS10: Cognitv Consequence/Technology Section ID: 145540

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS10: Cognitv Consequence/Technology Section ID: 145545

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS108: Data Science in Practice Section ID: 145543

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS108: Data Science in Practice Section ID: 145544

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS108: Data Science in Practice Section ID: 145583

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS109: Modeling & Data Analysis Section ID: 145541

Department: **Course Fees:** \$
Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS109: Modeling & Data Analysis **Section ID: 145542**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS118B: Intro to Machine Learning II **Section ID: 145577**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS118B: Intro to Machine Learning II **Section ID: 145578**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS18: Introduction to Python **Section ID: 145537**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS18: Introduction to Python **Section ID: 145538**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS18: Introduction to Python **Section ID: 145550**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS18: Introduction to Python **Section ID: 145551**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS9: Introduction to Data Science **Section ID: 145552**
Department: **Course Fees:** \$
Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COGS9: Introduction to Data Science **Section ID: 145553**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COMM126: Children and Media **Section ID: 145549**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

COMM40008: Adv Bus Reading/Discuss 2-unit **Section ID: 143311**
Department: International Programs - Bldg. E **Course Fees:** \$ 275
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 12/4/2019

COMM40009: Adv Case Studies Bus 2-unit **Section ID: 143313**
Department: International Programs - Bldg. E **Course Fees:** \$ 275
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 12/4/2019

COMM40010: Adv Conversation 2-unit **Section ID: 143316**
Department: International Programs - Bldg. E **Course Fees:** \$ 275
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 12/4/2019

COMM40011: Adv Disc World Events 2-unit **Section ID: 143323**
Department: International Programs - Bldg. E **Course Fees:** \$ 275
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 12/4/2019

COMM40012: Adv Neg & Debate 3-unit **Section ID: 143326**
Department: International Programs - Bldg. E **Course Fees:** \$ 375
Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 10/15/2019 | **End Date:** 12/5/2019

COMM40013: Adv Bus Presentation 3-unit **Section ID:** 143310

Department: International Programs - Bldg. E **Course Fees:** \$ 375

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 10/15/2019 | **End Date:** 12/5/2019

COMM40014: Adv Conversation 3-unit **Section ID:** 143319

Department: International Programs - Bldg. E **Course Fees:** \$ 375

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 10/15/2019 | **End Date:** 12/5/2019

COMM40015: Adv Disc Amer Culture 2-unit **Section ID:** 143320

Department: International Programs - Bldg. E **Course Fees:** \$ 275

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 12/4/2019

COMM40016: Adv Disc Music History 2-unit **Section ID:** 143322

Department: International Programs - Bldg. E **Course Fees:** \$ 275

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 12/4/2019

COMM80000: Conversation Improvement **Section ID:** 143086

Department: International Programs - Bldg. E **Course Fees:** \$ 225

Instructor: Valentino, Dominique **Status:** Active

Instructional Method: InClass **Start Date:** 10/2/2019 | **End Date:** 10/30/2019

COMM80001: Adv. Conversation Improvement **Section ID:** 143088

Department: International Programs - Bldg. E **Course Fees:** \$ 225

Instructor: Valentino, Dominique **Status:** Active

Instructional Method: InClass **Start Date:** 11/7/2019 | **End Date:** 12/12/2019

COMM80002: Accent Modification Seminar **Section ID:** 143078

Department: International Programs - Bldg. E **Course Fees:** \$ 75

Instructor: Mann, Ellen **Status:** Active

Instructional Method: InClass **Start Date:** 10/1/2019 | **End Date:** 10/1/2019

CSE100: Advanced Data Structures **Section ID:** 145518

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE100: Advanced Data Structures **Section ID:** 145521

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE101: Design & Analysis of Algorithm **Section ID:** 145579

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE101: Design & Analysis of Algorithm **Section ID:** 145580

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE12: Basic Data Struct & OO Design **Section ID:** 145529

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE12: Basic Data Struct & OO Design **Section ID:** 145530

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE12: Basic Data Struct & OO Design **Section ID:** 145581

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE12: Basic Data Struct & OO Design Section ID: 145582

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE120: Princ/Computer Operating System Section ID: 145573

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE120: Princ/Computer Operating System Section ID: 145574

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE123: Computer Networks Section ID: 145575

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE123: Computer Networks Section ID: 145576

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE132A: Database System Principles Section ID: 145524

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE132A: Database System Principles Section ID: 145525

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE134B: Web Client Languages Section ID: 145567

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE140: Component&Design Tech/Digitl Sys Section ID: 145519

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE140: Component&Design Tech/Digitl Sys Section ID: 145520

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE140L: Digital Systems Laboratory Section ID: 145522

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE140L: Digital Systems Laboratory Section ID: 145523

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE152: Intro to Computer Vision Section ID: 145526

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE152: Intro to Computer Vision Section ID: 145527

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE158: Recommender Sys&Web Mining Section ID: 145559

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE158: Recommender Sys&Web Mining Section ID: 145560

Department: Course Fees: \$
Instructor: Status: Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/12/2019

CSE40605: Funds of the .NET Framework Section ID: 143184

Department: Science & Technology **Course Fees:** \$ 725
Instructor: Schurter, Bruce E. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/25/2019 | **End Date:** 11/6/2019

CSE40706: C# Programming III Section ID: 143182

Department: Science & Technology **Course Fees:** \$ 725
Instructor: Schurter, Bruce E. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/26/2019 | **End Date:** 11/14/2019

CSE40798: Instructional Technology Tools Section ID: 142640

Department: Education **Course Fees:** \$ 245
Instructor: MCCORMICK, LAURA J **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/8/2019

CSE40799: Enhnc OL Crse/Stremng&Mltimed Section ID: 142641

Department: Education **Course Fees:** \$ 385
Instructor: Guptill, Anne **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/25/2019

CSE40834: LabVIEW Programming Section ID: 143161

Department: Science & Technology **Course Fees:** \$ 775
Instructor: Pakett, Allan G **Status:** Active
Instructional Method: OnLine **Start Date:** 10/2/2019 | **End Date:** 11/27/2019

CSE40849: Software Business Practices Section ID: 143178

Department: Science & Technology **Course Fees:** \$ 695
Instructor: Blaine, J David **Status:** Active
Instructional Method: Blended **Start Date:** 9/30/2019 | **End Date:** 12/9/2019

CSE40933: Intro SQL Programming Concepts Section ID: 143215

Department: Science & Technology **Course Fees:** \$ 725
Instructor: Williamson, Eric D **Status:** Active
Instructional Method: OnLine **Start Date:** 9/25/2019 | **End Date:** 11/20/2019

CSE40948: Intermediate SQL Programming Section ID: 143288

Department: Science & Technology **Course Fees:** \$ 695
Instructor: Williamson, Eric D **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 12/14/2019

CSE40956: CISSP Academic Prep Section ID: 143305

Department: Science & Technology **Course Fees:** \$ 920
Instructor: Anderson, Gene **Status:** Active
Instructional Method: Hybrid **Start Date:** 10/7/2019 | **End Date:** 11/2/2019

CSE40991: Intro to GIS Section ID: 143289

Department: Science & Technology **Course Fees:** \$ 750
Instructor: Batchelor, Heidi **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

CSE41069: Introduction to Statistics Section ID: 143208

Department: Science & Technology **Course Fees:** \$ 695
Instructor: SIFFERLEN, PETER **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CSE41097: Programming in "R" Section ID: 143209

Department: Science & Technology **Course Fees:** \$ 695
Instructor: Li, Arthur **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

CSE41097: Programming in "R" Section ID: 143328

Department: Science & Technology **Course Fees:** \$ 900
Instructor: Li, Arthur **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

CSE41132: Web Analytics Section ID: 143868

Department: Science & Technology **Course Fees:** \$ 675
Instructor: Bush, Alan **Status:** Active
Instructional Method: Blended **Start Date:** 9/26/2019 | **End Date:** 11/7/2019

CSE41157: Search Engine Optmztn & Mrkng Section ID: 142439

Department: Business, Professional & Legal Programs **Course Fees:** \$ 900
Instructor: Bush, Alan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/30/2019

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

CSE41242: Intro to Prog using Java **Section ID: 142611**
Department: Science & Technology **Course Fees:** \$ 695
Instructor: Eichberger, German **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

CSE41242: Intro to Prog using Java **Section ID: 143965**
Department: Science & Technology **Course Fees:** \$ 900
Instructor: Eichberger, German **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/18/2019

CSE41243: Discrete Math **Section ID: 143303**
Department: Science & Technology **Course Fees:** \$ 650
Instructor: Verdian-Rizi, Fatemah (Maryam) **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

CSE41246: Android Java Fundamentals **Section ID: 143188**
Department: Science & Technology **Course Fees:** \$ 675
Instructor: Gappy, James **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/19/2019

CSE41254: Introduction to SPSS **Section ID: 143296**
Department: Science & Technology **Course Fees:** \$ 650
Instructor: Barron, Dean **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/15/2019

CSE41258: Data Mining Fundamentals **Section ID: 143279**
Department: Science & Technology **Course Fees:** \$ 725
Instructor: Balac, Natasha **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/30/2019

CSE41262: Data Mining: Adv Concepts **Section ID: 143280**
Department: Science & Technology **Course Fees:** \$ 725
Instructor: Balac, Natasha **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

CSE41264: Stats for Data Analytics **Section ID: 143278**
Department: Science & Technology **Course Fees:** \$ 650
Instructor: Koo, Philip A **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

CSE41267: Web Perfmrnce & Test Auto **Section ID: 143165**
Department: Science & Technology **Course Fees:** \$ 695
Instructor: Wade, Steven **Status:** Active
Instructional Method: Blended **Start Date:** 10/16/2019 | **End Date:** 12/4/2019

CSE41269: UNIX & Linux Sys Admin I **Section ID: 143199**
Department: Science & Technology **Course Fees:** \$ 695
Instructor: Hodge, Edgar R. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/19/2019

CSE41273: Python Programming Fundam **Section ID: 143192**
Department: Science & Technology **Course Fees:** \$ 695
Instructor: Chen, Diane DeMers **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/19/2019

CSE41280: Cloud Comp Architect AWS **Section ID: 142632**
Department: Science & Technology **Course Fees:** \$ 895
Instructor: Fitipaldi, Ricardo **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

CSE41287: Linear Algebra for Mach Lrning **Section ID: 143292**
Department: Science & Technology **Course Fees:** \$ 725
Instructor: Aleksic, Bilyana **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

CSE41293: Sys.Engineering SftwreOverview **Section ID: 142627**
Department: Science & Technology **Course Fees:** \$ 775
Instructor: Baker, James D **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

CSE41296: LEAN Thinking/BigData Analyts **Section ID: 142367**
Department: Science & Technology **Course Fees:** \$ 775
Instructor: Meng, James C.S. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/7/2019

CSE41305: Probability & Stats Deep Learn **Section ID: 143293**
Department: Science & Technology **Course Fees:** \$ 725

Instructor: Aleksic, Bilyana **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 11/18/2019 | **End Date:** 2/27/2020

CSE41310: Intermediate Python **Section ID:** 143194
Department: Science & Technology **Course Fees:** \$ 695
Instructor: Schurter, Bruce E. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

CSE80006: Coding Boot Camp **Section ID:** 143317
Department: Science & Technology **Course Fees:** \$ 0
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 12/9/2019 | **End Date:** 6/11/2020

CSE41312: Deep Learning using TensorFlow **Section ID:** 143301
Department: Science & Technology **Course Fees:** \$ 725
Instructor: PAHWA, ASH **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

CSE80008: Data Science & Viz Boot Camp **Section ID:** 143321
Department: Science & Technology **Course Fees:** \$ 0
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 4/11/2020

CSE41313: Enterprise Software Selection **Section ID:** 143968
Department: Science & Technology **Course Fees:** \$ 675
Instructor: Sarafian, Raffi **Status:** Active
Instructional Method: OnLine **Start Date:** 10/15/2019 | **End Date:** 12/10/2019

CSE80013: Cybersecurity Boot Camp **Section ID:** 143306
Department: Science & Technology **Course Fees:** \$ 0
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 11/5/2019 | **End Date:** 5/2/2020

CSE41316: Python Unit Testing **Section ID:** 143196
Department: Science & Technology **Course Fees:** \$ 695
Instructor: McEntire, Norman C **Status:** Active
Instructional Method: OnLine **Start Date:** 10/19/2019 | **End Date:** 12/14/2019

CSE8A: Intro/Computer Sci: Java (I) **Section ID:** 145533
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE41318: Intro to Front End Tech **Section ID:** 143203
Department: Science & Technology **Course Fees:** \$ 675
Instructor: Sandsmark, Donna M **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/19/2019

CSE8A: Intro/Computer Sci: Java (I) **Section ID:** 145534
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

CSE41318: Intro to Front End Tech **Section ID:** 143497
Department: Science & Technology **Course Fees:** \$ 900
Instructor: Sandsmark, Donna M **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

CSE90025: FTRS HTML5 & JavaScript **Section ID:** 145228
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Al Ajrawi, Shams **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 10/1/2019

CSE41319: Adv HTML and CSS **Section ID:** 143207
Department: Science & Technology **Course Fees:** \$ 675
Instructor: Twiss, Arthur **Status:** Active
Instructional Method: OnLine **Start Date:** 9/26/2019 | **End Date:** 11/21/2019

CSE90026: FTRS Introduction to Swift **Section ID:** 143405
Department: Pre-College Programs **Course Fees:** \$ 395
Instructor: Wang, Wallace **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CSE80006: Coding Boot Camp **Section ID:** 143309
Department: Science & Technology **Course Fees:** \$ 0

CSE90026: FTRS Introduction to Swift **Section ID:** 143408
Department: Pre-College Programs **Course Fees:** \$ 395
Instructor: Wang, Wallace **Status:** Active

Instructional Method: InClass **Start Date:** 10/12/2019 | **End Date:** 12/14/2019

CSE90026: FTRS Introduction to Swift **Section ID: 145229**
Department: Pre-College Programs **Course Fees:** \$ 395
Instructor: Wang, Wallace **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 10/1/2019

CSE90027: FTRS Intro to Front End **Section ID: 143185**
Department: Pre-College Programs **Course Fees:** \$ 395
Instructor: Tavakoli, Hamid **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

CSE90027: FTRS Intro to Front End **Section ID: 143200**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Twiss, Arthur **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/5/2019

CSE90027: FTRS Intro to Front End **Section ID: 143918**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Tavakoli, Hamid **Status:** Active
Instructional Method: Hybrid **Start Date:** 9/29/2019 | **End Date:** 12/15/2019

CSE90027: FTRS Intro to Front End **Section ID: 144091**
Department: Pre-College Programs **Course Fees:** \$ 395
Instructor: Twiss, Arthur **Status:** Active
Instructional Method: InClass **Start Date:** 9/28/2019 | **End Date:** 12/14/2019

CSE90027: FTRS Intro to Front End **Section ID: 145227**
Department: Pre-College Programs **Course Fees:** \$ 395
Instructor: Tavakoli, Hamid **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 9/23/2019

CSE90028: FTRS iOS Programming I **Section ID: 145230**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Wang, Wallace **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/15/2019

CSE90029: FTRS iOS Programming II **Section ID: 145231**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Wang, Wallace **Status:** Active

Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/15/2019

DDPM202: Pharma/SmMolecule&Macromolecule **Section ID: 145451**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 3300
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

DDPM203: Pre-Clin&Clin RegSubmiss&Strat **Section ID: 145452**
Department: Office of Adv Prof Education & Development **Course Fees:** \$ 3300
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

ECE40051: Signals & Systems **Section ID: 142612**
Department: Science & Technology **Course Fees:** \$ 775
Instructor: Razavilar, Javad **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

ECE40105: Embedded Linux **Section ID: 142623**
Department: Science & Technology **Course Fees:** \$ 795
Instructor: Abbott, Douglas L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

ECE40153: Intro to Embedded Systems **Section ID: 142617**
Department: Science & Technology **Course Fees:** \$ 775
Instructor: Kim, William Jeongwoo **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

ECE40170: FPGA I **Section ID: 142624**
Department: Science & Technology **Course Fees:** \$ 795
Instructor: Kinman, David **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

ECE40171: RFIC Design **Section ID: 143155**
Department: Science & Technology **Course Fees:** \$ 825
Instructor: Moazzam, Reza **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

ECE40244: Mixed Signal Design Section ID: 142615
Department: Science & Technology **Course Fees:** \$ 775
Instructor: Eldon, John **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

ECE40247: GIS III: Geodatabase Design Section ID: 143290
Department: Science & Technology **Course Fees:** \$ 775
Instructor: Batchelor, Heidi **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

ECE40272: GIS Capstone Project Section ID: 143291
Department: Science & Technology **Course Fees:** \$ 775
Instructor: Batchelor, Jason **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

ECE40284: Distributed Energy Resources Section ID: 142630
Department: Science & Technology **Course Fees:** \$ 775
Instructor: Abi-Samra, Nicholas **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

ECE40290: Embedded Real-Time Operate Sys Section ID: 142619
Department: Science & Technology **Course Fees:** \$ 795
Instructor: McEntire, Norman C **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

ECE40291: Embedded Contrler Prog w/EmbC Section ID: 142618
Department: Science & Technology **Course Fees:** \$ 795
Instructor: McEntire, Norman C **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

ECE40295: Intro to Autonomous Vehicles Section ID: 143250
Department: Science & Technology **Course Fees:** \$ 890
Instructor: Silberman, Jack **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/14/2019

ECE90008: Intro to Circuits w/MM (NExT) Section ID: 142339
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Muralidharan, Manju **Status:** Active
Instructional Method: InClass **Start Date:** 11/2/2019 | **End Date:** 11/2/2019

EDS117: Language,Culture & Education Section ID: 145547
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

EDS117: Language,Culture & Education Section ID: 145548
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

EDUC30008: US Constitution/Prep & Exam Section ID: 142765
Department: Education **Course Fees:** \$ 175
Instructor: Pluciennik, Dale Z **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 10/25/2019

EDUC30008: US Constitution/Prep & Exam Section ID: 142766
Department: Education **Course Fees:** \$ 175
Instructor: Pluciennik, Dale Z **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/22/2019

EDUC30057: Persp. Health Educ/Teacher Section ID: 142744
Department: Education **Course Fees:** \$ 275
Instructor: MCCORMICK, JOE **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/11/2019

EDUC30057: Persp. Health Educ/Teacher Section ID: 142745
Department: Education **Course Fees:** \$ 275
Instructor: Romo, Ylianna **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC30057: Persp. Health Educ/Teacher Section ID: 142746
Department: Education **Course Fees:** \$ 275
Instructor: MCCORMICK, JOE **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 10/25/2019

EDUC30057: Persp. Health Educ/Teacher Section ID: 142747
Department: Education **Course Fees:** \$ 275
Instructor: Romo, Ylianna **Status:** Active

Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/1/2019

EDUC30057: Persp. Health Educ/Teacher Section ID: 142748
Department: Education **Course Fees:** \$ 275
Instructor: Vice, William E **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/8/2019

EDUC30057: Persp. Health Educ/Teacher Section ID: 142749
Department: Education **Course Fees:** \$ 275
Instructor: MCCORMICK, JOE **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/22/2019

EDUC30057: Persp. Health Educ/Teacher Section ID: 142750
Department: Education **Course Fees:** \$ 275
Instructor: Vice, William E **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 11/29/2019

EDUC30057: Persp. Health Educ/Teacher Section ID: 142751
Department: Education **Course Fees:** \$ 275
Instructor: Romo, Ylianna **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/6/2019

EDUC30057: Persp. Health Educ/Teacher Section ID: 142752
Department: Education **Course Fees:** \$ 275
Instructor: MCCORMICK, JOE **Status:** Active
Instructional Method: OnLine **Start Date:** 11/25/2019 | **End Date:** 12/13/2019

EDUC30145: The Reading Process Section ID: 142762
Department: Education **Course Fees:** \$ 480
Instructor: Morrison, Kimberly Ann **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/18/2019

EDUC30145: The Reading Process Section ID: 142763
Department: Education **Course Fees:** \$ 480
Instructor: Witmer, Tina K **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/1/2019

EDUC30145: The Reading Process Section ID: 142764
Department: Education **Course Fees:** \$ 480
Instructor: Morrison, Kimberly Ann **Status:** Active

Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/29/2019

EDUC30145: The Reading Process Section ID: 142990
Department: Education **Course Fees:** \$ 480
Instructor: Morrison, Kimberly Ann **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/13/2019

EDUC30146: Mainstreaming/Special Child Section ID: 142756
Department: Education **Course Fees:** \$ 480
Instructor: MARRONE, MARIA D **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/25/2019

EDUC30146: Mainstreaming/Special Child Section ID: 142757
Department: Education **Course Fees:** \$ 480
Instructor: Levine, Harriet **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/8/2019

EDUC30146: Mainstreaming/Special Child Section ID: 142758
Department: Education **Course Fees:** \$ 480
Instructor: Edwards, Kathleen M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/15/2019

EDUC30146: Mainstreaming/Special Child Section ID: 142759
Department: Education **Course Fees:** \$ 480
Instructor: MARRONE, MARIA D **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/29/2019

EDUC30146: Mainstreaming/Special Child Section ID: 142760
Department: Education **Course Fees:** \$ 480
Instructor: Edwards, Kathleen M **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

EDUC30146: Mainstreaming/Special Child Section ID: 142761
Department: Education **Course Fees:** \$ 480
Instructor: Edwards, Kathleen M **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/13/2019

EDUC30150: Integ Tech in Educ K-12 Lev 1 Section ID: 142753
Department: Education **Course Fees:** \$ 480
Instructor: MCCORMICK, LAURA J **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/18/2019

Instructor: BRIDI, JULIA **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/15/2019

EDUC30150: Integ Tech in Educ K-12 Lev 1 **Section ID:** 142754

EDUC30789: ILP for Induction II **Section ID:** 142792

Department: Education **Course Fees:** \$ 480
Instructor: MCCORMICK, LAURA J **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/13/2019

Department: Education **Course Fees:** \$ 600
Instructor: Pluciennik, Ruth A **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/13/2019

EDUC30151: Integ Tech in Educ K-12 Lev 2 **Section ID:** 142755

EDUC30789: ILP for Induction II **Section ID:** 142793

Department: Education **Course Fees:** \$ 480
Instructor: MCCORMICK, LAURA J **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/15/2019

Department: Education **Course Fees:** \$ 600
Instructor: Pluciennik, Ruth A **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/8/2019

EDUC30787: Induction Orientation **Section ID:** 142786

EDUC30789: ILP for Induction II **Section ID:** 143546

Department: Education **Course Fees:** \$ 500
Instructor: BRIDI, JULIA **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

Department: Education **Course Fees:** \$ 600
Instructor: BRIDI, JULIA **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/8/2019

EDUC30787: Induction Orientation **Section ID:** 142787

EDUC30790: ILP for Induction III **Section ID:** 142794

Department: Education **Course Fees:** \$ 500
Instructor: Kelley, Cynthia A **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/22/2019

Department: Education **Course Fees:** \$ 600
Instructor: BRIDI, JULIA **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC30788: ILP for Induction I **Section ID:** 142788

EDUC30791: ILP for Induction IV **Section ID:** 142795

Department: Education **Course Fees:** \$ 600
Instructor: BOLOGNA, LISA **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/15/2019

Department: Education **Course Fees:** \$ 600
Instructor: BRIDI, JULIA **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC30788: ILP for Induction I **Section ID:** 142789

EDUC30792: ILP for Induction V **Section ID:** 142796

Department: Education **Course Fees:** \$ 600
Instructor: BRIDI, JULIA **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/13/2019

Department: Education **Course Fees:** \$ 600
Instructor: BRIDI, JULIA **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC30788: ILP for Induction I **Section ID:** 142790

EDUC30793: Induction Portfolio **Section ID:** 142797

Department: Education **Course Fees:** \$ 600
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/13/2019

Department: Education **Course Fees:** \$ 500
Instructor: BRIDI, JULIA **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC30789: ILP for Induction II **Section ID:** 142791

EDUC30794: Design ILP, T1 **Section ID:** 142802

Department: Education **Course Fees:** \$ 600

Department: Education **Course Fees:** \$ 300
Instructor: BRIDI, JULIA **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/18/2019

EDUC30794: Design ILP, T1 **Section ID: 142803**
Department: Education **Course Fees:** \$ 300
Instructor: Pluciennik, Ruth A **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

EDUC30795: Overview for Induction SBM **Section ID: 142804**
Department: Education **Course Fees:** \$ 0
Instructor: Romo, Ylianna **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 10/18/2019

EDUC30795: Overview for Induction SBM **Section ID: 142805**
Department: Education **Course Fees:** \$ 0
Instructor: Romo, Ylianna **Status:** Active
Instructional Method: OnLine **Start Date:** 12/2/2019 | **End Date:** 12/13/2019

EDUC30796: SBM Training for Induction I **Section ID: 142806**
Department: Education **Course Fees:** \$ 0
Instructor: Miller, Peggy **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 10/25/2019

EDUC30796: SBM Training for Induction I **Section ID: 142807**
Department: Education **Course Fees:** \$ 0
Instructor: Miller, Peggy **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/22/2019

EDUC30797: SBM Training for Induction II **Section ID: 142808**
Department: Education **Course Fees:** \$ 0
Instructor: Miller, Peggy **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 10/25/2019

EDUC30797: SBM Training for Induction II **Section ID: 142809**
Department: Education **Course Fees:** \$ 0
Instructor: LaQua, Stephanie M **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/22/2019

EDUC31217: Culture and Inclusion **Section ID: 142704**
Department: Education **Course Fees:** \$ 475
Instructor: Bastian, Toni M **Status:** Active

Instructional Method: OnLine **Start Date:** 9/2/2019 | **End Date:** 9/27/2019

EDUC31217: Culture and Inclusion **Section ID: 142705**
Department: Education **Course Fees:** \$ 475
Instructor: Pluciennik, Dale Z **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/18/2019

EDUC31217: Culture and Inclusion **Section ID: 142706**
Department: Education **Course Fees:** \$ 475
Instructor: Alderson, Sue **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/1/2019

EDUC31217: Culture and Inclusion **Section ID: 142707**
Department: Education **Course Fees:** \$ 475
Instructor: Chell, Heather **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/15/2019

EDUC31217: Culture and Inclusion **Section ID: 142708**
Department: Education **Course Fees:** \$ 475
Instructor: Pluciennik, Dale Z **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC31217: Culture and Inclusion **Section ID: 142709**
Department: Education **Course Fees:** \$ 475
Instructor: Brown, Carrie A **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/29/2019

EDUC31217: Culture and Inclusion **Section ID: 142710**
Department: Education **Course Fees:** \$ 475
Instructor: Brown, Carrie A **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

EDUC31217: Culture and Inclusion **Section ID: 142711**
Department: Education **Course Fees:** \$ 475
Instructor: Alderson, Sue **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/13/2019

EDUC31218: Language/Language Development **Section ID: 142712**
Department: Education **Course Fees:** \$ 475
Instructor: LaQua, Stephanie M **Status:** Active

Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/25/2019

EDUC31218: Language/Language Development **Section ID:** 142713

Department: Education **Course Fees:** \$ 475
Instructor: Charbonneau, Lisa M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/8/2019

EDUC31218: Language/Language Development **Section ID:** 142714

Department: Education **Course Fees:** \$ 475
Instructor: LaQua, Stephanie M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC31218: Language/Language Development **Section ID:** 142715

Department: Education **Course Fees:** \$ 475
Instructor: LaQua, Stephanie M **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/29/2019

EDUC31218: Language/Language Development **Section ID:** 142716

Department: Education **Course Fees:** \$ 475
Instructor: OLER, DEBORAH S **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

EDUC31218: Language/Language Development **Section ID:** 142717

Department: Education **Course Fees:** \$ 475
Instructor: OLER, DEBORAH S **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/13/2019

EDUC31219: Assessment of English Learners **Section ID:** 142718

Department: Education **Course Fees:** \$ 425
Instructor: Engers, Debra **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC31219: Assessment of English Learners **Section ID:** 142719

Department: Education **Course Fees:** \$ 425
Instructor: Lambert, Kristie **Status:** Active

Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/1/2019

EDUC31219: Assessment of English Learners **Section ID:** 142720

Department: Education **Course Fees:** \$ 425
Instructor: Colapinto, Perry **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/10/2019

EDUC31219: Assessment of English Learners **Section ID:** 142721

Department: Education **Course Fees:** \$ 425
Instructor: Lambert, Kristie **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/22/2019

EDUC31219: Assessment of English Learners **Section ID:** 142722

Department: Education **Course Fees:** \$ 425
Instructor: Mancina, Carmen **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/6/2019

EDUC31220: Foundations/Methods of Eng Dev **Section ID:** 142723

Department: Education **Course Fees:** \$ 680
Instructor: LaQua, Stephanie M **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/1/2019

EDUC31220: Foundations/Methods of Eng Dev **Section ID:** 142724

Department: Education **Course Fees:** \$ 680
Instructor: Lambert, Kristie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/8/2019

EDUC31220: Foundations/Methods of Eng Dev **Section ID:** 142725

Department: Education **Course Fees:** \$ 680
Instructor: Colapinto, Perry **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/15/2019

EDUC31220: Foundations/Methods of Eng Dev **Section ID:** 142726

Department: Education **Course Fees:** \$ 680
Instructor: Lambert, Kristie **Status:** Active

Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC31220: Foundations/Methods of Eng Dev Section ID: 142727

Department: Education **Course Fees:** \$ 680
Instructor: Lambert, Kristie **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 12/6/2019

EDUC31220: Foundations/Methods of Eng Dev Section ID: 142728

Department: Education **Course Fees:** \$ 680
Instructor: Lambert, Kristie **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/13/2019

EDUC31221: CTEL Portfolio Section ID: 142729

Department: Education **Course Fees:** \$ 175
Instructor: Appel, Morgan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/11/2019

EDUC31221: CTEL Portfolio Section ID: 142730

Department: Education **Course Fees:** \$ 175
Instructor: Appel, Morgan **Status:** Active
Instructional Method: OnLine **Start Date:** 12/2/2019 | **End Date:** 12/13/2019

EDUC31300: Orientation: CLAD Through CTCL Section ID: 142702

Department: Education **Course Fees:** \$ 40
Instructor: Duncan, Amy **Status:** Active
Instructional Method: OnLine **Start Date:** 10/2/2019 | **End Date:** 10/4/2019

EDUC31300: Orientation: CLAD Through CTCL Section ID: 142703

Department: Education **Course Fees:** \$ 40
Instructor: Leroux-Lindsey, Natalie **Status:** Active
Instructional Method: OnLine **Start Date:** 12/4/2019 | **End Date:** 12/6/2019

EDUC31356: Collab & Support, Effect Tch Section ID: 142772

Department: Education **Course Fees:** \$ 425
Instructor: Chell, Heather **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 5/1/2020

EDUC31356: Collab & Support, Effect Tch Section ID: 142991

Department: Education **Course Fees:** \$ 425
Instructor: Chell, Heather **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 5/1/2020

EDUC31357: Pedagogy f/Effective Teaching Section ID: 142773

Department: Education **Course Fees:** \$ 495
Instructor: Montes De Oca, Kelly S **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC31357: Pedagogy f/Effective Teaching Section ID: 142774

Department: Education **Course Fees:** \$ 495
Instructor: Montes De Oca, Kelly S **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC31358: Equitable&Inclusive Lrn Envirn Section ID: 142775

Department: Education **Course Fees:** \$ 495
Instructor: Bastian, Toni M **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/25/2019

EDUC31359: Teaching English Learners Section ID: 142776

Department: Education **Course Fees:** \$ 495
Instructor: LaQua, Stephanie M **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/25/2019

EDUC31360: Teaching Special Populations Section ID: 142777

Department: Education **Course Fees:** \$ 495
Instructor: MARRONE, MARIA D **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/18/2019

EDUC31361: Clear Credential Portfolio Section ID: 142779

Department: Education **Course Fees:** \$ 175
Instructor: Chell, Heather **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/22/2019

EDUC31415: R&L: Culture of Literacy Section ID: 142738

Department: Education **Course Fees:** \$ 495
Instructor: OLER, DEBORAH S **Status:** Active

Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/1/2019

EDUC31415: R&L: Culture of Literacy **Section ID: 143763**
Department: Education **Course Fees:** \$ 495
Instructor: OLER, DEBORAH S **Status:** Active
Instructional Method: Blended **Start Date:** 9/16/2019 | **End Date:** 10/18/2019

EDUC31416: R&L: Assess, Inter, & Instruct **Section ID: 142739**
Department: Education **Course Fees:** \$ 495
Instructor: McDuffie, Regina **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

EDUC31416: R&L: Assess, Inter, & Instruct **Section ID: 143764**
Department: Education **Course Fees:** \$ 495
Instructor: OLER, DEBORAH S **Status:** Active
Instructional Method: Blended **Start Date:** 10/21/2019 | **End Date:** 11/22/2019

EDUC31417: R&L: Resrch, Instruct, & Inter **Section ID: 142740**
Department: Education **Course Fees:** \$ 495
Instructor: Levine, Harriet **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/1/2019

EDUC31418: R&L: Pln,Org& Prd Ltrcy Instrc **Section ID: 142741**
Department: Education **Course Fees:** \$ 680
Instructor: Levine, Harriet **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/13/2019

EDUC31419: Reading & Literacy Portfolio **Section ID: 142742**
Department: Education **Course Fees:** \$ 175
Instructor: OLER, DEBORAH S **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/1/2019

EDUC31510: K-12 Pedagogy for Teachers **Section ID: 142781**
Department: Education **Course Fees:** \$ 495
Instructor: Levine, Harriet **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/8/2019

EDUC31537: Teach Read, beginning readers **Section ID: 142767**
Department: Education **Course Fees:** \$ 480

Instructor: Bastian, Toni M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/15/2019

EDUC31584: Brain-Compatible Learning **Section ID: 143101**
Department: Education **Course Fees:** \$ 0
Instructor: Appel, Morgan **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/15/2019

EDUC31591: Instrctnl Strategies, w/ **Section ID: 142679**
Department: Education **Course Fees:** \$ 495
Instructor: Edwards, Kathleen M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/15/2019

EDUC31592: P Behavior Spprt, w/ASD **Section ID: 142680**
Department: Education **Course Fees:** \$ 495
Instructor: Edwards, Kathleen M **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/13/2019

EDUC31610: Socio-Emotional Needs **Section ID: 142997**
Department: Education **Course Fees:** \$ 200
Instructor: Appel, Morgan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/13/2019

EDUC31610: Socio-Emotional Needs **Section ID: 143109**
Department: Education **Course Fees:** \$ 0
Instructor: Appel, Morgan **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/13/2019

EDUC31682: SUHSD TeacherInductionQ6 **Section ID: 145206**
Department: Education **Course Fees:** \$ 49.5
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 12/9/2019 | **End Date:** 12/13/2019

EDUC31690: SBM Training Induction IIII **Section ID: 142811**
Department: Education **Course Fees:** \$ 0
Instructor: Miller, Peggy **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/1/2019

EDUC31691: SBM Training for Induction IV **Section ID: 142812**
Department: Education **Course Fees:** \$ 0

Instructor: Edwards, Kathleen M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/1/2019

EDUC31692: SBM Training for Induction V **Section ID: 142813**
Department: Education **Course Fees:** \$ 0
Instructor: Edwards, Kathleen M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/1/2019

EDUC31693: SBM Induction Debrief **Section ID: 142814**
Department: Education **Course Fees:** \$ 0
Instructor: Miller, Peggy **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/1/2019

EDUC31694: Overview for Induction SBP **Section ID: 142816**
Department: Education **Course Fees:** \$ 0
Instructor: Romo, Ylianna **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 10/18/2019

EDUC31694: Overview for Induction SBP **Section ID: 142817**
Department: Education **Course Fees:** \$ 0
Instructor: Romo, Ylianna **Status:** Active
Instructional Method: OnLine **Start Date:** 12/2/2019 | **End Date:** 12/13/2019

EDUC31695: Develop ILP, T2 **Section ID: 142818**
Department: Education **Course Fees:** \$ 500
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/18/2019

EDUC31695: Develop ILP, T2 **Section ID: 142819**
Department: Education **Course Fees:** \$ 500
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/18/2019

EDUC31695: Develop ILP, T2 **Section ID: 142820**
Department: Education **Course Fees:** \$ 500
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

EDUC31695: Develop ILP, T2 **Section ID: 142821**
Department: Education **Course Fees:** \$ 500
Instructor: **Status:** Active

Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

EDUC31696: Continuum of TP for ILP I **Section ID: 142822**
Department: Education **Course Fees:** \$ 500
Instructor: Enriquez, Patricia **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/8/2019

EDUC31696: Continuum of TP for ILP I **Section ID: 142823**
Department: Education **Course Fees:** \$ 500
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/15/2019

EDUC31696: Continuum of TP for ILP I **Section ID: 142824**
Department: Education **Course Fees:** \$ 500
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/13/2019

EDUC31696: Continuum of TP for ILP I **Section ID: 142825**
Department: Education **Course Fees:** \$ 500
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/13/2019

EDUC31697: Continuum of TP for ILP II **Section ID: 142826**
Department: Education **Course Fees:** \$ 500
Instructor: Enriquez, Patricia **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/8/2019

EDUC31697: Continuum of TP for ILP II **Section ID: 142827**
Department: Education **Course Fees:** \$ 500
Instructor: Conners,Carolynn **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/8/2019

EDUC31697: Continuum of TP for ILP II **Section ID: 142828**
Department: Education **Course Fees:** \$ 500
Instructor: Pluciennik, Ruth A **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/8/2019

EDUC31697: Continuum of TP for ILP II **Section ID: 142829**
Department: Education **Course Fees:** \$ 500
Instructor: Presby, Robert E. **Status:** Active

Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/8/2019

EDUC31697: Continuum of TP for ILP II **Section ID: 143780**
Department: Education **Course Fees:** \$ 500
Instructor: Pluciennik, Dale Z **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/8/2019

EDUC31698: Continuum of TP for ILP III **Section ID: 142830**
Department: Education **Course Fees:** \$ 500
Instructor: Pluciennik, Ruth A **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC31698: Continuum of TP for ILP III **Section ID: 143519**
Department: Education **Course Fees:** \$ 500
Instructor: Pluciennik, Dale Z **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC31698: Continuum of TP for ILP III **Section ID: 143524**
Department: Education **Course Fees:** \$ 500
Instructor: Charbonneau, Lisa M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC31699: Continuum of TP for ILP IV **Section ID: 142831**
Department: Education **Course Fees:** \$ 500
Instructor: Young, Karen **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC31699: Continuum of TP for ILP IV **Section ID: 143503**
Department: Education **Course Fees:** \$ 500
Instructor: BRIDI, JULIA **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC31700: Continuum of TP for ILP V **Section ID: 142832**
Department: Education **Course Fees:** \$ 500
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC31701: Overview for Induction UBM **Section ID: 142815**
Department: Education **Course Fees:** \$ 0
Instructor: Duncan, Amy **Status:** Active

Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 10/25/2019

EDUC40090: Tchg Gifted/Recog Indiv Diff **Section ID: 142671**
Department: Education **Course Fees:** \$ 385
Instructor: Presby, Robert E. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/25/2019

EDUC40090: Tchg Gifted/Recog Indiv Diff **Section ID: 142672**
Department: Education **Course Fees:** \$ 385
Instructor: Presby, Robert E. **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40091: Current Issues in Adult Educ **Section ID: 142645**
Department: Education **Course Fees:** \$ 245
Instructor: Miller, Peggy **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/6/2019

EDUC40093: Intro/Tchg English as Sec Lang **Section ID: 142648**
Department: Education **Course Fees:** \$ 385
Instructor: Lambert, Kristie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/25/2019

EDUC40096: Foundations of Adult Learning **Section ID: 142644**
Department: Education **Course Fees:** \$ 385
Instructor: Young, Karen **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/25/2019

EDUC40099: GATE/Differenting/Curriculum **Section ID: 142669**
Department: Education **Course Fees:** \$ 385
Instructor: BOLOGNA, LISA **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/1/2019

EDUC40099: GATE/Differenting/Curriculum **Section ID: 142670**
Department: Education **Course Fees:** \$ 385
Instructor: BOLOGNA, LISA **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

EDUC40100: Program Development/Gifted Section ID: **142675**

Department: Education **Course Fees:** \$ 385
Instructor: Montes De Oca, Kelly S **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/8/2019

EDUC40100: Program Development/Gifted Section ID: **142676**

Department: Education **Course Fees:** \$ 385
Instructor: Montes De Oca, Kelly S **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/13/2019

EDUC40101: Strategies/Tch Gifted/Talented Section ID: **142673**

Department: Education **Course Fees:** \$ 385
Instructor: Young, Karen **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/18/2019

EDUC40101: Strategies/Tch Gifted/Talented Section ID: **142674**

Department: Education **Course Fees:** \$ 385
Instructor: Young, Karen **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/15/2019

EDUC40102: NxtGenScienceStandardsK12 Section ID: **145364**

Department: Education **Course Fees:** \$ 120
Instructor: Mabe, Brittany **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40104: MathProblemSolvingGr6-8 Section ID: **145425**

Department: Education **Course Fees:** \$ 120
Instructor: Mabe, Brittany **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40105: GoogleClassroomK12 Section ID: **145413**

Department: Education **Course Fees:** \$ 120
Instructor: McFadden, Lauren **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40106: Teaching Stem w/ the 5 Es Section ID: **142683**

Department: Education **Course Fees:** \$ 195
Instructor: Cochrane, Chelsea J **Status:** Active

Instructional Method: OnLine **Start Date:** 12/2/2019 | **End Date:** 12/13/2019

EDUC40111: Prep ELL for Success (K6) Section ID: **145365**

Department: Education **Course Fees:** \$ 120
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40112: STEMandNGSSPrimaryLevel(K-2) Section ID: **145330**

Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40113: LAUSD Module 1: BCL Section ID: **144686**

Department: Education **Course Fees:** \$ 200
Instructor: Appel, Morgan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/18/2019

EDUC40114: LAUSD Module 2: SEC Section ID: **144687**

Department: Education **Course Fees:** \$ 200
Instructor: Appel, Morgan **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40115: LAUSD Module 3: Practicum Section ID: **144688**

Department: Education **Course Fees:** \$ 200
Instructor: Appel, Morgan **Status:** Active
Instructional Method: OnLine **Start Date:** 12/2/2019 | **End Date:** 12/27/2019

EDUC40122: UnleashingPowerNGSSandSTEM(3-5) Section ID: **145332**

Department: Education **Course Fees:** \$ 120
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40127: EngageMotivateManageStuds4-8 Section ID: **145334**

Department: Education **Course Fees:** \$ 120
Instructor: Donaldson, Fallon **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40129: CharacterEd21stCenturyK12 Section ID: **145331**

Department: Education **Course Fees:** \$ 120
Instructor: Lambert, Jennifer **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40130: Principles College Counseling **Section ID:** 142657
Department: Education **Course Fees:** \$ 675
Instructor: Dendy, Katherine (Kate) **Status:** Active
Instructional Method: OnLine **Start Date:** 8/19/2019 | **End Date:** 9/27/2019

EDUC40130: Principles College Counseling **Section ID:** 142658
Department: Education **Course Fees:** \$ 675
Instructor: Hornor, Tara **Status:** Active
Instructional Method: OnLine **Start Date:** 8/26/2019 | **End Date:** 10/4/2019

EDUC40130: Principles College Counseling **Section ID:** 142659
Department: Education **Course Fees:** \$ 675
Instructor: MERCER, STEVEN L **Status:** Active
Instructional Method: OnLine **Start Date:** 9/2/2019 | **End Date:** 10/11/2019

EDUC40131: Strategies/College Counseling **Section ID:** 142660
Department: Education **Course Fees:** \$ 385
Instructor: Stewart, Wendy C **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/15/2019

EDUC40131: Strategies/College Counseling **Section ID:** 142661
Department: Education **Course Fees:** \$ 385
Instructor: Hornor, Tara **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40131: Strategies/College Counseling **Section ID:** 142662
Department: Education **Course Fees:** \$ 385
Instructor: Stewart, Wendy C **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/13/2019

EDUC40132: College Counseling Practicum **Section ID:** 142664
Department: Education **Course Fees:** \$ 385
Instructor: Dendy, Katherine (Kate) **Status:** Active

Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/22/2019

EDUC40132: College Counseling Practicum **Section ID:** 142665

Department: Education **Course Fees:** \$ 385
Instructor: Hornor, Tara **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/6/2019

EDUC40132: College Counseling Practicum **Section ID:** 142666

Department: Education **Course Fees:** \$ 385
Instructor: Hornor, Tara **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 12/13/2019

EDUC40138: Responsive Classroom Manag K-3 **Section ID:** 145335

Department: Education **Course Fees:** \$ 120
Instructor: Hays, Crystal **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40140: CllsrmMgntStrategiesHS **Section ID:** 145432

Department: Education **Course Fees:** \$ 120
Instructor: McFadden, Lauren **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40144: The Daily Five **Section ID:** 145333

Department: Education **Course Fees:** \$ 120
Instructor: Lambert, Jennifer **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40145: VocabBuildingStrategiesGr4-12 **Section ID:** 145431

Department: Education **Course Fees:** \$ 120
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40148: MasteringGoogleAppsforEducK12 **Section ID:** 145434

Department: Education **Course Fees:** \$ 120
Instructor: Mabe, Brittany **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40154: Mindful&SocialEmoLearning(K12) Section ID: 145435

Department: Education **Course Fees:** \$ 120
Instructor: McFadden, Lauren **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40155: MindfulSocialEmoLearning1.5 Section ID: 145329

Department: Education **Course Fees:** \$ 37
Instructor: Chavez, Caryn M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40156: Time/Task: Classroom Mgmt Section ID: 142684

Department: Education **Course Fees:** \$ 175
Instructor: Brown, Carrie A **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/1/2019

EDUC40159: PreparingSpecialNeeds(K3) Section ID: 145430

Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40162: Data-Driven Instruction (K-12) Section ID: 145436

Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40175: Ignite Stdnt Interest STEAM UE Section ID: 142681

Department: Education **Course Fees:** \$ 385
Instructor: Cochrane, Chelsea J **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40177: MotivatingEngagingGrds6-12 Section ID: 145445

Department: Education **Course Fees:** \$ 120
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40183: ES Induction Orientation Section ID: 142833

Department: Education **Course Fees:** \$ 450

Instructor: Bennett, Julia **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40183: ES Induction Orientation Section ID: 142834

Department: Education **Course Fees:** \$ 450
Instructor: Galaviz, Meridith Jucovics **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40183: ES Induction Orientation Section ID: 142835

Department: Education **Course Fees:** \$ 450
Instructor: Evans, Karen Suzanne **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40183: ES Induction Orientation Section ID: 142836

Department: Education **Course Fees:** \$ 450
Instructor: Brown, Carrie A **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40183: ES Induction Orientation Section ID: 142837

Department: Education **Course Fees:** \$ 450
Instructor: Young, Karen **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40183: ES Induction Orientation Section ID: 142838

Department: Education **Course Fees:** \$ 450
Instructor: Levine, Harriet **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40183: ES Induction Orientation Section ID: 142839

Department: Education **Course Fees:** \$ 450
Instructor: Chell, Heather **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40183: ES Induction Orientation Section ID: 142842

Department: Education **Course Fees:** \$ 450
Instructor: Montgomery, Maria **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40184: ES Design ILP, T1 Section ID: 142843

Department: Education **Course Fees:** \$ 350
Instructor: Bennett, Julia **Status:** Active

Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40184: ES Design ILP, T1 **Section ID: 142844**
Department: Education **Course Fees:** \$ 350
Instructor: Evans, Karen Suzanne **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40184: ES Design ILP, T1 **Section ID: 142845**
Department: Education **Course Fees:** \$ 350
Instructor: Brown, Carrie A **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40184: ES Design ILP, T1 **Section ID: 142846**
Department: Education **Course Fees:** \$ 350
Instructor: Young, Karen **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40184: ES Design ILP, T1 **Section ID: 142847**
Department: Education **Course Fees:** \$ 350
Instructor: Levine, Harriet **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40184: ES Design ILP, T1 **Section ID: 142848**
Department: Education **Course Fees:** \$ 350
Instructor: Chell, Heather **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40184: ES Design ILP, T1 **Section ID: 142849**
Department: Education **Course Fees:** \$ 350
Instructor: OLER, DEBORAH S **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40184: ES Design ILP, T1 **Section ID: 142850**
Department: Education **Course Fees:** \$ 350
Instructor: Lambert, Kristie **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40184: ES Design ILP, T1 **Section ID: 142851**
Department: Education **Course Fees:** \$ 350
Instructor: Montgomery, Maria **Status:** Active

Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40184: ES Design ILP, T1 **Section ID: 142852**
Department: Education **Course Fees:** \$ 350
Instructor: Galaviz, Meridith Jucovics **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40187: ES ILP for Induction III **Section ID: 142853**
Department: Education **Course Fees:** \$ 550
Instructor: Bennett, Julia **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40187: ES ILP for Induction III **Section ID: 142854**
Department: Education **Course Fees:** \$ 550
Instructor: Galaviz, Meridith Jucovics **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40187: ES ILP for Induction III **Section ID: 142855**
Department: Education **Course Fees:** \$ 550
Instructor: Evans, Karen Suzanne **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40187: ES ILP for Induction III **Section ID: 142856**
Department: Education **Course Fees:** \$ 550
Instructor: Brown, Carrie A **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40187: ES ILP for Induction III **Section ID: 142857**
Department: Education **Course Fees:** \$ 550
Instructor: Young, Karen **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40187: ES ILP for Induction III **Section ID: 142858**
Department: Education **Course Fees:** \$ 550
Instructor: Levine, Harriet **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40187: ES ILP for Induction III **Section ID: 142859**
Department: Education **Course Fees:** \$ 550
Instructor: Chell, Heather **Status:** Active

Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40187: ES ILP for Induction III **Section ID: 142860**
Department: Education **Course Fees:** \$ 550
Instructor: OLER, DEBORAH S **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40187: ES ILP for Induction III **Section ID: 142861**
Department: Education **Course Fees:** \$ 550
Instructor: Lambert, Jennifer **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40187: ES ILP for Induction III **Section ID: 142862**
Department: Education **Course Fees:** \$ 550
Instructor: McDuffie, Regina **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40191: ES Overview for Induction SBM **Section ID: 142863**
Department: Education **Course Fees:** \$ 0
Instructor: Bennett, Julia **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/11/2019

EDUC40191: ES Overview for Induction SBM **Section ID: 142864**
Department: Education **Course Fees:** \$ 0
Instructor: Galaviz, Meridith Jucovics **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40191: ES Overview for Induction SBM **Section ID: 142865**
Department: Education **Course Fees:** \$ 0
Instructor: Evans, Karen Suzanne **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40191: ES Overview for Induction SBM **Section ID: 142866**
Department: Education **Course Fees:** \$ 0
Instructor: Brown, Carrie A **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40191: ES Overview for Induction SBM **Section ID: 142867**

Department: Education **Course Fees:** \$ 0
Instructor: Young, Karen **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40191: ES Overview for Induction SBM **Section ID: 142868**

Department: Education **Course Fees:** \$ 0
Instructor: Levine, Harriet **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40191: ES Overview for Induction SBM **Section ID: 142869**

Department: Education **Course Fees:** \$ 0
Instructor: Chell, Heather **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40191: ES Overview for Induction SBM **Section ID: 142872**

Department: Education **Course Fees:** \$ 0
Instructor: Montgomery, Maria **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

EDUC40194: ES SBM Train for Induction III **Section ID: 142883**

Department: Education **Course Fees:** \$ 0
Instructor: Bennett, Julia **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40194: ES SBM Train for Induction III **Section ID: 142884**

Department: Education **Course Fees:** \$ 0
Instructor: Galaviz, Meridith Jucovics **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40194: ES SBM Train for Induction III **Section ID: 142885**

Department: Education **Course Fees:** \$ 0
Instructor: Evans, Karen Suzanne **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40194: ES SBM Train for Induction III **Section ID: 142886**

Department: Education **Course Fees:** \$ 0
Instructor: Brown, Carrie A **Status:** Active

Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40194: ES SBM Train for Induction III **Section ID: 142887**

Department: Education **Course Fees:** \$ 0
Instructor: Young, Karen **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40194: ES SBM Train for Induction III **Section ID: 142888**

Department: Education **Course Fees:** \$ 0
Instructor: Levine, Harriet **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40194: ES SBM Train for Induction III **Section ID: 142889**

Department: Education **Course Fees:** \$ 0
Instructor: Chell, Heather **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40194: ES SBM Train for Induction III **Section ID: 142890**

Department: Education **Course Fees:** \$ 0
Instructor: OLER, DEBORAH S **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40194: ES SBM Train for Induction III **Section ID: 142891**

Department: Education **Course Fees:** \$ 0
Instructor: Lambert, Kristie **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40194: ES SBM Train for Induction III **Section ID: 142892**

Department: Education **Course Fees:** \$ 0
Instructor: McDuffie, Regina **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/29/2019

EDUC40198: LGBTQIA Symposium **Section ID: 143932**

Department: Education **Course Fees:** \$ 82.5
Instructor: Appel, Morgan **Status:** Active
Instructional Method: InClass **Start Date:** 9/30/2019 | **End Date:** 10/21/2019

EDUC40199: IC ES Induction Orientation **Section ID: 145447**

Department: Education **Course Fees:** \$ 165
Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40207: IC ES Overview for Induction **Section ID: 145448**

Department: Education **Course Fees:** \$ 82.5
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40221: ImpWrkpModelWrtgReadMathSci4-8 **Section ID: 145339**

Department: Education **Course Fees:** \$ 120
Instructor: Varner, Wendy L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40222: Departmentalized ELD K-12 **Section ID: 142734**

Department: Education **Course Fees:** \$ 735
Instructor: Charbonneau, Lisa M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/1/2019

EDUC40222: Departmentalized ELD K-12 **Section ID: 142735**

Department: Education **Course Fees:** \$ 735
Instructor: Charbonneau, Lisa M **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

EDUC40223: MathFoundationalSkillsK3 **Section ID: 145437**

Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40224: Preventing Bullying in HS **Section ID: 145438**

Department: Education **Course Fees:** \$ 120
Instructor: McFadden, Lauren **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40241: TCH COMP THNKG EVERY **Section ID: 143093**

Department: Education **Course Fees:** \$ 660
Instructor: Simon, Elizabeth Ann **Status:** Active
Instructional Method: InClass **Start Date:** 10/1/2019 | **End Date:** 10/31/2019

EDUC40241: TCH COMP THNKG EVERY **Section ID: 143094**

Department: Education **Course Fees:** \$ 660
Instructor: Simon, Elizabeth Ann **Status:** Active

Instructional Method: InClass **Start Date:** 11/1/2019 | **End Date:** 11/30/2019

EDUC40241: TCH COMP THNKG EVERY **Section ID: 143095**

Department: Education **Course Fees:** \$ 660
Instructor: Simon, Elizabeth Ann **Status:** Active
Instructional Method: InClass **Start Date:** 12/1/2019 | **End Date:** 12/31/2019

EDUC40242: TCH COMP DIG WLD **Section ID: 143222**

Department: Education **Course Fees:** \$ 660
Instructor: Simon, Elizabeth Ann **Status:** Active
Instructional Method: InClass **Start Date:** 10/1/2019 | **End Date:** 10/31/2019

EDUC40242: TCH COMP DIG WLD **Section ID: 143223**

Department: Education **Course Fees:** \$ 660
Instructor: Simon, Elizabeth Ann **Status:** Active
Instructional Method: InClass **Start Date:** 11/1/2019 | **End Date:** 11/30/2019

EDUC40242: TCH COMP DIG WLD **Section ID: 143224**

Department: Education **Course Fees:** \$ 660
Instructor: Simon, Elizabeth Ann **Status:** Active
Instructional Method: InClass **Start Date:** 12/1/2019 | **End Date:** 12/31/2019

EDUC40245: InterventionsStrgglReaderGr4-6 **Section ID: 145439**

Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40247: CulturallyResponsiveTeaching **Section ID: 145340**

Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40248: Ethics of College Counseling **Section ID: 143828**

Department: Education **Course Fees:** \$ 390
Instructor: MERCER, STEVEN L **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 11/22/2019

EDUC40250: Adaptive Music in Sp Ed Conf **Section ID: 145590**

Department: Education **Course Fees:** \$ 82.5

Instructor: Baron, Jessica **Status:** Active

Instructional Method: InClass **Start Date:** 10/19/2019 | **End Date:** 10/26/2019

EDUC40252: TeachingWithPrimaryResources **Section ID: 142457**

Department: Education **Course Fees:** \$ 137.5
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 7/17/2019 | **End Date:** 7/19/2019

EDUC40255: Mentor ILP Review, Induction **Section ID: 142873**

Department: Education **Course Fees:** \$ 0
Instructor: Bennett, Julia **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40255: Mentor ILP Review, Induction **Section ID: 142874**

Department: Education **Course Fees:** \$ 0
Instructor: Galaviz, Meridith Jucovics **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40255: Mentor ILP Review, Induction **Section ID: 142875**

Department: Education **Course Fees:** \$ 0
Instructor: Evans, Karen Suzanne **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40255: Mentor ILP Review, Induction **Section ID: 142876**

Department: Education **Course Fees:** \$ 0
Instructor: Brown, Carrie A **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40255: Mentor ILP Review, Induction **Section ID: 142877**

Department: Education **Course Fees:** \$ 0
Instructor: Young, Karen **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40255: Mentor ILP Review, Induction **Section ID: 142878**

Department: Education **Course Fees:** \$ 0

Instructor: Levine, Harriet **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40255: Mentor ILP Review, Induction **Section ID:** 142879

Department: Education **Course Fees:** \$ 0
Instructor: Chell, Heather **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40255: Mentor ILP Review, Induction **Section ID:** 142880

Department: Education **Course Fees:** \$ 0
Instructor: OLER, DEBORAH S **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40255: Mentor ILP Review, Induction **Section ID:** 142881

Department: Education **Course Fees:** \$ 0
Instructor: Lambert, Kristie **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40255: Mentor ILP Review, Induction **Section ID:** 142882

Department: Education **Course Fees:** \$ 0
Instructor: Montgomery, Maria **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC40261: CriticalSocialEmoSkillsLitK-12 **Section ID:** 145442

Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40264: Guided Reading 101 **Section ID:** 145440

Department: Education **Course Fees:** \$ 120
Instructor: Goldman, Elizabeth B. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40267: Culturally Responsive Edu **Section ID:** 145589

Department: Education **Course Fees:** \$ 82.5
Instructor: Appel, Morgan **Status:** Active
Instructional Method: InClass **Start Date:** 11/23/2019 | **End Date:** 12/13/2019

EDUC40269: MultiSenseTeachSpecialNeedsK-5 **Section ID:** 145441

Department: Education **Course Fees:** \$ 120
Instructor: Goldman, Elizabeth B. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC40408: Tchg/Testg ESL Listeng/Speakg **Section ID:** 142649

Department: Education **Course Fees:** \$ 385
Instructor: Alca, Melanie **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/8/2019

EDUC40556: Teaching Community College **Section ID:** 142646

Department: Education **Course Fees:** \$ 245
Instructor: Kaufman, Amy **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 10/25/2019

EDUC40989: Intro to Online Learning **Section ID:** 142636

Department: Education **Course Fees:** \$ 245
Instructor: Stewart Jr, Michael D **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/18/2019

EDUC40989: Intro to Online Learning **Section ID:** 142637

Department: Education **Course Fees:** \$ 245
Instructor: Stewart Jr, Michael D **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

EDUC40990: Fdn Curic Dsgn Eval Adult Educ **Section ID:** 142638

Department: Education **Course Fees:** \$ 245
Instructor: Kaufman, Amy **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/18/2019

EDUC40990: Fdn Curic Dsgn Eval Adult Educ **Section ID:** 142639

Department: Education **Course Fees:** \$ 245
Instructor: Miller, Peggy **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

EDUC41231: Adv.CrclmDesignF/OnlineClstrm **Section ID:** 142642

Department: Education **Course Fees:** \$ 385
Instructor: Guptill, Anne **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/6/2019

EDUC41232: Teaching Online Practicum **Section ID: 142643**
Department: Education **Course Fees:** \$ 200
Instructor: Kaufman, Amy **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/13/2019

EDUC41233: CC Capstone Portfolio **Section ID: 142647**
Department: Education **Course Fees:** \$ 200
Instructor: Kaufman, Amy **Status:** Active
Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/13/2019

EDUC41323: MathSolutionsFirstGradeCCSS **Section ID: 145397**
Department: Education **Course Fees:** \$ 120
Instructor: Sukut, Stephanie L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41345: MultimediaProjectDesign&Devel **Section ID: 145407**
Department: Education **Course Fees:** \$ 120
Instructor: Varner, Wendy L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41382: Differentiation Sys Design I **Section ID: 142686**
Department: Education **Course Fees:** \$ 390
Instructor: Presby, Robert E. **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC41393: Implementing Counseling Prog **Section ID: 142667**
Department: Education **Course Fees:** \$ 390
Instructor: Dendy, Katherine (Kate) **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/1/2019

EDUC41412: Special Topics in GATE **Section ID: 143158**
Department: Education **Course Fees:** \$ 250
Instructor: Appel, Morgan **Status:** Active
Instructional Method: OnLine **Start Date:** 10/23/2019 | **End Date:** 11/17/2019

EDUC41433: Read Intrvntns Middle Grd Stds **Section ID: 145353**

Department: Education **Course Fees:** \$ 120
Instructor: Goldman, Elizabeth B. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41434: Teaching Real World Math **Section ID: 145355**
Department: Education **Course Fees:** \$ 120
Instructor: Richardson, Kymbria **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41435: Mkning Most of Internt in Clssrm **Section ID: 145362**

Department: Education **Course Fees:** \$ 120
Instructor: Benoy, Terry G. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41437: Implmnt K CmmnCore Read fr Lit **Section ID: 145379**

Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41438: Implmnt G1 CmnCore Read fr Lit **Section ID: 145381**

Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41439: Implmnt G2 CmnCore Read fr Lit **Section ID: 145382**

Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41440: Implmnt G3 CmnCore Read fr Lit **Section ID: 145384**

Department: Education **Course Fees:** \$ 120
Instructor: Goldman, Elizabeth B. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41441: Implmnt G4 CmnCore Read fr Lit **Section ID: 145389**

Department: Education **Course Fees:** \$ 120
Instructor: Goldman, Elizabeth B. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41442: Implmnt G5 CmnCore Read fr Lit **Section ID: 145390**

Department: Education **Course Fees:** \$ 120
Instructor: Varner, Wendy L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41443: Study Smarter Not Harder **Section ID: 145417**

Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41444: Positive Discipline, Clsrm Mng **Section ID: 145420**

Department: Education **Course Fees:** \$ 120
Instructor: Varner, Wendy L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41445: Prmry Grd Teacher Gd Pos Dscp **Section ID: 145421**

Department: Education **Course Fees:** \$ 120
Instructor: Richardson, Kymbria **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41446: A & H-O Science Instruction **Section ID: 145427**

Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41447: SDAIE Theory into Practice **Section ID: 145349**

Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41449: Intervention in Reading K-6 **Section ID: 145352**

Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41450: ReadingWkspApproachStudents4-8 **Section ID: 145354**

Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41452: Reading to Learn: DSRS 4-12 **Section ID: 145356**

Department: Education **Course Fees:** \$ 120
Instructor: Goldman, Elizabeth B. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41453: Eff Strategies f/New Teachers **Section ID: 145357**

Department: Education **Course Fees:** \$ 120
Instructor: Adamson, Sharie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41454: Use MS Excel in 3-12 Classroom **Section ID: 145338**

Department: Education **Course Fees:** \$ 37
Instructor: Chavez, Caryn M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41457: Fundamentals of Teaching ELD **Section ID: 145348**

Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41458: Imprv Student TestTaking Skills **Section ID: 145358**

Department: Education **Course Fees:** \$ 120
Instructor: Goldman, Elizabeth B. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41465: Strtgs Improve Student Writing **Section ID: 145370**

Department: Education **Course Fees:** \$ 120
Instructor: Varner, Wendy L. **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41466: Eftv Strts, Emrgnt/ Eryl Wrtrs **Section ID: 145372**

Department: Education **Course Fees:** \$ 120
Instructor: Lambert, Jennifer **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41467: Use Childrens Lit in Classroom **Section ID: 145373**

Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41469: Reach Students, Character Educ **Section ID: 145378**

Department: Education **Course Fees:** \$ 120
Instructor: Adamson, Sharie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41470: HOL w/ Math Manipulatives **Section ID: 145380**

Department: Education **Course Fees:** \$ 120
Instructor: Adamson, Sharie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41471: Teaching Struggling Readers **Section ID: 145385**

Department: Education **Course Fees:** \$ 120
Instructor: Richardson, Kymbria **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41472: Instrct Strg, ELD & SDAIE K-12 **Section ID: 145386**

Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41473: Clssrm Mngmnt Survival Course **Section ID: 145394**

Department: Education **Course Fees:** \$ 120
Instructor: Sukut, Stephanie L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41474: Comprehension: Key to Success **Section ID: 145398**

Department: Education **Course Fees:** \$ 120
Instructor: Adamson, Sharie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41475: Focus on Phonics **Section ID: 145400**

Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41476: Comprehension Strategies 4-12 **Section ID: 145402**

Department: Education **Course Fees:** \$ 120
Instructor: Sukut, Stephanie L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41477: Design & Creating a WebQuest **Section ID: 145403**

Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41478: Dvlp Phonemic Awr EmergentRdrs **Section ID: 145404**

Department: Education **Course Fees:** \$ 120
Instructor: Sukut, Stephanie L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41479: MngClassroomStdnt Success K-12 **Section ID: 145406**

Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41480: VocabInstrctPrimGrades **Section ID: 145408**

Department: Education **Course Fees:** \$ 120
Instructor: Adamson, Sharie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41482: ExpoWriting-Research Reports **Section ID: 145411**

Department: Education **Course Fees:** \$ 120
Instructor: McFadden, Lauren **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41483: VocabforImprovedReading4-12 **Section ID:** 145412

Department: Education **Course Fees:** \$ 120
Instructor: Goldman, Elizabeth B. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41485: WriterWkspElemClassroom **Section ID:** 145414

Department: Education **Course Fees:** \$ 120
Instructor: Goldman, Elizabeth B. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41486: Design&CreateVirtualFieldTrip **Section ID:** 145415

Department: Education **Course Fees:** \$ 120
Instructor: Benoy, Terry G. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41487: Differentiatd Instrct: DNT&Fall **Section ID:** 145416

Department: Education **Course Fees:** \$ 120
Instructor: Hays, Crystal **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41488: Six Traits of Writing **Section ID:** 145418

Department: Education **Course Fees:** \$ 120
Instructor: Richardson, Kymbria **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41489: Yng Adlt Lit in the Classroom **Section ID:** 145419

Department: Education **Course Fees:** \$ 120
Instructor: Benoy, Terry G. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41490: PreK-3 Instrc Aprch Ltrcy Dvlp **Section ID:** 145422

Department: Education **Course Fees:** \$ 120
Instructor: Lambert, Jennifer **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41491: NonfictionintheK-3Classroom **Section ID:** 145423

Department: Education **Course Fees:** \$ 120
Instructor: Adamson, Sharie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41492: NewApproachSpellingInstruct **Section ID:** 145426

Department: Education **Course Fees:** \$ 120
Instructor: Adamson, Sharie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41493: Educational Technology 101 **Section ID:** 145428

Department: Education **Course Fees:** \$ 120
Instructor: Adamson, Sharie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41494: Use MS Word in K-12 Classroom **Section ID:** 145337

Department: Education **Course Fees:** \$ 37
Instructor: Chavez, Caryn M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41497: BULLYING GR 4-8 **Section ID:** 145392

Department: Education **Course Fees:** \$ 120
Instructor: Varner, Wendy L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41498: Integrating Whiteboards **Section ID:** 145391

Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41501: Primary Grade Bullying **Section ID:** 145393

Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41508: Reading/Writing Common Core **Section ID:** 143146

Department: Education **Course Fees:** \$ 495

Instructor: Mancia, Carmen **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41509: Google Classroom Tool **Section ID: 145395**
Department: Education **Course Fees:** \$ 120
Instructor: Varner, Wendy L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41526: Tech Tools & Common Core **Section ID: 142688**
Department: Education **Course Fees:** \$ 495
Instructor: Kaufman, Amy **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/1/2019

EDUC41512: Math Common Core Kinder **Section ID: 145396**
Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41528: TeachingStudentswSpecialNeeds **Section ID: 145351**
Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41515: Intro to CCSS **Section ID: 145377**
Department: Education **Course Fees:** \$ 120
Instructor: Varner, Wendy L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41529: Math Common Core Grade Three **Section ID: 145401**
Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41517: Effectively Using iPads **Section ID: 145410**
Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Lori Ann **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41530: KinderCommonCoreWriting **Section ID: 145387**
Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41518: Practicum in GATE **Section ID: 142677**
Department: Education **Course Fees:** \$ 475
Instructor: Appel, Morgan **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/1/2019

EDUC41531: First Common Core Writing **Section ID: 145366**
Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41521: UsingPowerPointInTheClassroom **Section ID: 145336**
Department: Education **Course Fees:** \$ 37
Instructor: Chavez, Caryn M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41535: PrepStudentsCCAssessments **Section ID: 145375**
Department: Education **Course Fees:** \$ 120
Instructor: Richardson, Kymbria **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41522: Math and the Common Core **Section ID: 142689**
Department: Education **Course Fees:** \$ 495
Instructor: Chell, Heather **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 11/22/2019

EDUC41541: Grade2_CCSS_Writing **Section ID: 145367**
Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41524: MathSolutionsG2CCMath **Section ID: 145399**
Department: Education **Course Fees:** \$ 120

EDUC41542: Grade4_CCSS_Math **Section ID: 145405**

Department: Education **Course Fees:** \$ 120
Instructor: Benoy, Terry G. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41543: Grade3_CCSS_Writing **Section ID: 145341**
Department: Education **Course Fees:** \$ 120
Instructor: Sukut, Stephanie L. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41574: HelpingMiddleGrWriters **Section ID: 145347**
Department: Education **Course Fees:** \$ 120
Instructor: Richardson, Kymbria **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41544: Grade4_CCSS_Writing **Section ID: 145342**
Department: Education **Course Fees:** \$ 120
Instructor: Benoy, Terry G. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41578: GuidingStrugglingWriters **Section ID: 145359**
Department: Education **Course Fees:** \$ 120
Instructor: Lambert, Jennifer **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41546: Grade5_CCSS_Writing **Section ID: 145369**
Department: Education **Course Fees:** \$ 120
Instructor: Benoy, Terry G. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41579: Science and the Common Core **Section ID: 142690**
Department: Education **Course Fees:** \$ 495
Instructor: Young, Karen **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/8/2019

EDUC41551: Grade 5_CCSS_Math **Section ID: 145368**
Department: Education **Course Fees:** \$ 120
Instructor: Benoy, Terry G. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41580: BestSuccessfulHSClassroom **Section ID: 145361**
Department: Education **Course Fees:** \$ 120
Instructor: McFadden, Lauren **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41567: TheFlippedClassroom **Section ID: 145346**
Department: Education **Course Fees:** \$ 120
Instructor: Benoy, Terry G. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41594: MathProbSolvStratG3-6 **Section ID: 145360**
Department: Education **Course Fees:** \$ 120
Instructor: Richardson, Kymbria **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41570: BestPracticePrimClassroom **Section ID: 145343**
Department: Education **Course Fees:** \$ 120
Instructor: Lambert, Jennifer **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41603: MasteringTxtComplexity4-8 **Section ID: 145374**
Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41572: BestPractMiddleSchlClass **Section ID: 145345**
Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41605: Career Counselor College/Carr **Section ID: 142685**
Department: Education **Course Fees:** \$ 600
Instructor: Kaufman, Amy **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/8/2019

EDUC41573: BestPract4-6Class **Section ID: 145344**
Department: Education **Course Fees:** \$ 120

EDUC41609: PrimaryGrProblemSolving **Section ID: 145383**

Department: Education **Course Fees:** \$ 120
Instructor: Hays, Crystal **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41612: UsingTechtoWriteStories **Section ID: 145371**
Department: Education **Course Fees:** \$ 120
Instructor: Benoy, Terry G. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41616: LearnerCenteredMath3-6 **Section ID: 145388**
Department: Education **Course Fees:** \$ 120
Instructor: Cahill, Laura M. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41621: BehavChallengesSpecNeedSt **Section ID: 145376**
Department: Education **Course Fees:** \$ 120
Instructor: **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41671: Navigate College Adm Tests **Section ID: 142668**
Department: Education **Course Fees:** \$ 675
Instructor: Steiner, Matt **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/22/2019

EDUC41675: MathManipulativesPrimary **Section ID: 145363**
Department: Education **Course Fees:** \$ 120
Instructor: Hays, Crystal **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41676: ReadFoundationsEmergentReader **Section ID: 145409**
Department: Education **Course Fees:** \$ 120
Instructor: Plat, Jennifer T. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC41685: SixthGradeCommonCoreMath **Section ID: 145350**
Department: Education **Course Fees:** \$ 120
Instructor: Mabe, Brittany **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

EDUC80012: Reading & Literacy Orientation **Section ID: 142737**

Department: Education **Course Fees:** \$ 40
Instructor: Leroux-Lindsey, Natalie **Status:** Active
Instructional Method: OnLine **Start Date:** 10/2/2019 | **End Date:** 10/5/2019

EDUC80013: SAT Prep **Section ID: 143798**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Perry-Aguirre, Stephanie A. **Status:** Active
Instructional Method: InClass **Start Date:** 10/5/2019 | **End Date:** 11/9/2019

EDUC80013: SAT Prep **Section ID: 143800**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Morales, Christine **Status:** Active
Instructional Method: InClass **Start Date:** 9/28/2019 | **End Date:** 11/2/2019

EDUC80013: SAT Prep **Section ID: 143801**
Department: Pre-College Programs **Course Fees:** \$ 450
Instructor: Dorsainvil White, StevenClaude **Status:** Active
Instructional Method: InClass **Start Date:** 10/12/2019 | **End Date:** 11/23/2019

EDUC80013: SAT Prep **Section ID: 143802**
Department: Pre-College Programs **Course Fees:** \$ 450
Instructor: Dong, Maysoon Lehmeidi **Status:** Active
Instructional Method: InClass **Start Date:** 10/12/2019 | **End Date:** 11/23/2019

EDUC80013: SAT Prep **Section ID: 143803**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Dong, Maysoon Lehmeidi **Status:** Active
Instructional Method: InClass **Start Date:** 10/12/2019 | **End Date:** 11/16/2019

EDUC80013: SAT Prep **Section ID: 143809**
Department: Pre-College Programs **Course Fees:** \$ 450
Instructor: Dorsainvil White, StevenClaude **Status:** Active
Instructional Method: InClass **Start Date:** 9/21/2019 | **End Date:** 10/26/2019

EDUC80013: SAT Prep **Section ID: 143810**
Department: Pre-College Programs **Course Fees:** \$ 450
Instructor: Chow, Cecilia **Status:** Active
Instructional Method: InClass **Start Date:** 9/21/2019 | **End Date:** 10/26/2019

EDUC80013: SAT Prep **Section ID: 144165**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Austin, Marlith **Status:** Active
Instructional Method: InClass **Start Date:** 9/28/2019 | **End Date:** 10/4/2019

EDUC80013: SAT Prep **Section ID: 144226**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Cervantes, Lizeth **Status:** Active
Instructional Method: InClass **Start Date:** 9/13/2019 | **End Date:** 11/22/2019

EDUC80013: SAT Prep **Section ID: 145180**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Lundeberg, Soph M **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 9/27/2019

EDUC80014: ACT Test Prep **Section ID: 143811**
Department: Pre-College Programs **Course Fees:** \$ 450
Instructor: Bing, Benny K **Status:** Active
Instructional Method: InClass **Start Date:** 9/14/2019 | **End Date:** 10/19/2019

EDUC80061: TESL Practicum **Section ID: 142654**
Department: Education **Course Fees:** \$ 385
Instructor: LaQua, Stephanie M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 12/13/2019

EDUC80318: CC Site-Based Mentor Clinic **Section ID: 142769**
Department: Education **Course Fees:** \$ 0
Instructor: Romo, Ylianna **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/4/2019

EDUC90008: GRE Test Prep **Section ID: 143812**
Department: Pre-College Programs **Course Fees:** \$ 500
Instructor: Lundeberg, Soph M **Status:** Active
Instructional Method: InClass **Start Date:** 9/28/2019 | **End Date:** 10/19/2019

EDUC90008: GRE Test Prep **Section ID: 143813**
Department: Pre-College Programs **Course Fees:** \$ 500
Instructor: Lundeberg, Soph M **Status:** Active
Instructional Method: InClass **Start Date:** 10/22/2019 | **End Date:** 11/12/2019

EDUC90008: GRE Test Prep **Section ID: 143814**

Department: Pre-College Programs **Course Fees:** \$ 500
Instructor: Lundeberg, Soph M **Status:** Active
Instructional Method: InClass **Start Date:** 11/14/2019 | **End Date:** 12/12/2019

EDUC90008: GRE Test Prep **Section ID: 143815**
Department: Pre-College Programs **Course Fees:** \$ 500
Instructor: Bing, Benny K **Status:** Active
Instructional Method: InClass **Start Date:** 11/22/2019 | **End Date:** 12/20/2019

EDUC90008: GRE Test Prep **Section ID: 143816**
Department: Pre-College Programs **Course Fees:** \$ 500
Instructor: Lundeberg, Soph M **Status:** Active
Instructional Method: InClass **Start Date:** 11/16/2019 | **End Date:** 12/14/2019

EDUC90009: GMAT Test Prep **Section ID: 143819**
Department: Pre-College Programs **Course Fees:** \$ 500
Instructor: Lundeberg, Soph M **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 10/17/2019

EDUC90009: GMAT Test Prep **Section ID: 143820**
Department: Pre-College Programs **Course Fees:** \$ 500
Instructor: Lundeberg, Soph M **Status:** Active
Instructional Method: InClass **Start Date:** 10/21/2019 | **End Date:** 11/18/2019

EDUC90010: LSAT Test Prep **Section ID: 143817**
Department: Pre-College Programs **Course Fees:** \$ 500
Instructor: Lundeberg, Soph M **Status:** Active
Instructional Method: InClass **Start Date:** 9/28/2019 | **End Date:** 10/19/2019

EDUC90011: MCAT Test Prep **Section ID: 143804**
Department: Pre-College Programs **Course Fees:** \$ 500
Instructor: Smith, Lincoln **Status:** Active
Instructional Method: InClass **Start Date:** 10/19/2019 | **End Date:** 11/16/2019

EDUC90011: MCAT Test Prep **Section ID: 143821**
Department: Pre-College Programs **Course Fees:** \$ 500
Instructor: Smith, Lincoln **Status:** Active
Instructional Method: InClass **Start Date:** 11/23/2019 | **End Date:** 12/21/2019

EDUC90032: GMAT: Verbal Reasoning **Section ID: 145220**
Department: Pre-College Programs **Course Fees:** \$ 0

Instructor: Lundeberg, Soph M **Status:** Active
Instructional Method: InClass **Start Date:** 11/2/2019 | **End Date:** 11/2/2019

EDUC90033: GMAT: Quantitative Reasoning **Section ID:** 145219

Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Lundeberg, Soph M **Status:** Active
Instructional Method: InClass **Start Date:** 10/26/2019 | **End Date:** 10/26/2019

EE40034: FndmntlOfDigitalComm f/WrlsSys **Section ID:** 142614

Department: Science & Technology **Course Fees:** \$ 775
Instructor: Bing, Benny K **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/23/2019

EE40129: Antenna Theory and Design **Section ID:** 142616

Department: Science & Technology **Course Fees:** \$ 775
Instructor: Rodriguez, Alberto R. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/19/2019

EE40137: RF Principles & Applications **Section ID:** 143154

Department: Science & Technology **Course Fees:** \$ 775
Instructor: Babaian, Tony E **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

EE40173: Power System Analysis **Section ID:** 143741

Department: Science & Technology **Course Fees:** \$ 795
Instructor: Ghoudjehbaklou, Hassan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

ENG100D: Design for Development **Section ID:** 145546

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

ENG40021: Accelerated LSS Black Belt **Section ID:** 142233

Department: Business, Professional & Legal Programs **Course Fees:** \$ 3595
Instructor: Van Der Linden, Richard M **Status:** Active
Instructional Method: InClass **Start Date:** 10/17/2019 | **End Date:** 2/6/2020

ENG40021: Accelerated LSS Black Belt **Section ID:** 142240

Department: Business, Professional & Legal Programs **Course Fees:** \$ 3595
Instructor: Wentz, Shane Allen **Status:** Active
Instructional Method: OnLine **Start Date:** 9/16/2019 | **End Date:** 2/7/2020

ENVR40000: Conservation Psychology **Section ID:** 142375

Department: Science & Technology **Course Fees:** \$ 550
Instructor: Schultz, Wesley **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/7/2019

ENVR40005: Community Engagement **Section ID:** 142374

Department: Science & Technology **Course Fees:** \$ 550
Instructor: Danoff-Burg, James **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 12/14/2019

ENVR40008: Writing CEQA EIR **Section ID:** 142371

Department: Science & Technology **Course Fees:** \$ 425
Instructor: Beckstrom, Chad **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/16/2019

ENVR40009: Advanced CEQA **Section ID:** 142368

Department: Science & Technology **Course Fees:** \$ 525
Instructor: Grattidge, Brian **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/30/2019

ENVR40010: CEQA in Practice **Section ID:** 142370

Department: Science & Technology **Course Fees:** \$ 425
Instructor: Miles Bradford, Lee **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/16/2019

ENVR40012: Behavioral Economics **Section ID:** 142601

Department: Science & Technology **Course Fees:** \$ 550
Instructor: Lomax, Micah **Status:** Active
Instructional Method: OnLine **Start Date:** 11/4/2019 | **End Date:** 12/7/2019

ENVR40013: Econ&Life Cycle Cost Analysis **Section ID:** 142376

Department: Science & Technology **Course Fees:** \$ 495
Instructor: Pratt, Linda G **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/7/2019

ENVR40016: Sustainability Leadership Section ID: 142377

Department: Science & Technology **Course Fees:** \$ 495
Instructor: Gilleskie, Robert **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 12/14/2019

ENVR40018: California Native Plants Section ID: 143778

Department: Science & Technology **Course Fees:** \$ 295
Instructor: Gonzales, Michael J **Status:** Active
Instructional Method: Blended **Start Date:** 9/24/2019 | **End Date:** 12/10/2019

EXAM80002: T&I Entrance Exam Section ID: 142481

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 85
Instructor: Negrete, Mary **Status:** Active
Instructional Method: OnLine **Start Date:** 11/30/2019 | **End Date:** 12/14/2019

FPM296: Community Med Independnt Rsrch Section ID: 144620

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 8/12/2019 | **End Date:** 12/20/2019

FPM40060: Laws & Reg/Occup Hlth & Sfty Section ID: 134179

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Howell, Van A **Status:** Active
Instructional Method: InClass **Start Date:** 9/30/2019 | **End Date:** 10/3/2019

FPM40173: Drug Development Process Section ID: 142898

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 495
Instructor: Olson, Suzan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/1/2019

FPM40179: Setting Up New Clinical Study Section ID: 142914

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 395
Instructor: Paredes Solis, Jenny **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

FPM40187: Nuts&Bolts Monitr.Clinic.Trial Section ID: 142903

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 395

Instructor: Paredes Solis, Jenny **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

FPM40188: Med.Writing:Proto.Reports Summ Section ID: 142904

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 395
Instructor: Paillard, Florence C **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/15/2019

FPM40189: Regulation of Drugs Biologics Section ID: 142908

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 495
Instructor: Olson, Suzan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

FPM40204: Good Clinical Practices Section ID: 142900

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 495
Instructor: Olson, Suzan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 11/8/2019

FPM40206: Drug Safety:Surveilnc&Reprting Section ID: 142902

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 395
Instructor: Chiplin, Anne **Status:** Active
Instructional Method: Blended **Start Date:** 11/2/2019 | **End Date:** 11/9/2019

FPM40207: Prospectv Prep/Intrnl & Extrnl Section ID: 142909

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 245
Instructor: Olson, Suzan **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/14/2019

FPM40208: Site & Investigator Recruitmnt Section ID: 142912

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 245
Instructor: Agee, Jan **Status:** Active

Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/17/2019

FPM40226: Case Management Intensive **Section ID: 142945**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 1295

Instructor: Hagan, Jennifer B **Status:** Active

Instructional Method: Blended **Start Date:** 9/28/2019 | **End Date:** 12/14/2019

FPM40228: Working With CROs **Section ID: 142913**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 245

Instructor: Paredes Solis, Jenny **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

FPM40229: Clinical StudyImplement'n&Mgmt **Section ID: 142911**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 395

Instructor: Paredes Solis, Jenny **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

FPM40233: Practical Clinical Statistics **Section ID: 142905**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 395

Instructor: Olson, Suzan **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

FPM40272: Clinical Trial Program **Section ID: 142917**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 1095

Instructor: Paredes Solis, Jenny **Status:** Active

Instructional Method: Blended **Start Date:** 12/12/2019 | **End Date:** 12/13/2019

FPM40273: ClinicalTrialsIntensiveWorkshp **Section ID: 142916**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 1295

Instructor: Agee, Jan **Status:** Active

Instructional Method: Blended **Start Date:** 10/21/2019 | **End Date:** 10/24/2019

FPM40280: OSHA #500 Instr/Stnds f/Constn **Section ID: 134178**

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: Fernandez, Robert **Status:** Active

Instructional Method: InClass **Start Date:** 9/30/2019 | **End Date:** 10/3/2019

FPM40280: OSHA #500 Instr/Stnds f/Constn **Section ID: 134204**

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: Norton, Mark **Status:** Active

Instructional Method: InClass **Start Date:** 12/9/2019 | **End Date:** 12/12/2019

FPM40280: OSHA #500 Instr/Stnds f/Constn **Section ID: 134427**

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: Norton, Mark **Status:** Active

Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 9/26/2019

FPM40280: OSHA #500 Instr/Stnds f/Constn **Section ID: 134436**

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: SCHROEDER, RUDY **Status:** Active

Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 10/10/2019

FPM40280: OSHA #500 Instr/Stnds f/Constn **Section ID: 134452**

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: Gribow, Harold **Status:** Active

Instructional Method: InClass **Start Date:** 11/4/2019 | **End Date:** 11/7/2019

FPM40280: OSHA #500 Instr/Stnds f/Constn **Section ID: 134458**

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: Marsden, John **Status:** Active

Instructional Method: InClass **Start Date:** 11/18/2019 | **End Date:** 11/21/2019

FPM40280: OSHA #500 Instr/Stnds f/Constn **Section ID: 134461**

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: Barringer, Russell **Status:** Active

Instructional Method: InClass **Start Date:** 12/9/2019 | **End Date:** 12/12/2019

FPM40280: OSHA #500 Instr/Stnds f/Constn **Section ID: 136310**

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 11/4/2019 | **End Date:** 11/7/2019

FPM40281: OSHA 501 Vol Compl/Safety/Hlth **Section ID:** 134193

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Stefanik, Thomas **Status:** Active
Instructional Method: InClass **Start Date:** 11/4/2019 | **End Date:** 11/7/2019

FPM40281: OSHA 501 Vol Compl/Safety/Hlth **Section ID:** 134429

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Stefanik, Thomas **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 9/26/2019

FPM40281: OSHA 501 Vol Compl/Safety/Hlth **Section ID:** 134449

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Geraci, Charles **Status:** Active
Instructional Method: InClass **Start Date:** 10/28/2019 | **End Date:** 10/31/2019

FPM40281: OSHA 501 Vol Compl/Safety/Hlth **Section ID:** 134455

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Norton, Mark **Status:** Active
Instructional Method: InClass **Start Date:** 11/12/2019 | **End Date:** 11/15/2019

FPM40281: OSHA 501 Vol Compl/Safety/Hlth **Section ID:** 134459

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Stefanik, Thomas **Status:** Active
Instructional Method: InClass **Start Date:** 11/18/2019 | **End Date:** 11/21/2019

FPM40296: OSHA #521 Industrial Hygiene **Section ID:** 134182

Department: OSHA Programs **Course Fees:** \$ 795
Instructor: Heramb, Brian I **Status:** Active
Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 10/10/2019

FPM40297: OSHA #2255 PrcplesOfErgonomics **Section ID:** 134177

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: EISENBERG, MICHELLE **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 9/26/2019

FPM40297: OSHA #2255 PrcplesOfErgonomics **Section ID:** 134205

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: EISENBERG, MICHELLE **Status:** Active
Instructional Method: InClass **Start Date:** 11/18/2019 | **End Date:** 11/21/2019

FPM40297: OSHA #2255 PrcplesOfErgonomics **Section ID:** 136309

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: EISENBERG, MICHELLE **Status:** Active
Instructional Method: InClass **Start Date:** 10/21/2019 | **End Date:** 10/24/2019

FPM40298: OSHA #2045: Machine Guarding **Section ID:** 134192

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Stefanik, Thomas **Status:** Active
Instructional Method: InClass **Start Date:** 10/28/2019 | **End Date:** 10/31/2019

FPM40299: OSHA #510:Construction Standard **Section ID:** 134195

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Counts, Kimberly Ann **Status:** Active
Instructional Method: InClass **Start Date:** 11/12/2019 | **End Date:** 11/15/2019

FPM40299: OSHA #510:Construction Standard **Section ID:** 134435

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Fernandez, Robert **Status:** Active
Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 10/10/2019

FPM40299: OSHA #510:Construction Standard **Section ID:** 134446

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Fernandez, Robert **Status:** Active
Instructional Method: InClass **Start Date:** 10/21/2019 | **End Date:** 10/24/2019

FPM40299: OSHA #510:Construction Standard **Section ID:** 134451

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: Barringer, Russell **Status:** Active
Instructional Method: InClass **Start Date:** 11/4/2019 | **End Date:** 11/7/2019

FPM40299: OSHA #510:Construction Standard Section ID: 136308

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Watkins, Terrill **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 9/26/2019

FPM40300: OSHA #3095: Electrical Stands Section ID: 134175

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Barringer, Russell **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 9/26/2019

FPM40300: OSHA #3095: Electrical Stands Section ID: 134200

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Nelson, David J **Status:** Active
Instructional Method: InClass **Start Date:** 12/2/2019 | **End Date:** 12/5/2019

FPM40300: OSHA #3095: Electrical Stands Section ID: 134450

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Nelson, David J **Status:** Active
Instructional Method: InClass **Start Date:** 10/28/2019 | **End Date:** 10/31/2019

FPM40301: OSHA #3015 Excavation Standard Section ID: 134186

Department: OSHA Programs **Course Fees:** \$ 695
Instructor: Barringer, Russell **Status:** Active
Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 10/16/2019

FPM40301: OSHA #3015 Excavation Standard Section ID: 134460

Department: OSHA Programs **Course Fees:** \$ 695
Instructor: Gribow, Harold **Status:** Active
Instructional Method: InClass **Start Date:** 12/2/2019 | **End Date:** 12/4/2019

FPM40303: OSHA 2225: Respiratory Protect Section ID: 134196

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Heramb, Brian I **Status:** Active
Instructional Method: InClass **Start Date:** 11/12/2019 | **End Date:** 11/15/2019

FPM40308: Trenching Trainer Section ID: 134187

Department: OSHA Programs **Course Fees:** \$ 450
Instructor: Barringer, Russell **Status:** Active
Instructional Method: InClass **Start Date:** 10/17/2019 | **End Date:** 10/18/2019

FPM40320: Anatomy & Physiology AH Section ID: 141743

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 450
Instructor: Metwalli, Sari **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40338: Finan Mngmt of Clinical Trials Section ID: 142915

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 245
Instructor: Waldo, Janet **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 12/13/2019

FPM40366: OSHA #511 OSHA Standards f/GI Section ID: 134181

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Marsden, John **Status:** Active
Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 10/10/2019

FPM40366: OSHA #511 OSHA Standards f/GI Section ID: 134428

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Geraci, Charles **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 9/26/2019

FPM40366: OSHA #511 OSHA Standards f/GI Section ID: 134432

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Phillips, Brandon **Status:** Active
Instructional Method: InClass **Start Date:** 9/30/2019 | **End Date:** 10/3/2019

FPM40366: OSHA #511 OSHA Standards f/GI Section ID: 134440

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Keberle, Kenneth **Status:** Active
Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 10/17/2019

FPM40366: OSHA #511 OSHA Standards f/GI Section ID: **144198**

Department: OSHA Programs **Course Fees:** \$ 1100
Instructor: McCarthy, Robert Jude **Status:** Active
Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 10/10/2019

FPM40367: OSHA 7100 Machine Guarding Section ID: **145165**

Department: OSHA Programs **Course Fees:** \$ 300
Instructor: Gribow, Harold **Status:** Active
Instructional Method: InClass **Start Date:** 10/16/2019 | **End Date:** 10/16/2019

FPM40368: 7000 Ergonomics for Healthcare Section ID: **134206**

Department: OSHA Programs **Course Fees:** \$ 250
Instructor: EISENBERG, MICHELLE **Status:** Active
Instructional Method: InClass **Start Date:** 11/22/2019 | **End Date:** 11/22/2019

FPM40388: Human Subjects Protect & IRBS Section ID: **142899**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 395
Instructor: Holmes, Jennifer **Status:** Active
Instructional Method: Blended **Start Date:** 10/26/2019 | **End Date:** 11/2/2019

FPM40392: OSHA #5600 Disaster Site Train Section ID: **134194**

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: BEELER, JEFF **Status:** Active
Instructional Method: InClass **Start Date:** 11/4/2019 | **End Date:** 11/7/2019

FPM40397: OSHA 7300 Confined Space Section ID: **134207**

Department: OSHA Programs **Course Fees:** \$ 250
Instructor: BEELER, JEFF **Status:** Active
Instructional Method: InClass **Start Date:** 12/3/2019 | **End Date:** 12/3/2019

FPM40403: OSHA 7205 Hlth Hazard Awarenes Section ID: **134183**

Department: OSHA Programs **Course Fees:** \$ 250
Instructor: Shamsky, Suzy **Status:** Active
Instructional Method: InClass **Start Date:** 10/25/2019 | **End Date:** 10/25/2019

FPM40410: OSHA 7105 Intro Evacuation Section ID: **134201**

Department: OSHA Programs **Course Fees:** \$ 250
Instructor: BEELER, JEFF **Status:** Active
Instructional Method: InClass **Start Date:** 12/2/2019 | **End Date:** 12/2/2019

FPM40415: Overview of Medical Practice Section ID: **141744**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 350
Instructor: SERIO, KENNETH JOHN **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40484: OSHA 5400 Maritime Trainer Section ID: **134199**

Department: OSHA Programs **Course Fees:** \$ 795
Instructor: Deem, Barton **Status:** Active
Instructional Method: InClass **Start Date:** 11/18/2019 | **End Date:** 11/21/2019

FPM40489: OSHA #3115 Fall Arrest Systems Section ID: **134190**

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Barringer, Russell **Status:** Active
Instructional Method: InClass **Start Date:** 10/28/2019 | **End Date:** 10/31/2019

FPM40489: OSHA #3115 Fall Arrest Systems Section ID: **134437**

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Norton, Mark **Status:** Active
Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 10/10/2019

FPM40489: OSHA #3115 Fall Arrest Systems Section ID: **134456**

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: Gribow, Harold **Status:** Active
Instructional Method: InClass **Start Date:** 11/18/2019 | **End Date:** 11/21/2019

FPM40489: OSHA #3115 Fall Arrest Systems Section ID: **136311**

Department: OSHA Programs **Course Fees:** \$ 765
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 12/9/2019 | **End Date:** 12/12/2019

FPM40490: Safety Inspections-3 day Section ID: **134444**

Department: OSHA Programs **Course Fees:** \$ 695
Instructor: Gribow, Harold **Status:** Active

Instructional Method: InClass **Start Date:** 10/21/2019 | **End Date:** 10/23/2019

FPM40493: Understanding Oncology **Section ID: 142906**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 495

Instructor: Kitson-Hart, Joan **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

FPM40494: Monitoring Oncology Trials **Section ID: 142907**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 495

Instructor: Kosits, Cheryl **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

FPM40497: OSHA #7115 **Section ID: 134202**

Department: OSHA Programs **Course Fees:** \$ 250

Instructor: Stefanik, Thomas **Status:** Active

Instructional Method: InClass **Start Date:** 12/4/2019 | **End Date:** 12/4/2019

FPM40507: Military EM385-1-1 40HR Safety **Section ID: 137986**

Department: OSHA Programs **Course Fees:** \$ 995

Instructor: Stefanik, Thomas **Status:** Active

Instructional Method: InClass **Start Date:** 9/30/2019 | **End Date:** 10/4/2019

FPM40511: #5109 OSHA Stndrds f/Cnstrtn **Section ID: 134188**

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: Marsden, John **Status:** Active

Instructional Method: InClass **Start Date:** 10/21/2019 | **End Date:** 10/24/2019

FPM40511: #5109 OSHA Stndrds f/Cnstrtn **Section ID: 134457**

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: Pisani, Mark **Status:** Active

Instructional Method: InClass **Start Date:** 11/18/2019 | **End Date:** 11/21/2019

FPM40512: #5119 Standards f/Gen Industry **Section ID: 134441**

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: Martinez, Ryan **Status:** Active

Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 10/17/2019

FPM40512: #5119 Standards f/Gen Industry **Section ID: 134453**

Department: OSHA Programs **Course Fees:** \$ 765

Instructor: Martinez, Ryan **Status:** Active

Instructional Method: InClass **Start Date:** 11/4/2019 | **End Date:** 11/7/2019

FPM40537: Trainer Update-Construction **Section ID: 134197**

Department: OSHA Programs **Course Fees:** \$ 525

Instructor: BEELER, JEFF **Status:** Active

Instructional Method: InClass **Start Date:** 11/18/2019 | **End Date:** 11/20/2019

FPM40537: Trainer Update-Construction **Section ID: 134448**

Department: OSHA Programs **Course Fees:** \$ 525

Instructor: Gribow, Harold **Status:** Active

Instructional Method: InClass **Start Date:** 10/28/2019 | **End Date:** 10/30/2019

FPM40537: Trainer Update-Construction **Section ID: 134454**

Department: OSHA Programs **Course Fees:** \$ 525

Instructor: Fernandez, Robert **Status:** Active

Instructional Method: InClass **Start Date:** 11/12/2019 | **End Date:** 11/14/2019

FPM40538: Trainer Update-General Ind **Section ID: 134184**

Department: OSHA Programs **Course Fees:** \$ 525

Instructor: Stefanik, Thomas **Status:** Active

Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 10/16/2019

FPM40538: Trainer Update-General Ind **Section ID: 134434**

Department: OSHA Programs **Course Fees:** \$ 525

Instructor: Gribow, Harold **Status:** Active

Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 10/9/2019

FPM40539: Cal OSHA Construction Update **Section ID: 134198**

Department: OSHA Programs **Course Fees:** \$ 295

Instructor: BEELER, JEFF **Status:** Active

Instructional Method: InClass **Start Date:** 11/21/2019 | **End Date:** 11/21/2019

FPM40541: OSHA #7845 Recordkeeping **Section ID: 134203**

Department: OSHA Programs **Course Fees:** \$ 125

Instructor: Stefanik, Thomas **Status:** Active

Instructional Method: InClass **Start Date:** 12/5/2019 | **End Date:** 12/5/2019

FPM40552: Overview Alcohol/Drug Problems **Section ID: 142959**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 345
Instructor: Feliciano, Alvin **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 11/26/2019

FPM40554: Occupational Safety & Security **Section ID: 142278**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 195
Instructor: Bipes, Mark **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40562: OSHA #5402 Update Maritime **Section ID: 134174**

Department: OSHA Programs **Course Fees:** \$ 675
Instructor: Phillips, Brandon **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 9/25/2019

FPM40565: OSHA #5410 Maritime Standards **Section ID: 134189**

Department: OSHA Programs **Course Fees:** \$ 995
Instructor: Phillips, Brandon **Status:** Active
Instructional Method: InClass **Start Date:** 10/21/2019 | **End Date:** 10/25/2019

FPM40566: Fall Protection Trainer **Section ID: 134191**

Department: OSHA Programs **Course Fees:** \$ 250
Instructor: Barringer, Russell **Status:** Active
Instructional Method: InClass **Start Date:** 11/1/2019 | **End Date:** 11/1/2019

FPM40577: Infection Prev./Clinical Epid **Section ID: 142949**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 129
Instructor: Myers, Frank Edward **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/13/2019

FPM40587: BehaviorChange/LifestyleCoach **Section ID: 141736**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 185
Instructor: Comana, Fabio **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40608: Figures Tables & Graphs **Section ID: 142238**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 350
Instructor: Toroser, Dikran **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40617: Pathophysiology Humn Dis **Section ID: 141742**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 795
Instructor: Metwalli, Sari **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40618: Food as Medicine **Section ID: 141734**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 225
Instructor: MacElhern, Lauray **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40619: Business Integrative Nutrition **Section ID: 141731**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 195
Instructor: MacElhern, Lauray **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40620: Advanced Nutrition Topics **Section ID: 141737**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 285
Instructor: Saxe, Gordon **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40624: Nutrition Practicum **Section ID: 142497**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 100
Instructor: MacElhern, Lauray **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40627: Capstone: Med Ed Materials **Section ID: 142235**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 995
Instructor: Alexander, Lori **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40628: Capstone: Reg. Writing **Section ID: 142236**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 995

Instructor: Mikyas, Yeshi **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40629: Capstone: Scientific Writing **Section ID: 142237**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 995

Instructor: Sauer-Gehring, Michelle **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40630: Capstone: Jrn Art. Pub Dev **Section ID: 142234**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 995

Instructor: Simcoe, Donna **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM40632: Medical Terminology **Section ID: 142895**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 275

Instructor: Stern, Donna **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/20/2019

FPM40632: Medical Terminology **Section ID: 142896**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 275

Instructor: Stern, Donna **Status:** Active

Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/10/2019

FPM40632: Medical Terminology **Section ID: 142897**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 275

Instructor: Stern, Donna **Status:** Active

Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/8/2019

FPM40634: Prjct Mgt Clinical Trials **Section ID: 142910**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 495

Instructor: Sivaramakrishna, Radhika **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/13/2019

FPM40636: Intro to Fire & Life Safety **Section ID: 136456**

Department: OSHA Programs **Course Fees:** \$ 450

Instructor: BEELER, JEFF **Status:** Active

Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/2/2019

FPM40637: OSHA 7505 Intro Accident Inves **Section ID: 134433**

Department: OSHA Programs **Course Fees:** \$ 250

Instructor: Phillips, Brandon **Status:** Active

Instructional Method: InClass **Start Date:** 10/4/2019 | **End Date:** 10/4/2019

FPM40637: OSHA 7505 Intro Accident Inves **Section ID: 134438**

Department: OSHA Programs **Course Fees:** \$ 250

Instructor: Norton, Mark **Status:** Active

Instructional Method: InClass **Start Date:** 10/11/2019 | **End Date:** 10/11/2019

FPM40637: OSHA 7505 Intro Accident Inves **Section ID: 134447**

Department: OSHA Programs **Course Fees:** \$ 250

Instructor: Gribow, Harold **Status:** Active

Instructional Method: InClass **Start Date:** 10/24/2019 | **End Date:** 10/24/2019

FPM40638: OSHA 3085 **Section ID: 134445**

Department: OSHA Programs **Course Fees:** \$ 695

Instructor: SCHROEDER, RUDY **Status:** Active

Instructional Method: InClass **Start Date:** 10/21/2019 | **End Date:** 10/23/2019

FPM40640: Workers Compensation F/Safety **Section ID: 137202**

Department: OSHA Programs **Course Fees:** \$ 250

Instructor: Gribow, Harold **Status:** Active

Instructional Method: InClass **Start Date:** 11/22/2019 | **End Date:** 11/22/2019

FPM40640: Workers Compensation F/Safety **Section ID: 137203**

Department: OSHA Programs **Course Fees:** \$ 250

Instructor: Gribow, Harold **Status:** Active

Instructional Method: InClass **Start Date:** 11/8/2019 | **End Date:** 11/8/2019

FPM40641: Safety Leadership I **Section ID: 145508**

Department: OSHA Programs **Course Fees:** \$ 200
Instructor: Norton, Mark **Status:** Active
Instructional Method: InClass **Start Date:** 10/18/2019 | **End Date:** 10/18/2019

FPM40641: Safety Leadership I **Section ID: 145509**

Department: OSHA Programs **Course Fees:** \$ 350
Instructor: Norton, Mark **Status:** Active
Instructional Method: InClass **Start Date:** 10/21/2019 | **End Date:** 10/21/2019

FPM40641: Safety Leadership I **Section ID: 145510**

Department: OSHA Programs **Course Fees:** \$ 250
Instructor: Norton, Mark **Status:** Active
Instructional Method: InClass **Start Date:** 10/25/2019 | **End Date:** 10/25/2019

FPM40642: Safety Leadership II **Section ID: 136453**

Department: OSHA Programs **Course Fees:** \$ 695
Instructor: Marsden, John **Status:** Active
Instructional Method: OnLine **Start Date:** 10/28/2019 | **End Date:** 12/9/2019

FPM40653: Spectrum of Med Writing **Section ID: 142241**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 445
Instructor: Alexander, Lori **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

FPM80011: Nuts & Bolts of Mon Clin Trial **Section ID: 142946**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 0
Instructor: Stern, Donna **Status:** Active
Instructional Method: OnLine **Start Date:** 10/26/2019 | **End Date:** 12/11/2019

FPM80012: Working with CROs CTA Cohort **Section ID: 142948**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 0
Instructor: Stern, Donna **Status:** Active
Instructional Method: OnLine **Start Date:** 10/26/2019 | **End Date:** 12/11/2019

FPM80013: Setting Up New Clin Study Coho **Section ID: 142947**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 0

Instructor: Stern, Donna **Status:** Active
Instructional Method: OnLine **Start Date:** 10/26/2019 | **End Date:** 12/11/2019

FPM80020: Infection Prevention **Section ID: 142950**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 129
Instructor: Myers, Frank Edward **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/22/2019

HIEU127: Sport in the Modern World **Section ID: 145532**

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

HIEU138: Imperial Spain 1476-1808 **Section ID: 145531**

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

LAAR40000: Arabic f/Communication I **Section ID: 143862**

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 320
Instructor: El Cheddadi, Youniss **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/2/2019

LACH40000: Chinese f/Communication I **Section ID: 142446**

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 320
Instructor: Fan, Feifei **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/2/2019

LACH40002: Chinese f/Communication III **Section ID: 143495**

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 295
Instructor: Fan, Feifei **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 11/26/2019

LACH40006: Advanced Chinese Part A **Section ID: 143252**

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 0

Instructor: Fan, Feifei **Status:** Active
Instructional Method: InClass **Start Date:** 10/8/2019 | **End Date:** 12/5/2019

LAFR40000: French f/Communication I Section ID: 142448
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 320
Instructor: Gentet, Annick **Status:** Active
Instructional Method: InClass **Start Date:** 10/3/2019 | **End Date:** 12/12/2019

LAFR40001: French f/Communication II Section ID: 142449
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 295
Instructor: Gentet, Annick **Status:** Active
Instructional Method: InClass **Start Date:** 9/30/2019 | **End Date:** 12/9/2019

LAFR40004: French Refining Fluency Part A Section ID: 142451
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 295
Instructor: Gentet, Annick **Status:** Active
Instructional Method: InClass **Start Date:** 10/2/2019 | **End Date:** 12/11/2019

LAFR40007: French for Communication IV Section ID: 142450
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 295
Instructor: Gentet, Annick **Status:** Active
Instructional Method: InClass **Start Date:** 10/1/2019 | **End Date:** 12/3/2019

LAJA40000: Japanese f/Communication I Section ID: 142454
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 320
Instructor: Kipnis, Yuko **Status:** Active
Instructional Method: InClass **Start Date:** 9/25/2019 | **End Date:** 11/20/2019

LAJA40001: Japanese f/Communication II Section ID: 142455
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 295
Instructor: Kipnis, Yuko **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 11/21/2019

LAJA40003: Japanese f/Communication III Section ID: 142456

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 295
Instructor: Kipnis, Yuko **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 11/19/2019

LAJA40005: Japanese f/Communication IV Section ID: 142458
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 295
Instructor: Uyesugi, Eriko **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/2/2019

LANG40009: ASL Section ID: 143743
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 295
Instructor: O'Loughlin, John Thomas Keating **Status:** Active
Instructional Method: Blended **Start Date:** 9/28/2019 | **End Date:** 12/7/2019

LASP40001: Spanish f/Communication I Section ID: 142466
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 320
Instructor: Rodriguez, Arantza **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 11/26/2019

LASP40001: Spanish f/Communication I Section ID: 142468
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 320
Instructor: Ramirez, Rebeca C **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/5/2019

LASP40002: Spanish f/Communication II Section ID: 142470
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 320
Instructor: Ramirez, Rebeca C **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 11/26/2019

LASP40003: Spanish f/Communication III Section ID: 142471
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 320
Instructor: Alzas, Carmen **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 11/26/2019

LASP40004: Spanish f/Communication IV Section ID: 142473

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 320
Instructor: Alzas, Carmen **Status:** Active
Instructional Method: InClass **Start Date:** 9/25/2019 | **End Date:** 12/4/2019

LASP40005: Spanish f/Communication V **Section ID: 142474**
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 320
Instructor: Rodriguez, Arantza **Status:** Active
Instructional Method: InClass **Start Date:** 9/25/2019 | **End Date:** 12/4/2019

LASP40056: SpanishCnvrstns:News/WrldIssue **Section ID: 142478**
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 320
Instructor: Batelman, Liliana **Status:** Active
Instructional Method: InClass **Start Date:** 9/25/2019 | **End Date:** 11/20/2019

LASP40057: Spanish Adv Grammar Review **Section ID: 143744**
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 295
Instructor: Gonzalez, Maria **Status:** Active
Instructional Method: Blended **Start Date:** 9/26/2019 | **End Date:** 11/21/2019

LASP40062: SpnshRfngFncy:Andean&Cntrl Am **Section ID: 142479**
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 320
Instructor: Rodriguez, Arantza **Status:** Active
Instructional Method: Blended **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

LASP40150: Spanish for Med Prof. I **Section ID: 142476**
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 320
Instructor: Gomez-Vittori, Graciela **Status:** Active
Instructional Method: Blended **Start Date:** 9/26/2019 | **End Date:** 12/5/2019

LASP40152: Spanish for Med Prof. III **Section ID: 142477**
Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 320
Instructor: Gomez-Vittori, Graciela **Status:** Active

Instructional Method: Blended **Start Date:** 9/25/2019 | **End Date:** 12/4/2019

LAW40000: Intro to Legal System **Section ID: 142408**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 295
Instructor: Emison, Clifton O. **Status:** Active
Instructional Method: Blended **Start Date:** 9/23/2019 | **End Date:** 10/7/2019

LAW40000: Intro to Legal System **Section ID: 142423**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 295
Instructor: PARK, DANIEL W **Status:** Active
Instructional Method: Blended **Start Date:** 9/24/2019 | **End Date:** 10/8/2019

LAW40000: Intro to Legal System **Section ID: 144126**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 500
Instructor: Emison, Clifton O. **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/18/2019

LAW40001: Business Law **Section ID: 142413**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Townsend, Jamie R. **Status:** Active
Instructional Method: Blended **Start Date:** 10/1/2019 | **End Date:** 12/3/2019

LAW40001: Business Law **Section ID: 142594**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Townsend, Jamie R. **Status:** Active
Instructional Method: OnLine **Start Date:** 10/8/2019 | **End Date:** 12/10/2019

LAW40003: Legal Research **Section ID: 142414**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Dunlap, Julia M **Status:** Active
Instructional Method: Blended **Start Date:** 10/2/2019 | **End Date:** 12/4/2019

LAW40003: Legal Research **Section ID: 142593**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Baldwin, Nicole **Status:** Active

Instructional Method: Blended **Start Date:** 9/30/2019 | **End Date:** 12/9/2019

LAW40015: Legal Communications **Section ID: 142410**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 395
Instructor: Wilkins, Kate **Status:** Active
Instructional Method: Blended **Start Date:** 9/23/2019 | **End Date:** 10/21/2019

LAW40018: Civil Litigation-I **Section ID: 142411**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Baldwin, Nicole **Status:** Active
Instructional Method: Blended **Start Date:** 9/25/2019 | **End Date:** 10/21/2019

LAW40021: Civil Litigation II **Section ID: 142418**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Baldwin, Nicole **Status:** Active
Instructional Method: Blended **Start Date:** 10/23/2019 | **End Date:** 12/12/2019

LAW40021: Civil Litigation II **Section ID: 142595**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Carver, Jennifer **Status:** Active
Instructional Method: InClass **Start Date:** 10/2/2019 | **End Date:** 12/4/2019

LAW40028: Profssnl Ethics f/Legal Assts **Section ID: 142409**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 295
Instructor: Wilkins, Kate **Status:** Active
Instructional Method: Blended **Start Date:** 9/24/2019 | **End Date:** 10/8/2019

LAW40028: Profssnl Ethics f/Legal Assts **Section ID: 142894**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 295
Instructor: Wilkins, Kate **Status:** Active
Instructional Method: Blended **Start Date:** 10/15/2019 | **End Date:** 10/29/2019

LAW40035: Evidence **Section ID: 142416**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 395
Instructor: Ramey, Christopher L. **Status:** Active

Instructional Method: InClass **Start Date:** 10/28/2019 | **End Date:** 12/9/2019

LAW40037: Tort Law **Section ID: 142419**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 395
Instructor: Bennett, Duane E. **Status:** Active
Instructional Method: InClass **Start Date:** 11/6/2019 | **End Date:** 12/11/2019

LAW40038: Immigration Law **Section ID: 142580**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 395
Instructor: Purcell, Teodora D. **Status:** Active
Instructional Method: Blended **Start Date:** 10/16/2019 | **End Date:** 11/20/2019

LAW40047: Administrative Law **Section ID: 142424**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Morrison, Catriona **Status:** Active
Instructional Method: Blended **Start Date:** 9/30/2019 | **End Date:** 12/9/2019

LAW40061: Discovery Principles **Section ID: 142417**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 395
Instructor: Ramey, Christopher L. **Status:** Active
Instructional Method: InClass **Start Date:** 10/28/2019 | **End Date:** 12/9/2019

LAW40070: Computers for Paralegals **Section ID: 142415**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Hunter, June **Status:** Active
Instructional Method: Blended **Start Date:** 9/26/2019 | **End Date:** 11/21/2019

LAW40070: Computers for Paralegals **Section ID: 142893**
Department: Business, Professional & Legal Programs **Course Fees:** \$ 495
Instructor: Hunter, June **Status:** Active
Instructional Method: Blended **Start Date:** 10/10/2019 | **End Date:** 12/12/2019

LAW40071: Paralegal Career Success **Section ID: 142420**
Department: Business, Professional & Legal Programs **Course Fees:** \$
Instructor: **Status:** Active

Instructional Method: Blended **Start Date:** 9/23/2019 | **End Date:** 1/5/2020

LAW40071: Paralegal Career Success **Section ID: 142421**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 295

Instructor: Parente, Abigail **Status:** Active

Instructional Method: Blended **Start Date:** 10/22/2019 | **End Date:** 12/12/2019

LAW40071: Paralegal Career Success **Section ID: 143641**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 295

Instructor: Quindt, Linda E. **Status:** Active

Instructional Method: Blended **Start Date:** 11/6/2019 | **End Date:** 11/20/2019

LAW40074: Intro to Tribal Legal Studies **Section ID: 145226**

Department: Education **Course Fees:** \$ 495

Instructor: **Status:** Active

Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 12/13/2019

LAW81275: Ethics Seminar **Section ID: 142432**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 115

Instructor: Ensz, Bethany S **Status:** Active

Instructional Method: InClass **Start Date:** 10/19/2019 | **End Date:** 10/19/2019

LHCO202: Strategic Mngmnt & Org Change **Section ID: 143665**

Department: Office of Adv Prof Education & Development **Course Fees:** \$ 3080

Instructor: Cameron, Ashley **Status:** Active

Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

LHCO215: Modern Healthcare **Section ID: 143664**

Department: Office of Adv Prof Education & Development **Course Fees:** \$ 1540

Instructor: Gilmer, Todd **Status:** Active

Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

LHCO219: Process Improvement-Healthcare **Section ID: 143666**

Department: Office of Adv Prof Education & Development **Course Fees:** \$ 3080

Instructor: Hansen, Philip C. **Status:** Active

Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

LHCO221: Current Topics in Healthcare **Section ID: 143740**

Department: Office of Adv Prof Education & Development **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

LHCO221: Current Topics in Healthcare **Section ID: 143749**

Department: Office of Adv Prof Education & Development **Course Fees:** \$ 1540

Instructor: Kaplan, Robert **Status:** Active

Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

LIGN101: Introduction/Study of Language **Section ID: 145562**

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

LIGN8: Languages & Cultures/America **Section ID: 145563**

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

LING4000: Ling/Gram Analysis/Lang Tchr **Section ID: 142650**

Department: Education **Course Fees:** \$ 385

Instructor: Scofield, James M **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/25/2019

LING4000: Ling/Gram Analysis/Lang Tchr **Section ID: 142651**

Department: Education **Course Fees:** \$ 385

Instructor: Scofield, James M **Status:** Active

Instructional Method: OnLine **Start Date:** 11/18/2019 | **End Date:** 12/13/2019

LING40004: Theory/Practice of Translation **Section ID: 142489**

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 475

Instructor: Figueroa, Kathy **Status:** Active

Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/2/2019

LING40005: Grammar/ESL Teaching Section ID: 142653

Department: Education **Course Fees:** \$ 385
Instructor: LaQua, Stephanie M **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/8/2019

LING40011: Spanish/English Translation II Section ID: 142487

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 475
Instructor: Martinez, Ashleigh **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/2/2019

LING40020: MedicalEnglishI Section ID: 143083

Department: International Programs - Bldg. E **Course Fees:** \$ 225
Instructor: Andrade, Christina **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/8/2019

LING40025: Business Translation Section ID: 142493

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 475
Instructor: Negrete, Mary **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/2/2019

LING40027: English/Spanish TranslationII Section ID: 142488

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 475
Instructor: Alzas, Carmen **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/2/2019

LING40031: Theories/Sec Lang AcquisitionSection ID: 142652

Department: Education **Course Fees:** \$ 385
Instructor: Pluciennik, Ruth A **Status:** Active
Instructional Method: OnLine **Start Date:** 10/21/2019 | **End Date:** 11/15/2019

LING40038: Simultaneous Interpretation Section ID: 142491

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 475
Instructor: Newman, Teresa **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/2/2019

LING40039: English/Spanish Translation I Section ID: 142485

Department: Arts, Humanities, Languages & Digital

Arts **Course Fees:** \$ 475
Instructor: Alzas, Carmen **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/2/2019

LING40040: Spanish/EnglishTrnsltin I Section ID: 142486

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 475
Instructor: Inciarte, Monique Dascha **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/2/2019

LING40044: Teaching Writing Skills Section ID: 143068

Department: International Programs - Bldg. E **Course Fees:** \$ 395
Instructor: TEAGUE, NICOLA **Status:** Active
Instructional Method: InClass **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

LING40045: Adv. Sentence Structure I Section ID: 143058

Department: International Programs - Bldg. E **Course Fees:** \$ 395
Instructor: Gonzalez, Kim L **Status:** Active
Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 12/2/2019

LING40046: Theory/Methods Reading Instruc Section ID: 143071

Department: International Programs - Bldg. E **Course Fees:** \$ 395
Instructor: TEAGUE, NICOLA **Status:** Active
Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 12/2/2019

LING40063: Games for the EFL Classroom Section ID: 143073

Department: International Programs - Bldg. E **Course Fees:** \$ 145
Instructor: OWEN, TODD PAUL **Status:** Active
Instructional Method: InClass **Start Date:** 10/26/2019 | **End Date:** 10/26/2019

LING40065: Advanced Grammar Seminar Section ID: 143060

Department: International Programs - Bldg. E **Course Fees:** \$ 375
Instructor: Gonzalez, Kim L **Status:** Active
Instructional Method: InClass **Start Date:** 10/15/2019 | **End Date:** 12/5/2019

LING40071: Intro to Court Interpretation Section ID: 142494
Department: Arts, Humanities, Languages & Digital
Arts **Course Fees:** \$ 475
Instructor: Inciarte, Monique Dascha **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/2/2019

LING40075: Adv Anal/English Sent Struc II Section ID: 143059
Department: International Programs - Bldg. E **Course Fees:** \$ 395
Instructor: Bredeck, Elizabeth J **Status:** Active
Instructional Method: InClass **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

LING40076: Pronunciation & Fluency Section ID: 143087
Department: International Programs - Bldg. E **Course Fees:** \$ 375
Instructor: Mann, Ellen **Status:** Active
Instructional Method: InClass **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

LING40081: Effective Oral Presentation Section ID: 143091
Department: International Programs - Bldg. E **Course Fees:** \$ 375
Instructor: Palmer, Timothy Michael **Status:** Active
Instructional Method: InClass **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

LING40082: Grammar/Vocabulary Bldg Section ID: 143082
Department: International Programs - Bldg. E **Course Fees:** \$ 375
Instructor: Palmer, Timothy Michael **Status:** Active
Instructional Method: InClass **Start Date:** 10/10/2019 | **End Date:** 12/5/2019

LING40083: Adv Pronunciation & Fluency Section ID: 143089
Department: International Programs - Bldg. E **Course Fees:** \$ 375
Instructor: Mattson, Lucy **Status:** Active
Instructional Method: InClass **Start Date:** 10/9/2019 | **End Date:** 12/4/2019

LING40086: Sight Translation Section ID: 142490
Department: Arts, Humanities, Languages & Digital
Arts **Course Fees:** \$ 475
Instructor: Negrete, Mary **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/2/2019

LING40087: Visual Media in EFL Classroom Section ID: 143072
Department: International Programs - Bldg. E **Course Fees:** \$ 145
Instructor: Andrade, Christina **Status:** Active
Instructional Method: InClass **Start Date:** 11/2/2019 | **End Date:** 11/2/2019

LING40092: Medical Translation: Int'l Med Section ID: 142498
Department: Arts, Humanities, Languages & Digital
Arts **Course Fees:** \$ 475
Instructor: Newman, Teresa **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/2/2019

LING40096: Intro Tch Engl as Foreign Lang Section ID: 143061
Department: International Programs - Bldg. E **Course Fees:** \$ 395
Instructor: Gonzalez, Kim L **Status:** Active
Instructional Method: InClass **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

LING40097: Intro to Teaching Writing Section ID: 143062
Department: International Programs - Bldg. E **Course Fees:** \$ 395
Instructor: TEAGUE, NICOLA **Status:** Active
Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 12/2/2019

LING40099: Oral Pres for Lang Teachers Section ID: 143063
Department: International Programs - Bldg. E **Course Fees:** \$ 395
Instructor: TEAGUE, NICOLA **Status:** Active
Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 12/2/2019

LING40100: TEYL Class Management Section ID: 143065
Department: International Programs - Bldg. E **Course Fees:** \$ 395
Instructor: SMITH, KELLY **Status:** Active
Instructional Method: Blended **Start Date:** 10/7/2019 | **End Date:** 12/2/2019

LING40101: Grammar & Editing II Section ID: 143081
Department: International Programs - Bldg. E **Course Fees:** \$ 375
Instructor: Bredeck, Elizabeth J **Status:** Active

Instructional Method: InClass **Start Date:** 10/9/2019 | **End Date:** 12/4/2019

LING40106: IntroductionToTranslation Section ID: 142482

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 250
Instructor: Figueroa, Kathy **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 10/28/2019

LING40106: IntroductionToTranslation Section ID: 142483

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 250
Instructor: Figueroa, Kathy **Status:** Active
Instructional Method: OnLine **Start Date:** 10/29/2019 | **End Date:** 12/2/2019

LING40107: Tools & Tech in Translation Section ID: 142492

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 475
Instructor: Lombardino, Rafaela **Status:** Active
Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/2/2019

LING40109: IntroductionToInterpretation Section ID: 142484

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 250
Instructor: Jenner, Judy **Status:** Active
Instructional Method: OnLine **Start Date:** 10/29/2019 | **End Date:** 12/2/2019

LING40110: Theories&Meth of LangTch&Learn Section ID: 143070

Department: International Programs - Bldg. E **Course Fees:** \$ 395
Instructor: LaQua, Stephanie M **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 12/6/2019

LING40111: TEFL Practicum Section ID: 143064

Department: International Programs - Bldg. E **Course Fees:** \$ 395
Instructor: TEAGUE, NICOLA **Status:** Active
Instructional Method: InClass **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

LING40115: Topics in Adv Engl Structure Section ID: 143085

Department: International Programs - Bldg. E **Course Fees:** \$ 200

Instructor: Singer, Jennifer B **Status:** Active
Instructional Method: InClass **Start Date:** 10/22/2019 | **End Date:** 11/26/2019

LING40119: Acad Comp in the US Uni-1 Section ID: 143076

Department: International Programs - Bldg. E **Course Fees:** \$ 200
Instructor: Palmer, Timothy Michael **Status:** Active
Instructional Method: InClass **Start Date:** 10/19/2019 | **End Date:** 10/19/2019

LING40120: Teaching Lang Through Art Section ID: 143067

Department: International Programs - Bldg. E **Course Fees:** \$ 145
Instructor: Nelson, Annika M. **Status:** Active
Instructional Method: InClass **Start Date:** 11/16/2019 | **End Date:** 11/16/2019

LING40121: MedicalEnglishII Section ID: 143084

Department: International Programs - Bldg. E **Course Fees:** \$ 225
Instructor: Andrade, Christina **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

LING40123: American Idioms and Slang I Section ID: 143079

Department: International Programs - Bldg. E **Course Fees:** \$ 200
Instructor: Carothers, Crystal Rose **Status:** Active
Instructional Method: OnLine **Start Date:** 10/14/2019 | **End Date:** 11/8/2019

LING40124: Teach English Primary Grades Section ID: 143069

Department: International Programs - Bldg. E **Course Fees:** \$ 395
Instructor: Quinn, Jessica **Status:** Active
Instructional Method: InClass **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

LING40125: Teach English Int YoungLearner Section ID: 143066

Department: International Programs - Bldg. E **Course Fees:** \$ 395
Instructor: SMITH, KELLY **Status:** Active
Instructional Method: Blended **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

LING40127: American Idioms and Slang II Section ID: 143080

Department: International Programs - Bldg. E **Course Fees:** \$ 200

Instructor: Andrade, Christina **Status:** Active
Instructional Method: OnLine **Start Date:** 11/11/2019 | **End Date:** 12/6/2019

LING40128: Adv Idioms & Slang 2-unit **Section ID: 143325**

Department: International Programs - Bldg. E **Course Fees:** \$ 275

Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 12/4/2019

LING40129: Adv Fluency & Pronunc 2-unit **Section ID: 143324**

Department: International Programs - Bldg. E **Course Fees:** \$ 275

Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 12/4/2019

LIPO40000: Portuguese f/Communication I **Section ID: 142459**

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 320

Instructor: HILLIER, SOLIMAR **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

LIPO40001: Portuguese f/Communication II **Section ID: 142462**

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 295

Instructor: HILLIER, SOLIMAR **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 11/19/2019

LIPO40002: Portuguese f/Communication III **Section ID: 143863**

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 295

Instructor: HILLIER, SOLIMAR **Status:** Active
Instructional Method: InClass **Start Date:** 9/25/2019 | **End Date:** 11/20/2019

LIT40022: Literatures of Immigration **Section ID: 142309**

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 245

Instructor: Mendoza, Sylvia **Status:** Active

Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/16/2019

LIT40069: Women and Madness **Section ID: 142308**

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 245

Instructor: Weissenburger, Renee **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 10/28/2019

LIT40093: History of Children Lit **Section ID: 143104**

Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 395

Instructor: Marsden, Carolyn **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 12/7/2019

MAE104: Aerodynamics **Section ID: 145584**

Department: **Course Fees:** \$ **Instructor:** **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

MAE122: Flow & Transport/Environment **Section ID: 145569**

Department: **Course Fees:** \$ **Instructor:** **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

MAE20: Elements of Materials Science **Section ID: 145585**

Department: **Course Fees:** \$ **Instructor:** **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

MAE280A: Linear Systems Theory **Section ID: 145564**

Department: **Course Fees:** \$ **Instructor:** **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

MAE40004: Lean Six Sigma Black Belt **Section ID: 139681**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 5495

Instructor: Van Der Linden, Richard M **Status:** Active
Instructional Method: InClass **Start Date:** 9/13/2019 | **End Date:** 2/13/2020

MAE40013: Lean Six-Sigma Green Belt **Section ID: 139963**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 2495

Instructor: O'Rourke, Tracy **Status:** Active

Instructional Method: Blended **Start Date:** 9/6/2019 | **End Date:** 12/13/2019

MAE40013: Lean Six-Sigma Green Belt **Section ID: 142260**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 2495

Instructor: Vasko, Edward **Status:** Active

Instructional Method: InClass **Start Date:** 10/4/2019 | **End Date:** 1/31/2020

MAE40013: Lean Six-Sigma Green Belt **Section ID: 143490**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 1995

Instructor: O'Rourke, Tracy **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

MAE40013: Lean Six-Sigma Green Belt **Section ID: 145057**

Department: Business, Professional & Legal Programs **Course Fees:** \$ 1995

Instructor: O'Rourke, Tracy **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/6/2019

MAE40028: Solid Works **Section ID: 143157**

Department: Science & Technology **Course Fees:** \$ 775

Instructor: Carter, Braxton **Status:** Active

Instructional Method: Blended **Start Date:** 9/23/2019 | **End Date:** 11/25/2019

MAE40030: Mech. Design with MATLAB **Section ID: 144125**

Department: Science & Technology **Course Fees:** \$ 775

Instructor: Nguyen, Tony Triet **Status:** Active

Instructional Method: Blended **Start Date:** 10/5/2019 | **End Date:** 12/7/2019

MAE40031: Geometric Dimensioning (GD&T) **Section ID: 143160**

Department: Science & Technology **Course Fees:** \$ 775

Instructor: Wheeler, Raymond A. **Status:** Active

Instructional Method: InClass **Start Date:** 10/15/2019 | **End Date:** 10/17/2019

MAE40033: PltcPrtDsgnfnInjctnMoldng **Section ID: 143159**

Department: Science & Technology **Course Fees:** \$ 775

Instructor: Dao, Tuan M **Status:** Active

Instructional Method: InClass **Start Date:** 9/28/2019 | **End Date:** 11/2/2019

MAE8: MATLAB Program for Engr Analy **Section ID: 145565**

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

MAE8: MATLAB Program for Engr Analy **Section ID: 145566**

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

MAE90000: Intro to Robotics **Section ID: 142343**

Department: Pre-College Programs **Course Fees:** \$ 0

Instructor: Muralidharan, Manju **Status:** Active

Instructional Method: InClass **Start Date:** 10/24/2019 | **End Date:** 10/24/2019

MATH#20C: Calc and Analytic Geometry **Section ID: 142600**

Department: Pre-College Programs **Course Fees:** \$ 500

Instructor: Shay, Brian J **Status:** Active

Instructional Method: InClass **Start Date:** 8/26/2019 | **End Date:** 12/18/2019

MATH180C: Intro/Stochastic Processes II **Section ID: 145557**

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

MATH180C: Intro/Stochastic Processes II **Section ID: 145558**

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

MATH283: Stat Methods in Bioinformatics **Section ID: 145561**

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

MATH40017: Introduction to Calculus **Section ID: 143299**

Department: Science & Technology **Course Fees:** \$ 650

Instructor: Lackpour, Matin **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/22/2019

MATHX3C: Precalculus **Section ID: 143785**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Dimitrova, Radostina **Status:** Active
Instructional Method: Blended **Start Date:** 7/29/2019 | **End Date:** 12/18/2019

MATHX3C: Precalculus **Section ID: 143922**
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Dimitrova, Radostina **Status:** Active
Instructional Method: Blended **Start Date:** 7/29/2019 | **End Date:** 12/18/2019

MEDC40018: ICD-10-CM **Section ID: 141739**
Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 645
Instructor: Patricio, Grace **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

MEDC40020: CPT/HCPCS Coding **Section ID: 141738**
Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 645
Instructor: Patricio, Grace **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

MEDC40022: Legal/Ethic Issue Coding **Section ID: 141741**
Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 325
Instructor: Clancy, Emmy **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

MEDC40024: Intro to Medical Coding **Section ID: 141740**
Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 325
Instructor: Nowak, Caryn **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

MGT131A: Intermediate Accounting A **Section ID: 142337**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

MGT132: Auditing **Section ID: 142338**
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

MUS40006: Piano I **Section ID: 143115**
Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 275
Instructor: CRATTY, WILLIAM **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 11/12/2019

MUS40009: Piano II **Section ID: 143116**
Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 275
Instructor: CRATTY, WILLIAM **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 11/12/2019

MUS40021: Singing I **Section ID: 143120**
Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 295
Instructor: Nussman, Jonathan **Status:** Active
Instructional Method: InClass **Start Date:** 9/30/2019 | **End Date:** 11/25/2019

MUS40032: Guitar I **Section ID: 143118**
Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 295
Instructor: Wetzell, Robert **Status:** Active
Instructional Method: InClass **Start Date:** 9/30/2019 | **End Date:** 11/25/2019

MUS40035: Singing II **Section ID: 143122**
Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 295
Instructor: Nussman, Jonathan **Status:** Active
Instructional Method: InClass **Start Date:** 10/1/2019 | **End Date:** 11/19/2019

MUS40048: Intermediate Piano **Section ID: 143117**
Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 275
Instructor: CRATTY, WILLIAM **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 11/21/2019

NANO15: Engin. Comp Using MATLAB **Section ID: 145586**

Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

NANO15: Engin. Comp Using MATLAB **Section ID:** 145587
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

NANO164: Adv Micro & Nano Materl/Energy **Section ID:** 145570
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

NURS40002: Emergency Deptmnt Nursing II **Section ID:** 142952
Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 395
Instructor: MCAMIS, MOLLY ANN **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/13/2019

NURS40003: Emerg.Dept.Nurse Preceptorship **Section ID:** 142953
Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 245
Instructor: MCAMIS, MOLLY ANN **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 3/21/2020

NURS40005: Emergency Department Nursing I **Section ID:** 142951
Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 395
Instructor: MCAMIS, MOLLY ANN **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/13/2019

PATH40011: Hematology/Coagulation **Section ID:** 144224
Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 0
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

PHYS212A: Quantum Mechanics **Section ID:** 145554
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

PHYS215A: Particles & Fields I **Section ID:** 145555
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

PHYS225A: General Relativity **Section ID:** 145556
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

PSY40070: Appld Skills f/Grp Dynamic/Fac **Section ID:** 141640
Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 345
Instructor: Whitney, Teresa **Status:** Active
Instructional Method: Blended **Start Date:** 9/23/2019 | **End Date:** 12/2/2019

PSY40214: Chem Dep I: Dis-Sympts-Diag **Section ID:** 142960
Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 345
Instructor: Feliciano, Alvin **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/5/2019

PSY40234: Play Therapy,Art Therapy,Asses **Section ID:** 142940
Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 250
Instructor: Lacter, Ellen **Status:** Active
Instructional Method: InClass **Start Date:** 10/5/2019 | **End Date:** 10/19/2019

PSY40234: Play Therapy,Art Therapy,Asses **Section ID:** 143460
Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 250
Instructor: Lacter, Ellen **Status:** Active
Instructional Method: InClass **Start Date:** 11/9/2019 | **End Date:** 11/23/2019

PSY40321: Practicum Alc/Drug Abuse Cnslr **Section ID: 142962**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 325

Instructor: Synold, Jerome **Status:** Active

Instructional Method: InClass **Start Date:** 9/28/2019 | **End Date:** 11/23/2019

PSY40346: Intro to Counseling Models **Section ID: 142961**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 345

Instructor: Synold, Jerome **Status:** Active

Instructional Method: OnLine **Start Date:** 9/24/2019 | **End Date:** 12/14/2019

PSY40374: Basic/Adv Counseling Skills **Section ID: 142941**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 290

Instructor: Cornia, Laurian M **Status:** Active

Instructional Method: InClass **Start Date:** 10/5/2019 | **End Date:** 10/19/2019

PSY40391: History of Play Therapy **Section ID: 142938**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 135

Instructor: Shezifi, Oded **Status:** Active

Instructional Method: InClass **Start Date:** 10/26/2019 | **End Date:** 10/26/2019

PSY40401: Integrative Play Therapy **Section ID: 142939**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 135

Instructor: Bartlett, Kimberly **Status:** Active

Instructional Method: InClass **Start Date:** 9/28/2019 | **End Date:** 9/28/2019

RMED40006: Lactation Educator Counselor **Section ID: 136194**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 695

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED40006: Lactation Educator Counselor **Section ID: 136195**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 695

Instructor: Christian, Ann-Marie J **Status:** Active

Instructional Method: Blended **Start Date:** 9/10/2019 | **End Date:** 11/6/2019

RMED40006: Lactation Educator Counselor **Section ID: 136196**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 695

Instructor: Baker, Virginia **Status:** Active

Instructional Method: Blended **Start Date:** 10/28/2019 | **End Date:** 12/10/2019

RMED40006: Lactation Educator Counselor **Section ID: 139702**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 695

Instructor: Baker, Virginia **Status:** Active

Instructional Method: Blended **Start Date:** 9/23/2019 | **End Date:** 11/14/2019

RMED40006: Lactation Educator Counselor **Section ID: 139703**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 695

Instructor: Baker, Virginia **Status:** Active

Instructional Method: Blended **Start Date:** 10/2/2019 | **End Date:** 12/6/2019

RMED40019: Lactation Consultant Education **Section ID: 137599**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 995

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 3/21/2020

RMED40026: CLEC Refresher **Section ID: 137601**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 125

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80000: Lactation MedicalDocumentation **Section ID: 137598**

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 45

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80001: A&P for IBCLCs Section ID: 142247

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 100

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80002: Bio Properties Human Milk Section ID: 142248

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 20

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80003: Being an IBCLC Section ID: 142249

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 40

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80004: Common Concerns Section ID: 142250

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 120

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80005: Jaundice Section ID: 142251

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 100

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80006: Newborn BF Instincts Section ID: 142252

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 20

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80007: Position & Latch Section ID: 142253

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 100

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80008: Science of Suck Section ID: 142254

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 120

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80009: Tongue Tie Section ID: 142255

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 60

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80011: Case Mgmt: The Puzzle Section ID: 142257

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 20

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80012: Ethics for Lactation Intern Section ID: 142258

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 45

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

RMED80013: IBLCE Exam Review Section ID: 142262

Department: Healthcare & Behavioral Sciences **Course Fees:** \$ 75

Instructor: Baker, Virginia **Status:** Active

Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/14/2019

SIO12: History of Earth & Evolution Section ID: 145568

Department: **Course Fees:** \$

Instructor: **Status:** Active

Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/6/2019

SIO90020: Messy Science: Earth (NExT) Section ID: 142341

Department: Pre-College Programs **Course Fees:** \$ 0

Instructor: Carter, Sasha Peter **Status:** Active

Instructional Method: InClass **Start Date:** 11/9/2019 | **End Date:** 11/9/2019

SIO90020: Messy Science: Earth (NExT) Section ID: 142342

Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Carter, Sasha Peter **Status:** Active
Instructional Method: InClass **Start Date:** 11/20/2019 | **End Date:** 11/20/2019

SIO90021: Oceans: Marine Bio+Art (NExT) Section ID: 143499
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Kenion, Anika **Status:** Active
Instructional Method: InClass **Start Date:** 10/19/2019 | **End Date:** 10/19/2019

SIO90022: Squid Dissection (NExT) Section ID: 142322
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Friet, Lorrie Blackard **Status:** Active
Instructional Method: InClass **Start Date:** 11/12/2019 | **End Date:** 11/12/2019

SIO90022: Squid Dissection (NExT) Section ID: 142330
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Friet, Lorrie Blackard **Status:** Active
Instructional Method: InClass **Start Date:** 12/3/2019 | **End Date:** 12/3/2019

SIO90022: Squid Dissection (NExT) Section ID: 142344
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Friet, Lorrie Blackard **Status:** Active
Instructional Method: InClass **Start Date:** 11/5/2019 | **End Date:** 11/5/2019

SOCLX1: Introduction to Sociology Section ID: 143791
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Abel, Andrea **Status:** Active
Instructional Method: InClass **Start Date:** 7/29/2019 | **End Date:** 12/20/2019

SOCLX1: Introduction to Sociology Section ID: 143792
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Aydemir, Sumeyra **Status:** Active
Instructional Method: InClass **Start Date:** 8/26/2019 | **End Date:** 1/24/2020

SOCLX1: Introduction to Sociology Section ID: 143793
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Aydemir, Sumeyra **Status:** Active
Instructional Method: InClass **Start Date:** 8/26/2019 | **End Date:** 1/24/2020

SOCLX1: Introduction to Sociology Section ID: 143794
Department: Pre-College Programs **Course Fees:** \$ 0

Instructor: Aydemir, Sumeyra **Status:** Active
Instructional Method: InClass **Start Date:** 8/26/2019 | **End Date:** 1/24/2020

SOCLX1: Introduction to Sociology Section ID: 143971
Department: Pre-College Programs **Course Fees:** \$ 0
Instructor: Abel, Andrea **Status:** Active
Instructional Method: InClass **Start Date:** 8/30/2019 | **End Date:** 1/24/2020

SURG496: Clinical Independent Study Section ID: 144621
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 8/12/2019 | **End Date:** 12/20/2019

SURG496: Clinical Independent Study Section ID: 144622
Department: **Course Fees:** \$
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 8/12/2019 | **End Date:** 12/20/2019

THEA40007: Introduction to Acting Section ID: 143111
Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 295
Instructor: Polak, John **Status:** Active
Instructional Method: InClass **Start Date:** 9/28/2019 | **End Date:** 11/23/2019

THEA40013: Acting II Section ID: 143112
Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 295
Instructor: Polak, John **Status:** Active
Instructional Method: InClass **Start Date:** 9/30/2019 | **End Date:** 11/25/2019

THEA40029: Improv 101 Section ID: 143113
Department: Arts, Humanities, Languages & Digital Arts **Course Fees:** \$ 295
Instructor: Anton, Vanessa **Status:** Active
Instructional Method: InClass **Start Date:** 10/2/2019 | **End Date:** 11/20/2019

WCWP40000: Acad Wrtnng f/Int'l Stud:Basics Section ID: 143077
Department: International Programs - Bldg. E **Course Fees:** \$ 375
Instructor: Flenniken, Lauren Diane **Status:** Active

Instructional Method: InClass **Start Date:** 10/8/2019 | **End Date:** 12/3/2019

WCWP40107: Art & Craft Creative Writing **Section ID: 142305**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 345
Instructor: KENYON, KAREN **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 11/19/2019

WCWP40142: Finding Our Voices **Section ID: 142307**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 345
Instructor: Belyea, Cory **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/23/2019

WCWP40150: Info Design f/ Communicators **Section ID: 142301**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 295
Instructor: Herman, Elizabeth **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/2/2019

WCWP40151: Technical Communication I **Section ID: 142299**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 395
Instructor: Graham Gonzalez, Bonni **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40154: TechnicalCommunication-II **Section ID: 142300**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 395
Instructor: Boyd, Anita **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40158: Writing Online Documentation **Section ID: 142302**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 395
Instructor: Herman, Elizabeth **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40186: Writing for Children I **Section ID: 143105**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 395
Instructor: Tomp, Sarah **Status:** Active
Instructional Method: InClass **Start Date:** 9/24/2019 | **End Date:** 11/26/2019

WCWP40219: BusnsWrtng/NonNativeSp **Section ID: 143090**

Department: International Programs - Bldg. E **Course Fees:** \$ 375
Instructor: Bozanich, Laura **Status:** Active
Instructional Method: InClass **Start Date:** 10/7/2019 | **End Date:** 12/2/2019

WCWP40234: Grammar Lab **Section ID: 142291**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 595
Instructor: Adams, John A **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40234: Grammar Lab **Section ID: 142292**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 595
Instructor: Adams, John A **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40234: Grammar Lab **Section ID: 142293**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 595
Instructor: Felix, Barbara A **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40234: Grammar Lab **Section ID: 142294**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 595
Instructor: Felix, Barbara A **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40234: Grammar Lab **Section ID: 142295**

Department: Arts, Humanities, Languages & Digital Arts
Course Fees: \$ 595
Instructor: Negrete, Mary **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40234: Grammar Lab **Section ID: 142296**

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Negrete, Mary **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40236: Copyediting I **Section ID: 142281**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Steele, Christine **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40236: Copyediting I **Section ID: 142282**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Humphrey, Elizabeth King **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40236: Copyediting I **Section ID: 142284**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 595
Instructor: Venard, Lourdes **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40237: Copyediting II **Section ID: 142285**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 495
Instructor: Steele, Christine **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40237: Copyediting II **Section ID: 142286**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 495
Instructor: Venard, Lourdes **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40237: Copyediting II **Section ID: 142287**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 495
Instructor: Venard, Lourdes **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40238: Copyediting III **Section ID: 142288**

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 495
Instructor: Allen, Mark **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40238: Copyediting III **Section ID: 142289**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 495
Instructor: Sanders, Suzanne **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 12/7/2019

WCWP40245: Developing Characters **Section ID: 142306**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 245
Instructor: Mendoza, Sylvia **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 11/9/2019

WCWP40245: Developing Characters **Section ID: 145328**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 245
Instructor: Belyea, Cory **Status:** Active
Instructional Method: OnLine **Start Date:** 10/7/2019 | **End Date:** 11/16/2019

WCWP40259: How To Start a Novel **Section ID: 142311**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 145
Instructor: Bustance, Jennifer Lane **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 10/12/2019

WCWP40261: Writing Childrens Picture Book **Section ID: 143106**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 325
Instructor: Colleen, Marcie **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 12/7/2019

WCWP40269: Writing Narrative Non-Fiction **Section ID: 142313**
Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 345
Instructor: Vizzo, Emily Christina **Status:** Active
Instructional Method: OnLine **Start Date:** 9/23/2019 | **End Date:** 11/23/2019

WCWP40297: Novel Writing II **Section ID: 142312**

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 345
Instructor: Bustance, Jennifer Lane **Status:** Active
Instructional Method: InClass **Start Date:** 9/26/2019 | **End Date:** 12/5/2019

WCWP40313: Self-Publishing **Section ID: 142315**

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 425
Instructor: Mendoza, Sylvia **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 12/7/2019

WCWP40329: Sci Comm Internship **Section ID: 145073**

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 220
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 9/23/2019 | **End Date:** 12/13/2019

WCWP40331: Adv Academic Writing 2-unit **Section ID: 143308**

Department: International Programs - Bldg. E **Course Fees:** \$ 275
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 12/4/2019

WCWP40332: Adv Business Writing 2-unit **Section ID: 143312**

Department: International Programs - Bldg. E **Course Fees:** \$ 275
Instructor: **Status:** Active
Instructional Method: InClass **Start Date:** 10/14/2019 | **End Date:** 12/4/2019

WCWP80031: Marketing for Copyeditors **Section ID: 142297**

Department: Arts, Humanities, Languages & Digital
 Arts **Course Fees:** \$ 220
Instructor: Glass, Andrea **Status:** Active
Instructional Method: OnLine **Start Date:** 9/30/2019 | **End Date:** 10/27/2019