► **2021-2022**
GRADUATE CATALOG

CALIFORNIA UNIVERSITY
OF PENNSYLVANIA

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July 2021

California University of Pennsylvania Graduate Catalog

This catalog is edited by the Academic Affairs Office.

California University of Pennsylvania
250 University Avenue
California PA 15419-1394
724-938-4404
www.calu.edu

The core values of California University of Pennsylvania (Cal U) are integrity, civility and responsibility.

Cal U is a member of Pennsylvania's State System of Higher Education.

Pennsylvania's State System of Higher Education
2986 North Second Street
Harrisburg PA 17110
717-720-4000
www.passhe.edu

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Disclaimer

This catalog is neither a contract nor an offer of a contract. The information it contains was accurate when it was printed and/or placed on the Internet. Fees, deadlines, academic requirements, courses, degree programs, academic policies and other matters described in this catalog may change without notice. Not all courses are offered each academic year, and faculty assignments may change. This catalog is updated annually.

From the President

California University of Pennsylvania has been a place of opportunity for nearly 170 years. Since the institution was founded in 1852, students have come to California to build a strong academic foundation, fulfill their personal potential and prepare for successful careers.

Today, Cal U offers a high-quality academic experience, whether students are on campus or online. Undergraduates choose from among more than 100 programs of study, while graduate-level degree, certificate and professional certification programs offer opportunities for advanced study and professional growth.

Cal U faculty members are experts in their fields. Although many professors are involved in research or other scholarly pursuits, their passion is teaching. Working side by side with a team of student support professionals, our faculty members are committed to empowering students to become confident, successful learners.

Many academic programs include hands-on components, and students are encouraged to extend their learning beyond the classroom. Through practical, applied learning activities, Cal U students engage with and serve the community, putting their education to work as they address real-world issues. Both the Career and Professional Development Center and the Internship Center give our students a competitive advantage as they prepare to enter the workplace.

Cal U is a student-centered university, and we understand the importance of a vibrant and inclusive campus environment. The University's secure, comfortable, on-campus residence halls are second to none. About a mile away, on our upper campus, the Student Association Inc. makes apartment-style living available at Vulcan Village.

More than 100 student clubs and organizations offer leadership opportunities and a broad range of activities. The Herron Recreation and Fitness Center is open daily for individual workouts, group fitness classes and intramural sports. On the upper campus, Roadman Park and the Student Association's SAI Farm host athletic contests and outdoor recreation, as well as academic projects and fieldwork. Renowned speakers, performers and entertainers visit our campus regularly, creating an atmosphere rich in culture and creativity.

Cal U is proud to be a diverse, caring and scholarly learning community, dedicated to academic excellence. We strive to support each student and to graduate knowledgeable, confident, career-ready professionals. Inspired by our core values of integrity, civility and responsibility, we give our students the tools and teaching they need to rise up and achieve.

I invite you to unlock your story and build your future at Cal U.

Sincerely,

Robert J. Thorn, interim University President

About California University of Pennsylvania

California University of Pennsylvania lies within the borough of California, a community of approximately 6,300 residents located on the banks of the Monongahela River, less than an hour's drive south of Pittsburgh. It is accessible via Interstate 70 Exits 15 (PA 43), 16 (Speers) or 17 (PA 88, Charleroi) or via U.S. 40 (PA 43 or 88). The Mon Valley Fayette Expressway (PA 43) links California to the federal Interstate Highway System. The University is approximately 30 minutes from Exit 8 (New Stanton) of the Pennsylvania Turnpike, and an hour from Pittsburgh International Airport.

The main campus consists of 98 acres, including the Phillipsburg annex. The 98-acre recreation complex, George H. Roadman University Park, is located just over a mile from campus. This complex includes a football stadium, an all-weather track, tennis courts, a baseball diamond, a softball diamond, soccer and rugby fields, a cross country course, areas for intramural sports and picnic facilities.

Adjoining Roadman Park is the 94-acre SAI Farm, purchased in 2010. The parcel includes a cross country course, recreation space and a farmhouse that has been renovated for student meetings. Together, Roadman Park and the SAI Farm comprise the University's upper campus.

In the University's award-winning residence halls, students enjoy the comfort and convenience of on-campus living, usually sharing a bathroom with no more than one other person. All residence halls are air-conditioned and have state-of-the-art sprinkler and security systems.

Roadman Park is the site of an upper-campus housing complex, Vulcan Village, whose residents live in attractive, furnished garden-style apartments owned by the nonprofit Student Association Inc. Most Vulcan Village apartments have individual baths, living room, dining area, completely furnished kitchen (including dishwasher and microwave) and full-size washer and dryer. Vulcan Flyer shuttles make it easy for Vulcan Village residents to ride to and from the main campus.

The geographic location of the University gives the resident student opportunities to explore and pursue a wide variety of activities. The University is a short drive from scenic locations for camping, hiking, fishing, hunting, white-water rafting, canoeing and skiing. In addition to varied cultural activities on campus, students have easy access to the Pittsburgh metropolitan area, located only 35 miles north of the campus. This provides an opportunity to enjoy the Pittsburgh Symphony Orchestra; the Pittsburgh Ballet; the Civic Light Opera; the David L. Lawrence Convention Center; the Pittsburgh Steelers, Penguins and Pirates; various museums; and all of the excitement and attractions of a major metropolitan area.

History

The institution that is now California University of Pennsylvania began as an academy in 1852. It has evolved over the years into a comprehensive university, one of the 14 state-owned institutions that comprise Pennsylvania's State System of Higher Education.

1852: A two-story academy, offering education from kindergarten through college, is established in the recently founded community of California, Pa.

1865: The academy obtains a charter as a normal school for its district and becomes a teacher-preparatory institution.

1874: The institution is renamed the South-Western Normal School.

1914: The commonwealth acquires the institution and renames it the California State Normal School. The curriculum becomes exclusively a two-year preparatory course for elementary school teachers.

1928: The institution becomes California State Teachers College, returning to its previous status as a four-year-degree-granting institution, concentrating on industrial arts and special education.

California University of Pennsylvania

1959: Liberal arts curricula are introduced and the college becomes California State College.

1962: A graduate program is introduced.

1974: The college develops a special mission in science and technology.

1983: On July 1, 1983, the college becomes part of the Pennsylvania State System of Higher Education and changes its name to California University of Pennsylvania.

1983: The College of Science and Technology becomes fully operational.

1996: The College of Science and Technology is renamed the Eberly College of Science and Technology, honoring the Eberly Foundation for its philanthropic generosity.

1998: The University formally adopts three core values: integrity, civility and responsibility.

2002: The University Council of Trustees formally adopts a list of rights and responsibilities.

2004-2007: The University responds to student needs and completely redesigns the concept of residence life. Six suite-style residence halls are constructed on the main campus, and an apartment complex now known as Vulcan Village is constructed on the upper campus.

2009: After a major renovation and expansion project, Herron Recreation and Fitness Center is re-dedicated.

2010: The Student Association Inc. purchases SAI Farm and begins developing the location as a site for student recreation, learning and meetings.

2011: The Phillipsburg Soccer Facility is dedicated.

2012: Geraldine M. Jones is named acting President of the University; she is named interim President the following year.

2013: In May, the former Residence Hall A is renamed the G. Ralph Smith II Honors Hall in recognition of a former English professor whose bequest to the University is the largest in its modern history. In October, the former Residence Hall C is renamed Ivan '41 and Adelaide Ivill '38 Guesman Hall in honor of the philanthropic alumni couple.

2015: Natali Student Center is re-dedicated after a two-year renovation and expansion project.

2016: Geraldine M. Jones is inaugurated as California's seventh President.

2018: The largest gift in the institution's history establishes the Rutledge Institute for Early Childhood Education, named for donors Karen and Tom '77 Rutledge.

2019: Coover Hall, which houses applied engineering and technology programs, plus courses in art and graphic design, is rededicated, following a two-year renovation.

2021: Robert Thorn is named interim President of the University, following the retirement of President Geraldine M. Jones.

(Additional information about the University and its history may be found in the book *California University of Pennsylvania: The People's College in the Monongahela Valley*, by Regis J. Serinko, published in 1992.)

Identity and Mission

Identity

California University of Pennsylvania, a comprehensive regional institution of higher education and a member of Pennsylvania's State System of Higher Education, is a diverse, caring and scholarly learning community dedicated to excellence in the liberal arts, science and technology, and professional studies that is devoted to building character and careers, broadly defined. The University is inspired by its core values of **Integrity**, **Civility** and **Responsibility** and is guided by its Bill of Rights and Responsibilities:

- We have the right to safety and security;
- We have the responsibility to ensure the safety and security of others;
- We have the right to be treated with respect;
- We have the responsibility to treat others with respect;
- We have the right to expect the best;
- We have the responsibility to give our best;
- We have the right to be treated fairly;
- We have the responsibility to treat others fairly.

Vision

Supporting the vision of Pennsylvania's State System of Higher Education, California University of Pennsylvania will exemplify academic excellence, innovation, service, personal growth and social justice for all.

Mission

The mission of California University of Pennsylvania is to provide a high-quality, student-centered education that prepares an increasingly diverse community of lifelong learners to contribute responsibly and creatively to the regional, national and global society, while serving as a resource to advance the region's cultural, social and economic development. Accordingly, the Cal U Strategic Plan 2015-2020 looks to our mission for inspiration and guidance.

This strategic plan is designed to empower the University to serve as a resource in the region and the Commonwealth. The strategic plan consists of five goals, with 17 objectives (strategies) that are designed to enable the strategic plan to be a "living document" that will lead California University of Pennsylvania into the future.

The strategic plan focuses the University on three key initiatives to assure the success of the University in the coming years. Those initiatives are:

- Enhancing the academic excellence and experience of our students.
- Operating with sound and efficient fiscal and governance practices.
- Achieving optimal enrollment in these challenging times.

Legacy

Founded in 1852, and now in its second 150 years of service, the University is committed above all to academic excellence and intellectual rigor in the context of personal and institutional Integrity, Civility and Responsibility.

Adopted by the Council of Trustees of California University of Pennsylvania on June 4, 2003.

Governance and Administration

Pennsylvania State System of Higher Education

Chancellor

Daniel Greenstein

Board of Governors

Cynthia D. Shapira, Chair
David M. Maser, Vice Chair; Chair, Student Success Committee
Samuel H. Smith, Vice Chair; Chair, Audit and Compliance Committee
Donald E. Houser, Jr., Chair, Governance and Leadership Committee
Thomas S. Muller, Chair, University Success Committee
Marian D. Moskowitz, Vice Chair, Student Success Committee
Neil R. Weaver, Vice Chair, University Success Committee
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Nicole Dunlop
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William "Bill" Gindlesperger
Sen. Scott Martin
Noe Ortega, Acting Secretary of Education
Rep. Brad Roae
B. Michael Schaul
Sen. Judith L. Schwank
Larry C. Skinner
Meg Snead, Designee for Gov. Tom Wolf
Stephen L. Washington, Jr.
Governor Tom Wolf
Janet L. Yeomans

California University of Pennsylvania
Interim President

Robert J. Thorn

Council of Trustees

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Anthony H. Amadio '73
Robin M. Betza
Stephen M. DeFrank '92
Maria Dovshek, student trustee
Sandra Guthrie '01
James W. Harris '80
Sean T. Logue
Larry Maggi '79
Barry Niccolai '93
Justin Nwokeji '05
Daniel Greenstein, chancellor, ex-officio

Office of the President

Anna Stewart, interim executive assistant
Joy Folmar, administrative assistant II

Academic Affairs

Daniel E. Engstrom, interim provost/vice president for academic affairs
Mark Aune, director of honors program
Lanie Bilitski, administrative assistant
Jodie Bonidie, academic events coordinator
Leonard Colelli, associate provost for assessment and accreditation
Brenda Fredette, dean, Eberly College of Science and Technology

Shayne Gervais, university registrar
Yugo Ikach, dean, School of Graduate Studies and Research
Douglas Hoover, dean of library services and undergraduate research
Daphne Livingstone, executive staff assistant to the provost
Kristen Majocha, dean, College of Education and Liberal Arts
Marta McClintock-Comeaux, director of women's studies
Stephen H. Whitehead, associate provost of innovation and associate vice president for academic affairs

Administration and Finance

Fawn Petrosky, interim vice president for administration and finance
James Ahearn, director of payroll
Paul Allison, associate vice president and chief information officer for university technology services
Keith Curran, comptroller
Adam Gill, director of budget and strategic planning
Eric Guiser, director of human resources
Kristine Hall, administrative assistant
Christopher Johnston, director of parking and transportation
Michael Kanalis, director of facilities management
Edward McSheffery, chief of university police
Jack Rogers, director of student accounts
Thomas Taylor, director of administrative services
Ben Wise, fire safety specialist for environmental health and safety

Communication and Marketing

Christine Kindl, vice president for communications and marketing
Erin Angotti, SEO coordinator
Jeff Bender, director of digital communications
Emily Boarts, creative project manager
Zach Frailey, photo manager/editor
Phil Haragos, artist/illustrator 3
Keli Henderson, director of marketing
Ruth Kinder, administrative assistant I
Denise King, marketing assistant
Wendy Mackall, director of communications and public relations
John Miller, web designer/CMS coordinator
Greg Sofranko, director of creative services
Anthony Sonita, social media specialist

Diversity, Equity and Inclusion

Sheleta Camarda-Webb, interim chief diversity, equity and inclusion officer

Enrollment Management

T. David Garcia, vice president for enrollment management
Ben Brudnock, director of graduate admissions
Rhonda Gifford, director of career and professional development center
Jeffrey DeRubbo, director of financial aid
Jill Loop, director of academic success initiatives
Tracey Sheetz, dean of undergraduate admissions
Dana Turcic, executive staff assistant to the vice president for enrollment management

Student Affairs

Larry Sebek, interim vice president for student affairs/dean of students
Debra Anderson, nurse supervisor

Rebecca Barnhart, residence hall director
Dawn Bellotti, RN
Jayna Bonfini, counselor, assistant professor, counseling center
Terry Carnathan, coordinator of informal recreation and wellness
Tammy Clark, administrative assistant for university housing
Debra Custer, management technician, office for students with disabilities
Cathie Czernecki, RN
Cody Deitz, residence hall director
Brenda DePaoli, executive staff assistant, division of student affairs
Melissa Dunn, director of student engagement
Robert Farquhar, management technician, conference services/student engagement/auxiliary services
Paul Fazio, assistant director of student center
Donna George, PASSHE alcohol and other drug coalition coordinator
Christa Grillo, RN
Diane Hasbrouck, director, center for volunteer programs and service learning/commuter and non-traditional student services
Thomas Hasbrouck, assistant director of recreational services
Donna Hoak, secretary, women's center/end violence center/student conduct
Cheryl Lotti, RN
John Massella, director, associate professor, office for students with disabilities
Becky McMillen, director of auxiliary enterprises
Rachel Michaels, director of student wellness support services
Gloria Minutello, technical director
Dawn Moeller, clinical psychologist/professor, counseling center
Lindsay Mongell, director of events, conference services
James Pflugh, associate dean for student conduct
Tina Pierce, certified registered nurse practitioner
Micah Reed, residence hall director
Jamison Roth, director of recreational services
Nancy Skobel, associate dean for student affairs
Stephanie Stern, counselor, assistant professor, counseling center
Anthony Steve, student affairs systems administrator, CalCard services
Timothy Susick, associate vice president for student affairs, T.R.A.I.T. coordinator
Jackie Thorn, facilities and occupancy manager, university housing
Diane Tomi, administrative assistant, wellness center/recreational services
Terry Wigle, associate dean for student affairs

Student Association Inc. (SAI) / Vulcan Village

Nicole Arthur, administrative assistant, SAI
Kimberly Cupplo, senior traditional accountant, SAI
Pam DelVerne, director of technology services, SAI
Cheryl Golembiewski, student center coordinator, SAI
Lisa Hartley, accounts payable/payroll supervisor, SAI
Jeff Helsel, director of print and multimedia journalism, SAI
Joy Helsel, director of fraternity and sorority life/special publications, SAI
Leigh Ann Lincoln, chief financial officer, SAI
Richard Morris, maintenance technician, Vulcan Village
Justin Schiefelbein, community manager, Vulcan Village
Ron Sealy, athletic practice fields foreman, SAI
Jared Shiner, contract and marketing manager, Vulcan Village
Keith Skirpan, senior housing accountant, SAI
Gary Smith, director of CUTV operations, SAI
Thomas Zemany, maintenance manager, Vulcan Village

University Development and Alumni Relations

Anthony Mauro, vice president for university development and alumni relations
Ryan Barnhart, director of alumni relations
Christian Caldwell, manager of data and support services
Cathy Connelly, senior director of development
Mariah Peoples, development assistant
Marisa Novak, executive staff assistant to vice president for university development and alumni relations
Justin James, development associate
Randi Minerva, manager of annual giving programs
Staci Tedrow, administrative assistant for alumni relations

Academic Organization

Under the direction of the provost, two undergraduate colleges and the School of Graduate Studies and Research administer the academic affairs of the University. Each of these divisions is administered by a dean who is responsible for the operation of the college or school.

- College of Education and Liberal Arts
- Eberly College of Science and Technology
- School of Graduate Studies and Research

Accreditations

UNIVERSITY MEMBERSHIPS, RECOGNITIONS AND ACCREDITATIONS

MEMBER of the Pennsylvania State System of Higher Education

MEMBER of the American Association of State Colleges and Universities (AASCU)
1307 New York Ave. NW, Fifth Floor
Washington, DC 20005-4701
202-293-7070
Fax 202-296-5819
www.aascu.org

MEMBER of the American Association of Colleges of Teacher Education (AACTE)
1307 New York Ave. NW, Suite 300
Washington, DC 20005-4701
202-293-2450
Fax 202-457-8095
www.aacte.org

ACCREDITED by the Middle States Commission on Higher Education (MSCHE)
3624 Market St.
Philadelphia, PA 19104
267-284-5000
Fax 215-662-5501
www.msche.org

PROGRAM RECOGNITIONS and CERTIFICATIONS

Administrative Program for Principals (Embedded within the Master's Program) and Superintendent Letter of Eligibility (Post-Master's Certification)
Recognized by the Educational Leadership Constituent Council (ELCC)
1615 Duke St.
Alexandria, VA 22314-3483
703-518-6256
Fax 703-549-5568
http://naesp.org

B.S. Chemistry Program, Certified by the American Chemical Society (ACS)
1155 16th St.
Washington, DC 20036
www.acs.org/cpt

PROGRAM ACCREDITATIONS

B.A. Art, BFA Studio Art, and B.S.Ed. Art Education programs, accredited by the National Association of Schools of Art and Design (NASAD)
11250 Roger Bacon Dr. Suite 21
Reston, VA 20190
703-437-0700
Fax 703-437-6312
nasad.arts-accredit.org

B.S. (Business Administration: Management Information Systems and Integrated Global Business concentrations), B.S.B.A. (Accounting, Economics, Finance, Human Resources Management, Interdisciplinary Studies in Business and Commerce, Management, Marketing), MBA (Accounting, Applied Economics, Business Analytics, Healthcare Management, Management, Nursing Administration, Social Work Administration), and M.Acc. (Accountancy) accredited by the Accreditation Council for Business Schools & Programs (ACBSP)
World Headquarters
11520 West 119th Street
Overland Park, KS 66213 913-339-9356
https://www.acbsp.org/

M.S. Communication Disorders program, accredited by the American Speech-Language-Hearing Association (ASHA)
2200 Research Blvd.
Rockville, MD 20850-3289
301-296-5700
Fax 301-296-8580
www.asha.org

B.S. Computer Engineering Technology program, accredited by the Engineering Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)
111 Market Place, Suite 1050
Baltimore, MD 21202-4012
410-347-7700
Fax 410-625-2238
www.abet.org

B.S. Computer Information Systems program, accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)
415 N. Charles St.
Baltimore, MD 21201
410-347-7700
www.abet.org

B.S. Computer Science program, accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)
415 N. Charles St.
Baltimore, MD 21201
410-347-7700
www.abet.org

M.Ed. School Counseling and M.S. Clinical Mental Health Counseling programs, accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP)
500 Montgomery St, Suite 350
Alexandria, VA 22314
703-535-5990
Fax 703-739-6209
www.cacrep.org

B.S. Electrical Engineering Technology program, accredited by the Engineering Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)
111 Market Place, Suite 1050
Baltimore, MD 21202-4012
410-347-7700
Fax 410-625-2238
www.abet.org

A.S. and B.S. Digital Media programs, accredited by the Accrediting Council for Collegiate Graphic Communications, Inc. (ACCGC)
1034 W. 15th St.
Cedar Falls, IA 50613-3659
319-266-8432
www.accgc.org

B.S. Graphic Design program, accredited by the National Association of Schools of Art and Design (NASAD)
11250 Roger Bacon Dr., Suite 21
Reston, VA 20190
703-437-0700
Fax 703-437-6312
nasad.arts-accredit.org

B.S. Mechatronics Engineering Technology, accredited by the Engineering Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)
111 Market Place, Suite 1050
Baltimore, MD 21202-4012
410-347-7700
Fax 410-625-2238
www.abet.org

BSN and MSN (Nursing) programs, accredited by the Commission on Collegiate Nursing Education (CCNE)
655 K Street, NW, Suite 750
Washington, DC 20001
202-887-6791 x249

Fax 202-887-8476
www.ccneaccreditation.org

B.A. Parks and Recreation Management program, accredited by the National Recreation and Park Association Council on Accreditation for Parks, Recreation, Tourism and Related Professions (COAPRT)
1401 Marvin Rd. NE
STE 307, #172
Lacey, WA 98516
360-205-2096
Fax 360-453-7893
https://accreditationcouncil.org/

A.A.S. Physical Therapist Assistant program, accredited by the American Physical Therapy Association
3030 Potomac Ave., Suite 100
Alexandria, VA 22305-3085
703-706-3243 or 800-999-2782, ext. 3243
www.capteonline.org

A.S. Radiologic Technology program, accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Dr., Suite 28050
Chicago, Il 60606-3182
312-704-5300
Fax 312-704-5304
www.jrcert.org

M.S. + Certification program School Psychology program, accredited by the National Association of School Psychologists (NASP)
4340 E. West Highway, Suite 402
Bethesda, MD 20814
301-657-0270
Fax 301-657-0275
www.nasponline.org

BSW and MSW (Social Work) programs, accredited by the Council on Social Work Education (CSWE)
1701 Duke St., Suite 200
Alexandria, VA 22314
703-683-8080
Fax 703-683-8099
www.cswe.org

Educator Preparation programs, approved by NCATE, now referred to as the Council for the Accreditation of Education Preparation (CAEP)
1140 19th St. NW, Suite 400
Washington, DC 20036
202-223-0077
www.caepnet.org

B.A. Theatre program (and concentrations in Musical Theatre and Design and Entertainment Technology), Estill (voice) Education Affiliate, accredited by the National Association of Schools of Theatre (NAST)
11250 Roger Bacon Dr. Suite 21
Reston, VA 20190
703-437-0700
Fax 703-437-6312
Nast.arts-accredit.org

A.S. and B.S. Veterinary Technology programs, accredited by the AVMA Division of Education and Research Committee on Veterinary Technician Education and Activities (CVTEA)
1931 North Meacham Road, Suite 100
Schaumburg, IL 60173-4360
800-248-2862, ext. 6624
Fax 847-285-5732
www.avma.org

California University of Pennsylvania is currently seeking accreditation for their new Athletic Training program and is not accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The institution will be submitting a self-study to begin the accreditation process on July 1, 2022. Submission of the self-study and completion of a site visit does not guarantee that the program will become accredited. Students that graduate from the program prior to accreditation WILL NOT be eligible to sit for the credentialing examination for athletic trainers and will not be eligible for licensure in most states.

Academic Policies

Faculty advisers are available to assist students in academic planning and to discuss student academic progress.

Please visit https://www.calu.edu/inside/policies/ to view the most current academic policies.

Institutional Review Board (IRB)

For information about California University of Pennsylvania's Institutional Review Board (IRB), please visit the IRB website at: https://www.calu.edu/inside/faculty-staff/institutional-review/index.aspx.

Louis L. Manderino Library

LOUIS L. MANDERINO LIBRARY is committed to providing the resources needed to support the research needs of Cal U students. This includes a substantial collection of peer-reviewed journals, books (including e-books), online research databases and audiovisual materials. In addition to our collections, the library provides both individual and collaborative study areas, including private rooms for group use. To help reduce the stress of studying, the library has vending machines with drinks and snacks, a collection of popular DVDs, a graphic novel collection and a selection of popular reading books.

Electronic Resources: Online information retrieval has made library research more thorough and more efficient. Using the library's research databases and online catalog, students can quickly locate and access an impressive collection of scholarly journals, magazines, books, e-books, newspapers and audiovisual materials. All of the library's electronic resources are accessible from on- and off-campus locations, so students can research anywhere they have Internet access. Since the library is constantly working to provide the best resources for our students, please visit the library's website (https://library.calu.edu) for the current list of library resources.

Research Services and Library Instruction: With so many research options available, it can be daunting to know how to search effectively. Help with this process is available to students from the research librarians. Students are encouraged to contact the librarians through scheduled personal appointments, in the library or by telephone, email, chat, text or a Zoom online meeting. Cal U librarians are faculty members and work with classroom professors to provide instruction sessions to students regarding the effective use of library resources in their coursework.

Shared Library Resources and Interlibrary Loan: Beyond our own collections, Cal U participates in several resource-sharing programs that offer students a wealth of additional resources. When Manderino Library does not have the book a student needs, the online E-ZBorrow system allows students to request books from scores of academic libraries in Pennsylvania, West Virginia, New Jersey and New York. This system is both fast and free. If the book cannot be obtained from an E-ZBorrow library, or if a student needs an article that is not available in the library's journal resources, these can be requested from other libraries through our Interlibrary Loan Office.

University Police

The California University Police Department is a fully recognized law enforcement agency as authorized by 71 P.S. 646, the Administrative Code of 1929 as amended and Title 18 of the Pennsylvania Consolidated Status (Crimes and Offenses), and 24 P.S. 20-1006-A (14) 20-10A (5) of the State System of Higher Education Act.

The department consists of professionally trained individuals capable of responding to requests for assistance in routine and emergency situations. The department, a diverse group of police officers, communications officers and secretarial staff, provides continuous 24-hour assistance to the University community.

The staff includes a director/chief, assistant chief, four lieutenants (three patrol supervisors and one criminal investigator), one specialist/K-9 handler and 11 additional commissioned police officers that have received certification from a MPOETC- approved Act 120 police academy. Two security officers (dispatchers) and an administrative assistant contribute to the operation of the department.

Cal U's Police Department has also established a K-9 unit that will help track lost persons, recover evidence and engage in drug searches and public relations activities, in addition to day-to-day patrol of campus.

Additional services offered to University students, faculty and staff include parking and traffic management, criminal investigations, health, fire and safety surveys, special event planning, accident investigation and crime prevention information and presentations.

Pursuant to the Pennsylvania College and University Security Act and the Federal Crime Awareness and Campus Security Act of 1990, postsecondary institutions, including colleges and universities, must annually make available to all applicants, students and employees information with respect to campus crime statistics and the security policies of the institution.

The information is compiled by Cal U and made available through the Office of Admissions, Office of Student Affairs and University Police and on the University website.

Admissions

Application Process

Individuals may apply online at www.calu.edu and pay the non-refundable application fee.

Submit official transcripts of the degree required for admission to the School of Graduate Studies and Research, California University of Pennsylvania, 250 University Ave., California, PA 15419. The degree must have been awarded from a regionally accredited college or university. It is not necessary to send a transcript of coursework completed at Cal U.

Admission Decisions

Admission requirements to the graduate school vary by program. Prospective students should refer to the requirements listed for each graduate program on the University website. Applicants who do not meet the minimum cumulative GPA for regular admission may be considered for conditional admission and are encouraged to apply.

In addition to GPA, some programs require additional documentation, such as letters of recommendation, references, specified entrance exams (Praxis/PAPA, GRE, MAT) and/or other supporting material. See program requirements.

When Graduate Admissions has received all of the required application materials, the materials are reviewed for the admission decision.

An admission decision is valid for one academic year (two semesters and one summer term, i.e., the semester/ term the student applied for and the following two semesters/terms). An admitted student has one year to register for courses from the date listed on the Admissions decision notification. If a student does not register for classes during that time, the acceptance is no longer valid and the applicant must reapply for admission, repay the application fee and resubmit all materials.

Residency is determined at the time of admission. A Pennsylvania resident is defined as one who is a bona fide resident of and domiciled within the Commonwealth of Pennsylvania for a reasonable period, typically not less than one year, immediately preceding the student's registration for a term. Individuals who have been adjudged not to be a resident of Pennsylvania and would like to appeal the decision must petition after admission to the Residency Appeals Committee through the office of the Vice President for Academic Affairs. A student who is dissatisfied with the University's determination of their classification may challenge it by filing a written petition with the University officer or committee designated by the University president to consider challenges within 30 days after issuance of the determination. The petition shall contain a statement of reasons in support of the student's claim of Pennsylvania domicile and supporting documentation the student may wish to submit. Untimely petitions may not be considered.

Admission Policy

Several types of admission to the graduate school are available. Please consult the Admission to the Graduate School policy on the University Policies webpage for more details.

Application Deadlines

Application deadlines vary by program, and students are advised to apply for admission to the School of Graduate Studies and Research as early as possible. Most programs have rolling deadlines and applications may be submitted at any time. However, the programs listed below have strict application deadlines that must be met in order to be considered for admission. To meet the deadlines listed below, all required application materials must be received on or before the stated dates.

Master's Programs

Clinical Mental Health Counseling

- Spring Admission: Sep. 15
- Summer or Fall Admission: Feb. 15

Communication Disorders

- Feb. 15

Counselor Education

- Spring Admission: Sept. 15
- Summer or Fall Admission: Feb. 15

Criminal Justice Studies: Forensic Linguistics

- Third Monday of February

School Counseling

- Spring Admission: Sep. 15
- Summer or Fall Admission: Feb. 15

School Psychology

- Feb. 28

Doctorate Programs
Criminal Justice (D.C.J.)

- Feb. 15

Education and Administrative Leadership (Ed.D.)

- Jun. 1

Health Science and Exercise Leadership (D.H.Sc.)

- Jul. 15

Admission for Other Programs
In addition to degree programs, the University offers certification programs, certificates and options for non-degree and visiting students.

Certification Programs
Certification programs prepare individuals to apply for a certification or licensure from a third party, which normally imposes experiences and requirements beyond university credits. These additional program requirements develop appropriate competencies in specific areas of specialization.

Certificates
A certificate is not a certification but rather a formal, credit-based credential that indicates completion of a program of study that does not culminate in a degree or qualify the individual for certification.

Non-degree

Although most graduate students at Cal U are enrolled in degree programs, there are opportunities to take some graduate classes as a non-degree student for personal or professional growth without pursuing a graduate degree.

Admitted non-degree students may take only 6 credits before they are required to apply as a degree-seeking student. Completion of these courses does not automatically lead to admission to a degree or certification program. Applicants interested in further exploration must reapply (fee waived).

Visiting Students

Graduate students from other universities (sometimes known as "visiting students") may take courses at Cal U. Visiting students are responsible for knowing and adhering to the transfer policies of their home institutions.

International Students

Cal U welcomes applications from students from countries other than the United States. All international applicants studying on campus must follow the procedures and guidelines available at: https://www.calu.edu/international-students/.

Graduate Assistantships

All applicants who are interested may contact the School of Graduate Studies and Research regarding graduate assistantships and the Financial Aid Office regarding financial options. Admission into the University does not imply receipt of a graduate assistantship.

Overview of Graduate Academic Programs

California University of Pennsylvania (Cal U) offers a variety of master's degree and doctorate programs as well as post-baccalaureate and post-master's certificate/certification programs.

Where to Find Your Program in the Catalog

Within this academic catalog, information about individual graduate programs is organized by category:

- **AMS DataStreme**
    - Certificate in AMS DataStreme
- **Applied Criminology and Doctor of Criminal Justice**
    - M.A. in Criminal Justice: Applied Criminology and related dual degrees and certificates
    - Doctor of Criminal Justice (D.C.J.)
- **Applied Math and Data Science**
    - PSM in Applied Mathematics
    - Certificate in Data Science
- **Arabic Language and Linguistics**
    - M.A. in Arabic Language and Linguistics and related certificate
- **Athletic Training**
    - M.S. in Athletic Training
- **Business and Economics**
    - Master of Accountancy (M.Acc.)
    - MBA concentrations and related certificates
    - Certificate in Corporate Diplomacy
- **Communication Disorders**
    - M.S. in Communication Disorders
- **Conflict Resolution Studies**
    - M.A. in Conflict Resolution Studies
- **Counselor Education**
    - School Counseling M.Ed. and certification only programs
    - M.S. in Clinical Mental Health Counseling
    - Post-master's program in Counselor Education
    - Certificates in specialized areas of counseling
- **Cybersecurity**
    - PSM in Cybersecurity and related certificate
- **Exercise Science and Health Promotion**
    - M.S. in Exercise Science and Health Promotion concentrations and related certificates
- **Forensic Linguistics**
    - M.A. in Criminal Justice Studies: Forensic Linguistics and related dual degrees and certificate
- **Health Science and Exercise Leadership**
    - Doctor of Health Science (D.H.Sc.)
- **Legal Studies**
    - M.S. in Legal Studies concentrations (including criminal justice, homeland security, and law and public policy) and related certificates
    - Certificate in Police Executive Law and Policy
    - Certificate in Sexual Assault Investigation and Victimization
- **Nursing**
    - MSN in Nursing Administration and Leadership and related certificate
- **Psychology**
    - M.S. in School Psychology plus Certificate
    - Certificate in Threat Assessment and Management in Schools

Academic Programs

- **Social Work**
    - MSW in Social Work (regular and advanced standing programs)
- **Sport Management Studies**
    - M.S. in Sport Management Studies concentrations and related certificate
- **Teacher Education, Administration and Leadership**
    - Ed.D. (+SLE), M.Ed. and MAT programs and education-related certificates and certifications

Note: Each of the above sections in this catalog includes a page with a full list of the programs covered under that category. The above is designed to help you find the section that is relevant to you but is NOT an exhaustive list of graduate programs offered at Cal U.

AMS DataStreme
Program
Cal U offers a collaborative AMS (American Meteorological Society) post-baccalaureate DataStreme certificate geared toward active K-12 teachers nationwide.

Note: See the "Teacher Education, Administration and Leadership Graduate Programs" section of this catalog for additional information about education-related master's programs, including:

- Educational Studies: Weather and Climatology concentration of the M.Ed. in Educational Leadership
- Earth Science: Secondary Education with Initial Certification (MAT)
- Teacher Education: Integrative STEM Ed K-12 (M.Ed.)

Certificate in AMS DataStreme
Program Description
The post-baccalaureate DataStreme certificate program at Cal U is part of a unique partnership with the American Meteorological Society (AMS). The certificate program is designed to help K-12 teachers enhance their knowledge of Earth's atmosphere, ocean and climate systems.

Program Coordinator
Dr. Chad Kauffman

Delivery Mode
Global Online (100% online delivery)

Curriculum

Course	Credits
Select 9 credits from the following:	
EAS 511 DataStreme Atmospheric Studies	3
EAS 512 DataStreme Ocean Studies	3
EAS 513 DataStreme Climate Studies	3
EAS 514 Selected Topics in Atmospheric Studies	3
EAS 515 Selected Topics in Ocean Science Studies	3
Total	**9**

Program Webpage
http://calu.edu/ams

Applied Criminology and Doctor of Criminal Justice

Faculty

Dr. Aref M. Alkhattar | Dr. Robert Ambrosini | Carl Benoit, J.D. | Dr. Andrea Vargas Cencich | Dr. John Cencich | Dr. Robert Clark | Dr. Raymond J. Hsieh | Dr. Michael Hummel | Dr. Philip Reichel | Dr. Nikolas Roberts | Dr. Beverly Ross | Dr. Mathilda Spencer | Julie Warnick, J.D. | Dr. Christopher Wydra

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers graduate programs in:

- M.A. in Criminal Justice Studies: Applied Criminology
- Doctor of Criminal Justice (D.C.J.)
- Certificate in Applied Criminology
- Certificate in Behavioral Crime Analysis

Dual master's programs are also available:

- M.A. in Criminal Justice: Applied Criminology / M.A. in Conflict Resolution
- M.A. in Criminal Justice: Applied Criminology / M.S. in Exercise Science and Health Promotion: Tactical Strength and Conditioning

Note: Cal U also offers a forensic linguistics concentration to the M.A. in Criminal Justice Studies degree (see "Forensic Linguistics"); a threat assessment and management in schools certificate (see "Psychology"); and M.S. in Legal Studies concentrations (see "Legal Studies").

Certificate in Applied Criminology

Program Description

The applied criminology post-baccalaureate certificate program focuses on ethical and legal aspects of criminology, advanced criminological theories, research methods in criminology and applied research in criminology.

Program Coordinator

Dr. Christopher Wydra

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
CRM 700 Advanced Criminological Theories	3
CRM 720 Research Methods in Criminology	3
CRM 810 Violent Crime Analysis	3
CRM 820 Ethical and Legal Aspects of Criminology	3

Course	Credits
Total	12

Program Webpage

https://www.calu.edu/academics/graduate/certificates/applied-criminology/index.aspx

Certificate in Behavioral Crime Analysis

Program Description

The behavioral crime analysis post-baccalaureate certificate program is designed to give criminal justice professionals a deeper understanding of criminal behavior and equip them with new tools and strategies for contemporary and sophisticated criminal investigations and analysis.

Program Coordinator

Dr. Christopher Wydra

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
CRM 710 Advanced Behavioral Crime Analysis Theory	3
CRM 830 Criminal Investigative Analysis	3
CRM 840 Equivocal Death Analysis	3
CRM 850 Environmental Criminology	3
Total	**12**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/behavioral-crime-analysis/

Doctor of Criminal Justice

Program Description

The Doctor of Criminal Justice (D.C.J.) program focuses on contemporary criminal justice issues in the United States and is aimed at achieving justice more often.

Program Coordinator

Dr. John Cencich

Delivery Mode

Global Online (100% online delivery of coursework, with a one-week campus residency)

Curriculum

Course	Credits
CRJ 800 Leading Criminal Justice Agencies	3
CRJ 805 Using Theory to Improve CJ Practice	3
CRJ 810 Improving the Administration of Juvenile Justice	3
CRJ 820 21st Century Policing	3
CRJ 830 Corrections: Crisis and Management	3
CRJ 840 Advanced Criminal Law and Procedure for CJ Leaders	3
CRJ 855 Special Topics in Doctoral Criminal Justice Studies	3
CRJ 860 Criminal Justice Training: Needs, Problems, Solutions	3
CRJ 870 Constitutional Policing and Corrections	3
CRJ 880 Achieving Justice More Often	3
CRJ 890 Applied Criminal Justice Research Methods for CJ Leaders	3
CRJ 895 Legal Research Methods for Criminal Justice Practitioners	3
CRJ 920 Doctoral Research Portfolio	6
Total	**42**

Additional Requirements

A comprehensive exam is administered during the winter term preceding the final spring semester. Successful completion classifies students as doctoral candidates.

Program Webpage

https://www.calu.edu/academics/graduate/doctoral/criminal-justice/index.aspx

Dual Degree in Applied Criminology and Tactical Strength and Conditioning

Program Description

Through this dual degree program, students earn an M.A. in Criminal Justice: Applied Criminology and an M.S. in Exercise Science and Health Promotion: Tactical Strength and Conditioning.

Program Coordinators

Dr. Christopher Wydra (applied criminology) and Dr. Barry McGlumphy (tactical strength and conditioning)

Curriculum

Course	Credits
Exercise Science and Health Promotion Courses	**24**
PRF 700 Orientation to Exercise Science and Health Promotion	3
PRF 719 Advanced Techniques in Tactical Strength and Conditioning	3
PRF 720 Essentials of Human Movement Science	3
PRF 759 Tactical Strength and Conditioning Program Design	3
PRF 765 Nutrition for Peak Performance	3
PRF 770 Exercise Physiology: Assessment and Exercise Prescription	3
PRF 789 Current Topics in Tactical Strength and Conditioning	3
PRF 810 Research in Performance Enhancement	3
Applied Criminology Courses	**24**
CRM 700 Advanced Criminological Theories	3
CRM 710 Advanced Behavioral Crime Analysis Theory	3
CRM 810 Violent Crime Analysis	3
CRM 820 Ethical and Legal Aspects of Criminology	3
CRM 830 Criminal Investigative Analysis	3
CRM 840 Equivocal Death Analysis	3
CRM 850 Environmental Criminology	3
CRM 870 Special Topics in Criminology	3
Total	**48**

Dual Major in Applied Criminology and Conflict Resolution

Program Description

Through this dual major program, students earn an M.A. in Criminal Justice: Applied Criminology and an M.A. in Conflict Resolution.

Program Coordinators

Dr. Christopher Wydra (applied criminology) and Dr. Beverly Ross (conflict resolution)

Curriculum

Course	Credits
Conflict Resolution Courses	**21**
CRS 700 Conflict Resolution Theory and Practice	3
CRS 725 Restorative Justice and VOM	3
CRS 735 De-escalation and Community Conflict Management	3
CRS 740 Legal Aspects of Conflict Resolution	3
CRS 770 International and Intercultural Conflict Resolution	3
CRS 780 Principles of Mediation Practice	3
CRS 810 Conflict Resolution Graduate Internship OR **CRS 819** Conflict Resolution Applied Research Project	3
Applied Criminology Courses	**21**
CRM 700 Advanced Criminological Theories	3
CRM 710 Advanced Behavioral Crime Analysis Theory	3
CRM 810 Violent Crime Analysis	3
CRM 820 Ethical and Legal Aspects of Criminology	3
CRM 830 Criminal Investigative Analysis	3
CRM 840 Equivocal Death Analysis	3
CRM 850 Environmental Criminology	3
Total	**42**

M.A. in Criminal Justice Studies: Applied Criminology

Program Description

The applied criminology concentration of the Master of Arts in Criminal Justice Studies presents advanced criminological theories and examines the behavioral manifestations of violent offenders. By combining the best of criminal justice and applied criminology study, the program enables students to build a strong foundation of

theoretical and research knowledge and skills. This provides students with the sophisticated techniques needed to apply this analytical framework to real-world situations. Students also learn to apply this theoretical framework to real-world situations involving criminal investigative analysis, equivocal death analysis and geographical crime analysis.

Program Coordinator

Dr. Christopher Wydra

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
CRM 700 Advanced Criminological Theories	3
CRM 710 Advanced Behavioral Crime Analysis Theory	3
CRM 720 Research Methods in Criminology	3
CRM 810 Violent Crime Analysis	3
CRM 820 Ethical and Legal Aspects of Criminology	3
CRM 830 Criminal Investigative Analysis	3
CRM 840 Equivocal Death Analysis	3
CRM 850 Environmental Criminology	3
Select one of the following:	
CRM 880 Criminology Thesis*	6
CRM 885 Criminology Internship	6
CRM 890 Criminology Studies Abroad*	6
GRA 662 Prior Learning Assessment (FBI Academy, FLETC, CFE Certification and similar academies and programs)	6
Credits from the Tactical Strength and Conditioning Program	6
Total	**30**

* Depending on availability.

Program Webpage

www.calu.edu/academics/online-programs/applied-criminology/index.htm

Applied Math and Data Science

Faculty

Dr. Mohamed Benbourenane | Dr. Kaddour Boukaabar | Dr. Olaniyi Iyiola | Dr. Leandro Junes | Dr. Bismark Oduro | Dr. Melissa Sovak

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers math and data science graduate programs in:

- PSM in Applied Mathematics
- Certificate in Data Science

Certificate in Data Science

Program Description

The data science post-baccalaureate certificate program is designed to provide students with hands-on training in managing big data.

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
MAT 601 Data Preparation and Cleaning	3
MAT 602 Data Visualization	3
MAT 603 Big Data Tools	3
MAT 604 Big Data Analytics	3
MAT 605 Data Analytics Capstone Project	3
Total	**15**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/sas-data-science/index.aspx

PSM in Applied Mathematics

Program Description

The Professional Science Master's (PSM) in Applied Mathematics is designed to help develop skills in big data analysis and mathematics for a variety of STEM-related occupations for business, government and commercial applications.

Program Coordinators

Dr. Olaniyi Iyiola and Dr. Bismark Oduro

Delivery Mode

Global Online (100% online delivery)

Classes are conducted online with field experiences and internships taking place at the student's site.

Curriculum

Course	Credits
PSA 611 Optimization and Operations Research I	3
PSA 671 Advanced Multivariate Statistics	3
PSM 645 Applied Cryptography	3
PSM 675 Project Management	3
PSM 760 Leadership and Professional Development	3
PSM 799 PSM Capstone Course	6
Electives	9
Total	**30**

Experiential Component

In the capstone course experience, students in the PSM in Applied Mathematics program apply what they have learned in the classroom to real-world situations, gaining experience and confidence in the workplace. Students will effectively manage a project, design a solution and effectively communicate results to business partners and to faculty.

Program Webpage

https://www.calu.edu/academics/graduate/masters/applied-mathematics/index.aspx

Arabic Language and Linguistics

Faculty

Dr. Abdullah Alsaffar | Dr. Razak Surrey

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers the following Arabic language and linguistics graduate programs:

- M.A. in Arabic Language and Linguistics
- Certificate in Arabic Language and Linguistics

Note: A dual master's program (M.A. in Criminal Justice: Forensic Linguistics / M.A. in Arabic Language and Linguistics) is also available (see "Applied Criminology and Doctor of Criminal Justice" section of this catalog).

Certificate in Arabic Language and Linguistics

Program Description

This post-baccalaureate certificate program is designed for students interested in increasing their expertise in Arabic language and linguistics beyond a bachelor's level.

Program Coordinator

Dr. Razak Surrey

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
ARB 610 Arabic Linguistics	3
ARB 620 Arabic-English Translation	3
ARB 630 Arabic Literature and Social Cultural Aspects	3
ARB 640 Arabic Dialect Acquisition and Variation	3
ARB 810 Special Topics in Arabic	3
Total	**15**

M.A. in Arabic Language and Linguistics

Program Description

The Master of Arts in Arabic Language and Linguistics is designed for students interested in gaining advanced expertise in Arabic language and linguistics. Such knowledge and skills can be used in professions such as: educator, linguist, translator or interpreter.

Program Coordinator

Dr. Razak Surrey

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
Required Core Courses	
ARB 610 Arabic Linguistics	3
ARB 620 Arabic-English Translation	3
ARB 630 Arabic Literature and Social Culture Aspects	3
ARB 640 Arabic Dialect Acquisition and Variation	3
ARB 650 Images of Islam	3
ARB 660 Advanced Arabic Composition	3
ARB 670 Methods of Teaching and Learning Arabic	3
ARB 810 Special Topics in Arabic	3
Select 6 credits from the following:	
GRA 800 Graduate Internship	3 to 6
GRA 820 Graduate Studies Abroad	3 to 6
RES 849 Thesis	3 to 6
Total	**30**

Program Webpage

https://www.calu.edu/academics/graduate/masters/arabic/index.aspx

Athletic Training

Faculty

Dr. Shelly Fetchen DiCesaro | Jeff Giovannucci | Mercedes Himmons | James Hoover | Dr. Jamie Weary | Scott Zema

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Program

Cal U anticipates admitting their first cohort for Summer 2022.

Note: Cal U is currently seeking accreditation for their new Athletic Training program and is not accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The institution will be submitting a self-study to begin the accreditation process on July 1, 2023. Submission of the self-study and completion of a site visit does not guarantee that the program will become accredited. Students that graduate from the program prior to accreditation will not be eligible to sit for the credentialing examination for athletic trainers and will not be eligible for licensure in most states.

M.S. in Athletic Training

Program Description

The Master of Science in Athletic Training program takes a hands-on, multifaceted approach to preparing students for certification and a career in the fast-growing athletic training occupation while introducing them to special interest topics, such as cadaver dissection; complementary and alternative therapies; pediatrics; behavioral health; and leadership. Students in the program develop practical clinical skills outside of the classroom in areas of complementary manual therapies, therapeutic interventions, pediatric sports medicine and advanced care, alongside many other special interest areas in both practicum and clinical immersion courses.

Program Coordinator

Dr. Shelly Fetchen DiCesaro

Clinical Coordinator

Jeffrey Giovannucci

Delivery Mode

Traditional (on campus)

Curriculum

Course	Credits
ATE 600 Cadaver Anatomy Dissection	3
ATE 603 Foundations of Athletic Training	1
ATE 610 Clinical Skills in Athletic Training	1
ATE 615 Emergency Care and Lab	1
ATE 630 Therapeutic Intervention II and Lab	3
ATE 635 Examination of the Lower Extremity and Lab	3

Athletic Training Graduate Program

Course	Credits
ATE 650 Head and Spine Cadaver Anatomy Dissection	2
ATE 655 Examination of the Head and Spine and Lab	2
ATE 660 Principles of Research in Athletic Training (Online)	2
ATE 665 Examination of the Upper Extremity and Lab	3
ATE 670 Clinical Practicum I	2
ATE 673 Clinical Practicum II	2
ATE 680 Organization, Administration and Leadership in Athletic Training	2
ATE 685 Athletic Training in Pediatrics	1
ATE 690 Therapeutic Interventions I and Lab	3
ATE 710 Behavioral Health Considerations for the Athletic Trainer (Online)	2
ATE 715 Clinical Pathologies and General Medical Conditions	2
ATE 720 Biomechanics and Injury Prevention in Athletic Training	2
ATE 744 Pharmacology (Online)	2
ATE 761 Research Project Capstone (Online)	2
ATE 772 Clinical Immersion (repeatable three times)	3 (x3)
ATE 774 Practicum III	2
ATE 776 Clinical Practicum III	2
ATE 781 Complementary and Alternative Therapies with Lab	2
ATE 785 Professional Practice Transition (Online)	1
Total	**56**

Program Notes: Students are required to maintain a 3.0 GPA or higher with a grade of C or better in their coursework.

Program Webpage

https://www.calu.edu/academics/graduate/masters/athletic-training/index.aspx

Business and Economics

Faculty

Dr. Stephanie Adam | Dr. Ahmet Akgun | Dr. Jacob Bethem | Dr. Adnan Chawdhry | Dr. Joshua Chicarelli | Dr. Paul Hettler | Dr. Elizabeth Jones | Dr. Sarah Judge | Dr. Richard LaRosa | Dr. Mark Lennon | Dr. Nan Li | Dr. Edmund Matecki | Dr. Christian Ola | Dr. Joseph Schwerha

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers business and economics graduate programs in:

Master's Degrees

- Accounting (M.Acc.)
- Business Administration (MBA), with concentrations in:
    - Accounting
    - Applied Economics
    - Business Analytics
    - Healthcare Management
    - Management
    - Nursing Administration
    - Social Work Administration

Note: An overview of the MBA programs is available at: https://www.calu.edu/academics/graduate/masters/mba/index.aspx

Certificates

- Applied Economics
- Business Analytics
- Corporate Diplomacy

Certificate in Applied Economics

Program Description

The post-baccalaureate certificate program in applied economics is designed to provide students with specialized knowledge in economics, laying a foundation of microeconomic and macroeconomic theory along with data analysis skills.

Program Coordinator

Dr. Stephanie Adam

Delivery Mode

100% Online

Curriculum

Course	Credits
Core Courses	
MBA 710 Quantitative Reasoning and Analysis	3

Course	Credits
ECO 710 Advanced Microeconomics	3
ECO 720 Advanced Macroeconomics	3
ECO 730 Applied Econometric Analysis	3
BUS 740 Forecasting and Predictive Modeling	3
Elective *(Select one of the following)*	
MBA 730 Managerial Decision Making	3
MBA 740 Business, Government and Society	3
Business Electives (500-level or higher ACC, BUS, ECO, ENP, FIN, HRM, MGT, MIS, MKT or PSA)	3
Total	**18**

Pre-Requisites: Three credits of calculus (equivalent of BUS 281 or MAT 273 or 281) are required as a pre-requisite to ECO 710 and 720.

Certificate in Business Analytics
Program Description
The post-baccalaureate certificate program in business analytics is designed to help students develop skills related to data mining and analysis.

Program Coordinator
Dr. Stephanie Adam

Delivery Mode
100% Online

Curriculum

Course	Credits
Required Courses	
BUS 710 Applied Data Analysis for Business	3
BUS 740 Forecasting and Predictive Modeling	3
MBA 710 Quantitative Reasoning and Analysis	3
MIS 720 Business Analytics for Big Data	3
MIS 730 Decision Support Systems	3

Course	Credits
Business Electives (500-level or higher ACC, BUS, ECO, ENP, FIN, HRM, MGT, MIS, MKT or PSA)	3
Total	**18**

Additional Requirements

Students who have not completed 3 credits of undergraduate statistics with a B grade or better are required to complete MAT 215 or 225 or MBA 700 as a co-requisite to MBA 710.

Program Webpage

https://www.calu.edu/academics/graduate/certificates/business-analytics/index.aspx

Certificate in Corporate Diplomacy

Program Description

The post-baccalaureate certificate program in corporate diplomacy enhances students' business skills and their ability to build relationships and collaborative work environments. The program blends MBA coursework with specialized courses in conflict resolution.

Faculty Contacts

Dr. Stephanie Adam and Dr. Beverly Ross

Curriculum

Course	Credits
Required Courses	**9**
MBA 700 Business Foundations	3
MBA 720 Leading the Enterprise	3
MGT 710 Leadership Dynamics	3
Electives *(Select three courses from the following)*	**9**
CRS 700 Conflict Resolution Theory and Practice	3
CRS 710 Special Topics in Conflict Resolution	3
CRS 735 De-escalation and Community Conflict Management	3
CRS 740 Legal Aspects of Conflict Resolution	3
CRS 750 Dialogue, Persuasion and Negotiation	3
CRS 780 Principles of Mediation Practice	3

Course	Credits
Total	**18**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/corporate-diplomacy/index.aspx

M.Acc. in Accounting

Program Description

The specialized Master of Accountancy (M.Acc.) degree program expands knowledge of accounting principles and practices. Students will conduct relevant accounting research, using both primary and secondary sources. Students also will build the technical, research and communication skills required to remain relevant in this rapidly evolving profession. Courses required to earn the M.Acc. degree also help students obtain the 150 credit hours required to become a certified public accountant, or CPA.

Program Coordinator

Dr. Joshua Chicarelli

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
Required Courses	**21**
ACC 710 Financial Accounting	3
ACC 715 Advanced Tax	3
ACC 720 Advanced Financial Accounting	3
ACC 725 Controllership	3
ACC 730 Advanced Auditing	3
ACC 735 Emerging Issues in Accounting	3
MBA 730 Managerial Decision Making	3
Course Options: Specialized Courses	**9**
Select two courses from the following:	
MBA 710 Quantitative Reasoning and Analysis	3
BUS 710 Applied Data Analysis for Business	3
BUS 740 Forecasting and Predictive Modeling	3

Course	Credits
ECO 710 Advanced Microeconomics	3
ECO 730 Applied Econometric Analysis	3
Select one course from the following:	
MIS 720 Business Analytics for Big Data	3
MIS 730 Decision Support Systems	3
Total	**30**

Program Requirements:

Foundation Courses: Applicants who do not possess an undergraduate degree with an accounting major may also be required to take one or more of the three foundation courses:

- **ACC 200** Financial Accounting (3 credits)
- **ACC 301** Intermediate Accounting I (3 credits)
- **ACC 302** Intermediate Accounting II (3 credits)

Program Notes:

- ACC 200 (Financial Accounting) is a pre-requisite for Intermediate Accounting I.
- ACC 301 (Intermediate Accounting) is a pre-requisite for Intermediate Accounting II.

Program Webpage
https://www.calu.edu/academics/graduate/masters/macc-degree/index.aspx

MBA in Business Administration: Accounting
Program Description
The accounting concentration of the MBA program expands students' knowledge of accounting principles and practices. It builds technical, research and communication skills and is suitable for students with little to no accounting background who are interested in the role that accounting plays in business operations.

Students in this concentration:

- Utilize relevant professional accounting technology.
- Apply fundamental concepts of accounting in various business scenarios.
- Demonstrate an understanding of how national and international changes to accounting policies impact the accounting profession.

Note: It is recommended that students seeking to become certified public accountants pursue Cal U's M.Acc. degree. For just 48 credits, students are able to earn both the M.Acc. and the MBA: Accounting degrees.

Program Coordinator
Dr. Stephanie Adam
(Additional Contact: Joshua Chicarelli)

Delivery Mode
Blended or 100% Online

Accreditation
Cal U's business and economics programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a leading specialized accreditation body for business education supporting, celebrating and rewarding teaching excellence. The association embraces the virtues of teaching excellence and emphasizes to students that it is essential to learn.

Curriculum

Course	Credits
Core Courses	
MBA 700 Business Foundations	3
MBA 710 Quantitative Reasoning and Analysis	3
MBA 720 Leading the Enterprise	3
MBA 730 Managerial Decision Making	3
MBA 740 Business, Government and Society	3
MBA 750 MBA Capstone	3
Course Options (Specialized Courses)	
ACC 710 Financial Accounting	3
ACC 715 Advanced Federal Income Tax	3
ACC 720 Advanced Financial Accounting	3
ACC 730 Advanced Auditing	3
Business Electives (500-level or higher ACC, BUS, ECO, ENP, FIN, HRM, MBA, MGT, MIS or MKT)	6
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/mba/accounting.aspx

MBA in Business Administration: Applied Economics

Program Description

The applied economics concentration of the MBA program provides a solid foundation in microeconomic and macroeconomic theory and cultivates data analysis skills. Students are able to apply the knowledge they gain to a variety of problems in business, public policy and behavioral analysis.

Students in this concentration:

- Identify and describe economic problems in a variety of business, government and nonprofit settings.
- Communicate analyses in a clear and coherent manner to a variety of audiences.
- Apply the theoretical tools of microeconomics and macroeconomics and appropriate quantitative and econometric tools to find a solution to economic problems.

Program Coordinator

Dr. Stephanie Adam

Delivery Mode

Blended or 100% Online

Accreditation

Cal U's business and economics programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a leading specialized accreditation body for business education supporting, celebrating and rewarding teaching excellence. The association embraces the virtues of teaching excellence and emphasizes to students that it is essential to learn.

Curriculum

Course	Credits
Core Courses	
MBA 700 Business Foundations	3
MBA 710 Quantitative Reasoning and Analysis	3
MBA 720 Leading the Enterprise	3
MBA 730 Managerial Decision Making	3
MBA 740 Business, Government and Society	3
MBA 750 MBA Capstone	3
Course Options (Specialized Courses)	
ECO 710 Advanced Microeconomics	3
ECO 720 Advanced Macroeconomics	3

Course	Credits
ECO 730 Applied Econometric Analysis	3
BUS 740 Forecasting and Predictive Modeling	3
Business Electives (500-level or higher ACC, BUS, ECO, ENP, FIN, HRM, MBA, MGT, MIS or MKT)	6
Total	**36**

Program Webpage
https://www.calu.edu/academics/graduate/masters/mba/applied-economics.aspx

MBA in Business Administration: Business Analytics

Program Description
The business analytics concentration of the MBA program explores ways to analyze and interpret big data to make better business decisions and manage businesses more effectively and efficiently.

Students in this concentration:

- Evaluate and execute advanced forecasting principles using various modeling techniques to solve complex business problems.
- Analyze and apply big data management strategies using statistical tools.
- Describe and communicate the improved performance of business strategies using key business intelligence theories.
- Apply data analytics methods to improve managerial decision-making using reporting and software applications.

Program Coordinator
Dr. Stephanie Adam

Delivery Mode
Blended or 100% Online

Accreditation
Cal U's business and economics programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a leading specialized accreditation body for business education supporting, celebrating and rewarding teaching excellence. The association embraces the virtues of teaching excellence and emphasizes to students that it is essential to learn.

Curriculum

Course	Credits
Core Courses	
MBA 700 Business Foundations	3

Course	Credits
MBA 710 Quantitative Reasoning and Analysis	3
MBA 720 Leading the Enterprise	3
MBA 730 Managerial Decision Making	3
MBA 740 Business, Government and Society	3
MBA 750 MBA Capstone	3
Course Options (Specialized Courses)	
BUS 710 Applied Data Analysis for Business	3
MIS 720 Business Analytics for Big Data	3
MIS 730 Decision Support Systems	3
BUS 740 Forecasting and Predictive Modeling	3
Business Electives (500-level or higher ACC, BUS, ECO, ENP, FIN, HRM, MBA, MGT, MIS or MKT)	6
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/mba/analytics.aspx

MBA in Business Administration: Healthcare Management

Program Description

The healthcare management concentration of the MBA program focuses on business management skills that are relevant to professionals in medical and healthcare organizations.

Students in this concentration:

- Evaluate policy implications of the changing nature of health and medical care and the implications in the areas of medical practice, medical education and research, and health policy.
- Assess healthcare administration and contexts for successful management of practices in healthcare administration and healthcare systems and business entities in the U.S. and other countries.
- Apply economic principles to healthcare and related health problems.
- Analyze major information technology challenges in healthcare that systems face with managing their information technology adoption and implementation.

Program Coordinator

Dr. Stephanie Adam

Delivery Mode

Blended or 100% Online

Accreditation

Cal U's business and economics programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a leading specialized accreditation body for business education supporting, celebrating and rewarding teaching excellence. The association embraces the virtues of teaching excellence and emphasizes to students that it is essential to learn.

Curriculum

Course	Credits
Core Courses	
MBA 700 Business Foundations	3
MBA 710 Quantitative Reasoning and Analysis	3
MBA 720 Leading the Enterprise	3
MBA 730 Managerial Decision Making	3
MBA 740 Business, Government and Society	3
MBA 750 MBA Capstone	3
Course Options (Specialized Courses)	
ECO 765 Health Economics and Policy	3
MGT 761 U.S. Health Care Policy	3
MGT 763 Health Systems Management	3
MIS 766 Healthcare Informatics	3
Business Electives (500-level or higher ACC, BUS, ECO, ENP, FIN, HRM, MBA, MGT, MIS or MKT)	6
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/mba/healthcare-management.aspx

MBA in Business Administration: Management

Program Description

The management concentration of the MBA program delves deeper into competencies related to leadership, management and administration. It refines organizational problem-solving skills, exploring how to ethically lead — and follow.

Students in this concentration:

- Enhance personal leadership competencies.
- Refine organizational problem-solving and results-generating skills.
- Develop ethical organizational followership competencies.

Program Coordinator

Dr. Stephanie Adam

Delivery Mode

Blended or 100% Online

Accreditation

Cal U's business and economics programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a leading specialized accreditation body for business education supporting, celebrating and rewarding teaching excellence. The association embraces the virtues of teaching excellence and emphasizes to students that it is essential to learn.

Curriculum

Course	Credits
Core Courses	
MBA 700 Business Foundations	3
MBA 710 Quantitative Reasoning and Analysis	3
MBA 720 Leading the Enterprise	3
MBA 730 Managerial Decision Making	3
MBA 740 Business, Government and Society	3
MBA 750 MBA Capstone	3
Course Options (Specialized Courses)	
MGT 710 Leadership Dynamics	3
MGT 720 Leveraging Diversity	3
MGT 730 Organizational Problem Solving	3
MGT 740 Managing Projects	3
Business Electives (500-level or higher ACC, BUS, ECO, ENP, FIN, HRM, MBA, MGT, MIS or MKT)	6
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/mba/management.aspx

MBA in Business Administration: Nursing Administration

Program Description

The nursing administration concentration of the MBA program is designed to give nurse leaders a deeper understanding of business issues in medical settings. Students in this program are required to have earned -- or be working toward -- their MSN degree.

Program Coordinators

Dr. Stephanie Adam (MBA Program Coordinator) and Dr. Nicole Evanick (MSN Program Coordinator)

Delivery Mode

Blended or 100% Online

Accreditation

Cal U's business and economics programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a leading specialized accreditation body for business education supporting, celebrating and rewarding teaching excellence. The association embraces the virtues of teaching excellence and emphasizes to students that it is essential to learn.

Curriculum

Course	Credits
Core Courses	
MBA 700 Business Foundations	3
MBA 710 Quantitative Reasoning and Analysis	3
MBA 720 Leading the Enterprise	3
MBA 730 Managerial Decision Making	3
MBA 740 Business, Government and Society	3
MBA 750 MBA Capstone	3
Course Options (Specialized Courses)	
NUR 602 Health Policy in Nursing	3
NUR 603 Information Systems for Nurses in Health Care Organizations	3
NUR 714 Legal Aspects of Health Care Administration	3
NUR 715 Financial Management in Non-profit Health Care Organizations	3
Business Electives (500-level or higher ACC, BUS, ECO, ENP, FIN, HRM, MBA, MGT, MIS or MKT)	6

Course	Credits
Total	**36**

MSN Students

Students working to concurrently earn both the MSN in Nursing Leadership and Administration and the MBA in Business Administration: Nursing Administration can complete the requirements for both programs with 54 credits:

Course	Credits
MBA Courses	
MBA 700 Business Foundations	3
MBA 710 Quantitative Reasoning and Analysis	3
MBA 720 Leading the Enterprise	3
MBA 730 Managerial Decision Making	3
MBA 740 Business, Government and Society	3
MBA 750 MBA Capstone	3
Business Electives (500-level or higher ACC, BUS, ECO, ENP, FIN, HRM, MBA, MGT, MIS or MKT)	6
MSN/MBA Shared Courses	
NUR 602 Health Policy in Nursing	3
NUR 603 Information Systems for Nurses in Health Care Organizations	3
NUR 714 Legal Aspects of Health Care Administration	3
NUR 715 Financial Management in Non-profit Health Care Organizations	3
MSN Courses	
NUR 601 Theory and Research in Nursing	3
NUR 604 Population Health Promotion and Disease Prevention	3
NUR 711 Nursing Organization and Leadership Theory	3
NUR 712 Nursing Administration and Leadership Role	3
NUR 813 Nursing Administration Role Practicum	6

Course	Credits
Total	**54**

Program Webpage

https://www.calu.edu/academics/graduate/masters/mba/nursing-administration.aspx

MBA in Business Administration: Social Work Administration

Program Description

The social work administration concentration of the MBA program is designed to help social work practitioners build leadership competencies and business knowledge. Students in this program are required to have earned -- or be working toward -- the MSW degree at Cal U.

Program Coordinators

Dr. Stephanie Adam (MBA Program Coordinator) and Dr. Thoa Pham (MSW Program Coordinator)

Delivery Mode

Blended

Accreditation

Cal U's business and economics programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP), a leading specialized accreditation body for business education supporting, celebrating and rewarding teaching excellence. The association embraces the virtues of teaching excellence and emphasizes to students that it is essential to learn.

Curriculum

Course	Credits
Core Courses	
MBA 700 Business Foundations	3
MBA 710 Quantitative Reasoning and Analysis	3
MBA 720 Leading the Enterprise	3
MBA 730 Managerial Decision Making	3
MBA 740 Business, Government and Society	3
MBA 750 MBA Capstone	3
Course Options (Specialized Courses)	
SWK 705 Human Behavior and Social Environment	3

Course	Credits
SWK 707 Human Diversity	3
SWK 709 Social Welfare Policy and Services	3
SWK 812 Practice in Social Work Supervision and Administration	3
Business Electives (500-level or higher ACC, BUS, ECO, ENP, FIN, HRM, MBA, MGT, MIS or MKT)	6
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/mba/mba-msw.aspx

Communication Disorders

Faculty

Nancy Carlino | Dr. Joseph Constantine | Sheri Lake | Dr. Robert Skwarecki | April Wright

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Program

Cal U offers an M.S. in Communication Disorders graduate program.

Facilities

The program has excellent facilities, including a Speech and Hearing Clinic for children and adults with communication disorders; a Learning and Language Center for preschool children; and a technologically advanced Communication Science Laboratory.

M.S. in Communication Disorders

Program Description

The Master of Science in Communication Disorders provides specialized training in all areas of communication disorders.

Program Coordinator

Nancy Carlino

Delivery Mode

Traditional Full-Time (face-to-face delivery with some online/distance elements)

Accreditation

The master's program in communication disorders (speech-language pathology) at Cal U is accredited by:

Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association
2200 Research Blvd.
Rockville, MD 20850-3289
Phone: 800-498-2071
Fax: 301-296-8580
www.asha.org

Curriculum

Course	Credits
Area I: Core Courses Required	**36**
CMD 600 Research and Professional Practice in SLP	3
CMD 701 Language Disorders in Adults	3
CMD 702 Language Disorders in Children	3
CMD 703 Fluency Disorders	3

Communication Disorders Graduate Program

Course	Credits
CMD 705 Voice Disorders	3
CMD 707 Phonology and Articulation	3
CMD 708 Neurology	3
CMD 718 Advanced Audiology for the SLP	3
CMD 765 Dysphagia	3
CMD 766 Traumatic Brain Injury	3
CMD 772 Augmentative and Alternative Communication	3
CMD 785 Seminar in Medical Speech-Language Pathology	3
Area II: Clinical Experiences Required	**15**
CMD 711 Applied Therapeutic Procedures in Preschool Setting	1 to 3
CMD 712 Applied Therapeutic Procedures in Outpatient Setting	1 to 5
CMD 713 Applied Diagnostic Procedures in Speech Pathology	1 to 3
CMD 714 Applied Audiologic Diagnostics and Rehab Procedures	1 to 3
CMD 715 Applied Therapeutic Procedures in Educational Setting	1 to 3
CMD 716 Applied Neurogenic Procedures in Healthcare Facilities	1 to 3
Area III: Rotating Elective Courses	**3**
CMD 731 Early Intervention in Speech-Language Pathology	3
CMD 732 Counseling in Speech-Language Pathology	3
CMD 763 Communication Problems of Special Groups	3
CMD 764 Instrumentation in Speech Language Pathology	3
CMD 773 Communication and Diversity	3

Communication Disorders Graduate Program

Course	Credits
Area IV: Research Course Required	**2 (min.)**
RES 829 Research Project	2
RES 849 Master's Thesis	3 to 6
Total	**56**

Program Requirements

- 25 clinical observation hours
- 375 supervised clinical hours
- Successful completion of candidacy
- Praxis 5331 passing score

Note: All academic coursework and clinical practicum must be completed before beginning the CF experience. If any coursework or practicum is incomplete, which includes all pre-requisites (i.e., basic biology, chemistry or physics, etc.) and core coursework, the hours completed toward your CF experience will not count toward your minimum 1,260 hours. (Retrieved from https://www.asha.org/certification/slpcertification/)

Cohorts

Students move through the program as a cohort. Each cohort completes an identical core of required courses that are critical to successful functioning as a speech-language pathologist (SLP). In addition to those courses, each cohort completes a unique combination of additional courses.

Criteria for Continuing in the Program

Students must maintain a minimum 3.00 GPA while in the program. A remediation process may be utilized in academic and clinical coursework to ensure proficiency in knowledge and skills areas. Students who fail to maintain an overall 3.00 GPA will not be permitted to complete an oral candidacy presentation and written candidacy examination. Successful completion of the candidacy process is required to register for an externship placement. Failure to reacquire a 3.00 during the single probationary semester may result in dismissal from the program.

Program Webpage

https://www.calu.edu/academics/graduate/masters/communication-disorders/index.aspx

Conflict Resolution Studies

Faculty

Dr. Nikolas Roberts | Dr. Beverly Ross

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers an M.A. in Conflict Resolution Studies.

Note: Conflict resolution coursework is also integrated into Cal U's certificate program in corporate diplomacy (see "Business and Economics" section of this catalog). Dual master's programs are offered in:

- M.A. in Criminal Justice: Applied Criminology / M.A. in Conflict Resolution (see "Applied Criminology and Doctor of Criminal Justice" section)
- M.A. in Criminal Justice: Forensic Linguistics / M.A. in Conflict Resolution (see "Forensic Linguistics" section)

M.A. in Conflict Resolution Studies

Program Description

The Master of Arts in Conflict Resolution Studies is designed to help develop skills in alternative dispute resolution (ADR), arbitration and mediation for a variety of occupations in education, human resources, labor relations, law enforcement, counseling, government, law, social work, military and court systems.

Program Coordinator

Dr. Beverly Ross

Delivery Mode

Global Online (100% online delivery)

Classes are conducted online with field experiences and internships taking place at the student's site.

Curriculum

Course	Credits
Required Courses	
CRS 700 Conflict Resolution Theory and Practice	3
CRS 710 Special Topics in Conflict Resolution	3
CRS 725 Restorative Justice and Victim Offender Mediation	3
CRS 735 De-escalation and Community Conflict Management	3
CRS 740 Legal Aspects of Conflict Resolution	3
CRS 750 Dialogue, Persuasion and Negotiation	3
CRS 765 Family Meditation Theory and Practice	3

Course	Credits
CRS 770 International and Intercultural Conflict Resolution	3
CRS 780 Principles of Mediation Practice	3
CRS 790 Neuroscience and Conflict Resolution	3
CRS 800 Research Methods in Conflict Resolution	3
Capstone Experience (choose one)	
CRS 810 Conflict Resolution Internship	3
CRS 819 Applied Research Project	3
Total	**36**

Program Webpage

www.calu.edu/academics/online-programs/conflict-resolution/index.htm

Counselor Education

Faculty

Dr. Grafton Eliason | Dr. Elizabeth Gruber | Dr. Robert Mehalik | Dr. Jeff L. Samide | Dr. Jacqueline A. Walsh | Dr. Jacob Wheatley

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers counselor education graduate programs in:

Master's Degrees
- Clinical Mental Health Counseling (M.S.)
- School Counseling (M.Ed.)

Certification Only
- School Counseling (post-master's)

Post-Master's Program
- Counselor Education

Certificates
- Addictive Disorders
- Spiritual, Ethical and Religious Counseling
- Sports Counseling and Student Athlete Mental Wellness
- Student Affairs Practice

Certificate in Addictive Disorders

Program Description

The post-baccalaureate certificate program in addictive disorders is appropriate for anyone interested in learning more about addiction. It is beneficial to individuals in education, mental and behavioral health, criminal justice, medical professions, employee assistance programs and other fields that work with individuals affected by addiction.

Program Coordinator

Dr. Jacob Wheatley

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
Select three courses from the following:	
CED 760 Gambling Addiction	3
CED 761 Addiction and the Family	3

Course	Credits
CED 762 Assessment and Evaluation of Substance Use Disorders and Advanced Group Skills	3
CED 788 Contemporary Topics in Counselor Education (must be in area of addiction)	3
Total	**9**

Program Webpage
https://www.calu.edu/academics/graduate/certificates/addictive-disorders-counseling/index.aspx

Certificate in Spiritual, Ethical and Religious Counseling
Program Description
The post-baccalaureate certificate program in spiritual, ethical and religious counseling prepares students and practitioners to better serve populations in a variety of counseling and ministry settings, including hospitals, private practice, community agencies, churches, rescue missions, shelters or faith-based counseling centers. This program provides competencies in four core areas of study:

1. Self-awareness and knowledge of applied theory to practical contextual settings of spiritual, ethical and religious counseling;
2. Ethics in spiritual and religious counseling;
3. Grief and loss counseling and care, and/or contemporary spiritual, ethical and religious perspectives in counseling; and
4. The integration and application of spiritual, ethical and religious counseling skills into the counseling and ministry process.

Program Coordinator
Dr. Jacob Wheatley

Delivery Mode
Global Online (100% online delivery)

Curriculum

Course	Credits
CED 770 Spiritual, Ethical and Religious Values in Counseling	3
CED 771 Applied Spiritual, Ethical and Religious Counseling Theory	3
CED 772 Grief and Loss Counseling OR **CED 788** Contemporary Topics in Counselor Education	3
Total	**9**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/spiritual-ethical-religious-counseling/index.aspx

Certificate in Sports Counseling and Student Athlete Mental Wellness

Program Description

The post-baccalaureate certificate program in sports counseling and student athlete mental wellness meets the particular interests and needs of counselors, educators and other helping professionals who work with the athlete population in youth sports programs, interscholastic programs, colleges and universities, community and social agencies, professional sporting agencies, recreational settings, etc.

Note: This graduate certificate will not certify you as a professional counselor. However, it may be possible for the courses to be used for additional credits toward licensure or for continuing education credits. Check your state's licensure laws for more information.

Program Coordinator

Dr. Robert Mehalik

Delivery Mode

Global Online (100% online)

Curriculum

Course	Credits
CED 780 Issues and Techniques in Counseling Athletes	3
CED 781 Sports Counseling Programming	3
CED 783 Counseling and Advising Athletes with Death, Loss and Grief OR **CED 788** Contemporary Topics in Counselor Education (approved related to sports counseling)	3
CED 784 Student Athlete Mental Wellness	3
Total	12

Program Webpage

www.calu.edu/academics/online-programs/sports-counseling/index.htm

Certificate in Student Affairs Practice

Program Description

The post-baccalaureate certificate program in student affairs practice prepares students and practitioners to better serve populations in higher education and college counseling centers. Students learn the unique needs of traditional and nontraditional college students.

Program Coordinator

Dr. Robert Mehalik

Delivery Mode

Global Online (100% online)

Curriculum

Course	Credits
CED 777 Student Affairs Services in Higher Education	3
CED 778 The College Student and Higher Education Environment	3
CED 779 Administration of Student Services in Higher Education	3
Total	**9**

Program Webpage

https://www.calu.edu/academics/undergraduate/certificate/student-affairs/index.aspx

Certification-Only Program in School Counseling

Program Description

The non-degree school counseling certification-only program is designed to help students complete the course requirements for certification as a pre-K-12 counselor.

Program Coordinator

Dr. Elizabeth Gruber

Delivery Mode

Traditional (on-ground, face-to-face delivery with some online/distance elements)

Accreditation

Council for Accreditation of Counseling and Related Educational Programs (CACREP)
Approved by the Pennsylvania Department of Education

School counseling programs at Cal U are accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). Through the University, the Middle States Association of Colleges and Post-Secondary Schools accredits the Department of Counselor Education. The Council for the Accreditation of Educator Preparation (CAEP) accredits the school counseling programs (elementary and secondary school guidance). Courses offered by the Department of Counselor Education have been approved by both the National Board for Certified Counselors and by the Pennsylvania Department of Education for certification and continuing education credits (Act 48). The department is authorized by the Commonwealth of Pennsylvania Department of Education to offer certification programs in pre-K-12 school counseling.

Curriculum

Course	Credits
Area I: Core Courses Required for Candidacy	
CED 700 Foundations of School Counseling	3
CED 702 Counseling Theory	3
CED 710 Counseling Skills and Techniques	3
CED 724 Experiential Group Process	3
Area II: Advanced Counseling Core	
CED 705 Developmental Group Counseling	3
CED 720 Cross-Cultural Counseling	3
CED 786 Career Counseling	3
Area III: Psychological Foundations	
CED 721 Diagnosis and Counseling Children and Adolescents	3
CED 722 Assessment Procedures for Counselors	3
CED 755 Counseling Across the Life Span	3
CED 785 Research Methods in Counseling	3
Area IV: Counseling and Education Courses	
CED 708 Substance Abuse and Addiction	3
CED 732 Current Issues in School Counseling: Evidence-Based Practice	3
Electives* (three courses)	9
Area V: Field Education Core	
CED 711 Practicum in Counselor Education	3
CED 712 Clinical Field Experience in Counselor Education	6
CED 787 Ethics, Integration, Consultation and Collaboration	3

Course	Credits
Total	60

* Electives are selected in coordination with your adviser from any CED course or certificate.

Program Requirements:

- School Counseling Certification requires passing Praxis II for certification.
- Area I Core Courses and five readings are needed for candidacy. Please see your adviser and handbook.
- Students may also pursue Licensed Professional Counselor (LPC). Please see your adviser and handbook.

Program Notes:

CED 790 (Internship) can substitute for CED 712.

If you have not taken the following courses or their equivalent as either an undergraduate or graduate, they are required by the Pennsylvania Department of Education (PDE) and must be taken in order to receive school counseling certification:

- **ESP 610** Special Ed: Foundations and Collaboration (3 credits)
- **EDU 650** Supporting English Language Learners (3 credits)

Practicum/Field Education

Practicum and clinical field experience are taken near the end of the student's program. Practicum requires a minimum of 150 hours on-site. The student will be supervised by a professional in their area of interest. The clinical field experience requires a minimum of 600 hours under the supervision of a professional in the student's area of interest. This will be arranged in consultation with the field coordinator.

Program Webpage

https://www.calu.edu/academics/graduate/certificates/education/school-counseling/

M.Ed. in School Counseling
Program Description

The Master of Education in School Counseling fulfills the degree requirements needed for the National Counselor Examination (NCE), required to become a National Certified Counselor (NCC) and Licensed Professional Counselor (LPC). Students also have the option of taking an additional 12 credits before or after graduation to total 60 credits, also required to become an LPC in Pennsylvania (Pennsylvania Licensure Act 136 of 1998). Students will need two or more additional years of supervised work experience after graduation to complete the requirements for LPC.

Program Coordinator

Dr. Elizabeth Gruber

Delivery Mode

Traditional (on-ground, face-to-face delivery with some online/distance elements)

Accreditation

Council for Accreditation of Counseling and Related Educational Programs (CACREP)

Counselor Education Graduate Programs

Approved by the Pennsylvania Department of Education

School counseling programs at Cal U are accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). Through the University, the Middle States Association of Colleges and Post-Secondary Schools accredits the Department of Counselor Education. The Council for the Accreditation of Educator Preparation (CAEP) accredits the school counseling programs (elementary and secondary school guidance). Courses offered by the Department of Counselor Education have been approved by both the National Board for Certified Counselors and by the Pennsylvania Department of Education for certification and continuing education credits (Act 48). The department is authorized by the Commonwealth of Pennsylvania Department of Education to offer certification programs in pre-K-12 school counseling.

Curriculum

Course	Credits
Area I: Core Courses Required for Candidacy	
CED 700 Foundations of School Counseling	3
CED 702 Counseling Theory	3
CED 710 Counseling Skills and Techniques	3
CED 724 Experiential Group Process	3
Area II: Advanced Counseling Core	
CED 705 Developmental Group Counseling	3
CED 720 Cross-Cultural Counseling	3
CED 786 Career Counseling	3
Area III: Psychological Foundations	
CED 721 Diagnosis and Counseling Children and Adolescents	3
CED 722 Assessment Procedures for Counselors	3
CED 755 Counseling Across the Life Span	3
CED 785 Research Methods in Counseling	3
Area IV: Counseling and Education Courses	
CED 708 Substance Abuse and Addiction	3
CED 732 Current Issues in School Counseling: Evidence-Based Practice	3
Electives* (three courses)	9

Course	Credits
Area V: Field Education Core	
CED 711 Practicum in Counselor Education	3
CED 712 Clinical Field Experience in Counselor Education	6
CED 787 Ethics, Integration, Consultation and Collaboration	3
Total	**60**

* Electives are selected in coordination with your adviser from any CED course or certificate.

Program Requirements:

- School Counseling Certification requires passing Praxis II for certification.
- Area I Core Courses and five readings are needed for candidacy. Please see your adviser and handbook.
- Students may also pursue Licensed Professional Counselor (LPC). Please see your adviser and handbook.

Program Notes:

CED 790 (Internship) can substitute for CED 712.

If you have not taken the following courses or their equivalent as either an undergraduate or graduate, they are required by the Pennsylvania Department of Education (PDE) and must be taken in order to receive school counseling certification:

- **ESP 610** Special Ed: Foundations and Collaboration (3 credits)
- **EDU 650** Supporting English Language Learners (3 credits)

Practicum/Field Education

Practicum and clinical field experience are taken near the end of the student's program. Practicum requires a minimum of 150 hours on-site. The student will be supervised by a professional in their area of interest. The clinical field experience requires a minimum of 600 hours under the supervision of a professional in the student's area of interest. This will be arranged in consultation with the field coordinator.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-campus/school-counseling/index.aspx

M.S. in Clinical Mental Health Counseling
Program Description

The Master of Science in Clinical Mental Health Counseling prepares students to work as professional counselors in a variety of behavioral health and social service settings. The program fulfills the degree requirements necessary to become a National Certified Counselor (NCC) and a Licensed Professional Counselor (LPC), as well as being able to take the National Counselor Examination (NCE). Students completing the 60-credit master's degree program will meet the educational requirements required to become Licensed Professional Counselors

in Pennsylvania (Pennsylvania Licensure Act 136 of 1998). Students will need two or more additional years of supervised work experience after graduation to complete the requirements for LPC.

Program Coordinator
Dr. Robert Mehalik

Delivery Mode
Traditional/Multimodal

Accreditation
Council for the Accreditation of Counseling and Related Educational Programs (CACREP)

This program fulfills the master's degree requirements for:

- National Certified Counselor (NCC)
- Licensed Professional Counselor (LPC) in Pennsylvania

Curriculum

Course	Credits
Area I: Core Courses Required for Candidacy	
CED 702 Counseling Theory	3
CED 710 Counseling Skills and Techniques	3
CED 724 Experiential Group Process	3
CED 789 Introduction to Clinical Mental Health Counseling	3
Area II: Advanced Counseling Core	
CED 705 Developmental Group Counseling	3
CED 720 Cross-Cultural Counseling	3
CED 786 Career Counseling	3
Area III: Psychological Foundations	
CED 717 Diagnosis and Treatment in Psychopathology	3
CED 722 Assessment and Procedures for Counselors	3
CED 755 Counseling Across the Life Span	3
CED 785 Research Methods in Counseling	3
Area IV: Clinical Core	

Course	Credits
CED 708 Substance Abuse and Addiction	3
CED 735 Introduction to Family Therapy	3
CED 791 Crisis Counseling and Disaster Preparedness	3
Electives* (two courses)	6
Area V: Field Education Core	
CED 711 Practicum in Counselor Education	3
CED 712 Clinical Field Experience in Counselor Education	6
CED 787 Ethics, Integration, Consultation and Collaboration	3
Total	**60**

* Electives can be chosen from any CED course or certification in conjunction with your adviser.

Program Note: CED 790 (Internship) can substitute for CED 712.

Practicum/Clinical Field Experience

Practicum and clinical field experience are taken near the end of the student's program. Practicum requires a minimum of 150 hours on-site. The student will be supervised by a professional in their area of interest. The clinical field experience requires a minimum of 600 hours under the supervision of a professional in the student's area of interest. This will be arranged in consultation with the field site coordinator.

Program Webpage

https://www.calu.edu/academics/graduate/masters/clinical-mental-health-counseling/index.aspx

Post-Master's Program in Counselor Education

Program Description

The counselor education post-master's program is planned for individuals to take courses for professional development or licensure. There is not a set curriculum; students design their own post-master's curriculum.

This non-degree counselor education post-master's program is designed to provide the opportunity for students to complete courses after their master's degree to total 60 credits, as required to become an LPC in Pennsylvania (Pennsylvania Licensure Act 136 of 1998). Two or more additional years of supervised work experience after graduation is also required to complete the LPC. Students should contact their licensure board to verify their eligibility and requirements for licensure.

Program Coordinator

Dr. Elizabeth Gruber

Delivery Mode
Traditional/Multimodal

Accreditation
Council for the Accreditation of Counseling and Related Educational Programs (CACREP)

Curriculum

Course
The curriculum for this program varies by student. Courses taken will assist students in fulfilling the requirements necessary to maintain or become a Licensed Professional Counselor (LPC).

The department will evaluate student transcripts and advise which courses are recommended.

Program Webpage
https://www.calu.edu/academics/graduate/certificates/education/counselor-education/

Cybersecurity

Faculty

Dr. Gina Boff | Dr. Weifeng Chen | Dr. Leandro Junes | Dr. Nader Mohamed

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers these cybersecurity graduate programs:

- PSM in Cybersecurity
- Certificate in Cybersecurity

Certificate in Cybersecurity

Program Description

The cybersecurity post-baccalaureate certificate program is designed for professionals interested in network security, biometrics, cryptography and related areas. It is also part of the Professional Science Master's in Cybersecurity degree program.

Program Coordinator

Dr. Weifeng Chen

Delivery Mode

Global Online (100% online delivery)
Classes are conducted online with field experiences and internships taking place at the student's site.

Curriculum

Course	Credits
PSC 640 Computer and Networking	3
PSM 645 Applied Cryptography	3
PSC 755 Wireless Network and Security	3
PSC 735 Biometrics OR **PSC 745** Cybersecurity Risk Management and Assessment	3
Total	**12**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/cybersecurity/index.aspx

PSM in Cybersecurity

Program Description

The Professional Science Master's in Cybersecurity provides professionals with specialized knowledge in cybersecurity and related skillsets to meet the demands and challenges of economic and infrastructure security in a high-technology society. The curriculum emphasizes both fundamental knowledge in current cybersecurity practices and management/leadership abilities.

Program Coordinator

Dr. Weifeng Chen

Delivery Mode

Global Online (100% online delivery)
Classes are conducted online, with field experiences and internships taking place at the student's site.

Curriculum

Course	Credits
PSC 600 Operating Systems	3
PSC 640 Computer and Networking	3
PSM 645 Applied Cryptography	3
PSM 675 Project Management	3
PSC 755 Wireless Network and Security	3
PSM 760 Leadership and Professional Development	3
PSM 799 Capstone Course	6
Electives (2)	6
Total	**30**

Program Website

https://www.calu.edu/academics/graduate/masters/cybersecurity/index.aspx

Exercise Science and Health Promotion

Faculty

Dr. Carol M. Biddington | Dr. Marc S. Federico | Dr. Jeffrey R. Hatton | Dr. Barry E. McGlumphy | Dr. Laura L. Miller | Dr. Ben Reuter | Dr. Joni Lee Cramer Roh | Dr. Christine Romani-Ruby | Dr. Ronald W. Wagner | Dr. Ellen J. West | Dr. Tom West

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers exercise science and health promotion programs in:

Master's Degrees

- Exercise Science and Health Promotion (M.S.), with concentrations in:
    - Advanced Golf Performance Training
    - Applied Sport Science
    - Nutrition
    - Performance Enhancement and Injury Prevention
    - Rehabilitation Sciences
    - Sport Psychology
    - Tactical Strength and Conditioning
    - Wellness and Fitness
    - Wellness Coaching

Note: The Exercise Science and Health Promotion concentrations can be combined to create dual concentration options. When pursuing a dual concentration, students are required to fulfill all of the course requirements for both programs; however, because there is overlap in the courses needed, it generally takes just 48 credits to complete a dual concentration. The exception is any dual concentration that includes Applied Sport Science; in such cases, 54 credits are required.

Cal U also offers a dual M.A. in Criminal Justice: Applied Criminology / M.S. in Exercise Science and Health Promotion: Tactical Strength and Conditioning degree.

Certificates

- Advanced Golf Performance Training
- Nutrition
- Performance Enhancement and Injury Prevention
- Rehabilitation Sciences
- Sport Psychology
- Tactical Strength and Conditioning
- Wellness and Fitness
- Wellness Coaching

Program Webpage

An overview of the programs is available at: https://www.calu.edu/academics/graduate/masters/exercise-science/index.aspx

Certificate in Advanced Golf Performance Training

Program Description

The advanced golf performance training certificate program is composed of five concentration courses from the M.S. in Exercise Science and Health Promotion: Advanced Golf Performance Training program.

Program Coordinator

Dr. Barry E. McGlumphy
(Additional Contact: Justin Barroner)

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 704 Golf Performance Training	3
PRF 710 Performance Enhancement in Physical Activity	3
PRF 744 Golf Performance Training Program Design	3
PRF 774 Current Topics in Golf Performance, Fitness and Instruction	3
PRF 800 Research in Wellness and Fitness	3
Total	**15**

Certificate in Nutrition

Program Description

The nutrition certificate program is composed of four concentration courses from the M.S. in Exercise Science and Health Promotion: Nutrition program.

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 718 Health Behavior Change in Nutrition Education	3
PRF 758 Applied Principles of Human Nutrition	3

Course	Credits
PRF 788 Nutrition Through the Lifecycle	3
PRF 800 Research in Fitness and Wellness	3
Total	**12**

Certificate in Performance Enhancement and Injury Prevention

Program Description

The performance enhancement and injury prevention certificate program is composed of four concentration courses from the M.S. in Exercise Science and Health Promotion: Performance Enhancement and Injury Prevention program.

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 710 Performance Enhancement in Physical Activity	3
PRF 750 Performance Enhancement Program Design	3
PRF 780 Current Topics in Performance Enhancement	3
PRF 810 Research in Performance Enhancement	3
Total	**12**

Certificate in Rehabilitation Sciences

Program Description

The rehabilitation sciences certificate program is composed of four concentration courses from the M.S. in Exercise Science and Health Promotion: Rehabilitation Sciences program.

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 712 Corrective Exercise in Rehabilitation	3
PRF 752 Corrective Exercise Program Design	3
PRF 782 Current Topics in Rehabilitation	3
PRF 820 Research in Rehabilitation	3
Total	**12**

Certificate in Sport Psychology

Program Description

The sport psychology certificate program is composed of four concentration courses from the M.S. in Exercise Science and Health Promotion: Sport Psychology program.

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 713 Special Topics in Sport Psychology	3
PRF 753 Psychological Aspects of Sport Injury and Rehabilitation	3
PRF 783 Psychological Perspectives in Sport Performance Enhancement and Intervention	3
PRF 830 Research in Sport Psychology	3
Total	**12**

Certificate in Tactical Strength and Conditioning

Program Description

The tactical strength and conditioning certificate program is composed of four concentration courses from the M.S. in Exercise Science and Health Promotion: Tactical Strength and Conditioning program.

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 719 Advanced Techniques in Tactical Strength and Conditioning	3
PRF 759 Tactical Strength and Conditioning Program Design	3
PRF 789 Current Topics in Tactical Strength and Conditioning	3
PRF 820 Research in Performance Enhancement	3
Total	**12**

Certificate in Wellness Coaching

Program Description

The wellness coaching certificate program is composed of four concentration courses from the M.S. in Exercise Science and Health Promotion: Wellness Coaching program.

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 714 Health and Wellness Coaching Competencies	3
PRF 754 Health and Wellness Coaching - Facilitating Change	3
PRF 784 Current Topics in Wellness Coaching	3
PRF 840 Research in Health and Wellness Coaching	3
Total	**12**

Certificate in Wellness and Fitness

Program Description

The wellness and fitness certificate program is composed of four concentration courses from the M.S. in Exercise Science and Health Promotion: Wellness and Fitness program.

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 711 An Integrated Approach to Fitness and Wellness	3
PRF 751 Program Design in Fitness and Wellness	3
PRF 781 Current Topics in Fitness and Wellness	3
PRF 800 Research in Fitness and Wellness	3
Total	**12**

M.S. in Exercise Science and Health Promotion: Applied Sport Science

Program Description

The applied sport science concentration of the Master of Science in Exercise Science and Health Promotion connects students with new ways to help their clients achieve peak physical performance. This concentration was created in partnership with Fusionetics®.

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
GRA 800 Graduate Internship	6
PRF 700 Orientation to Exercise Science and Wellness	3
PRF 701 Advanced Topics in SAQ and Endurance Training	3
PRF 705 Industrial, Clinical and Corporate Wellness	3
PRF 715 Business and Entrepreneurship in the Fitness Industry	3
PRF 716 Advanced Techniques in Movement and Recovery	3
PRF 720 Essentials of Human Movement Science	3

Course	Credits
PRF 756 Program Design for Optimizing Human Movement and Recovery	3
PRF 760 Leadership and Professional Development	3
PRF 765 Nutrition for Peak Performance	3
PRF 770 Exercise Physiology: Assessment and Exercise Prescription	3
PRF 786 Current Topics in Movement and Recovery Science	3
PRF 816 Research in Movement and Recovery Science	3
Total	**42**

Program Website

https://www.calu.edu/academics/graduate/masters/exercise-science/applied-sport-science/index.aspx

M.S. in Exercise Science and Health Promotion: Advanced Golf Performance Training

Program Description

The advanced golf performance training concentration of the Master of Science in Exercise Science and Health Promotion explores swing biomechanics and fitness concepts relevant to amateur and professional golfers. This program prepares coaches and trainers to help clients improve their golf game and prevent injury.

Program Coordinator

Dr. Barry E. McGlumphy
(Additional Contact: Justin Barroner)

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 700 Orientation to Exercise Science and Health Promotion	3
PRF 701 Advanced Topics in Speed, Agility and Quickness and Endurance Training	3
PRF 704 Golf Performance Training and Instruction	3
PRF 710 Performance Enhancement in Physical Activity	3

Course	Credits
PRF 715 Business and Entrepreneurship in the Fitness Industry	3
PRF 720 Essentials of Human Movement Science	3
PRF 744 Golf Performance Program Design	3
PRF 760 Leadership and Professional Development	3
PRF 765 Nutrition for Peak Performance	3
PRF 770 Exercise Physiology: Assessment and Exercise Prescription	3
PRF 774 Current Topics in Golf Performance, Fitness and Instruction	3
PRF 800 Research in Wellness and Fitness	3
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/exercise-science/golf-performance/index.aspx

M.S. in Exercise Science and Health Promotion: Nutrition

Program Description

The nutrition concentration of the Master of Science in Exercise Science and Health Promotion connects students with advanced nutritional concepts, preparing them to create successful nutrition plans and offer coaching that leads to improved athletic performance and overall health and wellness.

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 700 Orientation to Exercise Science and Wellness	3
PRF 705 Industrial, Clinical and Corporate Wellness	3
PRF 715 Business and Entrepreneurship in the Fitness Industry	3
PRF 718 Health Behavior Change in Nutrition Education	3

Course	Credits
PRF 720 Essentials of Human Movement Science	3
PRF 758 Applied Principles of Human Nutrition	3
PRF 760 Leadership and Professional Development	3
PRF 765 Nutrition for Peak Performance	3
PRF 770 Exercise Physiology: Assessment and Exercise Prescription	3
PRF 781 Current Topics in Fitness and Wellness	3
PRF 788 Nutrition Through the Lifecycle	3
PRF 800 Research in Wellness and Fitness	3
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/exercise-science/nutrition/

M.S. in Exercise Science and Health Promotion: Performance Enhancement and Injury Prevention

Program Description

The performance enhancement and injury prevention concentration of the Master of Science in Exercise Science and Health Promotion prepares students for the National Academy of Sports Medicine exam for Performance Enhancement Specialist (PES) certification.

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 700 Orientation to Exercise Science and Wellness	3
PRF 701 Advanced Topics in SAQ and Endurance Training	3
PRF 705 Industrial, Clinical and Corporate Wellness	3
PRF 710 Performance Enhancement in Physical Activity	3

Course	Credits
PRF 715 Business and Entrepreneurship in the Fitness Industry	3
PRF 720 Essentials of Human Movement Science	3
PRF 750 Performance Enhancement Program Design	3
PRF 760 Leadership and Professional Development	3
PRF 765 Nutrition for Peak Performance	3
PRF 770 Exercise Physiology: Assessment and Exercise Prescription	3
PRF 780 Current Topics in Performance Enhancement	3
PRF 810 Research in Performance Enhancement	3
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/exercise-science/performance-enhancement-injury-prevention-concentration/index.aspx

M.S. in Exercise Science and Health Promotion: Rehabilitation Sciences

Program Description

The rehabilitation sciences concentration of the Master of Science in Exercise Science and Health Promotion prepares students for the National Academy of Sports Medicine (NASM) exam to become a Certified Exercise Specialist (CES).

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 700 Orientation to Exercise Science and Wellness	3
PRF 701 Advanced Topics in SAQ and Endurance Training	3
PRF 705 Industrial, Clinical and Corporate Wellness	3
PRF 712 Corrective Exercise in Rehabilitation	3

Course	Credits
PRF 715 Business and Entrepreneurship in the Fitness Industry	3
PRF 720 Essentials of Human Movement Science	3
PRF 752 Corrective Exercise Program Design	3
PRF 760 Leadership and Professional Development	3
PRF 765 Nutrition for Peak Performance	3
PRF 770 Exercise Physiology: Assessment and Exercise Prescription	3
PRF 782 Current Topics in Rehabilitation	3
PRF 820 Research in Rehabilitation	3
Total	**36**

Program Webpage
https://www.calu.edu/academics/graduate/masters/exercise-science/rehabilitation-science/index.aspx

M.S. in Exercise Science and Health Promotion: Sport Psychology

Program Description
The sport psychology concentration of the Master of Science in Exercise Science and Health Promotion is designed for students interested in better understanding the psychological effects of sport injuries, rehabilitation and recovery and the mental skills needed for peak athletic performance and competition.

Program Coordinator
Dr. Barry E. McGlumphy

Delivery Mode
Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 700 Orientation to Exercise Science and Wellness	3
PRF 701 Advanced Topics in SAQ and Endurance Training	3
PRF 705 Industrial, Clinical and Corporate Wellness	3
PRF 713 Special Topics in Sport Psychology	3

Course	Credits
PRF 715 Business and Entrepreneurship in the Fitness Industry	3
PRF 720 Essentials of Human Movement Science	3
PRF 753 Psychological Aspects of Sport Injury and Rehabilitation	3
PRF 760 Leadership and Professional Development	3
PRF 765 Nutrition for Peak Performance	3
PRF 770 Exercise Physiology: Assessment and Exercise Prescription	3
PRF 783 Psychological Perspectives in Sport Performance Enhancement	3
PRF 830 Research in Sport Psychology	3
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/exercise-science/sport-psychology/index.aspx

M.S. in Exercise Science and Health Promotion: Tactical Strength and Conditioning

Program Description

The tactical strength and conditioning concentration of the Master of Science in Exercise Science and Health Promotion focuses on fitness and strength training concepts specific to military personnel, law enforcement, fire fighters and other first responders.

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 700 Orientation to Exercise Science and Wellness	3
PRF 701 Advanced Topics in Speed, Agility, and Quickness and Endurance Training	3
PRF 705 Industrial, Clinical and Corporate Wellness	3

Course	Credits
PRF 715 Business and Entrepreneurship in the Fitness Industry	3
PRF 719 Advanced Techniques in Tactical Strength and Conditioning	3
PRF 720 Essentials of Human Movement Science	3
PRF 759 Tactical Strength and Conditioning Program Design	3
PRF 760 Leadership and Professional Development	3
PRF 765 Nutrition for Peak Performance	3
PRF 770 Exercise Physiology: Assessment and Exercise Prescription	3
PRF 789 Current Topics in Tactical Strength and Conditioning	3
PRF 810 Research in Performance Enhancement	3
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/exercise-science/tactical-strength-conditioning/index.aspx

M.S. in Exercise Science and Health Promotion: Wellness Coaching

Program Description

The wellness coaching concentration of the Master of Science in Exercise Science and Health Promotion was developed in partnership with Wellcoaches®. The program prepares students to earn the Health and Wellness Coach certification, endorsed by the American College of Sports Medicine (ACSM).

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 700 Orientation to Exercise Science and Wellness	3
PRF 701 Advanced Topics in SAQ and Endurance Training	3

Course	Credits
PRF 705 Industrial, Clinical and Corporate Wellness	3
PRF 714 Health and Wellness Coaching Competencies	3
PRF 715 Business and Entrepreneurship in the Fitness Industry	3
PRF 720 Essentials of Human Movement Science	3
PRF 754 Health and Wellness Coaching – Facilitating Change	3
PRF 760 Leadership and Professional Development	3
PRF 765 Nutrition for Peak Performance	3
PRF 770 Exercise Physiology: Assessment and Exercise Prescription	3
PRF 784 Current Topics in Wellness Coaching	3
PRF 840 Leadership and Professional Development	3
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/exercise-science/wellness-coaching/

M.S. in Exercise Science and Health Promotion: Wellness and Fitness

Program Description

The wellness and fitness concentration of the Master of Science in Exercise Science and Health Promotion prepares students to design fitness training and wellness programs using NASM's Optimum Performance Training (OPT™) model and to take the NASM exam to earn accredited certification as a Certified Personal Trainer (CPT).

Program Coordinator

Dr. Barry E. McGlumphy

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
PRF 700 Orientation to Exercise Science and Wellness	3

Exercise Science and Health Promotion Graduate Programs

Course	Credits
PRF 701 Advanced Topics in SAQ and Endurance Training	3
PRF 705 Industrial, Clinical and Corporate Wellness	3
PRF 711 An Integrated Approach to Fitness and Wellness	3
PRF 715 Business and Entrepreneurship in the Fitness Industry	3
PRF 720 Essentials of Human Movement Science	3
PRF 751 Program Design in Wellness and Fitness	3
PRF 760 Leadership and Professional Development	3
PRF 765 Nutrition for Peak Performance	3
PRF 770 Exercise Physiology: Assessment and Exercise Prescription	3
PRF 781 Current Topics in Fitness and Wellness	3
PRF 800 Research in Wellness and Fitness	3
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/exercise-science/wellness-fitness/index.aspx

Forensic Linguistics

Faculty

Dr. Andrea Vargas Cencich | Dr. John Cencich | James R. Fitzgerald | Natalia Vaughan | Dr. Mark Visonà

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers the following graduate programs related to forensic linguistics:

- M.A. in Criminal Justice Studies: Forensic Linguistics
- Certificate in Forensic Linguistics

Dual master's programs are also available:

- M.A. in Criminal Justice: Forensic Linguistics / M.A. in Arabic Language and Linguistics
- M.A. in Criminal Justice: Forensic Linguistics / M.A. in Conflict Resolution

Certificate in Forensic Linguistics

Program Description

The forensic linguistics post-baccalaureate certificate can be earned independent, or as part, of the forensic linguistics concentration of the M.A. in Criminal Justice Studies.

Program Coordinator

Dr. Christopher Wydra

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
CRM 600 Seminar in Forensic Linguistics	3
CRM 610 Forensic Sociolinguistics	3
CRM 620 Forensic Language Structure I	3
CRM 640 Forensic Language Structure II	3
CRM 650 Author Profiling and Threat Assessment	3
CRM 670 Authorial Attribution and Speaker Identification	3
CRM 690 Legal and Ethical Issues in Forensic Linguistics	3
Total	**21**

Dual Major in Forensic Linguistics and Arabic

Program Description

Through this dual major program, students earn an M.A. in Criminal Justice: Forensic Linguistics and an M.A. in Arabic Language and Linguistics.

Program Coordinators

Dr. Christopher Wydra (forensic linguistics) and Dr. Razak Surrey (Arabic language and linguistics)

Curriculum

Course	Credits
Arabic Courses	**24**
ARB 610 Arabic Linguistics	3
ARB 620 Arabic-English Translation	3
ARB 630 Arabic Literature and Social Cultural Aspects	3
ARB 640 Arabic Dialect Acquisition and Variation	3
ARB 650 Images of Islam	3
ARB 660 Advanced Arabic Composition	3
ARB 670 Methods of Teaching and Learning Arabic	3
ARB 810 Special Topics in Arabic	3
Forensic Linguistics Courses	**24**
CRM 600 Seminar in Forensic Linguistics	3
CRM 610 Forensic Sociolinguistics	3
CRM 620 Forensic Language Structure I	3
CRM 640 Forensic Language Structure II	3
CRM 650 Author Profiling and Threat Assessment	3
CRM 670 Authorial Attribution and Speaker Identification	3
CRM 690 Legal and Ethical Issues in Forensic Linguistics	3
CRM 700 Advanced Criminological Theories	3
Total	**48**

Note: Students in CRM 690 will be required to undertake a project, which serves as a culminating experience that is applicable to Arabic language and culture and forensic linguistics.

Dual Major in Forensic Linguistics and Conflict Resolution

Program Description

Through this dual major program, students earn an M.A. in Criminal Justice: Forensic Linguistics and an M.A. in Conflict Resolution.

Program Coordinators

Dr. Christopher Wydra (forensic linguistics) and Dr. Beverly Ross (conflict resolution)

Curriculum

Course	Credits
Conflict Resolution Courses	**24**
CRS 700 Conflict Resolution Theory and Practice	3
CRS 725 Restorative Justice and VOM	3
CRS 735 De-escalation and Community Conflict Management	3
CRS 740 Legal Aspects of Conflict Resolution	3
CRS 750 Dialogue, Negotiation and Persuasion	3
CRS 770 International and Intercultural Conflict Resolution	3
CRS 780 Principles of Mediation Practice	3
CRS 810 Conflict Resolution Graduate Internship OR **CRS 819** Conflict Resolution Applied Research Project	3
Forensic Linguistics Courses	**24**
CRM 600 Seminar in Forensic Linguistics	3
CRM 610 Forensic Sociolinguistics	3
CRM 620 Forensic Language Structure I	3
CRM 640 Forensic Language Structure II	3
CRM 650 Author Profiling and Threat Assessment	3
CRM 670 Authorial Attribution and Speaker Identification	3

Course	Credits
CRM 690 Legal and Ethical Issues in Forensic Linguistics	3
CRM 700 Advanced Criminological Theories	3
Total	**48**

M.A. in Criminal Justice Studies: Forensic Linguistics

Program Description

The forensic linguistics concentration of the Master of Arts in Criminal Justice Studies builds knowledge, skills and abilities in the field of forensic linguistics. Professionals in this field work as practitioners or consultants, bringing their expertise to criminal and civil investigations, corporate and national security matters, legal proceedings, and analysis of evidence such as emergency phone calls, suicide notes, ransom demands and fraudulent documents.

Program Coordinator

Dr. Christopher Wydra

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
Required Core Courses	**6**
CRM 700 Advanced Criminological Theories	3
CRM 720 Research Methods in Criminology	3
Concentration Courses	**24**
CRM 600 Seminar in Forensic Linguistics	3
CRM 610 Forensic Sociolinguistics	3
CRM 620 Forensic Language Structure I	3
CRM 640 Forensic Language Structure II	3
CRM 650 Author Profiling and Threat Assessment	3
CRM 670 Authorial Attribution and Speaker Identification	3

Forensic Linguistics Graduate Programs

Course	Credits
CRM 690 Legal and Ethical Issues in Forensic Linguistics	3
CRM 855 Applied Research in Criminology	3
Capstone Experience (select one)	**6**
CRM 880 Criminology Thesis*	6
CRM 885 Criminology Internship	6
CRM 890 Criminology Studies Abroad*	6
GRA 662 Prior Learning Assessment (FBI Academy, FLETC, CFE Certification and similar academies and programs)	6
Total	**36**

*Depending upon availability.

Program Webpage

https://www.calu.edu/academics/graduate/masters/forensic-linguistics/index.aspx

Health Science and Exercise Leadership
Faculty
Dr. Carol M. Biddington | Dr. Marc S. Federico | Dr. Jeffrey R. Hatton | Dr. Rebecca Hess | Dr. Barry E. McGlumphy | Dr. Brian Oddi | Dr. Ellen J. West | Dr. Tom West

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Program
Cal U offers a Doctor of Health Science (D.H.Sc.) in Health Science and Exercise Leadership graduate program.

Note: The University also offers master's and post-baccalaureate certificate programs in Exercise Science and Health Promotion (see the "Exercise Science and Health Promotion" section of this catalog).

D.H.Sc. in Health Science and Exercise Leadership
Program Description
The Doctor of Health Science (D.H.Sc.) degree in health science and exercise leadership is designed for individuals working in clinical, educational, professional, managerial and research roles within healthcare-related fields who wish to pursue an advanced professional degree that will provide opportunities for career enhancement or advancement.

Program Coordinator
Dr. Marc S. Federico

Delivery Mode
Global Online (100% online delivery)

Curriculum

Course	Credits
DHS 804 Evidence-Based Practice Theory	3
DHS 805 Health Promotion and Wellness for the Individual	3
DHS 806 Community and Corporate Wellness	3
DHS 825 Research Methods in Exercise Science I	3
DHS 826 Research Methods in Exercise Science II	3
DHS 830 Leadership in Wellness Education and Professional Practice	3
DHS 835 Values, Ethics and the Promotion of Health and Wellness	3
DHS 845 Advanced Instructional Technology in Evidence-Based Practice	3

Course	Credits
DHS 850 Theories and Foundations of Adult Learning	3
DHS 851 Learning Concepts for the Adult Learner	3
DHS 852 Curriculum and Course Design	3
DHS 899 Evidence-based Project Seminar	3
DHS 915 Evidence-based Professional Portfolio I	3
DHS 925 Evidence-based Professional Portfolio II	3
DHS 950 Evidence-based Professional Portfolio III	3
PRF Elective Course*	3
Total	**48**

+ Dissertation

Course	Credits
DHS 900 Dissertation	5
DHS 901 (Taken only as needed if Dissertation is not completed by end of Fall III for full-time students and of Fall IV for part-time students)	1 to 3
Total	**53**

* Cal U Exercise Science and Health Promotion M.S. graduates will select a PRF elective outside of the single or dual concentration of their master's program. Students who do not hold an M.S. in Exercise Science and Health Promotion from Cal U will enroll in PRF 760 Leadership and Professional Development.

August graduates of the D.H.Sc. program are strongly encouraged to present their research at the annual Future of Exercise and Health Science Showcase held the Friday morning of the Fall semester graduation ceremonies in December.

Program Webpage

www.calu.edu/academics/online-programs/doctorate-health-sciences/index.htm

Legal Studies

Faculty

Larry Bassi | Jeffrey Davidson | Kevin Govern, J.D. | Brian Kohlhepp | William Morgan, J.D. | David Smith, J.D. | Christina A. Toras, J.D. | Michael Vennum, J.D. | Karl Williams, M.D.

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers legal studies graduate programs in:

Master's Degrees

- Legal Studies (M.S.), with concentrations in:
  - Criminal Justice
  - Homeland Security
  - Law and Public Policy

Note: An overview of the legal studies master's programs is available at: https://www.calu.edu/academics/graduate/masters/legal-studies/index.aspx

Certificates

- Criminal Justice
- Homeland Security
- Law and Public Policy
- Police Executive Law and Policy
- Sexual Assault Investigation and Victimization

Note: The University also offers an M.A. in Criminal Justice: Applied Criminology and a Doctor of Criminal Justice program (see the "Applied Criminology and Doctor of Criminal Justice" section of this catalog).

Certificate in Criminal Justice

Program Description

The criminal justice certificate program is designed for students who are seeking an academic credential related to federal, state and local criminal justice agencies or in corporate security in the private sector. Aspects of criminal justice related to critical facets of investigations and structural/operational dynamics of criminal justice organizations are explored. The curriculum focuses heavily on the day-to-day work of the criminal justice professional.

This post-baccalaureate certificate program includes graduate courses from the M.S. in Legal Studies: Criminal Justice concentration program.

Program Coordinator

Dr. Christina A. Toras

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
LAW 605 Law and Police Process	3
PCJ 747 Financial Investigations	3
PCJ 748 Criminal Justice Organization and Management	3
PCJ 749 Seminar in Justice Studies	3
PCJ 750 Sexual Assault Investigations	3
Total	**15**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/criminal-justice/index.aspx

Certificate in Homeland Security

Program Description

The homeland security certificate program is designed for students who are seeking an academic credential related to federal, state or local homeland security and emergency management agencies, or in corporate security in the private sector. This increasingly important course of study takes an all-hazards approach while examining impact, prevention and sustainability from both the public and private sectors.

This post-baccalaureate certificate program includes graduate courses from the M.S. in Legal Studies: Homeland Security concentration program.

Program Coordinator

Dr. Christina A. Toras

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
AST 700 U.S. Homeland Security	3
AST 720 Domestic Extremism in the United States	3
AST 740 Terrorism, Threat and Vulnerability Analysis and Protection	3
AST 760 Biological, Chemical, Nuclear and WMD Threats in Homeland Security	3
AST 780 Intelligence Practice in Homeland Security	3
Total	**15**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/homeland-security/index.aspx

Certificate in Law and Public Policy

Program Description

The law and public policy certificate program is designed for students seeking graduate-level education in the analysis and application of law in a multitude of contexts. Students address, analyze and critique the law and its public policy implications from social, administrative, juridical, ethical, operational and managerial perspectives. Special emphasis is given to the practical ramifications of how law and policy intersect, influencing the culture, the community and the individual.

This post-baccalaureate certificate program includes courses from the M.S. in Legal Studies: Law and Public Policy concentration program.

Program Coordinator

Dr. Christina A. Toras

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
LAW 600 Law and Public Policy	3
LAW 602 Law, Civil Liberties and the Constitution	3
LAW 603 Law and Legal Method	3
LAW 608 Law and Civil Litigation	3
LAW 701 Law and Administrative Agencies	3
Total	**15**

Program Website

https://www.calu.edu/academics/graduate/certificates/law-public-policy/index.aspx

Certificate in Police Executive Law and Policy

Program Description

The police executive law and policy certificate program emphasizes necessary skills for current or future executive-level police leaders, specifically related to inter-connected issues of law and policy. Students who are currently in leadership or seeking a career in upper-level executive leadership will be provided with an essential understanding of the risk management issues required to effectively design organizational policy in a police organization.

This post-baccalaureate certificate program combines graduate courses from the (1) criminal justice and (2) law and public policy concentrations of the M.S. in Legal Studies.

Program Coordinator

Dr. Christina A. Toras

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
LAW 605 Law and Police Process	3
LAW 607 Law and Criminal Conduct	3
LAW 701 Law and Administrative Agencies	3
LAW 704 Law, Business and the Workplace	3
PCJ 748 Criminal Justice Organization and Management	3
Total	**15**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/police-executive/index.aspx

Certificate in Sexual Assault Investigation and Victimization

Program Description

The sexual assault investigation and victimization certificate program recognizes the multifaceted arena of investigating, prosecuting and working with victims of sexual-based crimes. Skills taught in this program are necessary for investigations in accordance with the demands of high-profile prosecutions. The program focuses on the legal issues related to victims of sex crimes, so investigators can meet the legal standards for prosecutions, while maintaining a level of compassion for victims.

This post-baccalaureate certificate program combines graduate courses from the (1) criminal justice and (2) law and public policy concentrations of the M.S. in Legal Studies program.

Program Coordinator

Dr. Christina A. Toras

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
LAW 702 Law, Science and Forensic Applications	3
LAW 730 Independent Study in Law and Public Policy	3

Course	Credits
PCJ 750 Sexual Assault Investigations	3
PCJ 752 Digital Imaging, Forensic Photography and the Law	3
PCJ 755 Polygraph and Lie Detection	3
Total	**15**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/sexual-assault/index.aspx

M.S. in Legal Studies: Criminal Justice

Program Description

The criminal justice concentration of the Master of Science in Legal Studies program explores aspects of criminal justice related to critical facets of investigations and structural/operation dynamics of criminal justice organizations. This includes critical issues of policy, criminal justice accountability and civil liability. The curriculum focuses heavily on the day-to-day work of the criminal justice professional or executive.

Program Coordinator

Dr. Christina A. Toras

Delivery Mode

Global Online (100% online delivery)

Partnerships

Cal U's legal studies program is an Academic Alliance partner with the FBI National Academy Associates (FBI NAA). FBI National Academy graduates who have completed graduate-level courses while attending the academy may transfer up to 9 credit hours to the M.S. in Legal Studies if they have not already been applied toward the requirements of another graduate degree.

The program also partners with the FBI Law Enforcement Executive Development Association (FBI-LEEDA Inc.) to award three graduate credits for completion of all three leadership courses required for the Trilogy Award. The three credits can be applied toward completion of the M.S. in Legal Studies.

Curriculum

Course	Credits
LAW 600 Law and Public Policy	3
LAW 601 Law and Ethics	3
LAW 602 Law, Civil Liberties and the Constitution	3
LAW 603 Law and Legal Method	3
LAW 605 Law and Police Process	3
PCJ 747 Financial Investigations	3

Course	Credits
PCJ 748 Criminal Justice Organization and Management	3
PCJ 749 Seminar in Justice Studies	3
PCJ 750 Sexual Assault Investigations	3
PCJ 752 Digital Imaging, Forensic Photography and the Law	3
Total	**30**

Program Webpage

https://www.calu.edu/academics/graduate/masters/criminal-justice/index.aspx

M.S. in Legal Studies: Homeland Security

Program Description

The homeland security concentration of the Master of Science in Legal Studies program provides a comprehensive study of various aspects of homeland security and national security of the United States. This increasingly important course of study takes an all-hazards approach while examining impact, prevention and sustainability from both the public and private sectors. Law and policy issues for the homeland security professional are emphasized and examined.

Program Coordinator

Dr. Christina A. Toras

Delivery Mode

Global Online (100% online delivery)

Partnerships

Cal U's legal studies program is an Academic Alliance partner with the FBI National Academy Associates (FBI NAA). FBI National Academy graduates who have completed graduate-level courses while attending the academy may transfer up to 9 credit hours to the M.S. in Legal Studies if they have not already been applied toward the requirements of another graduate degree.

The program also partners with the FBI Law Enforcement Executive Development Association (FBI-LEEDA Inc.) to award three graduate credits for completion of all three leadership courses required for the Trilogy Award. The three credits can be applied toward completion of the M.S. in Legal Studies.

Curriculum

Course	Credits
LAW 600 Law and Public Policy	3
LAW 601 Law and Ethics	3
LAW 602 Law, Civil Liberties and the Constitution	3
LAW 603 Law and Legal Method	3

Course	Credits
AST 700 U.S. Homeland Security	3
AST 710 Emergency Management Principles, Law and Policy	3
AST 720 Domestic Extremism in the United States	3
AST 740 Terrorism, Threat and Vulnerability Analysis and Protection	3
AST 760 Biological, Chemical, Nuclear and WMD Threats in Homeland Security	3
AST 780 Intelligence Practice in Homeland Security	3
Total	**30**

Program Website

https://www.calu.edu/academics/graduate/masters/homeland-security/index.aspx

M.S. in Legal Studies: Law and Public Policy

Program Description

The law and public policy concentration of the Master of Science in Legal Studies program is designed for students seeking graduate education in the analysis and application of law in a multitude of contexts. Students address, analyze and critique the law and its public policy implications from social, administrative, juridical, ethical, operational and managerial perspectives. Special emphasis is given to the practical ramifications of how law and public policy intersect, influencing the culture, the community and the individual.

Program Coordinator

Dr. Christina A. Toras

Delivery Mode

Global Online (100% online delivery)

Partnerships

Cal U's legal studies program is an Academic Alliance partner with the FBI National Academy Associates (FBI NAA). FBI National Academy graduates who have completed graduate-level courses while attending the academy may transfer up to 9 credit hours to the M.S. in Legal Studies if they have not already been applied toward the requirements of another graduate degree.

The program also partners with the FBI Law Enforcement Executive Development Association (FBI-LEEDA Inc.) to award three graduate credits for completion of all three leadership courses required for the Trilogy Award. The three credits can be applied toward completion of the M.S. in Legal Studies.

Curriculum

Course	Credits
LAW 600 Law and Public Policy	3
LAW 601 Law and Ethics	3

Legal Studies Graduate Programs

Course	Credits
LAW 602 Law, Civil Liberties and the Constitution	3
LAW 603 Law and Legal Method	3
LAW 607 Law and Criminal Conduct	3
LAW 608 Law and Civil Litigation	3
LAW 610 Law, Justice and the Family	3
LAW 700 Law and the International Community	3
LAW 701 Law and Administrative Agencies	3
LAW 704 Law, Business and the Workplace	3
Total	**30**

Program Website

https://www.calu.edu/academics/graduate/masters/law-public-policy/index.aspx

Nursing

Faculty

Dr. Nicole Evanick | Dr. Kathleen Morouse | Suzanne Palko | Dr. Linda Pina | Dr. Robin Weaver

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers nursing graduate programs in:

- MSN in Nursing Administration and Leadership
- Nursing Administration and Leadership Certificate

Note: Cal U also offers a MBA in Business Administration: Nursing Administration concentration (see "Business and Economics" section of this catalog) for students who have earned, or are working toward, their MSN in Nursing Administration and Leadership. The MBA shares four required courses with the MSN in Nursing Administration and Leadership program, and students are able to complete the requirements for both programs with a total of 54 credits.

An overview of Cal U's MSN programs and MBA nursing concentration is available at: https://www.calu.edu/academics/graduate/masters/msn/

Certificate in Nursing Administration and Leadership

Program Description

The nursing administration and leadership certificate program is composed of 21 credits that are part of the requirements of the MSN in Nursing Administration and Leadership program. The certificate program is designed to provide an extra credential focused on administration and leadership skills for those who have earned a baccalaureate or higher degree in nursing.

Program Coordinator

Dr. Nicole Evanick

Delivery Mode

Global Online (100% online delivery)

Accreditation

The baccalaureate degree program in nursing and master's degree program in nursing at California University of Pennsylvania are accredited by the Commission on Collegiate Nursing Education (http://www.ccneaccreditation.org).

Curriculum

Course	Credits
NUR 603 Information Systems for Nurses in Health Care Organizations	3
NUR 711 Nursing Organization and Leadership Theory	3
NUR 712 Nursing Administration and Leadership Role	3
NUR 714 Legal Aspects of Health Care Administration	3
NUR 715 Financial Management in Non-profit Health Care Organizations	3
NUR 813 Nursing Administration Role Practicum	6
Total	**21**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/nursing-administration/index.aspx

MSN in Nursing Administration and Leadership
Program Description

The Master of Science in Nursing (MSN degree) in Nursing Administration and Leadership is designed for those who have already obtained a baccalaureate degree in nursing. The MSN program is intended for nurses who:

1. Currently hold administrative or leadership positions and wish to complement their experience through advancing their education formally, and
2. Wish to gain knowledge and skills needed to expand their career options in the area of nursing administration and leadership in a variety of healthcare settings.

Upon completion of the MSN in Nursing Administration and Leadership program, graduates will be eligible academically to take one of the national certification exams for nurse administration offered by the American Organization of Nurse Executives (AONE) or the American Nurses Credentialing Center (ANCC).

Program Coordinator
Dr. Nicole Evanick

Delivery Mode
Global Online (100% online delivery)

Accreditation

The baccalaureate degree program in nursing and master's degree program in nursing at California University of Pennsylvania are accredited by the Commission on Collegiate Nursing Education (http://www.ccneaccreditation.org).

Curriculum

Course	Credits
NUR 601 Theory and Research in Nursing	3
NUR 602 Health Policy in Nursing	3
NUR 603 Information Systems for Nurses in Health Care Organizations	3
NUR 604 Population Health Promotion and Disease Prevention	3
NUR 711 Nursing Organization and Leadership Theory	3
NUR 712 Nursing Administration and Leadership Role	3
NUR 714 Legal Aspects of Health Care Administration	3
NUR 715 Financial Management in Non-profit Health Care Organizations	3
NUR 813 Nursing Administration Role Practicum	6

Course	Credits
Total	30

Program Webpage

https://www.calu.edu/academics/graduate/masters/msn/nursing.aspx

Psychology

Faculty

Dr. Michael Baranski | Dr. Angela Bloomquist | Dr. Reuben Brock | Dr. Justin D. Hackett | Dr. Dana Keener | Dr. Tamare Piersaint | Dr. Rebecca Regeth | Dr. Carrie Rosengart | Dr. Kristen Schaffner | Dr. Darla Timbo

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers psychology graduate programs in:

- M.S. in School Psychology plus Certificate
- Threat Assessment and Management in Schools Certificate

Certificate in Threat Assessment and Management in Schools

Program Description

The threat assessment and management in schools certificate program combines psychology and criminal justice courses to create a professional development credential designed for higher education personnel, K-12 educators, school resource officers and members of threat assessment teams. The program helps education professionals learn to identify threatening situations in school settings and respond appropriately.

Program Coordinators

Dr. Angela Bloomquist and Dr. John Cencich

Curriculum

Course	Credits
CRM 870 Special Topics: Threat Assessment in the Schools	3
PSY 741 Theories of Counseling and Psychotherapy	3
PSY 756 Consultation and Group Process	3
Total	**9**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/threat-assessment-management/index.aspx

M.S. in School Psychology plus Certificate Program

Program Description

The Master of Science in School Psychology plus certificate program is designed for individuals interested in becoming school psychologists in settings such as public or private schools, mental health centers, hospitals, state education agencies, private practice and universities. School psychology brings together the knowledge

base of several disciplines, including child psychology, human development and education with an emphasis on special education.

In order to practice as a school psychologist, candidates must earn a master's degree (36 credits) plus state certification (33 additional credits of certification preparation coursework) in school psychology.

Program Coordinator

Dr. Angela Bloomquist

Delivery Mode

Traditional (on-campus, face-to-face delivery with some online/distance elements)

Accreditation

Council for the Accreditation of Educator Preparation (CAEP, formerly NCATE)

National Association of School Psychologists (NASP) (SLFull, 2006)

Curriculum - Master of Science: School Psychology

Course	Credits
PSY 702* Psychopathology of Childhood	3
PSY 710* Principles of Instruction and Intervention	3
PSY 712 Advanced Psychology of Learning	3
PSY 713 Psychology of Growth and Development	3
PSY 721 Advanced Tests and Measurements	3
PSY 722 Individual Psychological Evaluation I	3
PSY 741 Theories of Counseling and Psychotherapy	3
PSY 752 Fundamentals of School Psychology	3
PSY 756 Consultation and Group Processes with Practicum	3
PSY 761 Statistics and Research Methods in Psychology I: Univariate	3
PSY 795* Seminar in Behavior Modification	3
PSY 796 Seminar in Analysis of Research in School Psych (non-thesis option) OR **PSY 849** Thesis Option (see student manual)	3
Total	**36**

*These courses meet the Pennsylvania Department of Education's Chapter 49 requirements of 9 credits addressing accommodations and adaptations for diverse learners in inclusive settings (PSY 702, PSY 710 and PSY 795) and 3 credits of meeting the needs of English language learners (EDU 650).

Curriculum - Post-Master's Certificate: School Psychology

School Psychology Graduate Programs

Course	Credits
EDU 650 Supporting English Language Learners	3
PSY 720 Neuropsychology	3
PSY 723 Individual Psychological Evaluation II	3
PSY 728 Practicum in School Psychology	3
PSY 734 Assessment of Personality and Behavior	3
PSY 742 Techniques of Counseling and Psychotherapy with Practicum	3
PSY 762 Statistics and Research Methods in Psychology: Multivariate	3
PSY 773 Internship in School Psychology	6
PSY 774 Internship in School Psychology	3
PSY 798 Seminar in Professional School Psychology	3
Total	**33**

Additional Requirements

- Minimum of 350 clock hours of practicum, typically obtained within the first two years of coursework via course assignments.
- Minimum of 1,200 clock hours of internship, typically completed in the third year of study, in a public school setting and in our on-site school psychology clinic.

Full-time school psychology candidates typically complete the master's plus certification program in three years. The first year begins by taking three courses in the summer. At the end of the second summer, successful candidates are awarded a Master of Science in School Psychology. Candidates interested in pursuing certification in school psychology continue with full-time coursework through the following summer, then complete a 1,200 clock hour internship in the third year of study. Once the internship requirements have been fulfilled, candidates may then apply for state certification in school psychology.

Program Webpages

- **Master of Science:** https://www.calu.edu/academics/graduate/masters/education-campus/school-psychology/index.aspx
- **Post-Master's Certificate:** https://www.calu.edu/academics/graduate/certificates/education/school-psychology/

Social Work

Faculty

Ann B. Bergamasco | Dr. Sheri Boyle | Dr. Janice McCall | Dr. Gwendolyn D. Perry-Burney | Dr. T. Thao Pham | Dr. Rosalie Smiley

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers regular and advanced standing Master of Social Work (MSW) programs.

Note: A 36-credit MBA: Social Work Administration concentration is also available for social workers who have already earned, or are working toward, their MSW at Cal U. (See the "Business and Economics" section of this catalog for additional information.)

Accreditation

The MSW program is accredited by the Council on Social Work Education (CSWE).

Master of Social Work: Advanced Standing Program

Program Description

The advanced standing Master of Social Work (MSW) program is designed for students with bachelor's degrees in social work from Council on Social Work Education accredited programs. It prepares students to respond professionally and creatively to the increasingly complex matrix of human needs and strengths in a changing society. Built on a professional advanced generalist curriculum model, the program prepares students to work in direct and indirect practice and develops students' leadership capacities.

Program Coordinator

Dr. Thoa Pham

Delivery Mode

Several courses are 100% online. The remainder follow a blended course format, with face-to-face classes held once every three weeks. Students complete other assignments and readings online in between the face-to-face classes.

Accreditation

Council on Social Work Education (CSWE)

Curriculum

Course	Credits
SWK 705 Human Behavior and the Social Environment	3
SWK 715 Research, Policy and Rural Social Work Practice	3
SWK 801 Advanced Generalist Practice	3

Course	Credits
SWK 803 Differential Assessment	3
SWK 806 Advanced Policy and Grant Writing	3
SWK 808 Advanced Practice Evaluation	3
SWK 812 Practice in Supervision and Administration	3
SWK 829 Advanced Field Practicum I	6
SWK 830 Advanced Field Practicum II	6
SWK Practice Electives* (2)	6
Total	**39**
*Practice Electives	
SWK 811 Practice with Aging in Rural and Small Town Environments	3
SWK 813 Practice in Health Care and Health Planning in Rural and Small Town Environments	3
SWK 814 Practice in Mental Health/Mental Retardation in Rural and Small Town Environments	3
SWK 815 Juvenile and Adult Justice System Practice in Rural and Small Town Environments	3
SWK 816 Practice with Children and Youth in Rural and Small Town Environments	3
SWK 821 Social Work with Substance Abuse/ Addictions in Rural and Small Town Environments	3
SWK 840 Electives (varied)	3

Additional Requirements

Students must register for at least 6 credits each semester, are required to follow the plan for appropriate course sequencing and must complete degree requirements within six years.

Program Webpage

https://www.calu.edu/academics/graduate/masters/social-work/index.aspx

Master of Social Work: Regular Program

Program Description

The regular Master of Social Work program is designed for students with bachelor's degrees in psychology, social sciences, sociology, liberal arts and other disciplines. It prepares students to respond professionally and creatively to the increasingly complex matrix of human needs and strengths in a changing society. It also provides students with a theoretical and professional practice-focused curriculum in social work that promotes an understanding and

appreciation of cultural diversity and its importance to competent advanced generalist practice. The program also prepares students to work in direct and indirect practice and develops students' leadership capacities.

Program Coordinator
Dr. Thao Pham

Delivery Mode
Several courses are 100% online. The remainder follow a blended course format, with face-to-face classes held once every three weeks. Students complete other assignments and readings online in between the face-to-face classes.

Accreditation
Council on Social Work Education (CSWE)

Curriculum

Course	Credits
SWK 701 Generalist Practice I	3
SWK 702 Generalist Practice II	3
SWK 705 Human Behavior and the Social Environment	3
SWK 707 Human Diversity	3
SWK 709 Social Welfare Policy and Services	3
SWK 716 Social Work Research Methodology and Data Analysis	3
SWK 730 First Year Field Practicum	6
SWK 801 Advanced Generalist Practice	3
SWK 803 Differential Assessment	3
SWK 806 Advanced Policy and Grant Writing	3
SWK 808 Advanced Practice Evaluation	3
SWK 812 Practice in Supervision and Administration	3
SWK 829 Advanced Field Practicum I	6
SWK 830 Advanced Field Practicum II	6
SWK Practice Electives* (2)	6
Total	**57**
*Practice Electives	
SWK 811 Practice with Aging in Rural and Small Town Environments	3

Course	Credits
SWK 813 Practice in Health Care and Health Planning in Rural and Small Town Environments	3
SWK 814 Practice in Mental Health/Mental Retardation in Rural and Small Town Environments	3
SWK 815 Juvenile and Adult Justice System Practice in Rural and Small Town Environments	3
SWK 816 Practice with Children and Youth in Rural and Small Town Environments	3
SWK 821 Social Work with Substance Abuse/ Addictions in Rural and Small Town Environments	3
SWK 840 Electives (varied)	3

Additional Requirements

Students must register for at least 6 credits each semester, are required to follow the plan for appropriate course sequencing and must complete degree requirements within six years.

Program Webpage

https://www.calu.edu/academics/graduate/masters/social-work/index.aspx

Sport Management Studies

Faculty

Dr. Carol M. Biddington | Dr. Mary Kreis | Dr. Robert G. Taylor | Dr. Linda P. Meyer | Dr. Laura L. Miller | Dr. Brian Wood

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers Sport Management Studies programs in:

- M.S. in Sport Management Studies, with concentrations in:
  - Intercollegiate Athletic Administration
  - Sport Management
  - Strategic Sport Analysis

- Certificate in Intercollegiate Athletic Administration

General Program Webpage

An overview of the programs is available at: https://www.calu.edu/academics/graduate/masters/sport-management/index.aspx

Certificate in Intercollegiate Athletic Administration

Program Description

The intercollegiate athletic administration certificate program is composed of the four concentration-specific courses from the M.S. in Sport Management Studies: Intercollegiate Athletic Administration program.

Program Coordinator

Dr. Robert G. Taylor

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
SPT 790 Sport Governance	3
SPT 791 Sport Compliance	3
SPT 792 Legal Aspects of Equity in Intercollegiate Athletics	3
SPT 793 Human Resource Strategies in Intercollegiate Athletics	3
Total	**12**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/intercollegiate-athletic-administration/index.aspx

M.S. in Sport Management Studies (Generalist Track)

Program Description

The sport management generalist concentration of the Master of Science in Sport Management Studies is designed for students seeking to develop sport management knowledge and skills. Concentration coursework places heavy emphasis on supervised hands-on experience.

Program Coordinator

Dr. Robert G. Taylor

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
SPT 700 Research Methods in Sport	3
SPT 710 Socio-cultural Aspects of Sport	3
SPT 720 Sport Marketing	3
SPT 730 Public Relations in Sport	3
SPT 740 Legal Aspects in Sport	3
SPT 750 Sport Finance	3
SPT 760 Sport Ethics	3
SPT 770 Leadership and Management in Sport	3
SPT 799 Mentorship*	12
Total	**36**

* Students may not enroll in SPT 799 until all core coursework has been successfully completed with a minimum overall GPA of 3.0.

Program Webpage

https://www.calu.edu/academics/online-programs/sport-management/curriculum/index.htm

M.S. in Sport Management Studies: Intercollegiate Athletic Administration

Program Description

The intercollegiate athletic administration concentration of the Master of Science in Sport Management Studies was developed in consultation with the NCAA. The program explores important concepts related to administration of intercollegiate athletic departments.

Program Coordinator

Dr. Robert G. Taylor

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
SPT 700 Research Methods in Sport	3
SPT 710 Socio-cultural Aspects of Sport	3
SPT 720 Sport Marketing	3
SPT 730 Public Relations in Sport	3
SPT 740 Legal Aspects in Sport	3
SPT 750 Sport Finance	3
SPT 760 Sport Ethics	3
SPT 770 Leadership and Management in Sport	3
SPT 790 Sport Governance	3
SPT 791 Sport Compliance	3
SPT 792 Legal Aspects of Equity in Intercollegiate Athletics	3
SPT 793 Development of Human Resource Strategies in Intercollegiate Athletics	3
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/intercollegiate-athletic-administration/index.aspx

M.S. in Sport Management Studies: Strategic Sport Analysis

Program Description

The strategic sport analysis concentration of the M.S. in Sport Management Studies covers skills needed for using data to make savvy business decisions within the sports, fitness and athletic industries.

Program Coordinator

Dr. Robert G. Taylor

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
SPT 700 Research Methods in Sport	3
SPT 710 Socio-cultural Aspects of Sport	3
SPT 720 Sport Marketing	3
SPT 730 Public Relations in Sport	3
SPT 740 Legal Aspects in Sport	3
SPT 750 Sport Finance	3
SPT 760 Sport Ethics	3
SPT 770 Leadership and Management in Sport	3
SPT 780 Current Trends and Issues in Sport Management	3
SPT 781 Sports Analytics	3
SPT 782 Economic Analysis in Sport	3
SPT 783 Strategic Sport Management	3
Total	**36**

Program Webpage

https://www.calu.edu/academics/graduate/masters/strategic-sport-analysis/index.aspx

Teacher Education, Administration and Leadership Graduate Programs

Programs

Cal U offers a variety of education programs that prepare educators for the classroom or leadership positions. Our graduate-level education and administration programs fall under the following categories:

- Administrative Leadership
- Childhood Education
- Integrative STEM Education
- Secondary Education
- Special Education
- Technology Education

Pennsylvania Teacher Certification

Individuals who possess a Pennsylvania Instructional I teaching certification may be able to use the credits earned in a graduate program at Cal U toward the post-baccalaureate requirements for the Instructional II certification.

Instructional I Certification

Some of our graduate programs lead to specialized initial teaching certification. Review the program requirements in this catalog.

Act 48 Continuing Education

Cal U is a Pennsylvania Department of Education-approved provider for Act 48 continuing professional education. All of California University's graduate education programs may be applied to Act 48 continuing education.

For more information on Pennsylvania Instructional II certification teaching certifications and professional education requirements, please visit the Pennsylvania Department of Education website at www.education.state.pa.us/portal/server.pt/community/pennsylvania_department_of_education/7237.

Administrative Leadership in Education

Faculty

Dr. Mark Abbondanza | Dr. Pete Aiken | Dr. Brian Barnhart | Dr. Silvia Braidic | Dr. David Foley | Dr. Robert Freil | Dr. Michael Ghilani | Dr. Todd E. Keruskin | Dr. J. Kevin Lordon | Dr. Randal Lutz | Dr. George Spalaris | Dr. Dave Schreiber | Dr. Gregory Taranto | Dr. Jeff Taylor | Dr. Brian Toth | Dr. Mary Wolf

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers these administrative leadership in education programs:

- M.Ed. in Educational Leadership: Administrative Program for Principals
- Ed.D. in Education Administration and Leadership (Ed.D. only)
- Ed.D. in Education Administration and Leadership (Ed.D. + SLE cert)
- Certification in Administrative Program for Principals (post-master's)
- Superintendent Letter of Eligibility (post-master's)

Administrative Program for Principals Certification

Program Description

The administrative program for principals certification program is a certification-only track for those who have previously obtained a master's degree and are seeking principal's certification.

Program Coordinator

Dr. Silvia Braidic

Delivery Mode

Global Online (100% online delivery)

Classes are conducted online, with field experiences and internships taking place at the student's school site.

Program Accreditation

Approved by the Pennsylvania Department of Education, this online program meets state educational requirements for certification as a principal. The program complies with Educational Leadership Constituent Council (ELCC) standards, and may be used to meet certification and professional development requirements in other states.

Curriculum

Course	Credits
ADP 621 Curriculum Leadership Using a Standards Aligned System	3
ADP 626 Instructional Leadership and Strategies for Inclusive Classrooms	3
ADP 631 School Law and Ethics	3

Course	Credits
ADP 641 School Community Relations Seminar	3
ADP 647 Orientation and Assessment	3
ADP 661 Educational Leadership	3
ADP 670 Internship Part 1	3
ADP 670 Internship Part 2	3
Total	**24**

Additional Requirements

Completion of an approved certification program is one requirement for certification in Pennsylvania. In the certification process, the University informs the state that a student has completed the University's state-approved program. The state then reviews the student's credentials and determines eligibility for certification. We encourage all students to review the Pennsylvania Department of Education certification requirements before beginning Cal U's program. The endorsement for certification process must be initiated by the student once they have met all state requirements.

Students seeking certification in a state other than Pennsylvania must check their respective state Department of Education requirements and whether completing the principal program at Cal U will be accepted. Out-of-state students seeking Pennsylvania certification are required to notify the department of that intent in order to meet the Pennsylvania certification expectations. Additional information related to Pennsylvania certification can be found on the Pennsylvania Department of Education website: www.education.state.pa.us/portal/server.pt/community/pennsylvania_department_of_education/7237.

Program Webpage

www.calu.edu/academics/online-programs/principals-program-certificate/curriculum/index.htm

Ed.D. in Education Administration and Leadership

Program Description

The Doctor of Education in Education Administration and Leadership (Ed.D. only) option is designed for individuals already holding superintendent letter of eligibility (SLE) certification.

Program Coordinator

Dr. Silvia Braidic

Delivery Mode

Global Online (100% online delivery)

Classes are conducted online, with field experiences and field projects taking place at the school district site.

Curriculum

Course	Credits
Core - Leadership and Research	**12**

Course	Credits
EAL 701 Leadership I	3
EAL 702 Leadership II	3
EAL 703 Qualitative Research in Educational Leadership	3
EAL 704 Quantitative Research in Educational Leadership	3
Concentration Courses	**15**
SLE 720 District Leadership for Public Relations and Marketing	3
SLE 730 District Leadership for Legal Issues in Education	3
SLE 740 District Leadership for Finances	3
SLE 750 District Leadership for Human Resources (PIL approved)	3
SLE 760 District Leadership Field Project - Fiscal Responsibility	3
Capstone	**12**
EAL 705 Introduction to Capstone Research	3
EAL 706 Capstone 1 – Research Question/Review of Literature	3
EAL 707 Capstone 2 – Methods/Data Collection	3
EAL 708 Capstone 3 – Data Analysis/Results/ Recommendations	3
Total	**39**

Program Webpage

https://www.calu.edu/academics/graduate/doctoral/education-administration-leadership/index.aspx

Ed.D. in Education Administration and Leadership + SLE

Program Description

The Doctor of Education in Education Administration and Leadership with Superintendent Letter of Eligibility certification (Ed.D. + SLE) option is designed for individuals seeking superintendent letter of eligibility certification

and doctorate. The program provides education administrators with the knowledge and applied skills required to manage a school district or other academic enterprise.

Program Coordinator

Dr. Silvia Braidic

Delivery Mode

Global Online (100% online delivery)

Classes are conducted online, with field experiences and internships taking place at the school district site.

Accreditation

Approved by the Pennsylvania Department of Education, the Superintendent Letter of Eligibility certification program meets state educational requirements for certification as a superintendent. The program complies with Educational Leadership Constituent Council Standards (ELCC), and may be used to meet certification and professional development requirements in other states. The certification coursework for the superintendent letter has also been approved by the Pennsylvania Inspired Leadership Program (PIL).

Curriculum

Course	Credits
Core - Leadership and Research	**12**
EAL 701 Leadership I	3
EAL 702 Leadership II	3
EAL 703 Qualitative Research in Educational Leadership	3
EAL 704 Quantitative Research in Educational Leadership	3
Concentration Courses	**33**
SLE 701 Administration Theory, Organization, and Operation	3
SLE 704 Technology and Facilities Development	3
SLE 705 Curriculum/Instruction and Leadership/ Supervision	3
SLE 707 Strategic Planning/Policy Analysis/Board Relations	3
SLE 708 Internship I	3
SLE 708 Internship II	3
SLE 720 District Leadership for Public Relations and Marketing	3

Course	Credits
SLE 730 District Leadership for Legal Issues in Education	3
SLE 740 District Leadership for Finances	3
SLE 750 District Leadership for Human Resources (PIL approved)	3
SLE 760 District Leadership Field Project - Fiscal Responsibility	3
Capstone	**12**
EAL 705 Introduction to Capstone Research	3
EAL 706 Capstone 1 – Research Question/Review of Literature	3
EAL 707 Capstone 2 – Methods/Data Collection	3
EAL 708 Capstone 3 – Data Analysis/Results/ Recommendations	3
Total	**57**

Additional Requirements

Completion of an approved certification program is one requirement for certification in Pennsylvania. In the certification process, the University informs the state that a student has completed the University's state-approved program. The state then reviews the student's credentials and determines eligibility for certification. We encourage all students to review the Pennsylvania Department of Education certification requirements before beginning Cal U's program. The endorsement for certification process must be initiated by the student once they have met all state requirements.

Students seeking certification in a state other than Pennsylvania must check their respective state Department of Education requirements and whether completing the superintendent letter of eligibility at Cal U will be accepted. Out-of-state students seeking Pennsylvania certification are required to notify the department of that intent in order to meet the Pennsylvania certification expectations. Additional information related to Pennsylvania certification can be found on the Pennsylvania Department of Education website: www.education.state.pa.us/ portal/server.pt/community/pennsylvania_department_of_education/7237.

Special Program Requirements

Although not required for admission, certification by the state of Pennsylvania requires a minimum of six years of professional certified service in the basic schools, three of which shall have been in supervisory/administrative position as defined by PDE. These three years must be completed before certification endorsement will be granted by the University.

Program Webpage

https://www.calu.edu/academics/graduate/doctoral/education-administration-leadership/index.aspx

M.Ed. in Educational Leadership: Administrative Program for Principals

Program Description

The Master of Education (M.Ed.) in Educational Leadership: Administrative Program for Principals (ADP) program is designed for individuals who are seeking a principal's certificate and a master's degree in education or who simply wish to continue to enhance their teaching and leadership skills. This program integrates K-12 principal certification into a master's degree.

Program Coordinator

Dr. Silvia Braidic

Delivery Mode

Global Online (100% online delivery)

Classes are conducted online with field experiences and internships taking place at the student's school site.

Program Accreditation

Approved by the Pennsylvania Department of Education, this online program meets state educational requirements for certification as a principal. The program complies with Educational Leadership Constituent Council (ELCC) standards, and may be used to meet certification and professional development requirements in other states.

Curriculum

Course	Credits
ADP 621 Curriculum Leadership Using a Standards Aligned System	3
ADP 626 Instructional Leadership and Strategies for Inclusive Classrooms	3
ADP 631 School Law and Ethics	3
ADP 641 School Community Relations Seminar	3
ADP 647 Orientation and Assessment	3
ADP 661 Educational Leadership	3
ADP 664 Field Project/Leadership (M.Ed. students only)	3
ADP 670 Internship Part 1	3
ADP 670 Internship Part 2 – Final Requirement for Certification	3
ADP 673 Field Project/Research and Evaluation (M.Ed. students only)	3
Total	**30**

Additional Requirements

Completion of an approved certification program is one requirement for certification in Pennsylvania. In the certification process, the University informs the state that a student has completed the University's state-approved program. The state then reviews the student's credentials and determines eligibility for certification. We encourage all students to review the Pennsylvania Department of Education certification requirements before beginning Cal U's program for further information about certification requirements in Pennsylvania. The endorsement for certification process must be initiated by the student once they have met all state requirements.

Students seeking certification in a state other than Pennsylvania must check their respective state Department of Education requirements and whether completing the principal program at Cal U will be accepted. Out-of-state students seeking Pennsylvania certification are required to notify the department of that intent in order to meet the Pennsylvania certification expectations. Additional information related to Pennsylvania certification can be found on the Pennsylvania Department of Education website: www.education.state.pa.us/portal/server.pt/community/pennsylvania_department_of_education/7237.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-online/administrative-program-for-principals/index.aspx

Superintendent Letter of Eligibility

Program Description

The superintendent letter of eligibility certificate program provides an opportunity for a graduate student to obtain certification in the Commonwealth of Pennsylvania as a superintendent.

Program Coordinator

Dr. Silvia Braidic

Delivery Mode

Global Online (100% online delivery)

Classes are conducted online, with field experiences and internships taking place at the student's site.

Accreditation

Approved by the Pennsylvania Department of Education, the Superintendent Letter of Eligibility certification program meets state educational requirements for certification as a superintendent. The program complies with Educational Leadership Constituent Council Standards (ELCC), and may be used to meet certification and professional development requirements in other states. The coursework has also been approved by the Pennsylvania Inspired Leadership Program (PIL).

Curriculum

Course	Credits
SLE 701 Administration Theory, Organization and Operation (PIL approved)	3
SLE 704 Technology and Facilities Development (PIL approved)	3
SLE 705 Curriculum/Instruction and Leadership/ Supervision (PIL approved)	3

Course	Credits
SLE 707 Strategic Planning/Policy Analysis/Board Relations (PIL approved)	3
SLE 708 Internship Part 1	3
SLE 708 Internship Part 2	3
Total	**18**

Additional Requirements

Completion of an approved certification program is one requirement for certification in Pennsylvania. In the certification process, the University informs the state that a student has completed the University's state-approved program. The state then reviews the student's credentials and determines eligibility for certification. We encourage all students to review the Pennsylvania Department of Education certification requirements before beginning Cal U's program. The endorsement for certification process must be initiated by the student once they have met all state requirements.

Students seeking certification in a state other than Pennsylvania must check their respective state Department of Education requirements and whether completing the superintendent letter of eligibility at Cal U will be accepted. Out-of-state students seeking Pennsylvania certification are required to notify the department of that intent in order to meet the Pennsylvania certification expectations. Additional information related to Pennsylvania certification can be found on the Pennsylvania Department of Education website: www.education.state.pa.us/ portal/server.pt/community/pennsylvania_department_of_education/7237.

Special Program Requirements

Although not required for admission, certification by the state of Pennsylvania requires a minimum of six years of professional certified service in the basic schools, three of which shall have been in supervisory/administrative position as defined by PDE. These three years must be completed before certification endorsement will be granted by the University.

Program Webpage

https://www.calu.edu/academics/graduate/certificates/education/superintendent-letter-of-eligibility/index.aspx

Childhood Education

Faculty

Dr. Peter Cormas | Dr. Holly Diehl | Dr. Diane Fine | Dr. J. William Hug | Dr. Rebecca Maddas | Dr. Christine Peterson | Dr. Michelle Early Torregano | Dr. Clover Wright

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers childhood education graduate programs in:

Master's Degrees
- Reading Specialist (M.Ed. with certification)
- Teacher Education: Early Childhood Education (M.Ed. only)
- Teacher Education: Pre-K-4 (M.Ed. with certification)

Certificates and Endorsements
- Gifted Education Endorsement
- Reading Specialist Certificate

Certificate in Reading Specialist

Program Description

The reading specialist post-baccalaureate certificate program prepares competent literacy leaders by developing and enhancing the knowledge, professional practices and professionalism of certified classroom teachers and educators for work in all educational settings.

This program is appropriate for students who are only interested in seeking reading specialist certification through the Pennsylvania Department of Education (PDE). At the completion of this program, Cal U awards a certificate of completion; candidates must apply to PDE for teacher certification, which requires a passing score on the associated Reading Specialist Praxis exam.

Program Coordinator

Dr. Diane Fine

Delivery Mode

100% online (including all courses and the summer reading clinical practicum experience)

Accreditation

The reading specialist program is accredited by the Council for the Accreditation of Educator Preparation (CAEP, formerly NCATE) and approved by the Pennsylvania Department of Education; the reading specialist program is nationally recognized by the International Literacy Association (ILA).

Curriculum

Course	Credits
RSP 700 Foundations of Literacy: Theory and Instruction	3
RSP 702 Literacy Assessment and Instruction	3

Course	Credits
RSP 703 Practicum I: Assessment	3
RSP 704 Practicum II: Instruction	3
RSP 705 Psychology of Reading	3
RSP 706 Literacy Leadership	3
RSP 707 Creating and Fostering Literate Environments	3
RSP 734 Content Area Reading	3
Total	**24**

Additional Requirements

To graduate from the program, candidates must successfully complete a PracticumFolio during the reading practicum experience.

To have the reading specialist certification added to a Pennsylvania teaching certificate, candidates must pass the Reading Specialist Praxis test. Candidates interested in certification outside Pennsylvania are required to secure and follow regulations from the other states or entities.

Clearances

 Pennsylvania Act 24, 34, 114, 131 and 151 clearances (or appropriate clearances for non-Pennsylvania residents) are required for field-based course registration but not admission. Applicants may be admitted to the program but will not be able to register for field-based courses until all of the up-to-date clearances are submitted to the CastleBranch clearance management system.

Program Webpage

https://www.calu.edu/academics/graduate/certificates/education/reading-specialist/index.aspx

Endorsement in Gifted Education

Program Description

This PDE-approved gifted education endorsement program is designed to prepare certified instructors in the content, pedagogy and dispositions necessary for teaching gifted learners. It is intended to improve a teacher's skills in dealing with complex classroom settings and is added to existing Level I or Level II certificates (but is not required to perform service in these areas).

Program Coordinator

Dr. Connie Monroe

Delivery Mode

Global Online (100% online delivery)

Clearances

Pennsylvania Act 24, 34, 114, 131 and 151 clearances (or appropriate clearances for non-Pennsylvania residents) are required for field-based course registration but not admission. Applicants may be admitted to the program but will not be able to register for field-based courses until all of the up-to-date clearances are submitted.

Curriculum

Course	Credits
EDU 701 Foundations of Gifted Education	3
EDU 702 Instructional Design and Strategies for Gifted Education	3
EDU 703 Assessment and Identification of Gifted Students	3
EDU 705 Program Models for Gifted Education: Service Delivery Options	3
Total	**12**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/education/gifted-endorsement/index.aspx

M.Ed. in Reading Specialist

Program Description

The reading specialist Master of Education program at Cal U prepares competent literacy leaders by developing and enhancing the knowledge, professional practices and professionalism of certified classroom teachers and educators for work in all educational settings. It is designed for students who want to earn a Master of Education degree and reading specialist certification on their Pennsylvania teaching certificate.

Program Coordinator

Dr. Diane Fine

Delivery Mode

100% online (including all courses and the summer reading clinical practicum experience)

Accreditation

The Reading Specialist program is accredited by the Council for the Accreditation of Educator Preparation (CAEP, formerly NCATE) and approved by the Pennsylvania Department of Education; the Reading Specialist program is nationally recognized by the International Literacy Association (ILA).

Curriculum

Course	Credits
RES 800 Methods of Research	3
RSP 700 Foundations of Literacy: Theory and Instruction	3
RSP 702 Literacy Assessment and Instruction	3
RSP 703 Practicum I: Assessment	3
RSP 704 Practicum II: Instruction	3

Course	Credits
RSP 705 Psychology of Reading	3
RSP 706 Literacy Leadership	3
RSP 707 Creating and Fostering Literate Environments	3
RSP 708 Literacy Development for English Language Learners	3
RSP 734 Content Area Reading	3
Total	**30**

Additional Requirements

To graduate from the program, candidates must successfully complete a PracticumFolio during the reading practicum experience.

To have the reading specialist certification added to a Pennsylvania teaching certificate, candidates must pass the Reading Specialist Praxis test. Candidates interested in certification outside Pennsylvania are required to secure and follow regulations from the other states or entities.

Clearances

Pennsylvania Act 24, 34, 114, 131 and 151 clearances (or appropriate clearances for non-Pennsylvania residents) are required for field-based course registration but not admission. Applicants may be admitted to the program but will not be able to register for field-based courses until all of the up-to-date clearances are submitted to the CastleBranch clearance management system.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-campus/reading-specialist/index.aspx

M.Ed. in Teacher Education: Early Childhood Education

Program Description

The Master of Education in Early Childhood Education program is for teachers who are certified in elementary, early childhood or special education and are interested in pursuing a Master of Education without certification. Graduate students in the early childhood education program apply knowledge of child development, families and best teaching practices to a variety of educational settings, including public schools' pre-K to grade 4 primary programs, preschool programs, Head Start, child care, and parenting and family support programs. This program is open to students with a bachelor's, master's or doctorate degree from an accredited program and teaching certification in N-3, K-6 and/or special education Pre-K-12.

Program Coordinator

Michael Ulderich

Delivery Mode

Global Online (100% online delivery)

Accreditation

This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Clearances

Pennsylvania Act 24, 34, 114, 131 and 151 clearances (or appropriate clearances for non-Pennsylvania residents) are required for field-based course registration but not admission. Applicants may be admitted to the program but will not be able to register for field-based courses until all of the up-to-date clearances are submitted.

Curriculum

Course	Credits
ECE 700 Early Childhood Curriculum and Assessment	3
ECE 702 Advanced Childhood Development	3
ECE 703 Literacy Development	3
ECE 704 Special Topics in Early Childhood Education	3
ECE 705 Science and Math in Early Childhood	3
ECE 707 Leadership and Management in Early Childhood Settings	3
EDE 701 Standards Aligned Curriculum, Instruction and Assessments	3
ESP 610 Special Ed Foundations Collab	3
PSY 712 Advanced Psychology of Learning	3
RES 800 Methods of Research	3
Total	**30**

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-online/childhood-education/index.aspx

M.Ed. in Teacher Education: Pre-K-4 (with certification)

Program Description

The Master of Education in Teacher Education: Pre-K-4 with certification program is designed for students who have a baccalaureate degree and are seeking a master's degree and Pennsylvania elementary education certification (grades pre-K-4).

Program Coordinator

Michael Ulderich

Delivery Mode

Traditional (on-ground, face-to-face delivery with some online/distance elements)

Accreditation

This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
ECE 703 Literacy Development	3
EDE 701 Standards Aligned Curriculum, Instruction and Assessment	3
ELE 621 Instructional Strategies	3
ELE 701 Teaching and Assessment in Language Arts	3
ELE 702 Teaching and Assessment in Reading	3
ELE 703 Field Experience	3
ELE 711 Teaching and Assessment in Mathematics	3
ELE 721 Teaching and Assessment in Science	3
ELE 731 Teaching and Assessment in Social Studies	3
ELE 741 Diverse Arts and Culture in Education	3
ELE 795 Student Teaching	9
ESP 610 Special Education Foundations and Collaboration	3
ESP 612 Evidence-based Practices for Pre-K-8 Inclusion	3
ESP 701 Introduction to Behavior Analysis	3
PSY 712 Advanced Psychology of Learning	3
RES 800 Methods of Research	3
Total	**54**

Additional Requirements

Students who are not certified in Pennsylvania must pass the PECT test. It is possible to earn the master's degree and pre-K-4 certification in the same program.

Candidates for Pennsylvania certification must have completed undergraduate or graduate coursework that includes the following:

- College-level mathematics (6 credits)

- English composition and American/British literature (3 credits/3 credits)
- Health and wellness (3 credits)
- Citizen: geography, political or economy (3 credits)
- English language learners (3 credits)
- Instructional technology (3 credits)
- U.S. history (3 credits)
- Physical science (3 credits)
- Environmental/earth science (3 credits)
- Biology (3 credits)

The courses listed above apply only to the Master of Education with certification program. Students entering the program without all, or part, of the undergraduate requirements may meet them with additional coursework or by competency tests while they are taking the graduate classes.

Clearances

Pennsylvania Act 24, 34, 114, 131 and 151 clearances (or appropriate clearances for non-Pennsylvania residents) are required for field-based course registration but not admission. Applicants may be admitted to the program but will not be able to register for field-based courses until all of the up-to-date clearances are submitted.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-campus/elementary-education/certification.aspx

Integrative STEM Education

Faculty
Dr. Diane Fine | Dr. J. William Hug | Dr. Peter Cormas | Michael Ulderich

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs
Cal U offers STEM education graduate programs in:

- Teacher Education: Integrative STEM Education K-12 (M.Ed.)
- Integrative STEM Education K-12 Endorsement

Integrative STEM Education K-12 Endorsement

Program Description
The integrative STEM education K-12 endorsement program is designed for certified teachers and other educators who are seeking to gain valuable skills in STEM education. This is a stand-alone credential. Upon completion of this program, candidates who hold a Pennsylvania Level I or II teaching certificate can apply to add the STEM Education PreK-12 Endorsement to their existing teaching certificate.

Program Coordinator
Dr. Diane Fine

Delivery Mode
Global Online (100% online delivery)

Accreditation
Cal U's teacher education programs are approved by the Pennsylvania Department of Education. In addition, Cal U education programs have been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
EDE 750 Foundations of Integrative STEM Education K-12	3
EDE 753 Integrative STEM Pedagogy and Instructional Design	3
EDE 754 Creating Innovative Measures of Learning for Integrative STEM Learning Communities	3
EDE 769 Integrative Project in STEM Education	3
Total	**12**

Clearances

Pennsylvania Act 24, 31, 34, 114 and 151 clearances (or appropriate clearances for non-Pennsylvania residents) are required for field-based course registration but not admission. Applicants may be admitted to the program but will not be able to register for field-based courses until all of the up-to-date clearances are submitted.

Program Webpage

www.calu.edu/academics/online-programs/stem-teacher-education/index.htm

M.Ed. in Teacher Education: Integrative STEM Education K-12

Program Description

The Master of Education in Teacher Education: Integrative STEM Education K-12 is designed for certified teachers and other educators interested in learning how to develop rigorous, relevant, innovative and engaging integrative practices for incorporating STEM principles across disciplines while ensuring that learners are able to apply STEM content, concepts and skills in both academic and real-world contexts. Upon completion of this program, candidates who hold a Pennsylvania Level I or II teaching certificate can apply to add the STEM Education PreK-12 Endorsement to their existing teaching certificate.

Program Coordinator

Dr. Diane Fine

Delivery Mode

Global Online (100% online delivery)

Accreditation

Cal U's teacher education programs are approved by the Pennsylvania Department of Education. In addition, Cal U education programs have been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
EDE 701 Standards Aligned Curriculum, Assessment and Instruction	3
EDE 750 Foundations of Integrative STEM Education K-12	3
EDE 751 Building Scientific Literacy and Understanding Through Inquiry	3
EDE 752 Mathematics as Problem Solving	3
EDE 753 Integrative STEM Pedagogy and Instructional Design	3
EDE 754 Creating Innovative Measures of Learning for Integrative STEM Learning Communities	3

Course	Credits
EDE 755 STEM Teachers as Leaders	3
EDE 769 Integrative Project in STEM Education	3
RES 800 Methods of Research	3
TED 775 Integrating Technology in Elementary/Middle School STEM Curriculum	3
Total	**30**

Clearances

Pennsylvania Act 24, 31, 34, 114 and 151 clearances (or appropriate clearances for non-Pennsylvania residents) are required for field-based course registration but not admission. Applicants may be admitted to the program but will not be able to register for field-based courses until all of the up-to-date clearances are submitted.

Program Webpage

www.calu.edu/academics/online-programs/stem-teacher-education/index.htm

Secondary Education

Faculty

Dr. Keith Hepner | Dr. Marcia Hoover | Dr. Chad Kauffman | Dr. Mario Majcen | Dr. Connie Monroe | Dr. Susan Morris-Rutledge | Dr. Michael Perrotti

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs

Cal U offers secondary education programs in:

Master's Degrees
- Educational Leadership (M.Ed.) with concentrations in:
    - Advanced Studies in Secondary Education and Teacher Leadership
    - Educational Studies
    - Weather and Climatology
- Teacher Certification (M.A.T.) with concentrations in:
    - Art Education K-12
    - Biology Education 7-12
    - Chemistry Education 7-12
    - Communications Education 7-12
    - Earth Space Education 7-12
    - English Education 7-12
    - Math Education 7-12
    - Physics Education 7-12
    - Social Studies Education 7-12
    - Spanish Education K-12
- Teacher Education (M.Ed.), with a concentration in:
    - English as a Second Language (M.Ed. only)
    - English as a Second Language (M.Ed. with certification)

Certificates and Endorsements
- English as a Second Language Certificate
- Online Teaching Endorsement

Certificate in English as a Second Language (ESL)

Program Description

The English as a second language (ESL) post-baccalaureate certificate program is designed for certified teachers. It builds skills related to language, culture, instruction, assessment and professionalism that are relevant when working with English language learners. The curriculum is aligned with the Pennsylvania Department of Education ESL Program Specialist Standards and Teachers of English to Speakers of Other Languages (TESOL) Standards.

Program Coordinator

Dr. Susan Morris-Rutledge

Delivery Mode

Global Online (100% online delivery)

Accreditation

Cal U's teacher education programs are approved by the Pennsylvania Department of Education. In addition, Cal U education programs have been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
EDU 704 Foundations of ESL Education (offered summer only)	3
EDU 709 Sociolinguistics (offered fall only)	3
EDU 712 Content-Based ESL Instruction (offered spring only)	3
EDU 713 Language Acquisition and Development (offered summer only)	3
EDU 714 Language Assessment (offered spring only)	3
EDU 719 Supporting Second Language Learners, Families and Community (offered fall only)	3
Total	**18**

Program Notes

- ESL courses require field experiences.
- This is not an initial teaching licensure program. Pennsylvania requires initial licensure before the ESL program specialist certificate can be added on.

Program Webpage

https://www.calu.edu/academics/graduate/certificates/education/esl/index.aspx

Endorsement in Online Teaching

Program Description

The online teaching endorsement program is designed for teachers seeking to expand skills related to instructional design and technology, teaching strategies and assessment in an online environment.

Program Coordinators

Dr. Marcia Hoover and Dr. Connie Monroe

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
MSE 740 Advanced Instructional Technology	3

Course	Credits
MSE 750 Strategies in Teaching Online	3
MSE 761 Assessment	3
MSE 766 Instructional Design	3
Total	12

Program Webpage

https://www.calu.edu/academics/graduate/certificates/education/online-teaching-endorsement/index.aspx

M.A.T. in Teacher Certification: Art Education K-12

Program Description

The art education K-12 concentration of the Master of Arts in Teaching (M.A.T.) in Teacher Certification program prepares individuals with a background in art to apply for initial teacher certification in that area. Students may apply for Pennsylvania teacher certification at the completion of student teaching. During the program, they may apply for a Pennsylvania intern certificate if they have a school district willing to hire them full time.

Program Coordinators

Dr. Michael Perrotti and Dr. Marcia Hoover

Delivery Mode

Online with two-day on-campus residency component (during the summer semester only)

Field observations/experiences and student teaching are conducted in public school settings.

Program Accreditation

This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
Required Courses	
MSE 641 Orientation to 7-12 Education	3
MSE 642 Standards-Based Instruction in 7-12 Education	3
MSE 643 Content Area Literacy	3
MSE 644 Instructional Strategies in 7-12	3
MSE 645 Technology Integration in 7-12 Education	3

Course	Credits
MSE 646 Assessments and Interventions	3
MSE 647 Classroom Management in 7-12 Education	3
MSE 655 Methods of Art Teaching K-12	3
MSE 661 Student Teaching	9
Total Credits	**33**

Undergraduate Content Course Requirements

Certification requirements for the Pennsylvania Department of Education include appropriate certification testing. A minimum of 30 credits of content area coursework is required. These courses may be taken at the undergraduate level. Students must demonstrate college coursework with a grade of C or higher in:

- Drawing
- 2D design
- 3D design
- Western art history
- Non-western art history
- Art history or art theory
- At least five art studio courses in at least four different media, such as printmaking, ceramics, jewelry, metals, painting, sculpture, photography or graphic arts

Note: Pennsylvania Department of Education requirements are subject to change.

Chapter 49-2

Chapter 49-2 requirements (12 credits) mandated by the Pennsylvania Department of Education must be met in order to receive certification. Courses may be satisfied with previously taken undergraduate or graduate courses, subject to approval of the program coordinator. Undergraduate 49-2 courses cannot be accepted for the graduate special education add-on certification program for students who later complete that program. If not already completed, the following courses are needed in addition to the requirements above:

- **ESP 610** Special Education Foundations and Collaboration
- **ESP 701** Introduction to Behavior Analysis
- **ESP 613** Evidence-based Practices in Secondary Inclusion
- **EDU 650** Supporting the English Language Learner

Student Teaching

Applications for spring student teaching are due October 1. Applications for fall student teaching are due April 1.

Student teaching requirements include:

- A GPA of 3.0 or higher for all courses, including undergraduate content course requirements
- A grade of C or higher for all required courses
- Completion of all required courses prior to student teaching
- Required clearances
- No incomplete (I) grades
- Passing of required Praxis tests
- TB tests
- Liability insurance

- Education requirements, such as seminars and portfolios

Program Notes
- The summer courses require a two-day residency in July.
- Clearances are required at all times throughout the program and must be updated every July.
- LiveText Watermark software is required for this program.

Teaching Certification
Upon successful completion of this master's degree, students are eligible to be "endorsed" for one Pennsylvania Department of Education Instructional I teaching certificate. This master's degree also meets the educational requirements of the Pennsylvania Instructional II certificate when a student has completed the necessary years of teaching. Note that the Pennsylvania Department of Education may change the requirements for instructional certificates at any time.

Program Webpage
https://www.calu.edu/academics/graduate/masters/education-campus/secondary-education/art.aspx

M.A.T. in Teacher Certification: Biology Education 7-12
Program Description
The biology education 7-12 concentration of the Master of Arts in Teaching (M.A.T.) in Teacher Certification program prepares individuals with a background in biology to apply for initial teacher certification in that area. Students may apply for Pennsylvania teacher certification at the completion of student teaching. During the program, they may apply for a Pennsylvania intern certificate if they have a school district willing to hire them full time.

Program Coordinator
Dr. Michael Perrotti and Dr. Marcia Hoover

Delivery Mode
Online with two-day on-campus residency component (during the summer semester only)

Field observations/experiences and student teaching are conducted in public school settings.

Program Accreditation
This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
Required Courses	
MSE 641 Orientation to 7-12 Education	3
MSE 642 Standards-Based Instruction in 7-12 Education	3

Course	Credits
MSE 643 Content Area Literacy	3
MSE 644 Instructional Strategies in 7-12	3
MSE 645 Technology Integration in 7-12 Education	3
MSE 646 Assessments and Interventions	3
MSE 647 Classroom Management in 7-12 Education	3
MSE 653 Methods of Science Teaching 7-12	3
MSE 661 Student Teaching	9
Total Credits	**33**

Undergraduate Content Course Requirements

Certification requirements for the Pennsylvania Department of Education include appropriate certification testing. A minimum of 30 credits of content area coursework is required. These courses may be taken at the undergraduate level. Students must demonstrate college coursework with a grade of C or higher in:

- Chemistry with lab
- Physics with lab
- Genetics
- Anatomy
- Physiology
- Ecology
- Zoology
- Botany
- Cellular or molecular
- Biology lab experiences

Note: Pennsylvania Department of Education requirements are subject to change.

Chapter 49-2

Chapter 49-2 requirements (12 credits) mandated by the Pennsylvania Department of Education must be met in order to receive certification. Courses may be satisfied with previously taken undergraduate or graduate courses, subject to approval of the program coordinator. Undergraduate 49-2 courses cannot be accepted for the graduate special education add-on certification program for students who later complete that program. If not already completed, the following courses are needed in addition to the requirements above:

- **ESP 610** Special Education Foundations and Collaboration
- **ESP 701** Introduction to Behavior Analysis
- **ESP 613** Evidence-based Practices in Secondary Inclusion
- **EDU 650** Supporting the English Language Learner

Student Teaching

Applications for spring student teaching are due October 1. Applications for fall student teaching are due April 1.

Student teaching requirements include:

- A GPA of 3.0 or higher for all courses, including undergraduate content course requirements
- A grade of C or higher for all required courses
- Completion of all required courses prior to student teaching
- Required clearances
- No incomplete (I) grades
- Passing of required Praxis tests
- TB tests
- Liability insurance
- Education requirements, such as seminars and portfolios

Program Notes
- The summer courses require a two-day residency in July.
- Clearances are required at all times throughout the program and must be updated every July.
- LiveText Watermark software is required for this program.

Teaching Certification
Upon successful completion of this master's degree, students are eligible to be "endorsed" for one Pennsylvania Department of Education Instructional I teaching certificate. This master's degree also meets the educational requirements of the Pennsylvania Instructional II certificate when a student has completed the necessary years of teaching. Note that the Pennsylvania Department of Education may change the requirements for instructional certificates at any time.

Program Webpage
https://www.calu.edu/academics/graduate/masters/education-campus/secondary-education/biology.aspx

M.A.T. in Teacher Certification: Chemistry Education 7-12
Program Description
The chemistry education 7-12 concentration of the Master of Arts in Teaching (M.A.T.) in Teacher Certification program prepares individuals with a background in chemistry to apply for initial teacher certification in that area. Students may apply for Pennsylvania teacher certification at the completion of student teaching. During the program, they may apply for a Pennsylvania intern certificate if they have a school district willing to hire them full time.

Program Coordinators
Dr. Michael Perrotti and Dr. Marcia Hoover

Delivery Mode
Online with two-day on-campus residency component (during the summer semester only)

Field observations/experiences and student teaching are conducted in public school settings.

Program Accreditation
This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
Required Courses	
MSE 641 Orientation to 7-12 Education	3
MSE 642 Standards-Based Instruction in 7-12 Education	3
MSE 643 Content Area Literacy	3
MSE 644 Instructional Strategies in 7-12	3
MSE 645 Technology Integration in 7-12 Education	3
MSE 646 Assessments and Interventions	3
MSE 647 Classroom Management in 7-12 Education	3
MSE 653 Methods of Science Teaching 7-12	3
MSE 661 Student Teaching	9
Total Credits	**33**

Undergraduate Content Course Requirements

Certification requirements for the Pennsylvania Department of Education include appropriate certification testing. A minimum of 30 credits of content area coursework is required. These courses may be taken at the undergraduate level. Students must demonstrate college coursework with a grade of C or higher in:

- Chemistry 1 with lab
- Chemistry 2 with lab
- Organic chemistry with lab
- Inorganic chemistry
- Biochemistry or physical chemistry
- Chemistry lab
- Analytical chemistry
- Chemistry elective
- Calculus
- Physics

Note: Pennsylvania Department of Education requirements are subject to change.

Chapter 49-2

Chapter 49-2 requirements (12 credits) mandated by the Pennsylvania Department of Education must be met in order to receive certification. Courses may be satisfied with previously taken undergraduate or graduate courses, subject to approval of the program coordinator. Undergraduate 49-2 courses cannot be accepted for the graduate special education add-on certification program for students who later complete that program. If not already completed, the following courses are needed in addition to the requirements above:

- **ESP 610** Special Education Foundations and Collaboration
- **ESP 701** Introduction to Behavior Analysis
- **ESP 613** Evidence-based Practices in Secondary Inclusion

- **EDU 650** Supporting the English Language Learner

Student Teaching

Applications for spring student teaching are due October 1. Applications for fall student teaching are due April 1.

Student teaching requirements include:

- A GPA of 3.0 or higher for all courses, including undergraduate content course requirements
- A grade of C or higher for all required courses
- Completion of all required courses prior to student teaching
- Required clearances
- No incomplete (I) grades
- Passing of required Praxis tests
- TB tests
- Liability insurance
- Education requirements, such as seminars and portfolios

Program Notes
- The summer courses require a two-day residency in July.
- Clearances are required at all times throughout the program and must be updated every July.
- LiveText Watermark software is required for this program.

Teaching Certification

Upon successful completion of this master's degree, students are eligible to be "endorsed" for one Pennsylvania Department of Education Instructional I teaching certificate. This master's degree also meets the educational requirements of the Pennsylvania Instructional II certificate when a student has completed the necessary years of teaching. Note that the Pennsylvania Department of Education may change the requirements for instructional certificates at any time.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-campus/secondary-education/chemistry.aspx

M.A.T. in Teacher Certification: Communications Education 7-12

Program Description

The communications education 7-12 concentration of the Master of Arts in Teaching (M.A.T.) in Teacher Certification program prepares individuals with a background in communications to apply for initial teacher certification in that area. Students may apply for Pennsylvania teacher certification at the completion of student teaching. During the program, they may apply for a Pennsylvania intern certificate if they have a school district willing to hire them full time.

Program Coordinators

Dr. Michael Perrotti and Dr. Marcia Hoover

Delivery Mode

Online with two-day on-campus residency component (during the summer semester only)

Field observations/experiences and student teaching are conducted in public school settings.

Program Accreditation

This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
Required Courses	
MSE 641 Orientation to 7-12 Education	3
MSE 642 Standards-Based Instruction in 7-12 Education	3
MSE 643 Content Area Literacy	3
MSE 644 Instructional Strategies in 7-12	3
MSE 645 Technology Integration in 7-12 Education	3
MSE 646 Assessments and Interventions	3
MSE 647 Classroom Management in 7-12 Education	3
MSE 651 Methods of English Teaching 7-12	3
MSE 661 Student Teaching	9
Total Credits	**33**

Undergraduate Content Course Requirements

Certification requirements for the Pennsylvania Department of Education include appropriate certification testing. A minimum of 30 credits of content area coursework is required. These courses may be taken at the undergraduate level. Students must demonstrate college coursework with a grade of C or higher in:

- English composition
- Writing theory
- Language (e.g., grammar, linguistics)
- Literature
- Drama in literature
- Communication theory
- Oral communication
- Video or media messaging
- Argument or debate
- Acting
- Directing
- Theatrical design
- Theater elective

Note: Pennsylvania Department of Education requirements are subject to change.

Chapter 49-2

Chapter 49-2 requirements (12 credits) mandated by the Pennsylvania Department of Education must be met in order to receive certification. Courses may be satisfied with previously taken undergraduate or graduate courses, subject to approval of the program coordinator. Undergraduate 49-2 courses cannot be accepted for the graduate special education add-on certification program for students who later complete that program. If not already completed, the following courses are needed in addition to the requirements above:

- **ESP 610** Special Education Foundations and Collaboration
- **ESP 701** Introduction to Behavior Analysis
- **ESP 613** Evidence-based Practices in Secondary Inclusion
- **EDU 650** Supporting the English Language Learner

Student Teaching

Applications for spring student teaching are due October 1. Applications for fall student teaching are due April 1.

Student teaching requirements include:

- A GPA of 3.0 or higher for all courses, including undergraduate content course requirements
- A grade of C or higher for all required courses
- Completion of all required courses prior to student teaching
- Required clearances
- No incomplete (I) grades
- Passing of required Praxis tests
- TB tests
- Liability insurance
- Education requirements, such as seminars and portfolios

Program Notes

- The summer courses require a two-day residency in July.
- Clearances are required at all times throughout the program and must be updated every July.
- LiveText Watermark software is required for this program.

Teaching Certification

Upon successful completion of this master's degree, students are eligible to be "endorsed" for one Pennsylvania Department of Education Instructional I teaching certificate. This master's degree also meets the educational requirements of the Pennsylvania Instructional II certificate when a student has completed the necessary years of teaching. Note that the Pennsylvania Department of Education may change the requirements for instructional certificates at any time.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-campus/secondary-education/communication.aspx

M.A.T. in Teacher Certification: Earth Space Education 7-12

Program Description

The Earth space education 7-12 concentration of the Master of Arts in Teaching (M.A.T.) in Teacher Certification program prepares individuals with a background in Earth and space science to apply for initial teacher certification in that area. Students may apply for Pennsylvania teacher certification at the completion of student teaching. During the program, they may apply for a Pennsylvania intern certificate if they have a school district willing to hire them full time.

Program Coordinators

Dr. Michael Perrotti and Dr. Marcia Hoover

Delivery Mode

Online with two-day on-campus residency component (during the summer semester only)

Field observations/experiences and student teaching are conducted in public school settings.

Program Accreditation

This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
Required Courses	
MSE 641 Orientation to 7-12 Education	3
MSE 642 Standards-Based Instruction in 7-12 Education	3
MSE 643 Content Area Literacy	3
MSE 644 Instructional Strategies in 7-12	3
MSE 645 Technology Integration in 7-12 Education	3
MSE 646 Assessments and Interventions	3
MSE 647 Classroom Management in 7-12 Education	3
MSE 653 Methods of Science Teaching 7-12	3
MSE 661 Student Teaching	9
Total Credits	**33**

Undergraduate Content Course Requirements

Certification requirements for the Pennsylvania Department of Education include appropriate certification testing. A minimum of 30 credits of content area coursework is required. These courses may be taken at the undergraduate level. Students must demonstrate college coursework with a grade of C or higher in:

- Astronomy
- Geology
- Oceanography
- Hydrology
- Meteorology
- Climatology
- Historical geography
- Geomorphography or tectonics

- Earth science elective
- Chemistry
- Physics
- Evidence of lab experiences

Note: Pennsylvania Department of Education requirements are subject to change.

Chapter 49-2

Chapter 49-2 requirements (12 credits) mandated by the Pennsylvania Department of Education must be met in order to receive certification. Courses may be satisfied with previously taken undergraduate or graduate courses, subject to approval of the program coordinator. Undergraduate 49-2 courses cannot be accepted for the graduate special education add-on certification program for students who later complete that program. If not already completed, the following courses are needed in addition to the requirements above:

- **ESP 610** Special Education Foundations and Collaboration
- **ESP 701** Introduction to Behavior Analysis
- **ESP 613** Evidence-based Practices in Secondary Inclusion
- **EDU 650** Supporting the English Language Learner

Student Teaching

Applications for spring student teaching are due October 1. Applications for fall student teaching are due April 1.

Student teaching requirements include:

- A GPA of 3.0 or higher for all courses, including undergraduate content course requirements
- A grade of C or higher for all required courses
- Completion of all required courses prior to student teaching
- Required clearances
- No incomplete (I) grades
- Passing of required Praxis tests
- TB tests
- Liability insurance
- Education requirements, such as seminars and portfolios

Program Notes
- The summer courses require a two-day residency in July.
- Clearances are required at all times throughout the program and must be updated every July.
- LiveText Watermark software is required for this program.

Teaching Certification

Upon successful completion of this master's degree, students are eligible to be "endorsed" for one Pennsylvania Department of Education Instructional I teaching certificate. This master's degree also meets the educational requirements of the Pennsylvania Instructional II certificate when a student has completed the necessary years of teaching. Note that the Pennsylvania Department of Education may change the requirements for instructional certificates at any time.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-campus/secondary-education/earth-science.aspx

M.A.T. in Teacher Certification: English Education 7-12

Program Description

The English education 7-12 concentration of the Master of Arts in Teaching (M.A.T.) in Teacher Certification program prepares individuals with a background in English to apply for initial teacher certification in that area. Students may apply for Pennsylvania teacher certification at the completion of student teaching. During the program, they may apply for a Pennsylvania intern certificate if they have a school district willing to hire them full time.

Program Coordinators

Dr. Michael Perrotti and Dr. Marcia Hoover

Delivery Mode

Online with two-day on-campus residency component (during the summer semester only)

Field observations/experiences and student teaching are conducted in public school settings.

Program Accreditation

This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
Required Courses	
MSE 641 Orientation to 7-12 Education	3
MSE 642 Standards-Based Instruction in 7-12 Education	3
MSE 643 Content Area Literacy	3
MSE 644 Instructional Strategies in 7-12	3
MSE 645 Technology Integration in 7-12 Education	3
MSE 646 Assessments and Interventions	3
MSE 647 Classroom Management in 7-12 Education	3
MSE 651 Methods of English Teaching 7-12	3
MSE 661 Student Teaching	9
Total Credits	**33**

Undergraduate Content Course Requirements

Certification requirements for the Pennsylvania Department of Education include appropriate certification testing. A minimum of 30 credits of content area coursework is required. These courses may be taken at the undergraduate level. Students must demonstrate college coursework with a grade of C or higher in:

- English composition I
- English composition II
- American literature
- British literature
- World literature
- Early western literature
- Writing theory
- Research for writing or journalism
- English or communication elective
- English or reading elective
- Two language courses (grammar, linguistics, history of the language)

Note: Pennsylvania Department of Education requirements are subject to change.

Chapter 49-2

Chapter 49-2 requirements (12 credits) mandated by the Pennsylvania Department of Education must be met in order to receive certification. Courses may be satisfied with previously taken undergraduate or graduate courses, subject to approval of the program coordinator. Undergraduate 49-2 courses cannot be accepted for the graduate special education add-on certification program for students who later complete that program. If not already completed, the following courses are needed in addition to the requirements above:

- **ESP 610** Special Education Foundations and Collaboration
- **ESP 701** Introduction to Behavior Analysis
- **ESP 613** Evidence-based Practices in Secondary Inclusion
- **EDU 650** Supporting the English Language Learner

Student Teaching

Applications for spring student teaching are due October 1. Applications for fall student teaching are due April 1.

Student teaching requirements include:

- A GPA of 3.0 or higher for all courses, including undergraduate content course requirements
- A grade of C or higher for all required courses
- Completion of all required courses prior to student teaching
- Required clearances
- No incomplete (I) grades
- Passing of required Praxis tests
- TB tests
- Liability insurance
- Education requirements, such as seminars and portfolios

Program Notes
- The summer courses require a two-day residency in July.
- Clearances are required at all times throughout the program and must be updated every July.
- LiveText Watermark software is required for this program.

Teaching Certification

Upon successful completion of this master's degree, students are eligible to be "endorsed" for one Pennsylvania Department of Education Instructional I teaching certificate. This master's degree also meets the educational requirements of the Pennsylvania Instructional II certificate when a student has completed the necessary years of teaching. Note that the Pennsylvania Department of Education may change the requirements for instructional certificates at any time.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-campus/secondary-education/english.aspx

M.A.T. in Teacher Certification: Math Education 7-12

Program Description

The math education 7-12 concentration of the Master of Arts in Teaching (M.A.T.) in Teacher Certification program prepares individuals with a background in math to apply for initial teacher certification in that area. Students may apply for Pennsylvania teacher certification at the completion of student teaching. During the program, they may apply for a Pennsylvania intern certificate if they have a school district willing to hire them full time.

Program Coordinators

Dr. Michael Perrotti and Dr. Marcia Hoover

Delivery Mode

Online with two-day on-campus residency component (during the summer semester only)

Field observations/experiences and student teaching are conducted in public school settings.

Program Accreditation

This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
Required Courses	
MSE 641 Orientation to 7-12 Education	3
MSE 642 Standards-Based Instruction in 7-12 Education	3
MSE 643 Content Area Literacy	3
MSE 644 Instructional Strategies in 7-12	3
MSE 645 Technology Integration in 7-12 Education	3
MSE 646 Assessments and Interventions	3

Course	Credits
MSE 647 Classroom Management in 7-12 Education	3
MSE 652 Methods of Mathematics Teaching 7-12	3
MSE 661 Student Teaching	9
Total Credits	**33**

Undergraduate Content Course Requirements

Certification requirements for the Pennsylvania Department of Education include appropriate certification testing. A minimum of 30 credits of content area coursework is required. These courses may be taken at the undergraduate level. Students must demonstrate college coursework with a grade of C or higher in:

- College algebra
- Trigonometry or pre-calculus
- Calculus 1
- Calculus 2
- Calculus 3
- Geometry
- Statistics
- Computer science or technology for math
- History of mathematics or mathematics in society
- Discrete math
- Math modeling
- Linear algebra
- Abstract algebra

Note: Pennsylvania Department of Education requirements are subject to change.

Chapter 49-2

Chapter 49-2 requirements (12 credits) mandated by the Pennsylvania Department of Education must be met in order to receive certification. Courses may be satisfied with previously taken undergraduate or graduate courses, subject to approval of the program coordinator. Undergraduate 49-2 courses cannot be accepted for the graduate special education add-on certification program for students who later complete that program. If not already completed, the following courses are needed in addition to the requirements above:

- **ESP 610** Special Education Foundations and Collaboration
- **ESP 701** Introduction to Behavior Analysis
- **ESP 613** Evidence-based Practices in Secondary Inclusion
- **EDU 650** Supporting the English Language Learner

Student Teaching

Applications for spring student teaching are due October 1. Applications for fall student teaching are due April 1.

Student teaching requirements include:

- A GPA of 3.0 or higher for all courses, including undergraduate content course requirements
- A grade of C or higher for all required courses
- Completion of all required courses prior to student teaching
- Required clearances

- No incomplete (I) grades
- Passing of required Praxis tests
- TB tests
- Liability insurance
- Education requirements, such as seminars and portfolios

Program Notes

- The summer courses require a two-day residency in July.
- Clearances are required at all times throughout the program and must be updated every July.
- LiveText Watermark software is required for this program.

Teaching Certification

Upon successful completion of this master's degree, students are eligible to be "endorsed" for one Pennsylvania Department of Education Instructional I teaching certificate. This master's degree also meets the educational requirements of the Pennsylvania Instructional II certificate when a student has completed the necessary years of teaching. Note that the Pennsylvania Department of Education may change the requirements for instructional certificates at any time.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-campus/secondary-education/mathematics.aspx

M.A.T. in Teacher Certification: Physics Education 7-12

Program Description

The physics education 7-12 concentration of the Master of Arts in Teaching (M.A.T.) in Teacher Certification program prepares individuals with a background in physics to apply for initial teacher certification in that area. Students may apply for Pennsylvania teacher certification at the completion of student teaching. During the program, they may apply for a Pennsylvania intern certificate if they have a school district willing to hire them full time.

Program Coordinators

Dr. Michael Perrotti and Dr. Marcia Hoover

Delivery Mode

Online with two-day on-campus residency component (during the summer semester only)

Field observations/experiences and student teaching are conducted in public school settings.

Program Accreditation

This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
Required Courses	

Course	Credits
MSE 641 Orientation to 7-12 Education	3
MSE 642 Standards-Based Instruction in 7-12 Education	3
MSE 643 Content Area Literacy	3
MSE 644 Instructional Strategies in 7-12	3
MSE 645 Technology Integration in 7-12 Education	3
MSE 646 Assessments and Interventions	3
MSE 647 Classroom Management in 7-12 Education	3
MSE 653 Methods of Science Teaching 7-12	3
MSE 661 Student Teaching	9
Total Credits	**33**

Undergraduate Content Course Requirements

Certification requirements for the Pennsylvania Department of Education include appropriate certification testing. A minimum of 30 credits of content area coursework is required. These courses may be taken at the undergraduate level. Students must demonstrate college coursework with a grade of C or higher in:

- Calculus 1
- Calculus 2
- College physics 1 with lab
- College physics 2 with lab
- College physics 3
- Electricity and magnetism
- Mechanics
- Atomic and nuclear structure
- Chemistry 1 with lab

Note: Pennsylvania Department of Education requirements are subject to change.

Chapter 49-2

Chapter 49-2 requirements (12 credits) mandated by the Pennsylvania Department of Education must be met in order to receive certification. Courses may be satisfied with previously taken undergraduate or graduate courses, subject to approval of the program coordinator. Undergraduate 49-2 courses cannot be accepted for the graduate special education add-on certification program for students who later complete that program. If not already completed, the following courses are needed in addition to the requirements above:

- **ESP 610** Special Education Foundations and Collaboration
- **ESP 701** Introduction to Behavior Analysis
- **ESP 613** Evidence-based Practices in Secondary Inclusion
- **EDU 650** Supporting the English Language Learner

Student Teaching

Applications for spring student teaching are due October 1. Applications for fall student teaching are due April 1.

Student teaching requirements include:

- A GPA of 3.0 or higher for all courses, including undergraduate content course requirements
- A grade of C or higher for all required courses
- Completion of all required courses prior to student teaching
- Required clearances
- No incomplete (I) grades
- Passing of required Praxis tests
- TB tests
- Liability insurance
- Education requirements, such as seminars and portfolios

Program Notes
- The summer courses require a two-day residency in July.
- Clearances are required at all times throughout the program and must be updated every July.
- LiveText Watermark software is required for this program.

Teaching Certification

Upon successful completion of this master's degree, students are eligible to be "endorsed" for one Pennsylvania Department of Education Instructional I teaching certificate. This master's degree also meets the educational requirements of the Pennsylvania Instructional II certificate when a student has completed the necessary years of teaching. Note that the Pennsylvania Department of Education may change the requirements for instructional certificates at any time.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-campus/secondary-education/physics.aspx

M.A.T. in Teacher Certification: Social Studies Education 7-12

Program Description

The social studies education 7-12 concentration of the Master of Arts in Teaching (M.A.T.) in Teacher Certification program prepares individuals with a background in history to apply for initial teacher certification in social studies. Students may apply for Pennsylvania teacher certification at the completion of student teaching. During the program, they may apply for a Pennsylvania intern certificate if they have a school district willing to hire them full time.

Program Coordinators

Dr. Michael Perrotti and Dr. Marcia Hoover

Delivery Mode

Online with two-day on-campus residency component (during the summer semester only)

Field observations/experiences and student teaching are conducted in public school settings.

Program Accreditation

This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
Required Courses	
MSE 641 Orientation to 7-12 Education	3
MSE 642 Standards-Based Instruction in 7-12 Education	3
MSE 643 Content Area Literacy	3
MSE 644 Instructional Strategies in 7-12	3
MSE 645 Technology Integration in 7-12 Education	3
MSE 646 Assessments and Interventions	3
MSE 647 Classroom Management in 7-12 Education	3
MSE 654 Methods of Social Studies Teaching 7-12	3
MSE 661 Student Teaching	9
Total Credits	**33**

Undergraduate Content Course Requirements

Certification requirements for the Pennsylvania Department of Education include appropriate certification testing. A minimum of 30 credits of content area coursework is required. These courses may be taken at the undergraduate level. Students must demonstrate college coursework with a grade of C or higher in:

- U.S. History 1
- U.S. History 2
- Early western civilization
- Later western civilization
- History elective
- Non-western history
- Anthropology
- Economics
- Geography
- American government
- Sociology
- Psychology

Note: Pennsylvania Department of Education requirements are subject to change.

Chapter 49-2

Chapter 49-2 requirements (12 credits) mandated by the Pennsylvania Department of Education must be met in order to receive certification. Courses may be satisfied with previously taken undergraduate or graduate courses, subject to approval of the program coordinator. Undergraduate 49-2 courses cannot be accepted for the graduate special education add-on certification program for students who later complete that program. If not already completed, the following courses are needed in addition to the requirements above:

- **ESP 610** Special Education Foundations and Collaboration

- **ESP 701** Introduction to Behavior Analysis
- **ESP 613** Evidence-based Practices in Secondary Inclusion
- **EDU 650** Supporting the English Language Learner

Student Teaching

Applications for spring student teaching are due October 1. Applications for fall student teaching are due April 1.

Student teaching requirements include:

- A GPA of 3.0 or higher for all courses, including undergraduate content course requirements
- A grade of C or higher for all required courses
- Completion of all required courses prior to student teaching
- Required clearances
- No incomplete (I) grades
- Passing of required Praxis tests
- TB tests
- Liability insurance
- Education requirements, such as seminars and portfolios

Program Notes

- The summer courses require a two-day residency in July.
- Clearances are required at all times throughout the program and must be updated every July.
- LiveText Watermark software is required for this program.

Teaching Certification

Upon successful completion of this master's degree, students are eligible to be "endorsed" for one Pennsylvania Department of Education Instructional I teaching certificate. This master's degree also meets the educational requirements of the Pennsylvania Instructional II certificate when a student has completed the necessary years of teaching. Note that the Pennsylvania Department of Education may change the requirements for instructional certificates at any time.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-campus/secondary-education/social-studies.aspx

M.A.T. in Teacher Certification: Spanish Education K-12

Program Description

The Spanish education K-12 concentration of the Master of Arts in Teaching (M.A.T.) in Teacher Certification program prepares individuals with a background in Spanish to apply for initial teacher certification in that area. Students may apply for Pennsylvania teacher certification at the completion of student teaching. During the program, they may apply for a Pennsylvania intern certificate if they have a school district willing to hire them full time.

Program Coordinators

Dr. Michael Perrotti and Dr. Marcia Hoover

Delivery Mode

Online with two-day on-campus residency component (during the summer semester only)

Field observations/experiences and student teaching are conducted in public school settings.

Program Accreditation

This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
Required Courses	
MSE 641 Orientation to 7-12 Education	3
MSE 642 Standards-Based Instruction in 7-12 Education	3
MSE 643 Content Area Literacy	3
MSE 644 Instructional Strategies in 7-12	3
MSE 645 Technology Integration in 7-12 Education	3
MSE 646 Assessments and Interventions	3
MSE 647 Classroom Management in 7-12 Education	3
MSE 656 Methods of Foreign Language Teaching	3
MSE 661 Student Teaching	9
Total Credits	**33**

Undergraduate Content Course Requirements

Certification requirements for the Pennsylvania Department of Education include appropriate certification testing. A minimum of 30 credits of content area coursework is required. These courses may be taken at the undergraduate level. Students must demonstrate college coursework with a grade of C or higher in:

- Elementary Spanish 1
- Elementary Spanish 2
- Intermediate Spanish 1
- Intermediate Spanish 2
- Conversational Spanish
- Spanish phonetics
- Spanish grammar and composition
- Spanish literature
- Spanish literature or culture
- Two foreign language electives

Note: Pennsylvania Department of Education requirements are subject to change.

Chapter 49-2

Chapter 49-2 requirements (12 credits) mandated by the Pennsylvania Department of Education must be met in order to receive certification. Courses may be satisfied with previously taken undergraduate or graduate courses, subject to approval of the program coordinator. Undergraduate 49-2 courses cannot be accepted for the graduate special education add-on certification program for students who later complete that program. If not already completed, the following courses are needed in addition to the requirements above:

- **ESP 610** Special Education Foundations and Collaboration
- **ESP 701** Introduction to Behavior Analysis
- **ESP 613** Evidence-based Practices in Secondary Inclusion
- **EDU 650** Supporting the English Language Learner

Student Teaching

Applications for spring student teaching are due October 1. Applications for fall student teaching are due April 1.

Student teaching requirements include:

- A GPA of 3.0 or higher for all courses, including undergraduate content course requirements
- A grade of C or higher for all required courses
- Completion of all required courses prior to student teaching
- Required clearances
- No incomplete (I) grades
- Passing of required Praxis tests
- TB tests
- Liability insurance
- Education requirements, such as seminars and portfolios

Program Notes
- The summer courses require a two-day residency in July.
- Clearances are required at all times throughout the program and must be updated every July.
- LiveText Watermark software is required for this program.

Teaching Certification

Upon successful completion of this master's degree, students are eligible to be "endorsed" for one Pennsylvania Department of Education Instructional I teaching certificate. This master's degree also meets the educational requirements of the Pennsylvania Instructional II certificate when a student has completed the necessary years of teaching. Note that the Pennsylvania Department of Education may change the requirements for instructional certificates at any time.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-campus/secondary-education/spanish.aspx

M.Ed. in Educational Leadership: Advanced Studies in Secondary Education and Teacher Leadership

Program Description
The advanced studies in secondary education and teacher leadership concentration of the Master of Education in Education Leadership program is designed for middle and high school teachers seeking a deeper understanding of student learning.

Program Coordinators
Dr. Michael Perrotti and Dr. Connie Monroe

Delivery Mode
Global Online (100% online delivery)

Accreditation
This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
ADP 664 Field Project/Leadership	3
ADP 673 Field Project/Research and Evaluation	3
MSE 720 Advanced Standards-Aligned Instruction 7-12	3
MSE 740 Advanced Instructional Technology	3
MSE 745 Advanced Classroom Management	3
MSE 750 Online Technologies in Education	3
MSE 755 Constructivist Instructional Strategies	3
MSE 761 Assessment	3
MSE 766 Instructional Design and Assessment	3
MSE 771 Strategies for Inclusive Classrooms in 7-12	3
Total	**30**

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-online/advanced-studies-in-secondary-education-and-teacher-leadership/index.aspx

M.Ed. in Educational Leadership: Educational Studies

Program Description

The educational studies concentration of the Master of Education in Educational Leadership is designed to be a master's degree-completion program. The program does not lead to teacher certification.

Program Coordinators

Dr. Connie Monroe and Dr. Michael Perrotti

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
ADP 664 Field Project/Leadership	3
ADP 673 Field Project/Research and Evaluation	3
Focus Area in Education	12
Cognate Courses	12
Total	**30**

Program Notes:

- Program entry requirement: a grade of B or higher in at least 12 credits of prior graduate courses from a single graduate education program.
- Upon entry into the program, the student must identify their focus area, which includes at least 12 credits in a single graduate education program. The student will provide a philosophy statement and rationale to be approved by the coordinator.
- Student prepares a portfolio in the focus area for faculty review related to accreditation and program review.
- The cognate courses are graduate courses that may be in several different disciplines related to the student's interests or their chosen focus.
- Students must seek permission of departments to take program-specific courses.
- This program does not lead to teacher certification.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-online/educational-leadership-educational-studies/index.aspx

M.Ed. in Educational Leadership: Weather and Climatology

Program Description

The weather and climatology concentration of the Master of Education in Educational Leadership program is designed to enable teachers to more effectively incorporate weather- and climate-related concepts into their classrooms.

Program Coordinators

Dr. Chad Kauffman and Dr. Connie Monroe

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
ADP 664 Field Project: Leadership	3
ADP 673 Field Project: Research & Evaluation	3
EAS 511 DataStreme Atmospheric Studies OR **EAS 512** DataStreme Ocean Studies OR **EAS 513** DataStreme Climate Studies (choose 2)	6
EAS 710 Water in Earth System	3
EAS 720 Sustainability in Changing Climate	3
EAS 730 Environmental Hazards in Changing Climate	3
MSE 745 Managing Learning Environments	3
MSE 750 Online Technologies in Education	3
MSE 755 Constructivist Instructional Strategies	3
Total	**30**

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-online/weather-climatology/index.aspx

M.Ed. in Teacher Education: English as a Second Language (ESL)

Program Description

The Master of Education in Teacher Education: English as a Second Language (ESL) program is designed for certified teachers who are interested in expanding their understanding of the needs of child and adult English language learners but who are not seeking ELS teaching certification.

Program Coordinator

Dr. Susan Morris-Rutledge

Delivery Mode

Global Online (100% online delivery)

Accreditation

Cal U's teacher education programs are approved by the Pennsylvania Department of Education. In addition, Cal U education programs have been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

The curriculum is aligned with the Pennsylvania Department of Education ESL Program Specialist Standards and Teachers of English to Speakers of Other Languages (TESOL) Standards.

Course	Credits
Required Courses	**24**
EDE 701 Standards Aligned Curriculum, Assessment and Instruction	3
EDU 704 Foundations of ESL Education (offered summer only)	3
EDU 709 Sociolinguistics (offered fall only)	3
EDU 712 Content-Based ESL Instruction (offered spring only)	3
EDU 713 Language Acquisition and Development (offered summer only)	3
EDU 714 Language Assessment (offered spring only)	3
EDU 719 Supporting Second Language Learners, Families and Community (offered fall only)	3
RES 800 Methods of Research OR **ADP 673** Supervised Field Project/Research and Evaluation	3
Elective Courses *(Select two from the following)*	**6**
EDU 702 Instructional Design and Strategies for Gifted Education	3
EDE 765 Foundations of Integrative Stem**	3
ESP 610 Special Education Foundations	3
MSE 643 Content Area Literacy	3

Course	Credits
MSE 656 Methods of Foreign Language Teaching*	3
MSE 740 Advanced Instructional Technology	3
MSE 750 Online Technologies in Education	3
MSE 755 Constructivist Instructional Strategies	3
MSE 771 Strategies for Inclusive Classrooms	3
PSY 702 Psychology of Childhood	3
PSY 713 Psychology of Growth and Development	3
Total	**30**

* Summer-only course

** Speak with program coordinator

Program Notes:
- ESL courses require field experiences.
- This is not an initial teaching licensure program. Pennsylvania requires initial licensure before the ESL program specialist certificate can be added on.

Program Webpage
https://www.calu.edu/academics/graduate/masters/english-as-a-second-language/index.aspx

M.Ed. in Teacher Education: English as a Second Language (ESL) with Certificate
Program Description
The Master of Education in Teacher Education: English as a Second Language (ESL) with certificate program is designed for certified teachers who are interested in earning ESL teaching certification. The program equips teachers to work with child and adult English language learners.

Program Coordinator
Dr. Susan Morris-Rutledge

Delivery Mode
Global Online (100% online delivery)

Accreditation
Cal U's teacher education programs are approved by the Pennsylvania Department of Education. In addition, Cal U education programs have been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

The curriculum is aligned with the Pennsylvania Department of Education ESL Program Specialist Standards and Teachers of English to Speakers of Other Languages (TESOL) Standards.

Course	Credits
Required Courses	**24**
EDE 701 Standards Aligned Curriculum, Assessment and Instruction	3
EDU 704 Foundations of ESL Education (offered summer only)	3
EDU 709 Sociolinguistics (offered fall only)	3
EDU 712 Content-Based ESL Instruction (offered spring only)	3
EDU 713 Language Acquisition and Development (offered summer only)	3
EDU 714 Language Assessment (offered spring only)	3
EDU 719 Supporting Second Language Learners, Families and Community (offered fall only)	3
RES 800 Methods of Research OR **ADP 673** Supervised Field Project/Research and Evaluation	3
Elective Courses *(Select two from the following)*	**6**
EDU 702 Instructional Design and Strategies for Gifted Education	3
EDE 750 Foundations of Integrative Stem**	3
ESP 610 Special Education Foundations	3
MSE 643 Content Area Literacy	3
MSE 656 Methods of Foreign Language Teaching*	3
MSE 740 Advanced Instructional Technology	3
MSE 750 Online Technologies in Education	3
MSE 755 Constructivist Instructional Strategies	3
MSE 771 Strategies for Inclusive Classrooms	3
PSY 702 Psychology of Childhood	3
PSY 713 Psychology of Growth and Development	3

Course	Credits
Total	30

* Summer-only course

** Speak with the program coordinator

Program Notes
- ESL courses require field experiences.
- This is not an initial teaching licensure program. Pennsylvania requires initial licensure before the ESL program specialist certificate can be added on.

Program Webpage

https://www.calu.edu/academics/graduate/masters/english-as-a-second-language/certification.aspx

Special Education

Faculty
Dr. James Burton | Dr. Peter Heh | Dr. Jason Kight | Dr. Kalie Kossar

For faculty bios, visit: https://www.calu.edu/inside/faculty-staff/profiles/

Programs
Cal U offers special education graduate programs in:

Master's Degrees
- Special Education (M.Ed.), with concentrations in:
    - Applied Behavior Analysis (Autism Track)
    - Applied Behavior Analysis (General Track)
    - Autism Spectrum Disorders

Certificates and Endorsements
- Autism Spectrum Disorders Endorsement
- Autism Spectrum Disorders Certificate
- Board Certified Behavior Analyst® (BCBA®) Preparation Certificate (post-master's certificate)

Board Certified Behavior Analyst® Preparation Certificate

Program Description
Cal U's Board Certified Behavior Analyst® (BCBA®) preparation certificate is designed for students who already hold a master's degree in an area approved by the Behavior Analyst Certification Board (BACB). It prepares students for the BCBA® exam.

Note: This certification preparation is also built into Cal U's M.Ed. in Special Education: Applied Behavior Analysis program.

Program Coordinator
Dr. Peter Heh

Delivery Mode
Global Online (100% online delivery)

Curriculum

Course	Credits
ESP 700 Foundations of Measurement and Experimental Design in Applied Behavior Analysis	3
ESP 701 Introduction to Behavior Analysis	3
ESP 750 Concepts, Principles and Assessments	3
ESP 751 Applied Behavior Analysis Interventions	3

Course	Credits
ESP 752 Behavioral Assessment, Intervention and Supervision in Applied Behavior Analysis	3
ESP 753 Professional Ethical Practice Behavior Analyst	3
ESP 800 Seminar in Advanced Behavior Analysis and Research Design	3
Total	**21**

Course Options:

- **ESP 754** Applied Behavior Analysis Practicum Training (3 to 12 credits)

Individuals may choose to arrange for the accumulation of experience hours through enrollment in ESP 754. Students may only enroll in this course through department approval for 3 credits per semester. Individuals enrolled in ESP 754 must follow observation and supervision guidelines per the Behavior Analysis Certification Board (BACB). Individuals are not required to enroll in ESP 754 to meet graduation requirements.

Practicum
Practicum for the applied behavior analysis program gives students a wide range of potential placements, including public and private school settings; individualized home programming sites; and other mental health-related settings. Students will be supervised by a Board Certified Behavior Analyst while applying the content they have covered during their coursework. Students must first complete ESP 700 and ESP 701 prior to being permitted to enroll in practicum.

Program Webpage
https://www.calu.edu/academics/graduate/certificates/education/applied-behavior-analysis/index.aspx

Certificate in Autism Spectrum Disorders
Program Description
The autism spectrum disorders professional development certificate is designed for individuals who do not currently hold special education certification but are interested in gaining a deeper understanding of autism spectrum disorders.

Program Coordinator
Dr. Jason Kight

Delivery Mode
Online (100% online delivery)

Accreditation
This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
ESP 740 Nature/Characteristics of Autism Spectrum Disorders	3
ESP 741 Communication, Behavior and Instruction: Autism Spectrum Disorders	3
ESP 742 Life Transitions and Partnerships: Autism Spectrum Disorders	3
ESP 743 Navigating the Social World: Autism Spectrum Disorders	3
Total	**12**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/education/autism-spectrum-disorders/index.aspx

Endorsement in Autism Spectrum Disorders

Program Description

This autism spectrum disorders (ASD) Pennsylvania Department of Education endorsement preparation program is designed for individuals seeking to add ASD endorsement to existing certification in special education. Students who complete this program are eligible to apply to the Pennsylvania Department of Education to have an ASD endorsement added to their teaching credentials.

Program Coordinator

Dr. Jason Kight

Delivery Mode

Online (100% online delivery)

Accreditation

This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
ESP 740 Nature/Characteristics of Autism Spectrum Disorders	3
ESP 741 Communication, Behavior and Instruction: Autism Spectrum Disorders	3
ESP 742 Life Transitions and Partnerships: Autism Spectrum Disorders	3

Course	Credits
ESP 743 Navigating the Social World: Autism Spectrum Disorders	3
Total	**12**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/education/autism-spectrum-disorders/index.aspx

M.Ed. in Special Education: Applied Behavior Analysis (Autism Track)

Program Description

The autism track of the applied behavior analysis concentration of the Master of Education in Special Education program prepares students to take the certification exam to become board-certified behavior analysts as they also earn a certificate in autism.

Program Coordinator

Dr. Peter Heh

Delivery Mode

Global Online (100% online delivery)

Curriculum

Course	Credits
Required Courses	**12**
ESP 740 Nature/Characteristics of Autism Spectrum Disorders	3
ESP 741 Communication, Behavior and Instruction: Autism Spectrum Disorders	3
ESP 742 Life Transitions and Partnerships: Autism Spectrum Disorders	3
ESP 743 Navigating the Social World: Autism Spectrum Disorders	3
Required Specialized Courses	**18**
ESP 700 Foundations of Measurement and Experimental Design in Applied Behavior Analysis	3
ESP 701 Introduction to Behavior Analysis	3
ESP 750 Concepts, Principles and Assessments	3
ESP 751 Applied Behavior Analysis Interventions	3

Course	Credits
ESP 752 Behavioral Assessment, Intervention and Supervision in Applied Behavior Analysis	3
ESP 753 Professional Ethical Practice for the Behavior Analyst	3
Required Capstone Course	**3**
ESP 800 Seminar in Advanced Behavior Analysis and Research Design	3
Total	**33**

Course Options:

- **ESP 754** Applied Behavior Analysis Practicum Training (3 to 12 credits)

Individuals may choose to arrange for the accumulation of experience hours through enrollment in ESP 754. Students may only enroll in this course through department approval for 3 credits per semester. Individuals enrolled in ESP 754 must follow observation and supervision guidelines per the Behavior Analysis Certification Board (BACB). Individuals are not required to enroll in ESP 754 to meet graduation requirements.

Practicum
Practicum for the applied behavior analysis program gives students a wide range of potential placements, including public and private school settings; individualized home programming sites; and other mental health-related settings. Students will be supervised by a Board Certified Behavior Analyst while applying the content they have covered during their coursework. Students must first complete ESP 700 and ESP 701 prior to being permitted to enroll in practicum.

Program Webpage
https://www.calu.edu/academics/graduate/masters/education-online/applied-behavior-analysis/autism.aspx

M.Ed. in Special Education: Applied Behavior Analysis (General Track)
Program Description
The general track of the applied behavior analysis concentration of the Master of Education in Special Education program is designed for individuals seeking to earn a master's degree and become a board-certified behavior analyst. The program focuses on how to bring about meaningful changes in individuals' behavior (whether working with children with disabilities or employees of large corporations) while also preparing students for the certification exam for board-certified behavior analysts.

Program Coordinator
Dr. Peter Heh

Delivery Mode
Global Online (100% online delivery)

Curriculum

Course	Credits
Required Courses	**12**
ESP 603 Assessment and Prescriptive Teaching	3
ESP 610 Special Education Foundations and Collaboration	3
ESP 612 Evidence-Based Practices for PK-8 Inclusion OR **ESP 613** Evidence-Based Practices for Secondary Inclusion	3
ESP 620 Special Education History, Theory and Exceptionality	3
Required Specialized Courses	**18**
ESP 700 Foundations of Measurement and Experimental Design in Applied Behavior Analysis	3
ESP 701 Introduction to Behavior Analysis	3
ESP 750 Concepts, Principles and Assessments	3
ESP 751 Applied Behavior Analysis Interventions	3
ESP 752 Behavioral Assessment, Intervention and Supervision in Applied Behavior Analysis	3
ESP 753 Professional Ethical Practice for the Behavior Analyst	3
Required Capstone Course	**3**
ESP 800 Seminar in Advanced Behavior Analysis and Research Design	3
Total	**33**

Course Options:

- **ESP 754** Applied Behavior Analysis Practicum Training (3 to 12 credits)

Individuals may choose to arrange for the accumulation of experience hours through enrollment in ESP 754. Students may only enroll in this course through department approval for 3 credits per semester. Individuals enrolled in ESP 754 must follow observation and supervision guidelines per the Behavior Analysis Certification Board (BACB). Individuals are not required to enroll in ESP 754 to meet graduation requirements.

Practicum

Practicum for the applied behavior analysis program gives students a wide range of potential placements, including public and private school settings; individualized home programming sites; and other mental health-related settings. Students will be supervised by a Board Certified Behavior Analyst while applying the content they have covered during their coursework. Students must first complete ESP 700 and ESP 701 prior to being permitted to enroll in practicum.

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-online/applied-behavior-analysis/index.aspx

M.Ed. in Special Education: Autism Spectrum Disorders

Program Description

The Master of Education in Special Education: Autism Spectrum Disorders program is intended for applicants who already hold Pennsylvania teaching certification in special education. Upon completion, students will hold a master's degree in special education and will be eligible to add autism spectrum disorders (ASD) endorsement to their current teaching certificate.

Program Coordinator

Dr. Jason Kight

Delivery Mode

100% Online

Accreditation

This graduate degree program is approved by the Pennsylvania Department of Education. Cal U's education programs have also been accredited by the National Council for Accreditation of Teacher Education (NCATE) since 1954, and we are continuing with the successor organization, the Council for the Accreditation of Educator Preparation (CAEP).

Curriculum

Course	Credits
ESP 602 Life Skills Planning and Instruction	3
ESP 603 Assessment and Prescriptive Teaching	3
ESP 606 Transition Planning and Instruction OR **ESP 607** Early Intervention: Special Education	3
ESP 639 Field Experience Seminar in Special Education	3
ESP 701* Introduction to Behavior Analysis	3
ESP 740 Nature/Characteristics of Autism Spectrum Disorders	3
ESP 741 Communication, Behavior and Instruction: Autism Spectrum Disorders	3

Course	Credits
ESP 742 Life Transitions and Partnerships: Autism Spectrum Disorders	3
ESP 743 Navigating the Social World: Autism Spectrum Disorders	3
ESP 800 Seminar in Advanced Behavior Analysis and Research Design	3
Total	**30**

* ESP 701 is a pre-requisite course for all other courses in Special Education.

Students must complete 15 credits of Required Special Education Courses. These courses, listed in the sequence above, include ESP 602, ESP 603, ESP 606, ESP 607 and ESP 639. Students may substitute any of these required 15 credits with the following courses listed below:

- **ESP 612** Evidence Based Practices for PK-8 Inclusion (3 credits)
- **ESP 613** Evidence Based Practices for Secondary Inclusion (3 credits)
- **ESP 620** Special Ed. History, Theory and Exceptionality (3 credits)
- **ESP 622** Advanced Evidence Based Practices for PK-8 Inclusion (3 credits)
- **ESP 623** Advanced Evidence Based Practices for Secondary Inclusion (3 credits)

Program Webpage

https://www.calu.edu/academics/graduate/masters/education-online/autism-spectrum-disorders/index.aspx

Technology Education

Faculty
Dr. Marcia Hoover | Dr. René Kruse | Dr. Michael Ulderich

Programs
Cal U offers technology education graduate programs in:

- Technology Education (M.Ed. only)
- STEM Secondary Education Certificate

Note: Courses required for the certificate are also required for the master's degree.

Certificate in STEM Secondary Education

Program Description
The STEM for secondary education post-baccalaureate certificate program provides educators with a fundamental understanding of STEM subject matter in secondary schools. The certificate is not intended for individuals interested in educational or instructional technology.

This program does not lead to certification. (Students interested in Pennsylvania certification in technology education should contact global online at calugo@calu.edu.)

Program Coordinator
Dr. René Kruse

Delivery Mode
Global Online (100% online delivery)

Accreditation
Council for the Accreditation of Educator Preparation (CAEP, formerly NCATE)

Curriculum

Course	Credits
TED 703 Strategic Management in Education	3
TED 704 Integrating Math, Science and Technology	3
TED 725 Applied Research Science, Technology, Engineering and Mathematics Education	3
Total	**9**

Program Webpage

https://www.calu.edu/academics/graduate/certificates/education/stem/index.aspx

M.Ed. in Technology Education

Program Description

The Master of Education in Technology Education program provides professional development to teachers and other educators in the field of technology education, providing a broad-based understanding of the field and its direction. The degree is not intended for individuals interested in educational or instructional technology.

This program does not lead to certification. (Students interested in Pennsylvania certification in technology education should contact global online at calugo@calu.edu.)

Program Coordinator

Dr. René Kruse

Delivery Mode

Global Online (100% online delivery)

Accreditation

Council for the Accreditation of Educator Preparation (CAEP, formerly NCATE)

Curriculum

Course	Credits
TED 701 Issues in Technology Education Curriculum and Instruction	3
TED 702 Assessment in a Constructivist Classroom	3
TED 703 Strategic Management in Education	3
TED 704 Integrating Math, Science and Technology	3
TED 705 Technology and Sustainable Development	3
TED 715 Study in Human Creativity	3
TED 718 Special Populations in Laboratory-based Programs	3
TED 725 Applied Research Science, Technology, Engineering and Mathematics Education	3
TED 807 Technology Program Development and Improvement	3
TED 850 Technology Education Major Project	3
Total	**30**

Program Webpage

https://www.calu.edu/academics/graduate/masters/technology-education/index.aspx

Student Affairs

Student Affairs is a critical component of a student's learning experience that goes beyond the classroom and provides a safe and healthy living and learning environment. Student Affairs oversees life on campus, including student organizations, activities, wellness, housing, dining, recreational sports and much more. The professionals who work in Student Affairs are committed to helping all students enrich and deepen their lifetime journey of growth and self-exploration.

Phone: 724-938-4439
Email: stuaffairs@calu.edu

Mission

Inherent in the University's educational mission is a commitment to the total development of all students. The division of Student Affairs, under the direction of the vice president, is administratively responsible for the implementation of this commitment. The central focus of the Student Affairs division, therefore, is the personalization of the university experience, with concern for not only individual intellectual development, but for personal, social and physical development as well. The division is committed to recognizing and assisting in the realization of human potential, which includes promotion of the concepts of safety, freedom, justice, individual dignity and the right of the dissenter and openness of mind.

Student Affairs Committees

- The **Student Affairs Council** serves as a recommending body for strategic plan development; coordination of division-wide assessment efforts; and committee oversight.
- The **Student Affairs Assessment Committee** leads the coordination for assessment within Student Affairs.
- The **Student Affairs Communications Committee** works to educate, innovate and enrich communication among Student Affairs, SAI and University stakeholders.
- The **Student Affairs Diversity Committee** serves as a catalyst for change through awareness and understanding of diversity and inclusion.
- The **Student Affairs Professional Development Committee** serves as a catalyst for professional development, personal growth and community among the members of the Student Affairs Division.
- The **Student Affairs Retention Committee** serves to identify opportunities to create and enhance engagement to support student retention and success.
- The **Targeted Programming Committee** identifies trends and hot topics to forecast division-wide programming opportunities.

Services

Student Affairs works to personalize your Cal U experience and develop your personal and professional skills by providing a full range of University support services and programs, including:

- Auxiliary Services
    - Banking
    - Bookstore
    - Dining, Hospitality and Vending Services
- Cal Card Services
- Center for Volunteer Programs and Service Learning
- Commuter and Non-Traditional Student Services
- Conference Services and Convocation Center
- Fraternity and Sorority Life
- Natali Student Center
- Office for Students with Disabilities

- Recreational Services
  - Herron Fitness Center
  - Indoor and Outdoor Recreation
  - Intramurals and Group Fitness
  - Sports Clubs
- Student Association, Inc./SAI Farm/Clubs and Organizations
- Student Activities, Programming and Leadership
- Student Media Services
  - Multimedia Access Center (Mac Lab)
  - CUTV
  - WCAL Radio
  - Cal Times Newspaper
- University Housing/Residence Life
- Vice President's Office/Dean of Students
  - Class Excuses
  - Administrative/Medical Withdrawals
  - Student Conduct
  - Student Liaison Services and more
- Wellness Center
  - Alcohol and Other Drug Education
  - Counseling Center
  - End Violence Center
  - Health and Wellness Education
  - Student Health Center
  - Student Wellness Support Services
  - The PARC (Alcohol and Drug Recovery Center)
- Women's Center

Vice President's Office / Dean of Students

Student Affairs can help you get answers, discover resources and explore student life, all of which will enhance your life while at Cal U. The primary goal of the division is to provide essential support services that assist students as they pursue their academic goals. The Student Affairs office is located on the third floor of the Natali Student Center, and our main phone number is 724-938-4439.

Attendance Concerns

Except in cases of emergency, it is your responsibility to inform your professors in advance if you expect to be absent from class. If your absence is the result of sudden illness, hospitalization or an emergency family concern, contact the Dean of Students for an attendance memo as soon as possible at 724-938-4439.

The Dean of Students will verify documentation related to your absence, contact your instructors regarding the issue and provide support to you during the time of crisis. The Dean of Students may not be able to provide a memo if you do not make contact for support within a reasonable timeframe.

Remember, it is still your responsibility as a student to be in contact with your professors when you are able to return, or during your absence, if able. Ultimately, it is up to you and your faculty member to determine any course adjustments and approval of excused absences.

Medical Withdrawals

Students who are unable to complete the semester due to personal medical or emergency family issues should contact the Dean of Students at 724-938-4439 to discuss the possibility for an administrative/medical withdrawal.

Office of Student Conduct

The Student Code of Conduct is intended to provide guidance and structure for students in their relations with others, use of University and other's property, and development of appropriate decision-making abilities. Students learn from each situation they are involved in to refine decision-making and problem-solving skills and reflect on actions and decisions. In addition, students come to understand how their actions affect others and future career goals. All students should review the Student Code of Conduct and the University's policies on reporting and handling alleged violations. Additional information is found at https://www.calu.edu/inside/student-resources/student-conduct/index.aspx or call 724-938-4439.

Student Handbook

For additional information, the Student Handbook offers students a quick and easy guide to University programs, activities and services. While not always encyclopedic in its descriptions, it does tell you where to go for information: https://www.calu.edu/inside/policies/_files/general/Student-Handbook.pdf

Accommodations for Students with Disabilities

Office for Students with Disabilities

California University of Pennsylvania welcomes otherwise qualified students with disabilities. The University recognizes its responsibility to these students and is committed to providing reasonable accommodations to ensure equal access and full participation as guided by Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA/AA).

Students with disabilities follow the same admission procedures and standards as required by Cal U's Admissions Office for all students.

Accommodations

Accommodations for students with disabilities are approved through the Office for Students with Disabilities (OSD). It is the responsibility of the student to adhere to OSD procedures for self-identifying, providing documentation to substantiate requests and requesting reasonable accommodations in a timely manner. Students must meet the academic/technical standards of the classes/programs for which they are applying and/or in which they are enrolled. In those instances where class/program requirements simulate responsibilities of in-service personnel, students must meet the essential functions of the job. Inquiries regarding disability access for students should be directed to:

Office for Students with Disabilities
Carter Hall, Room G35
Phone: 724-938-5781
Email: osdmail@calu.edu
OSD website: www.calu.edu/current-students/student-services/disability/index.htm

Parking

Parking spaces for persons with disabilities are marked as such on campus. These spaces are solely for the use of persons who have the required state DOT-issued ADA parking credentials displayed. Persons who wish to request a temporary disabled parking permit (six weeks or less) must submit appropriate documentation to the Department of Parking and Transportation (724-938-4677). Persons with disabilities needing to obtain required DOT-issued credentials can make application to the respective state Department of Transportation in which the vehicle is licensed. Additional information regarding parking on campus at www.calu.edu/parking.

Contact Us

Inquiries regarding disability access for students should be directed to:

Office for Students with Disabilities

Carter Hall, Room G35
Phone: 724-938-5781
Email: osdmail@calu.edu
OSD website: www.calu.edu/current-students/student-services/disability/index.htm
(or use the search word "disability" on the Cal U website: www.calu.edu)

Center for Volunteer Programs and Service Learning

The Center for Volunteer Programs and Service Learning, located in 119 Natali Student Center, serves as a catalyst for students to connect with, build and sustain meaningful service initiatives in partnership with communities surrounding Cal U. Students enhance their learning and leadership development by engaging in educationally purposeful and diverse co-curricular experiences through volunteer opportunities. Student service hours are tracked through a volunteer management system to document students' volunteer experiences both on and off campus.

Cal U Cupboard

The Center also operates the Cal U Cupboard, a food pantry for students experiencing food insecurity. The Cal U Cupboard assists our students by providing food, academic supplies and personal hygiene items, so they can continue on the path toward graduation. Operated by Cal U's Center for Volunteer Programs and Service Learning and supported by our generous donors, the campus-based food pantry helps to meet students' basic needs.

Commuter and Non-Traditional Student Services

The Office of Commuter and Non-Traditional Student Services provides commuting and non-traditional students with resources and encourages student involvement.

The office offers resources for students commuting via public transportation and supports all commuting students, no matter what the means of transportation.

Commuter pods are areas located throughout campus with amenities for students, such as microwaves, lockers, printing, vending, seating and charging stations.

Commuter and non-traditional students are encouraged to get involved in organizations and participate in campus programs and activities. The office provides programming and information to students throughout the semester and is located in 123 Natali Student Center.

Counseling and Psychological Services

Counseling Center services are available for students seeking confidential help for personal as well as interpersonal difficulties. Services are free of charge to Cal U enrolled students. The Counseling Center, located in the Wellness Center, provides an array of short-term counseling and psychological services to University students with problems that interfere with their adjustment to campus life, personal development or effective educational performance. The Counseling Center provides the following services to students:

- Evaluation.
- Consultation.
- Brief therapy.
- Emergency intervention.

Students requiring intensive or specialized care will be referred to community mental health providers. All therapists working in the Counseling Center adhere to federal and state ethical and legal standards and laws concerning confidentiality. Enrolled students can make an appointment by calling 724-938-4056 or email studentwellness@calu.edu for referrals and resources.

Dining Services

The goal of the University dining services is to provide a quality, cost-effective, innovative dining program for students living on and off campus. The University encourages student involvement and awareness to help provide quality, nutritious meals at a reasonable cost. Dining locations provide an important environment for student interaction and socialization. Students living in the residence halls, as well as commuters, may choose from a variety of meal plans. All students who live in lower-campus University residence halls must participate in the meal program. Detailed University dining services information is available on the Cal U website. Call 724-938-4555 for further information or check out: https://www.calu.edu/student-life/living-at-calu/dining/index.aspx.

End Violence Center

The End Violence Center works proactively to raise awareness and provide prevention education for the campus community on the issues of sexual violence, intimate partner violence and stalking. In addition, the Center works reactively to offer survivors and secondary victim's advocacy, crisis intervention, supportive services and outreach.

The End Violence Center is located in Room 117 of Natali Student Center or call 724-938-5707.

Housing

Cal U has some of the best university housing in the nation: modern housing that's convenient, safe and exceptionally comfortable.

Staying in University housing fosters academic success and personal growth; studies show that students who live on campus during their first years outperform students who choose to live off campus. Residence halls provide a living environment that complements classroom learning. Students are encouraged to participate in learning communities with study groups and computer labs readily accessible.

Students tell us one of the best things about living in University housing is that you meet so many people and learn so much about yourself and others.

Check out our website for housing options: https://www.calu.edu/student-life/living-at-calu/housing-options.aspx

For further questions, email housing@calu.edu or call 724-938-4444.

Recreational Services

Herron Recreation and Fitness Center is located in Herron Hall and serves the University community. Students are admitted upon presentation of their valid CalCard. Students may purchase memberships for their spouse and/or children (age 16 or older) for a fee. The facility includes a lap pool, a steam room, a whirlpool, saunas, weight training equipment, fitness classes, cardiovascular equipment, two gymnasiums, a climbing wall, an indoor walking track and a variety of exercise machines. The facility also coordinates and manages University sports clubs; intramural and extramural sports; and the outdoor recreation program.

For additional information, visit: https://www.calu.edu/student-life/living-at-calu/sports-recreation.aspx

For additional information, call 724-938-5907.

Wellness Center

Student Health Services

- Monday-Friday: 24 hours
- Saturday and Sunday: 12 hours (7 p.m. - 7 a.m.)

A full-time staff of registered nurses is on duty during hours of operation. A University physician conducts regular hours and a nurse practitioner is available Monday-Friday.

A University health form must be completed by your family doctor and returned. For a copy of the form, visit: https://www.calu.edu/inside/forms/_files/medical/medical-information-form.pdf

For additional information, call 724-938-4232.

Alcohol and Other Drug (AOD) Services

AOD programs are located on the ground floor of Carter Hall in Suite G-45. Intervention, education and prevention comprise the operational components of Cal U's AOD programs. The BASICS and CASICS programs provide intervention, while education and prevention are provided by the Health and Wellness Education Center and the AOD education specialist. Call 724-938-4775 for additional information.

PARC

The Prevention Awareness Recovery Center (PARC) is on campus for students who are in recovery from drug and alcohol addiction as well as students who are allies and supporters of those in recovery. PARC is a safe, worry-free lounge area where students are welcome to hang out, meet other students in recovery and hold Cal Clean and Sober groups. The PARC is full of resources and referrals for students in need of support or treatment services. Call 724-938-4775 for additional information.

Student Wellness Support Services

Student Wellness Support Services offers support and guidance for all University:

- Students experiencing an acute crisis or who are in a situation that is greatly impacting their ability to successfully engage in daily activities.
- Students who require information or guidance to navigate University and/or community resources.
- Faculty and staff who are concerned about a student and would like some additional expertise or guidance.

Email studentwellness@calu.edu or call 724-938-4775 for referrals and resources.

Counseling and Psychological Services

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laws concerning confidentiality. Enrolled students can make an appointment by calling 724-938-4056 or email studentwellness@calu.edu for referrals and resources.

Financial Aid
Mission Statement
The primary mission of the Financial Aid Office at California University of Pennsylvania is to provide financial planning and assistance to students and their families in meeting the costs of education. In fulfilling this mission, each student will be given careful consideration, and the University will determine financial assistance based on federal state and institutional guidelines. Financial aid programs have been established to provide access to higher education with guidelines to ensure fairness in disbursing available funds to qualifying students. The Financial Aid Office strives to ensure that courteous, timely and accurate financial aid services are delivered to all students seeking assistance from our office.

For current information on the following items, please visit the Financial Aid Web pages at www.calu.edu/financial-aid:

- Eligibility requirements.
- Financial aid application process, including FAFSA.
- Cost of attendance.
- Grants.
- Student employment.
- Scholarships.
- Loans.
- Disbursement of financial aid.
- Financial aid warning, financial aid suspension, financial aid probation.

Location and Office Hours
The Financial Aid Office is located on the first floor of Dixon Hall. The office hours are 8 a.m. to 4 p.m., Monday through Friday. Appointments are encouraged, but a daily on-call counselor is available to assist walk-ins.

Students can contact the Financial Aid Office by phone at 724-938-4415 or by fax at 724-938-4551. In addition, general financial aid information may be obtained at www.calu.edu/financial-aid. Specific financial aid and student account information is available 24 hours a day through the Vulcan Information Portal (VIP).

ACC-Accounting

ACC710 - Financial Accounting

This class covers theoretical, conceptual and practical issues in financial accounting and how those issues impact decision making. Special emphasis will be placed on conducting research of authoritative accounting pronouncements, as well as current topical literature.

ACC711 - Managerial Accounting

This course focuses on the use of accounting data for corporate financial planning and control. Topics include organization for control, profit planning, budgeting, relevant costing, return on investment and administration of controllership functions in business organizations.

ACC715 - Advanced Federal Income Tax

This course offers the student an introduction to tax planning and tax research, while also incorporating the financial accounting treatment of income taxes. Topics covered include C Corporations, S Corporations, partnerships, exempt organizations and the impacts of international transactions. The emphasis on each topic is on tax research, planning and implementation of strategies, as well as the financial accounting implications of those strategies.

ACC720 - Advanced Financial Accounting

Investigates selected financial reporting topics and issues. Selected topics include: Accounting concepts and standards; financial statements; income statement items; financial statement disclosures; business combinations; derivatives, hedging and related topics.

ACC725 - Controllership

This course is designed to explore tools and techniques for understanding and analyzing problems related to the overall strategic financial management of a firm as well as day to day financial decisions to maximize firm value. The case study/project analysis approach is used and students are encouraged to relate their own applications where possible.

ACC730 - Advanced Auditing

This class will prepare the student to conduct an audit in accordance with generally accepted auditing standards in the United States of America. Emphasis will be placed on understanding, documenting and assessing internal controls and modifying the scope of the audit work to be performed based upon the internal controls assessment. Students will also have the opportunity to utilize electronic data analysis tools common in the auditing profession.

ACC735 - Emerging Issues in Accounting

This class integrates accounting theory with the current practices being conducted in the field. This class will provide the student with the opportunity to witness how accounting professionals today are responding to the foundational issues in the field.

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ADP-Professional Education

ADP621 - Curriculum Leadership Using a Standards-Aligned System

Among the many leadership roles and responsibilities in the principalship, none is more important than educational program development, administration and evaluation. The purpose of this course is to develop the student's understanding of a standards-aligned system curriculum development process and the leadership necessary for the process, and the structure needed to provide appropriate professional development.

ADP626 - Instructional Leadership and Strategies for Inclusive Classrooms

This course is designed to provide principal candidates with a framework for effective, practical use of a variety of instructional strategies to promote best inclusive practices. These strategies are used with teachers to improve curriculum and instruction. Through various learning experiences, you will develop your knowledge, skills and professional dispositions that will help you to lead your school. The course is designed to help you develop a foundation for leadership by understanding what differentiated instruction is, why it is appropriate for all learners, and how to serve as an instructional leader in this area. Principal candidates will explore and analyze Standards# Based Instruction, Bloom's Taxonomy of the Cognitive Development, Writing Across the Curriculum, Multiple Intelligences, Response to Intervention, Inclusion, Multiple Measures of Data to inform Decision#Making, and Leadership and Differentiated Instruction to support a diverse student body at all grade levels.

ADP631 - School Law and Ethics

This course helps students acquire a practical working knowledge of school law. Education operates within a complex legal framework of law. Local school board policy, administrative regulations, state and federal statutes, and the constitution all impact the daily operation of our schools. Hence, every person involved in the educational process should be aware of the laws that govern his or her daily activities in order to be fair, efficient,

and effective. Students completing this course should have the knowledge base necessary to make informed decisions and the research skills necessary to find additional information concerning points of law if needed.

ADP641 - School Community Relations

This course is for educators who hope to become principals or teachers who wish to assume a greater leadership role in the school where they teach. The purpose of this seminar is twofold: (1) to help school administrators and leaders develop an understanding of the conditions, diversity and changes that affect school-community interaction and its impact on student achievement, and (2) to help administrators and school leaders have an understanding of the strategic planning process, board policy on community relations and research on community partnerships and then apply this information to develop a five-year plan on the importance of school and community partnerships in relation to student achievement.

ADP647 - Orientation & Assessment

The Orientation and Assessment Seminar is required of all principal candidates at the beginning of their program in order to explain program philosophy and ongoing assessment activities. It provides students with the opportunity to become familiar with the program mission, philosophy, goals and competencies. "Orientation" indicates an introduction to the parameters and style of the course. "Assessment" indicates the self-assessment that transpires by the very nature of the course activities. By completing the required assignments, students come to understand the specific areas in which they are most familiar as well as those in which they need to place the most individual emphasis. Through a review of their personal values, dispositions toward leadership and actual leadership skills, as well as their knowledge and understanding of educational leadership, students will develop deeper understandings with which to guide their personal and professional development as school leaders. This process that promotes self-understanding and professional growth, within the context of educational leadership, is a focus of the Orientation and Assessment Seminar.

ADP661 - Educational Leadership

This course provides an introduction to the theory and practice of educational administration. The course progresses from an overview of leadership and leadership style to a review of the structures and management systems that can make good educational leadership possible and, finally, focuses on leadership skills needed by administrators to be effective leaders in education today. Included are such topics as organizational culture, power in and around schools, and the resolution of conflict, motivation, and ethics and moral leadership.

ADP664 - Field Project/Leadership

In this course, problem-solving activities and field projects planned cooperatively with university and school district personnel are designed in the area of Education Leadership or School Leadership and Special Education. This practice-centered approach requires students to apply their knowledge, and demonstrate proficiency in those skills that contribute to effective performance as a leader.

ADP670 - Internship

The internship is a leadership standards-based experience designed to put theory into practice. It is where formal coursework is applied in a field setting. It provides significant opportunities in the workplace to synthesize and apply the knowledge and to practice and develop skills identified in the program competency areas. An internship with a trained mentor is an important and highly valued part of the program. Each placement will be made in cooperation with the Administrative Program for Principals faculty, the participating school district, and the intern. The internship involves an in school year field placement with a carefully chosen and certified principal/mentor (field supervisor) in a K-12 school, who shares the Administrative Program for Principals program philosophy that the principal should function as a standards-driven change agent and facilitator of the reform process as well as a strong instructional leader. The intern is both a participant and observer under the direction of the principal who should provide the intern with as many standards based supervisory and administrative experiences as possible.

The intern gains valuable work-related experience and is given the opportunity to learn how academic knowledge and skills can be applied at the worksite with real people, problems and events.

ADP673 - Supervised Field Project/Research and Evaluation

Problem solving activities and field experiences planned cooperatively with university and school district personnel are designed in the area of Research and Evaluation. This practice-centered approach requires students to apply their knowledge, and demonstrate proficiency in those skills that contribute to effective performance as an administrator or teacher leader.

ARB-Arabic

ARB610 - Arabic Linguistics

Students will be introduced to the aspects of Arabic language that are of interest to linguists who focus on the linguistic aspects of the language. This course will focus on the study of Arabic as "a language system" in terms of modern linguistic analysis. Students will study the language's sound system (phonology), word structure (morphology), phrase and sentence structure (syntax), and meaning at the word and sentential level (semantics). The Arabic rhetoric, the history of Arabic and the issue of diglossia in Arabic-speaking countries will also be discussed in this course.

ARB620 - Arabic-English Translation

This course is meant to raise the awareness of the students to the importance of translation and interpretation from Arabic to English and vise versa. Students will work on stylistic, syntactic, technical, and cultural problems encountered in the Arabic-English translation process. Exercises will provide translation practice with different types of texts and documents. Texts and Documents will include, but not be limited to, legal, medical, business, media, etc.

ARB630 - Arabic Literature & Cultural Aspects

This course surveys selected Arabic literary works including the biography, poetry, prose, the tale, the fiction, the novel, the play, the song and the film. It will also discuss the language used in such works, and research how the culture of the community was reflected in that literary work. It will also examine how culture plays an important role in literature.

ARB640 - Arabic Dialect Acquisition & Variation

This course helps students to gain knowledge about Arabic dialectology and its geographical variation. Also, the students will be exposed to different examples from the very different types of Arabic dialects and accents which are spoken in the Arab Homeland.

ARB650 - Images of Islam: From Spain to Iran

This course discusses the influence of Islam on art and architecture from select countries from Spain to Iran, including North Africa and the Greater Middle East. It provides an accessible and appealing examination of the significant artistic, architectural, and cultural dimensions of the Islamic World, with special attention to developments during the Islamic Golden Age, and their influences on the West.

ARB660 - Advanced Arabic Composition

This course will focus on advanced Arabic grammar and writing, empowering students to develop writing skills within a variety of subjects and disciplines. In terms of advanced grammar, this course provides a review of both fundamental and basic points of the grammatical structural types of Arabic. It is designed to review students' grammatical knowledge of Arabic structures to improve their performance on both writing and speaking. Students will follow the steps of writing, including prewriting, research and data collection, drafting, revising, and editing and proofreading writing through multiple drafts.

ARB670 - Methods of Teach/Learn Arabic

This course introduces students to the theory and practice of foreign/second language instruction. It focuses on methods of teaching Arabic as a foreign language and starts by introducing students to models and theories of second language acquisition (SLA), including understanding what language and research are, what learning is, and for classroom contexts, what teaching is. The course will also focus on SLA research, including Arabic SLA studies, and the implications of major research findings for Arabic language teaching. In addition, the course will zero in on best practices in Arabic instruction, including the teaching of the four language skills (reading, writing, listening, and speaking). Finally, it will focus on a number of important questions that face the teacher of Arabic as a foreign language, such as teaching grammar and vocabulary, course design, writing lesson plans, material development, technology use, assessment, and teaching MSA and dialect.

ARB810 - Special Topics in Arabic

This course provides students the opportunity to explore and research graduate-level topics of interest that are not available as regular course offerings of the University.

AST-Advanced Security Studies

AST700 - U.S. Homeland Security

The goal of this course is to provide students with a thorough understanding of the strategic, political, legal and organizational challenges associated with the defense of the U.S. homeland, the efforts that are under way to meet these challenges and possible policy options. The course starts by examining the range of potential threats to the U.S. homeland, focusing on potential terrorist acts. The course then examines strategies and means for addressing these threats, including both military and non-military options. The course goes on to analyze organizational issues and impediments to effective policy coordination. Finally, the course addresses

the implications of homeland security challenges and policies for constitutional rights, legal protections and civil liberties.

AST710 - Emergency Management Principles, Law, and Policy

This course examines the theory and practice of emergency management. The interaction of government emergency management and the private sector will be reviewed. The principles of emergency management disciplines will be addressed in the context of law and policy issues.

AST720 - Domestic Extremism in the United States

In-depth study of US-based domestic extremism presented and taught within a legal studies framework. This course aims to present the growth of the domestic extremism threat in the United States within the legal context of the challenges and difficulties inherent in counterterrorism efforts directed at US persons. Topics include: domestic extremist ideologies, history and current state of domestic extremism, Constitutional law protections and civil liberties impacting counterterrorism efforts, intelligence and law enforcement techniques to combat domestic extremism, evolution of domestic extremism.

AST740 - Terrorism, Threats & Vulnerability

The course will help "bound the problem" of homeland security by examining how terrorism has spurred sharp changes in U.S. strategy, policy and governmental design, and how those changes should continue over the near and longer term. Elements of threat and vulnerability assessments will be thoroughly discussed as well as various procedures for assessments and the method of tailoring the assessment to the facility/area under study. Manners of protecting the facility/area in question will then be addressed, as well as evacuation plans and emergency plans.

AST760 - Biological, Chemical, Nuclear and WMD Threats in Homeland Security

This course gives a thorough overview of the different types of biological, chemical, nuclear and weapons of mass destruction in existence today. The intelligence preparation for vulnerability analyses from nuclear, biological and chemical weapons employment including low-level radiation, depleted uranium and toxic industrial chemical concerns are addressed. Vulnerability reduction measures that can be implemented for protection are also discussed. Formats for conducting risk assessments and vulnerability analyses are covered.

AST780 - Intelligence Practice in Homeland Security

This course examines threats, vulnerabilities, objectives, strategy, instruments of national power, resources, and risks associated with ensuring homeland defense. Students will have the opportunity to fully address and create policy, and discuss organizational and substantive issues regarding homeland security intelligence support. An overview of diverse intelligence disciplines and how the intelligence community operates will be discussed. Course emphasis will be on issues affecting policy, oversight and intelligence support to homeland security and national decision-making.

ATE-Athletic Training

ATE600 - Cadaver Anatomy Dissection

This course will entail dissection of a human cadaver including musculature, nerve innervation, and vascular supply of the extremities as well as the pectoral and pelvic girdles.

ATE603 - Foundations in Athletic Training

This course provides an overview of the profession of athletic training by describing the scope of practice, employment settings, and professional regulations. Additional information will include an introduction into the injury process, medical terminology, and documentation.

ATE610 - Clinical Skills in Athletic Training with LAB

Introduction to patient-based athletic training skills, including, but not limited to; goniometry, crutch fitting, taping/ wrapping, vital sign assessment etc.

ATE615 - Emergency Care with Lab

The course focuses on the knowledge and skills necessary for the immediate management of musculoskeletal, cardiovascular, and neurological trauma. Students will develop the knowledge and skills necessary to differentiate between - and provide proper care for - pathologies ranging from minor to potentially catastrophic.

ATE635 - Examination of the Lower Extremity with Lab

In this course, students will study the pathology, etiology, and diagnostic principles of common musculoskeletal disorders and orthopedic injuries of the lower extremity.

ATE650 - Head & Spine Cadaver Anatomy Dissection

This course will entail focused human cadaver dissection of the head, neck, and spine including detailed study of the osteology, musculature, innervation and vascular supply of these regions.

ATE655 - Examination of the Head & Spine with Lab

In this course, students will study the pathology, etiology, and diagnostic principles of common musculoskeletal disorders and orthopedic injuries of the head and spine.

ATE660 - Principles of Research

This course will introduce and explore scientific inquiry and interpretation of research in athletic training. Students will gain familiarity with the concepts of evidence-based practice, critically appraised topics, institutional review board processes and various fundamentals of experimental research. Additionally, students will become skilled at using library resources to conduct literature reviews. Students will create a research topic of their own and begin to outline their research interests and focus in educational and applied athletic training. Students will be introduced to current library research resources and methodology through interaction with librarian assigned to work with this discipline.

ATE665 - Examination of the Upper Extremity with Lab

In this course, students will study the pathology, etiology, and diagnostic principles of common musculoskeletal disorders and orthopedic injuries of the upper extremity.

ATE670 - Practicum I

This course is the first in a series of athletic training clinical education experiences with the purpose to develop, refine, and integrate classroom/lab knowledge and skills with the delivery of evidence-based patient care. The student will work under the direct supervision of their assigned preceptor in a variety of clinical settings and populations to gain and refine introductory clinical and administrative skills. Athletic training skills and concepts introduced in other AT courses will be reinforced in the classroom setting and evaluated in both the classroom and/or clinical setting.

ATE673 - Practicum II

This course is the second in a series of athletic training clinical education experiences with the purpose to develop, refine, and integrate classroom/lab knowledge and skills with the delivery of evidence-based patient care. The student will work under the direct supervision of their assigned preceptor in a variety of clinical settings and populations to gain and refine introductory clinical and administrative skills. Athletic training skills and concepts introduced in other AT courses will be reinforced in the classroom setting and evaluated in both the classroom and/or clinical setting.

ATE680 - Organization, Administration, and Leadership in Athletic Training

This course will explore organization, administration, and leadership as it pertains to athletic training. Students will study leadership theory and application, administrative issues and responsibilities, legal aspects, human resource management, budgeting and finance, professional ethics, facility design, emotional intelligence and personal effectiveness, proper record keeping, and employment aspects in athletic training.

ATE685 - Athletic Training in Pediatric

This course is designed specifically for the Master of Science in Athletic Training student to garner an understanding of the unique needs of the pediatric population. A vast number of athletic trainers work with population under the age of 18 in secondary schools, community sports and activities and clinics. Students will learn about the unique physiologic and anatomic characteristics of the pediatric patient and how healthcare for this population may need to be revised to meet those needs. Students will have an opportunity to create protocols and treatment plans unique to this population including those with special needs.

ATE690 - Therapeutic Interventions I with Lab

The course entails the study of mechanisms of pain management and mediation, and the theory and practice of therapeutic interventions/modalities including, but not limited to, thermotherapy, cryotherapy, electrotherapy, compression, traction and manual therapy. Student will be able to explain the theory behind the use of electromagnetic and acoustic modalities and demonstrate the proper application of therapeutic modalities.

ATE695 - Therapeutic Interventions II with Lab

The course contains the knowledge and skills necessary for an athletic trainer to plan, implement, document and evaluate the efficacy of a therapeutic intervention program for the rehabilitation of an injured patient. This course will contain therapeutic exercise techniques for the whole body focusing on mobilizations, pain-free range of motion, flexibility, muscle strength, neuromuscular control, speed, endurance, power, agility, and cardiovascular fitness.

ATE710 - Behavioral Health Considerations for Athletic Training

This course will explore the role of the athletic trainer in the screening, recognition, referral, and care of mental health conditions. Students will identify and understand the psychology behind mental health conditions and the impact of illness on rehabilitation and return to play, while aligning care plans with the NCAA mental health best practices.

ATE715 - Clinical Pathologies and General Medical Conditions

Concepts and skills for the evaluation of general medical conditions are the focus of this course. Pathological conditions of the respiratory, cardiovascular, gastrointestinal, genitourinary, integumentary, and neurological

systems are examined with emphasis on recognition and determination of plan of care and the need for physician referral.

ATE720 - Sports Therapy

Lecture and laboratory exercises that explain the theoretical and practical implementations of physical therapy modalities in the care of athletic injuries. The use of therapeutic exercise and testing in the rehabilitation of sports injuries comprises an equal portion of this course. (4 crs.)

ATE744 - Pharmacology

This course provides an overview of the management and administration of over the counter and prescription drugs. This course also looks at the pharmacokinetics and pharmacodynamics of drugs, performance enhancing substances, and drugs affecting the musculoskeletal, cardiovascular, nervous, endocrine, and gastrointestinal systems.

ATE760 - Research Project II

This course is designed to allow continued work toward the completion of student's research thesis/project. Data collection and analysis will be at the core of this course. Students will be allowed time outside of the classroom for data collection while working in the classroom on statistical analysis of their findings.

ATE761 - Research Project Capstone

This course will serve as the capstone to the athletic training research sequence. Students will synthesize their research findings through a discussion of results allowing for dissemination. Students will defend their research through a formal presentation, prepare a manuscript suitable for publication to a professional journal and create an abstract and professional poster.

ATE772 - Clinical Immersion

This course is a three time repeatable immersive athletic training clinical education experiences with the purpose to develop, refine, and integrate classroom/lab knowledge and skills with the delivery of evidence based patient care. The student will work under the direct supervision of their assigned preceptor in a variety of clinical settings and populations to gain and refine introductory clinical and administrative skills. Athletic training skills and concepts introduced in other AT courses will be reinforced in the classroom setting and evaluated in both the classroom and/or clinical setting.

ATE774 - Practicum III

This course is the fourth in a series of athletic training clinical education experiences with the purpose to develop, refine, and integrate classroom/lab knowledge and skills with the delivery of evidence-based patient care. The student will work under the direct supervision of their assigned preceptor in a variety of clinical settings and populations to gain and refine introductory clinical and administrative skills. Athletic training skills and concepts introduced in other AT courses will be reinforced in the classroom setting and evaluated in both the classroom and/or clinical setting.

ATE776 - Practicum IV

This course is the fifth and final course in a series of athletic training clinical education experiences with the purpose to develop, refine, and integrate classroom/lab knowledge and skills with the delivery of evidence-based patient care. The student will work under the direct supervision of their assigned preceptor in a variety of clinical settings and populations to gain and refine introductory clinical and administrative skills. Athletic training skills and concepts introduced in other AT courses will be reinforced in the classroom setting and evaluated in both the classroom and/or clinical setting.

ATE781 - Complementary & Alternative Therapies with Lab

This course focuses on the treatment of musculoskeletal conditions through the use of manual rehabilitative techniques and complementary and alternative therapies to assist a patient in treatment and recovery.

ATE785 - Professional Practice Transition

This course will focus on preparing students to transition from the class to clinical and professional practice, while focusing on role understanding, transition, professional responsibilities, and the board certification examination. Students will develop an employment portfolio to include resumes, curriculum vitae's, cover letters, applications, as well as professional development and employment plans

BUS-Business

BUS710 - Applied Data Analysis for Business

This course explores prediction of future outcomes using probabilities and trends, as well as relationship discoveries in data that are difficult to find with other forms of analysis in a problem and project driven course setup with various business-related managerial problems. Topics covered are data cleaning and preparation, cluster analysis, advanced regression models ie. multiple regression, autoregression, ARIMA models and predictive data mining techniques such as KNN, classification and regression trees, training and validation, ROC etc.

BUS740 - Forecasting and Predictive Modeling

This course will cover various topics used in developing predictive modeling and applying statistical forecasting methods used throughout business and academia. Topics in the course will assist business professionals in leveraging historical data to build models for predicting future results. Additionally, the course will utilize these topics in conjunction with data, integration, and information deployment to provide improved planning and better

predictive decision making. Forecasting techniques will be covered to evaluate complex business scenarios to make better decisions in Finance, Marketing, Production Scheduling, Process Control, and Strategic Planning.

BUS741 - Business Law

This course is designed to introduce students to the American legal system, increase their understanding of legal issues and potential liabilities in business contexts, and equip them to meet their legal obligations with ethical integrity in a competitive marketplace. Topics will include the structure and function of the American legal system, contracts, torts, white-collar crime, business organizations, and intellectual property law, with emphasis on legal reasoning and policy implications. It differs from undergraduate business law courses in that it will cover more material and at a greater depth, including a substantive group project where the students will explore a particular aspect of business law in an in-depth manner.

BUS743 - Business, Government, and Society

From management perspective, this course seeks to explore the interactions among business, government, and society in general. In doing so, it focuses on, among other issues, corporate social responsibility, ethics, globalization, the importance of law and regulation in the business environment, and historical background.

BUS745 - Business Ethics

The graduate course provides a framework to identify, analyze and understand how business people make ethical decisions and deal with ethical issues. Using a case method approach, students will analyze real-life business situations and gain insight into the realities and complexity of making decisions in a business environment.

BUS799 - Strategic Management

This course is designed as an integrated course that provides a theoretical and practitioner-oriented approach to the understanding of strategic management in organizations. An integrative strategic management model is

used to follow the flow from vision/mission to internal/external environmental scanning to strategy development, selection, implementation, and evaluation. Cohesive case studies are used to detail the strategic circumstances of an actual company and to provide hands-on experience in applying the strategic management concepts and techniques to a real organization.

CED-Counselor Education

CED700 - Foundations of School Counseling

The role of school counselors is explored in relation to counseling history, philosophy, theory, technology and trends. Counseling within the elementary and secondary school settings, consultation, and coordination are core components. Professional development, documentation, and ethical and legal standards are addressed. This course also focuses on the development of instructional programs as part of a comprehensive K-12 school counseling curriculum, including teaching methods, lesson planning and participation in multidisciplinary teams. Computer technology is explored and used as a resource for school counselors.

CED702 - Counseling Theory

This course reviews theories, objectives, principles and practices of counseling individuals, including children and the family. These theories are applicable in schools and other human service institutions.

CED705 - Developmental Group Process

This course includes the meaning, function, types and principles of the group approach to counseling; the dynamics of group interaction; leadership; role playing; personal development in groups; and the influence of the group processes on individual development.

CED708 - Substance Abuse and Addiction

The focus of this course is prevention and rehabilitation in drug and alcohol abuse. Since substance abuse and addiction are present in all sectors of society, it is important for human service professionals to understand the process of addiction and the special problems experienced by affected individuals and their significant others.

CED710 - Counseling Skills and Techniques

Graduate students develop counseling skills by learning and practicing therapeutic techniques that facilitate the counseling process. In a laboratory setting, students practice basic counseling skills such as attending to nonverbal behavior, focusing, reflection of feeling, etc. Students will audiotape and videotape practice sessions.

CED711 - Clinical Field Experience (Practicum)

The student implements effective helping skills and techniques using one or more recognized counseling theories. Students must see individual clients, and group experiences are required. Students spend 150 hours on site under the supervision of an experienced counselor, receive individual and-or triadic supervision from the site supervisor and faculty supervisor, and attend a regularly scheduled group supervision seminar. Students must be able to audiotape or videotape counseling sessions.

CED712 - Clinical Field Experience in Counselor Education

The purpose of this course is threefold: to help students practice the skills they have learned and apply them in a real-world setting; for students to learn to present cases to peers and offer constructive criticism and ideas in a "treatment team" or "case conference" format; and for students to actively participate in the supervision group experience in order to develop as counselors, supervisees and members of a "team" dedicated to their own and their peers' growth as professionals.

CED717 - Diagnosis and Treatment of Psychopathology

Students will learn to make accurate diagnoses of child and adult psychopathology according to the Diagnostic and Statistical Manual of Mental Disorders (DSM). Basic treatment strategies will be explored. Limitations inherent in the use of DSM and other diagnostic classifications are discussed. Multicultural counseling theory and ethics will be infused throughout the course.

CED720 - Cross-Cultural Counseling

Students will explore the cognitive, affective and behavioral considerations of culturally diverse client groups. Accordingly, counseling theories and programmatic approaches relevant to the mental health needs and concerns of these groups will be introduced. This will include an examination of how cultural attributes, strategies and coping skills can be effectively synthesized into the counseling process.

CED721 - Diagnosis and Counseling Children and Adolescents

This is a master's level course in the diagnosis and counseling of children and adolescents in the school setting. Students will be able to interpret diagnostic criteria of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) specifically related to children and adolescents in the school setting. Treatment and counseling considerations for psychopathologies most likely encountered by school counselors will be introduced in depth and students will be able to apply this knowledge.

CED722 - Assessment Procedures for Professional Counselors

This course is designed to assist school counselors, clinical mental health counselors, marriage and family therapists, career counselors, addictions counselors, and other specialized professional counselors in becoming better consumers of the diverse methods and procedures used in the process of assessment. The premise of

this course is that assessment involves collecting and integrating information about an individual or group from multiple methods and multiple sources. This course introduces studies that provide an understanding of individual and group approaches to assessment and evaluation in a multicultural society. This course also provides an understanding of assessment in counseling through an overview of basic counseling assessment concepts, an understanding of test construction, familiarity with instruments, and an overview of test interpretation. The course provides an overview of assessment of intelligence and general ability, achievement, aptitude, career and employment and personality as well as assessment in school and mental health settings. The course will also cover ethical and legal issues in the use of counseling assessment instruments, communicating assessment results and computer-based assessment. These methods will be studied in relation to a variety of institutions and facilities, including schools, mental health clinics, career counseling centers, substance abuse treatment centers, private practices, psychiatric hospitals and vocational rehabilitation centers. This course has clearly described implications specific for the field of professional counseling, including school counselors, clinical mental health counselors, and other counseling specialties.

CED724 - Experiential Group Process

This course requires that students participate in a personal growth group with other graduate counseling students. The purpose of the group is to have students develop an increased understanding of their thoughts, feelings and behaviors. The department feels that openness to understanding oneself is very important for counselors.

CED732 - Current Issues in School Counseling: Evidence Based Practices and Inclusion

School counselors work with students individually, in-group settings, in special education class settings and in the regular classroom. This course focuses on the school counselor's role with special education that may include: school counseling curriculum lessons; individual and/or group counseling to students with special needs; providing short-term, goal-focused counseling; consulting and collaborating with staff, families and related student support professionals; advocating for students with special needs; contributing to the school's

multidisciplinary team; and providing assistance with developing academic and transition plans for students in the IEP as appropriate.

CED735 - Introduction to Family Therapy

This course provides an introduction to family counseling. A systems perspective is emphasized. This course covers the history of the field, and provides an introduction to the theories, processes and techniques of family therapy. Professional issues, such as ethical, legal and multicultural issues, will be addressed.

CED740 - Sexuality and Counseling

This is a basic counseling course in sexuality from a bio-psycho-social perspective. The purpose will be for students to: gain factual knowledge of human sexual functioning; understand media and cultural messages; explore students' own values, attitudes and influences regarding sex; and therefore, become more aware, comfortable and helpful in discussing sexual topics with clients. We will a web format where students are active participants in discussion boards from readings, videos, and self-reflective activities.

CED741 - Neurocounseling

The counseling field is beginning to consider how neuroscience and neurobiology can inform, explain, and enhance the theory and practice of counseling. This course covers several topics related to this overarching theme including the fundamentals of neurophysiology and psychopharmacology. These concepts will be examined within the context of evaluation and treatment of mental health disorders and conditions such as PTSD, substance use, and traumatic brain injury. This course aims to prepare clinical mental health counselors to adopt a neuroscience informed clinical practice.

CED742 - Humor, Health & Healing

This course is a survey of theoretical and applied information for counselors, social workers, and other health professionals working in or wanting to work in a clinical setting. Course content includes an introduction to the philosophical, theoretical foundations, applied applications and health benefits of humor in mental health and clinical work, an overview of how humor affects the brain, and current issues that involve the use of humor in a mental health and clinical setting. The different types of humor will also be discussed.

CED755 - Counseling Across the Life Span: Prevention and Treatment in Schools and the Community

The practice of counseling involves working effectively with unique and diverse individuals representing a wide range of abilities, ages and life circumstances. This course examines the lifelong process of human growth and development as experienced by counseling clients, viewed through the eyes of a practicing counselor. The developmental tasks of children, teens and adults as represented by Eric Erickson, Carl Jung, Abraham Maslow, and others will serve as the framework for a deeper understanding of the role counselors' play as they assist their clients throughout their lives.

CED760 - Gambling Addiction

This course is designed for graduate students interested in working in community based human service systems and school counseling positions. Although directly applicable for those interested in the field of Problem Gambling/Gambling Addiction, alcohol and other drug rehabilitation treatment, the course material is also important for training professionals dealing with any target population. Since Problem Gambling/Gambling Addiction is inherent in all sectors of our society, it is important for human service professionals to understand Gambling Addiction and other Impulse Control Disorders, the dynamics of addiction and the special problems experienced by affected individuals.

CED761 - Addiction and the Family

This course is designed for graduate students interested in working in community based human service systems and school counseling positions. Although directly applicable for those interested in the field of alcohol and other drug rehabilitation treatment, the course material is also important for training professionals dealing with any target population. Characteristics are features discussed in this course are not limited to those individuals that have grown up in dysfunctional families associated to substance abuse or dependence but familial dysfunction in general. Characteristics of this type of role development can be found in any family with dysfunction and are precursors for multiple mental health diagnoses ranging from mood and affective disorders as well as axis to involvement or disorders or personality. Additionally, since substance abuse and addiction is inherent in all sectors of our society, it is imperative for human service professionals to develop a comprehensive understanding of the pertinent assessment and evaluation procedures relevant to working with the substance abuse population.

CED762 - Assessment and Evaluation of Substance Use Disorders and Advanced Skills

This course is designed for graduate students interested in working in community based human service systems and school counseling positions. Although directly applicable for those interested in the field of alcohol and other drug rehabilitation treatment, the course material is also important for training professionals dealing with any target population. This course integrates advanced group leadership practices and or interventions for the purpose of preparing counselors to appropriately facilitate/manage a process/psychoeducational group with a substance abuse focus. Additionally, since substance abuse and addiction is inherent in all sectors of our society, it is imperative for human service professionals to develop a comprehensive understanding of the pertinent assessment and evaluation procedures relevant to working with the substance abuse population.

CED770 - Spiritual, Ethical, and Religious Values in Counseling

This is an advanced level course, the purpose of which is to increase students' understanding of contemporary topics, practices and problems relevant to counselors who work in school and agency settings. Students in this class can expect to be proactive in researching, and sharing information as well as evaluating practices and policies for their efficacy in various settings. They will demonstrate their integration of this new knowledge into their prior learning as it relates to the counseling field through writing, discussion and presentations.

CED771 - Applied Spiritual, Ethical, and Religious Counseling Theory

This course is designed to introduce students to the theories, techniques, and treatment modalities needed by spiritual counseling professionals to best meet the needs of clients in hospitals, pastoral care & counseling, and religious settings. This class will focus on the diverse theoretical applications available in the field of spiritual counseling.

CED772 - Grief and Loss Counseling

This course is designed to introduce students to the theories, techniques, and treatment modalities needed by school and community counseling professionals to best meet the needs of bereaved clients and others affected by grief, loss, and death anxiety. This class will focus on the diverse interventions used by counselors applied therapeutically to the psychological, cultural, spiritual, and somatic aspects of grief.

CED777 - Student Affairs Services in Higher Education

This course is a survey of theoretical and applied information for counselors working in student affairs settings. Course content includes an introduction to the philosophical, legal and ethical foundations of the field of student

affairs work; an overview of the functional areas within student affairs divisions; and current issues in the field. The basics of program planning and evaluation are also introduced.

CED778 - The College Student and Higher Education Environment

This course examines the characteristics, learning and developmental needs of college students and the impact of the higher education environment on both traditional and nontraditional students. Issues that might affect the development and functioning of college students are explored in depth.

CED779 - Administration of Student Services in Higher Education

This course is intended to introduce students to the administration of student affairs programs in higher education. This course will focus primarily on the purpose of student affairs, its functions and how they can be effectively managed, coordinated and integrated as part of the broad educational purposes of the institution. It also examines institutional strategies for organizing, staffing and funding student affairs programs and services.

CED780 - Issues and Techniques in Counseling Athletes

This course examines current counseling strategies used with members of sport teams at the youth, high school, college and professional levels. Participants will explore current research in three main areas: motivation and life skill development, psychosocial development and career maturity.

CED781 - Sports Counseling Programming

This course offers students an overview of various life skills, including career development, study skills, goal setting, time management, health and wellness, values clarification, problem-solving, and decision-making, to name a few. Students will develop a teaching philosophy that includes methods for teaching life skills to the

athlete population. They will be given opportunities to make presentations on topics of their interest so that they

may teach or offer workshops on life skills to the athlete population.

CED782 - Advanced Issues and Techniques in Counseling Athletes

This course is twofold. One, the course is designed to prepare students for the roles as professionals in the field.

Areas of study include professional ethics and legal issues, record keeping, NCAA guidelines, and working as

part of an interdisciplinary team or as a consultant with individual athletes, teams and athletic organizations.

Additionally, this course is designed for students to improve their career development, counseling, and skill

building techniques with youth, adolescents, young adult and the adult athlete population. Participants have an

opportunity to develop and practice strategies to enhance their effectiveness in counseling this unique cultural

group. This course includes supervised fieldwork related to sports counseling, consultation, and/or sports

counseling programming with the athlete population of your choice. Students will be on site for a minimum of

25 hours (if registered for 3 credits) or 50 hours (if registered for 6 credits). Students will receive a minimum of

one-hour supervision per week by the on-site supervisor. In addition, students will be required to attend group

supervision, via the use of technology, once a week where students will present cases.

CED783 - Counseling and Advising Athletes with Death, Loss and Grief

This is an advanced level course, the purpose of which is to increase students' understanding of contemporary

topics, practices and problems relevant to counselors who work in school and agency settings. Students in

this class can expect to be proactive in researching, and sharing information as well as evaluating practices

and policies for their efficacy in various settings. They will demonstrate their integration of this new knowledge

into their prior learning as it relates to the counseling field through writing, discussion and presentations. More

specifically, the purpose of this course is to prepare you for dealing with death, loss and grief situations you may

encounter working with the athlete population. We will spend time reflecting on how people deal with death, loss

and grief and start to develop your skills in grief counseling and intervention. You will also examine some of the relevant research on grief counseling and intervention as well as the relevant research on death, loss and grief in sports. However, your major focus throughout the course will be on learning the practical skills of helping people who are dealing with death, grief and loss issues and learning assessment and treatment strategies used by counselors, educators, and other helping professionals who work with the athlete population to assist individuals, groups, and/or organizations (e.g., athletes, teams, athletic programs, schools, etc.).

CED784 - Student Athlete Mental Wellness

This course offers students a comprehensive understanding of student athlete mental wellness, mental health concerns, and emergencies. Mental health issues can affect the ability of student athletes to function effectively in their daily life and this includes their athletic performance. Thus, it is imperative that individuals providing mental health care to student athletes be able to identify (mental health issues and emergencies), intervene (with appropriate techniques), and refer (as needed to the appropriate entities). This course will address the previously mentioned issues in detail while promoting cultural competency in working with a diverse population of student athletes.

CED785 - Research Methods in Counselor Education

This is an introductory course in behavioral research techniques. The emphasis will be on the design, evaluation, and interpretation of basis human research. The main goal will be for students to be able to read, understand, and evaluate basic behavioral research.

CED786 - Career Counseling

This course reviews the theory and process of giving career information and of counseling in school and agency settings. Topics include sources of career information, appraisal, classification of careers, career resources, career and vocational education, systems of career guidance, and theories of career development.

CED787 - Ethics, Integration, Consultation, and Collaboratio

This course is intended for students who are near the end of their School Counseling and Clinical Mental Health programs. The purpose is to integrate the materials learned and to discuss the professional topics, practices, and applications of mental health and school counselors. This is done by focusing on the counselor as an ethical practitioner. Guidelines for ethical behavior and decision-making are applied to case studies. The Code of Ethics for counselors, as well as legal issues, relevant to school and professional counseling are taught in this course. This course will address the role of collaboration and consultation for counselors in various settings.

CED788 - Contemporary Topics in Counselor Education

This is an advanced-level course, the purpose of which is to increase students' understanding of contemporary topics, practices and problems relevant to counselors who work in school and agency settings. Students can expect to be proactive in researching and sharing information, as well as evaluating practices and policies for their efficacy in various settings. They will demonstrate their integration of this new knowledge into their prior learning as it relates to the counseling field through writing, discussion and presentations.

CED789 - Introduction to Clinical Mental Health Counseling

This course is a survey of theoretical and applied information for counselors working in mental health settings. Course content includes an examination of mental health counseling as a helping profession, an overview of the history of mental health counseling, the practice of mental health counseling, and the roles and tasks expected of mental health counselors. Mental health counseling settings, relationships with other human service professionals, and characteristics of individuals and communities are discussed. The topics of policy, consultation, and advocacy, as well as current issues in mental health counseling are covered.

CED790 - Counseling Internship

This course provides advanced graduate students in counseling with a supervised, on-the-job experience in an agency or school setting as a counselor trainee. Students will be on the site for a minimum of 300 hours (if registered for 3 credits) or 600 hours (if registered for 6 credits). Students who anticipate obtaining the Licensed Professional Counselor credential from the Commonwealth of Pennsylvania will be required to complete 6 credits of internship in addition to the requirements of practicum (CED 711). Of the 600 hours, a minimum of 240 hours must be direct service work with clients. Students will receive a minimum of one-hour supervision per week by the on-site supervisor. In addition, students will be required to attend a group supervision class once a week where students will present cases. Ethical and legal issues will be discussed, and information shared.

CED791 - Crisis Counseling and Disaster Preparedness

This course is a survey of theoretical and applied information for counselors working in crisis and disaster situations. Course content includes an examination of the dynamics, types and characteristics of crises and disasters, the reactions and risk factors of those impacted, as well as the nature and types of responses made in crises and disasters. Intervention techniques and strategies normally employed by counselors handling crises and disasters and with specific vulnerable populations will be explored. Multicultural, ethical, legal, moral and contemporary issues will also be discussed.

CIS-Computer Info Systems

CIS601 - Advanced Data Preparation and Cleaning

This course provides students with an introduction to the need for and methods for data cleaning. The course presents methods for locating and handling invalid values, out-of-range values, and missing values along with methods for managing datasets. The course uses SAS® software.

CIS602 - Data Visualization

This course explores techniques and tools for creating effective data visualizations. The course covers the creation and exploration of visualizations for categorical data, time series data, spatial and geospatial data. SAS® software will be used for this course.

CIS603 - Data Visualization

This course explores techniques and tools for creating effective data visualizations. The course covers the creation and exploration of visualizations for categorical data, time series data, spatial and geospatial data. SAS® software will be used for this course.

CIS604 - Advanced Big Data Analytics

This course is intended to provide the student with an introduction to big data, big data analytics and several methods useful in big data analytics such as clustering, association rules and various forms of regression. SAS® statistical software will also be introduced and used to solve data problems.

CIS605 - Advanced Data Analysis Capstone Project

This course is designed for the certificate in Data Science to provide hands-on experience in the area of data science. This experience will enable students to apply their knowledge of data science and provide valuable experience in the application of methods studied within the program that should enhance their job opportunities upon graduation. Students will receive experience with real world data. Analysis will be completed using SAS®.

CMD-Communication Disorders

CMD600 - Research and Professional Practice in Speech-Language Pathology

This course is designed to teach the graduate student to be both a consumer and producer of research. A research endeavor (research paper, project or thesis) is a requirement of graduation and is initiated in this class. Practice patterns in the profession (ethical, clinical and legal aspects) are also addressed.

CMD701 - Language Disorders in Adults

This course will prepare the graduate student with the academic information necessary to assess and treat language disorders in the adult population, including those patients diagnosed with cerebrovascular accident, dementia, traumatic brain injury, Alzheimer's Disease, Parkinson's Disease, and others.

CMD702 - Language Disorders in Children

Challenged by the number and diversity of language disorders, the graduate student will demonstrate the ability to appropriately select from a number of evidence-based treatments the one(s) most likely to build language within the language delayed or disordered child. The graduate student will demonstrate an understanding of the theoretical underpinnings upon which each treatment is built, and the key components of each. He/she will be able to assess not only the strengths and weaknesses of the treatment protocol, but the strengths and opportunities to improve while watching peers actually use the treatment during classroom presentations. He will reach "mastery level" for administration of 5 standardized language tests commonly given to children.

CMD703 - Fluency Disorders

This course provides the student with extensive information about the etiology and development of stuttering, appraisal of symptoms and underlying processes, and treatment of beginning, intermediate and advanced

stuttering in both children and adults. Review of major theories and therapies is provided with special emphasis placed on the effectiveness of combining these therapies eclectically. Through lecture, videotapes, in-class practice and clinical observation, the student is exposed to all the necessary theoretical and practical information necessary for basic evaluation and treatment of stutterers.

CMD705 - Voice Disorders

The purpose of this course is to provide comprehensive academic and clinical training in the etiological factors, description, and management of organic voice disorders. The teaching of esophageal speech, the use of the artificial larynx, and the study of tracheo-esophageal practice are covered in detail.

CMD707 - Phonology and Articulation

This course will prepare the serious student with the academic information necessary to assess and treat articulatory and phonologic disorders of both organic and functional origin. Assessment and treatment of special populations (delays, disorders, and cross-cultural variances) will be emphasized.

CMD708 - Neurology

This course is designed to provide the student with a understanding of the neurological governance of the body as that body carries out its communication functions: speaking, voicing, hearing, comprehending, perceiving, thinking and remembering. After appropriate review of neurologic development, structure and function within the context of normalcy, deviations from normal (secondary to disease, defect, aging, stress, injury or disorder) will be discussed. Hemisphericity (including split brain research), visual neglect, cognitive style and comparative anatomy will also be presented. Though substantial amounts of anatomical information will be presented, the overriding style of the course is highly pragmatic. Clinical application for the speech pathologist will be the central theme of this course.

CMD711 - Applied Therapeutic Procedures in the Preschool Setting

The class, resembling a lab experience, provides the graduate student with an "hands-on" experience in a preschool setting with typically-developing children, as well as children having speech, language, and /or other hearing disorders in a preschool setting.

CMD712 - Applied Therapeutic Procedures in the Outpatient Setting

This practicum course provides the beginning student of communication disorders with the opportunity for real life client contact. He/she will learn by doing! He/she will be assigned to provide either diagnostic or therapeutic services to a communicatively-impaired outpatient who is enrolled in the university speech and hearing clinic. A faculty supervisor will direct the graduate student in his work with the client. Models and theories of typical/atypical growth and behavior across age groups covered in this class will be discussed in such a manner that students begin to understand, and/or apply evidenced-based information to form therapeutic strategies related to cognition, communication, emotional/social development, motor development, sensory integration, and adaptation. A major focus is on basic human communication processes including (a) anatomical and physiological bases, (b) the physical and psychophysical bases, and (c) linguistic and psycholinguistic aspects. A major theme in this class is to learn about therapeutic intervention strategies, materials and resources used with the language, articulation, stuttering, voice, dysphagia, and children with syndromes and adult populations. Federal entitlements that relate to the provision of specialized service, service options, and equipment for individuals with speech & language disabilities will be introduced as appropriate. Where appropriate, service delivery models (collaboration, co-treatment, integration, pull-out of individuals and groups) will be discussed. This practicum course provides the graduate student with a realistic, practical, and comprehensive overview of clinical problems that are often encountered by the beginning clinician in an outpatient clinic setting. Beginning clinicians will take their first steps into the real world of clinical practice when assigned to clients in the university clinic. Advanced graduate students may enroll in this practicum class to gain specialized skill, or to work with complicated clients. This is a "hands-on"

course where the student should expect some client contact. A major focus will be to consider all the important aspects of client management, including but not limited to creation and maintenance of an effective learning environment, the establishment of a climate of fairness, the use of challenging/consistent standards and goals, within a safe physical environment, where universal precautions are consistently taught and demonstrated, where treatment principles are evidence-based, student diversity is addressed appropriately, community needs and resources are adequate, and Pa. academic standards are met.

CMD713 - Applied Diagnostic Procedures in Speech Pathology

This practicum course provides the beginning student of communication disorders with the opportunity for real life client contact. He/she will learn by doing! He/she will be assigned to provide diagnostic services to communicatively-impaired clients who seek clinical care from the university clinic. The graduate student will be involved at all levels of client contact, including but not limited to (a) accepting referrals, (b) taking a case history, (c) administering tests, (d) making clinical observations, (e) interpreting results and behaviors, (f) generating treatment plans, (h) making recommendations, (I) counseling patients and families, and (j) communicating results to other medical and educational personnel verbally and in writing. A faculty supervisor will direct the graduate student in ALL appraisal and diagnostic work with clients. Models and theories of typical/atypical growth and behavior across age groups covered in this class will be discussed in such a manner that students begin to understand, and/or apply evidenced-based information to form therapeutic strategies related to cognition, communication, emotional/social development, motor development, sensory integration, and adaptation. A major focus is on basic human communication processes including (a) anatomical and physiological bases, (b) psychophysical bases, (c) linguistic and psycholinguistic aspects, and (d) social, behavioral, and cultural aspects. A major theme in this class is to learn about therapeutic intervention strategies, materials and resources used with the language, articulation, stuttering, voice, dysphagia, and syndromic children and adult populations. This practicum course provides the graduate student with a realistic, practical, and comprehensive overview of formal and informal, standardized and non-standardized diagnostic and assessment procedures commonly used by speech-language pathologists. It is the clinician's first step into the real world of diagnostic practice.

Once the graduate student is familiar with a diagnostic procedure, he will be given the opportunity to administer it to clients under direct supervision of an AHSA-certified faculty member. This is a "hands-on" course where the student should expect extensive client contact. A major focus will be to consider all the important aspects of client management, including but not limited to creation and maintenance of an effective learning environment, the establishment of a climate of fairness, the use of challenging/consistent standards and goals, within a safe physical environment, where universal precautions are consistently taught and demonstrated, where treatment principles are evidence-based, student diversity is addressed appropriately, community needs and resources are adequate, and Pa. academic standards are met. Federal entitlements that relate to the provision of specialized service, service options, and equipment for individuals with speech & language disabilities will be introduced as appropriate. Where appropriate, service delivery models (collaboration, co-treatment, integration, pull-out of individuals and groups) will be discussed.

CMD714 - Applied Audiologic Diagnostic and Rehavilitative Procedures

This practicum course provides the beginning student of communication disorders with the opportunity for real life client contact. He/she will learn by doing! He/she will be assigned to provide audiologic screening and therapy services to clients who seek audiologic care from this university clinic. The graduate student will be involved at all levels of client contact, including but not limited to (a) accepting referrals, (b) taking a case history, (c) screening the hearing ability of clients, (d) making clinical observations, (e) interpreting screening results and behaviors, (f) generating aural habilitation/ rehabilitation treatment plans, (h) making recommendations, (i) counseling patients and families, and (j) communicating results to other medical and educational personnel verbally and in writing. A certified SLP or audiologist supervisor will direct the graduate student in ALL of his screening and therapeutic work with clients. This practicum course provides the graduate student with a realistic, practical, and comprehensive overview of formal and informal, standardized and non-standardized assessment and therapeutic procedures commonly used by speech-language pathologists during the provision of audiological screening, or aural habilitation or rehabilitation. It is the clinician's first step into the real world of basic audiological practice. Clinical experiences provided through CMD 714 will comply with ASHA standards which clearly define

the scope of practice for speech-language pathologists when providing audiologic services. Once the graduate student is familiar with specific procedures, he will be given the opportunity for "hands-on" client interaction under direct supervision of an ASHA-certified faculty- audiologist. Models and theories of typical/atypical growth and behavior across age groups covered in this class will be discussed in such a manner that students begin to understand, and/or apply evidenced-based information to form therapeutic strategies related to cognition, communication, emotional/social development, motor development, sensory integration, and adaptation. A major focus is on basic human communication processes including (a) anatomical and physiological bases, (b) the physical and psychophysical bases, and (c) linguistic and psycholinguistic aspects. A major theme in this class is to learn about therapeutic intervention strategies, materials and resources used with the speech, language, and syndromic populations. This is a "hands-on" course where the student should expect some client contact. A major focus will be to consider all the important aspects of client management, including but not limited to creation and maintenance of an effective learning environment, the establishment of a climate of fairness, the use of challenging/consistent standards and goals, within a safe physical environment, where universal precautions are consistently taught and demonstrated, where treatment principles are evidence-based, student diversity is addressed appropriately, community needs and resources are adequate, and Pennsylvania academic standards are met. Federal entitlements that relate to the provision of specialized service, service options, and equipment for individuals with speech & language disabilities will be introduced as appropriate. Where appropriate, service delivery models (collaboration, co-treatment, integration, pull-out of individuals and groups) will be discussed.

CMD715 - Applied Therapeutic Procedures in the Educational Setting

This practicum course provides the beginning student of communication disorders with the opportunity for real life client contact. He/she will learn by doing! He/she will be assigned to provide either diagnostic or therapeutic services (or both) to communicatively-impaired children who is enrolled in private, public, elementary, middle school, or high school programs. A school-based, ASHA certified SLP will serve as the on-site supervisor, directing the graduate student in his work with clients under the liaison-guidance of assigned faculty from the university. This practicum course provides the graduate student with a realistic, practical, and comprehensive

overview of clinical problems that are often encountered by the speech-language pathologist in the public or private educational setting. It may be the clinician's first step into the real world of clinical practice outside of the university clinic. The advanced graduate student may also enroll in CMD 715 to achieve specialized knowledge about the SLP as an educator. Throughout his graduate program, a student may enroll in CMD 715 more than one time. Since the mission of CMD 715 is to afford the graduate student with the opportunity to learn from a variety of others, it is assumed that each subsequent enrollment will occur in a different school or with a different school-based supervisor. ASHA requires that a student must complete practicum courses in three distinct sites. Such settings may include separate units/settings within a single organization IF each of those units provides a unique experience. Before RE-ENROLLING in this course, the graduate student should establish that the setting offers him a uniquely different experience than offered by previous settings. Models and theories of typical/atypical growth and behavior across age groups covered in this class will be discussed in such a manner that students begin to understand, and/or apply evidenced-based information to form therapeutic strategies related to cognition, communication, emotional/social development, motor development, sensory integration, and adaptation. A major focus is on basic human communication processes including (a) anatomical and physiological bases, (b) the physical and psychophysical bases, and (c) linguistic and psycholinguistic aspects. A major theme in this class is to learn about therapeutic intervention strategies, materials and resources used with the language, articulation, stuttering, voice, dysphagia, and syndromic children population. This is a "hands-on" course where the student should expect some client contact. A major focus will be to consider all the important aspects of client management, including but not limited to creation and maintenance of an effective learning environment, the establishment of a climate of fairness, the use of challenging/consistent standards and goals, within a safe physical environment, where universal precautions are consistently taught and demonstrated, where treatment principles are evidence-based, student diversity is addressed appropriately, community needs and resources are adequate, and Pa. academic standards are met. Federal entitlements that relate to the provision of specialized service, service options, and equipment for individuals with speech & language disabilities will be introduced as appropriate. Where appropriate, service delivery models (collaboration, co-treatment, integration, pull-out of individuals and groups) will be discussed.

CMD716 - Applied Neurogenic Procedures in Healthcare Facilities

This practicum course provides the beginning student of communication disorders with the opportunity for real life client contact. He/she will be learn by doing! He/she will be assigned to provide either diagnostic or therapeutic services within a healthcare setting outside of the university clinic. A facility-based, ASHAcertified speech-language pathologist will serve as the on-site supervisor, directing the graduate student in all of his work with clients under the liaison-guidance of assigned faculty. Models and theories of typical/atypical growth and behavior across age groups covered in this class will be discussed in such a manner that students begin to understand, and/or apply evidenced-based information to form therapeutic strategies related to cognition, communication, emotional/social development, motor development, sensory integration, and adaptation. A major focus is on basic human communication processes including (a) anatomical and physiological bases, (b) the physical and psychophysical bases, and (c) linguistic and psycholinguistic aspects. A major theme in this class is to learn about therapeutic intervention strategies, materials and resources used with the language, articulation, stuttering, voice, dysphagia, and syndromic children and adult population. This is a "hands-on" course where the student should expect some client contact. A major focus will be to consider all the important aspects of client management, including but not limited to creation and maintenance of an effective learning environment, the establishment of a climate of fairness, the use of challenging/consistent standards and goals, within a safe physical environment, where universal precautions are consistently taught and demonstrated, where treatment principles are evidence-based, student diversity is addressed appropriately, community needs and resources are adequate, and Pa. academic standards are met. Federal entitlements that relate to the provision of specialized service, service options, and equipment for individuals with speech & language disabilities will be introduced as appropriate. Where appropriate, service delivery models (collaboration, co-treatment, integration, pull-out of individuals and groups) will be discussed.

CMD718 - Advanced Audiology for the SLP

This course will provide the student with an understanding of behavioral and electrophysiological assessments for the determination of the location of pathology within the auditory system. The student will be introduced to concepts concerning specification, selection, fitting, care, and use of amplification systems. Models and theories of typical/atypical growth and behavior across age groups covered in this class will be discussed in such a manner that students begin to understand, and/or apply evidenced-based information to form therapeutic strategies related to cognition, communication, emotional/social development, motor development, sensory integration, and adaptation. A major focus is on basic human communication processes including (a) anatomical and physiological bases, (b) the physical and psychophysical bases, and (c) linguistic and psycholinguistic aspects. A major theme in this class is to learn about therapeutic intervention strategies, materials and resources used with the speech, language, and syndromic population. Where appropriate, service delivery models (collaboration, co-treatment, integration, pull-out of individuals and groups) will be discussed.

CMD732 - Counseling in Speech-Language Pathology

This course will provide a theoretical and practical framework for the role of the speech-language pathologist in counseling individuals with communication and swallowing disorders. Emphasis will be placed on (1) selfidentifying strengths and areas of need as a clinician relative to the daily practice of interaction (2) applying a theory-based framework for counseling in the clinical setting (3) mastering the application of counseling microskills and (4) communicating effectively, recognizing the needs, values, preferred communication, and cultural/linguistic background of the client, client's family, caregivers, and relevant others.

CMD763 - Communication Problems of Special Groups

This course will focus on the difference in speech/language of non-native users of English, with attention given to assessing when and what types of intervention are ethically and professionally appropriate. Dialectical differences and professional/corporate speech will also be included, along with professional issues and marketing of services

to the public. Models and theories of typical/atypical growth and behavior across age groups covered in this class will be discussed in such a manner that students begin to understand, and/or apply evidenced-based information to form therapeutic strategies related to cognition, communication, emotional/social development, motor development, sensory integration, and adaptation. A major focus is on basic human communication processes including (a) anatomical and physiological bases, (b) the physical and psychophysical bases, and (c) linguistic and psycholinguistic aspects. A major theme in this class is to learn about therapeutic intervention strategies, materials and resources used with the language, articulation, stuttering, voice, dysphagia, and syndromic population. Federal entitlements that relate to the provision of specialized service, service options, and equipment for individuals with speech & language disabilities will be introduced as appropriate. Where appropriate, service delivery models (collaboration, co-treatment, integration, pull-out of individuals and groups) will be discussed.

CMD765 - Dysphagia

This course is an in-depth study of deglutition (the normal act of swallowing) and dysphagia (swallowing disorders). It is deliberately designed in full, comprehensive, and particularized fashion because of the medical seriousness of dysphagia and its treatment: people DO DIE from dysphagia and from medical/clinical mistakes made in treating it. The course appropriately begins with anatomy and function of both normal and abnormal swallow patterns, then focuses on proper diagnosis and appraisal through the use of clinical exams, radiographic contrast examinations, electromyography, esophagoscopy, endoscopy and manometry. The final portion of the course focuses on surgical and therapeutic treatment strategies for the wide variety of dysphagic symptoms that exist for pediatric through geriatric populations. Some patient contact during the course should be expected. Where appropriate, service delivery models (collaboration, co-treatment, integration, pull-out of individuals and groups) will be discussed.

CMD766 - Traumatic Brain Injury

When working with many communication impairments, the speech/language pathologist functions as an individual practitioner fostering the necessary changes for the client by him-herself. Rehabilitation of the individual with traumatic brain injury (TBI) requires a diversified team of professionals working together throughout a lengthy continuum of care. In this class, the student will understand the individual and team goals for the client. The following topics will be addressed through lectures, in-class diagnosis, treatment, psychosocial and familial disturbances, conceptual issues, neuropsychological problems, cognition and memory deficits, language disorders, motor speech problems, augmentative communication, and pharmacological issues. Federal entitlements that relate to the provision of specialized service, service options, and equipment for individuals with speech and language disabilities will be introduced as appropriate. Where appropriate, service delivery models (collaboration, co-treatment, integration, pull-out of individuals and groups) will be addressed.

CMD772 - Augmentative and Alternative Communication

This course is an in-depth study of: 1)The underlying theory of augmentative and alternative communication systems (AAC) including state-of-the-art and emerging technologies; and 2) Methodology for assessing and training individuals with communication disorders to use AAC systems. Emphasis is placed on functional strategies for the practicing clinician in AAC. Hands-on experience with various AAC systems is an integral part of this course Models and theories of typical/atypical growth and behavior across age groups covered in this class will be discussed in such a manner that students begin to understand, and/or apply evidenced-based information to form therapeutic strategies related to cognition, communication, emotional/social development, motor development, sensory integration, and adaptation A major focus is on basic human communication processes including (a) anatomical and physiological bases, (b) the physical and psychophysical bases, and (c) linguistic and psycholinguistic aspects. A major theme in this class is to learn about therapeutic intervention strategies, materials and resources used with the language, articulation, stuttering, voice, dysphagia, and syndromic population. Where appropriate, service delivery models (collaboration, co-treatment, integration, pull-out of individuals and groups) will be discussed.

CMD785 - Seminar in Medical Speech-Language Pathology

A course in which students advance their knowledge in a specific content area not covered by other courses in the practice of Medical Speech-Language Pathology. This includes applied physiology and practice mechanics of particular relevance to healthcare settings. Particular emphasis is placed on evidence-based practice and the trans-disciplinary treatment model for communicatively or swallow-impaired patients who have multiple medical problems.

CRJ-Criminal Justice

CRJ800 - Leading Criminal Justice Agencies

This course is designed to introduce the student to the notion of complex leadership theory, particularly as it is applied to criminal justice agencies. Students will learn how to construct the leadership formula of influence, grasp the art and science of influence and execution, and employ 360 degree situational leadership. Emphasis will be placed on community-oriented practices such as leadership for building police and community teams.

CRJ805 - Using Theory to Improve Criminal Justice Practice

Through this course, students—using relevant theory—will learn to challenge underlying assumptions to changes in the broad field of criminal justice. Examples include broken windows, routine activities, and control theory. Students will learn about means of achieving crime reduction through condition change, and accordingly, will design an assessment of relevant organizational change.

CRJ810 - Improving the Administration of Juvenile Justice

A modern examination of juvenile justice issues in America, students will examine the literature surrounding the relationship between the drop in crime and increase in punishment, encounters with police on the street and

in schools, solitary confinement, and use of residential placements. Contemporary problems, such as private correctional facilities and the Pennsylvania scandal will be addressed. Finally, students will have the opportunity to study, discuss, and critique National Institute of Justice and the National Academy of Sciences reports on reform.

CRJ820 - 21st Century Policing

Students will critically examine the role of the police and the proper oversight of law enforcement policies, procedures, and tactics. Specific issues to be covered include examining the relationship between police efforts and crime rates, predictive policing, pursuits, race and diversity, and use of force. Overall, course design involves developing and integrating public policy for policing in America to specifically include policy related to the investigation of officer-involved shootings, use of force, and complaints of civil rights abuses. Included within these policies are media relations and keeping the public informed of the status of critical incidents.

CRJ830 - Corrections: Crisis and Management

This course examines contemporary issues in corrections such as the use and overuse of probation and incarceration, the empirical assessment of risk in sentencing decisions, and the management of jails and prisons. Intertwined with these issues are the causes and consequences of sentencing disparity. Additionally, students will critically examine methods of avoiding federal consent decrees through proper policies, procedures, management, and leadership. Further, students will learn to implement policies relating to the enforcement of federal consent decrees.

CRJ840 - Advanced Criminal Law, Procedure, and Evidence for Criminal Justice Leaders

Law is at the very core of the criminal justice system and its problems. Accordingly, this course will cover critical trends in substantive and procedural criminal law, including civil rights, hate crimes, and terrorism provisions at

the federal and state levels. U.S. Supreme Court cases, particularly those surrounding search and seizure and the use of force, will be covered as well as other law-related key issues around the country.

CRJ850 - Contemporary Forensic Science and Technology for Criminal Justice Leaders

Whether a police administrator, forensic scientist, or training director, there has never before been such rapid and significant development in relevant forensic sciences. This course is specifically designed to bring senior criminal justice personnel up-to-date on topics such as sources and new methods of extracting DNA, advances in firearms identification, and using emerging forensic science techniques to properly investigate officer-involved shootings and solving complex crimes such as cold case homicides and serial rapes.

CRJ855 - Special Topics in Doctoral Criminal Justice Studies

This course is a focused examination of an emerging and dynamic problem or issue in the criminal justice system at the doctoral level. Topics will generally be such as to be particularly relevant to policing, corrections, and the judicial process. Accordingly, the course will provide the student with the opportunity to apply the knowledge and skills learned in the program to subject matter that will vary each semester

CRJ860 - Criminal Justice Training: Needs, Problems, Solutions

Criminal justice training is evolving in complex ways, both from a substantive perspective and by way pedagogy and andragogy. This course provides the necessary tools for criminal justice managers, leaders, and trainers to conduct relevant and critical needs assessments, develop lesson plans, provide training for newly promulgated policies, and overall gain a better understanding of adult learners in the criminal justice profession.

CRJ870 - Constitutional Policing and Corrections

Of critical importance to municipalities, police departments, correctional institutions, and criminal justice practitioners generally, is the notion of civil liability. In this course students will examine specific conduct such as illegal search and seizure, false arrests, and how all of this applies to criminal justice managers and department heads. The analysis begins with negligent hiring in the first instance, and follows through examining negligent training, negligent supervision, and negligent retention.

CRJ880 - Adjudication: Achieving Justice More Often

When all is said and done, the public, victims, and individual defendants demand and deserve justice. The guilty must be treated fairly, but in a way that meets the goals and objectives of criminal justice public policy. And innocent persons should not be convicted of crimes they did not commit. Consequently, this course will involve an in-depth analysis of the notions of under criminalizing versus over criminalizing conduct, managing the consequences of legislative (policy) decisions, defense errors in capital cases, prosecutorial misconduct, the utility of and possible end to grand juries, and the reasons for wrongful convictions.

CRJ890 - Applied Criminal Justice Research Methods for Criminal Justice Leaders

Regardless of which element of the criminal justice profession one works, effective managers and leaders need to be able to interpret and apply qualitative and quantitative research methods. Students will learn how to interpret results of published research that can assist in effective policy development, crime control, supervision, and training. In the end, students will be able to apply evidence-based research to day-to-day criminal justice issues and problems.

CRJ895 - Legal Research Methods for Criminal Justice Practitioners

This course will focus on legal research methods for criminal justice practitioners. Special emphasis will be placed on evaluating legal research sources, primary and secondary sources, and legal writing. Students will practice research techniques that are designed to ensure timeliness and relevancy to a particular subject within a specific jurisdiction. Finally, students will learn about contemporary and scientific trends surrounding judicial use of empirical academic research.

CRJ900 - Case Studies in Criminal Justice Management

In this course the student will focus on the careful evaluation of systematic problems in criminal justice by comparing events at different times and places to understand their nature and response, and how to problem solve more effectively in the future through assessment of causes, reforms, and impacts. Examples of the types of subject matter to be covered include: federal supervision of local police departments, misconduct of corrections officers, violations of civil rights.

CRJ910 - Sentinel Event Reviews

This course involves original conclusions and recommendations surrounding incidents that resulted in unjust outcomes due to errors, lack of training, or ineffective policy. Examples include ineffective actions to prevent recurrence of domestic violence, racial profiling, incarceration of non-dangerous offenders, release of dangerous offenders, prosecutorial misconduct, and violations of civil rights. These reviews focus on single events, summarize what occurred using multiple sources, explain why it became an issue of public consequence, and propose an appropriate response. Additionally, students will detail whether the response is likely to be effective, given what is known about responses to prior events of this kind, and underlying issues of causation, law, policy, practice, research, and leadership.

CRJ920 - Doctoral Research Portfolio

This is the culminating course for the completion of the D.C.J. degree program and the professional, evidence-based, doctoral research portfolio process. The underlying focus of this course involves the continuation and finalization of the doctoral research portfolio by aligning the research question with the in-depth examination of relevant selected items of previously published scientific scholarship in the specialized area of inquiry. The doctoral candidate will do so by establishing the research context and evaluating the text, including the research methods, validity and reliability. From there, candidates will examine the results and establish the significance of the research. Ultimately, doctoral candidates will synthesize all data in order to be able to present best practices in a particular area of criminal justice.

CRM-Criminology

CRM600 - Seminar in Forensic Linguistics

Forensic linguistics has been described as the interface between linguistics and the law. This course will attempt to present the student with an awareness of linguistics and its role in forensic science, and how it can be helpful to law enforcement, intelligence, and security professionals in creating a more informed understanding of how forensic linguistics can be applied in legal cases and proceedings. Individuals in this class will participate in interactive discussions and exercises which will grow from the history and development of this emerging field. Discussions will provide a solid foundation for understanding how forensic linguistics can enhance investigations in both criminal and private security settings.

CRM610 - Forensic Sociolinguistics

This course investigates how language shapes and is shaped by society. The course presents a general overview of the field of sociolinguistics, then focuses in depth on three major approaches: quantitative sociolinguistics (variation analysis), discourse analysis (analysis of conversations, narratives, and other connected speech/

writing), and pragmatics (analysis of language in context, how people derive meanings from both context and the linguistic signal). The student will become acquainted with the major literature and research methods in the field and will learn how to apply their knowledge to designing and conducting an original sociolinguistic study. The student will also learn about applications of sociolinguistic knowledge beyond academia, including areas such as language policy and planning (including issues related to bi- and multilingualism and language endangerment), language and education (including teaching the standard language to native speakers of nonstandard dialects), and language and the law, especially the analysis of language evidence (e.g. ransom notes, threatening emails and text messages).

CRM620 - Forensic Language Structure I

This course introduces students to the linguistic study of phonetics – language sounds – and phonology – sound systems. There are four main units: Articulatory Phonetics (how speech sounds are produced), Acoustic Phonetics (the physical properties of sound waves and how to measure them), Segmental Phonology (how sounds contrast and alternate within systems), and Suprasegmental Phonology (aspects of sound systems larger than a single segment). An additional unit introduces students to Forensic Linguistic applications of phonetics. Crosslanguage and cross-dialectal variation in language sounds and sound systems and their implications for Forensic Linguistics are discussed throughout the course. In addition to a solid grounding in the fundamentals of phonetics and phonology, students also gain essential skills in phonetic transcription; recording sounds for phonetic analysis; producing, reading and interpreting spectrograms (commonly mislabeled "voiceprints"); and conducting basic phonological analyses. Students complete exercises in the various skill areas as the course progresses, including an exercise in the analysis of speech data and professional presentation of results in connection with a hypothetical forensic investigation.

CRM640 - Forensic Language Structure II

This course provides students with an introduction to the scientific study of morphology and syntax – that is, word and sentence structure. Students will learn the basic components of words, phrases, and sentences, and how

these components fit together to create well-formed words and sentsnces. Both linguistic universals and variables in word and sentence structure formation will be addressed, with a particular focus on variation in morphology and syntax across English dialects (including different standard Englishes). Students will learn the crucial importance of approaching morphology and syntax (i.e. "grammar") from a scientific perspective that investigates how people really form words and sentences in everyday life rather than simply how people are supposed to use grammar based on conventions particular to certain individuals/institutions, places, genres, and time periods. Students will learn to conduct syntactic analyses by diagramming phrases and sentences, as well as to conduct morphological analyses (i.e. breaking words into their component meaningful parts; e.g., roots, prefixes, affixes) using sets of data from both known and unfamiliar languages. Students will be introduced to different theoretical approaches to syntax and morphology, though the focus of this course is to introduce students to the basic components and processes that all theories of syntax and morphology must account for. Finally, students will investigate applications of the scientific study of morphology and syntax to Forensic Linguistics. Students complete basic exercises in syntactic analysis (phrase and sentence diagramming) and morphological analysis, as well as a final exercise in morphological-syntactic analysis, and professional presentation of results, in connection with a hypothetical forensic investigation.

CRM650 - Author Profiling and Threat Assessment

The first half of the course will cover author profiling, i.e., the analytical determination of the demographic features of an anonymous author by the linguistic features uncovered within the communication(s). The sociolinguistic concepts used to develop an author profile include language variation by region, age, gender, race, ethnicity, nativeness, etc. Ancillary issues relating to motivation, truthfulness, actual victimization status and commitment can also be determined through careful author profiling assessment. This course will help students construct potential author profiles of potential evidentiary and investigative value based on the science of linguistics and assist them in presenting profiles in report style. The second half of this course will cover threat assessment from a forensic linguistic perspective. It will be demonstrated that threat assessment can be effectively undertaken to recognize and assess the level of language usage within a communication as it relates to potentially injurious actions to an individual or organization. In particular, topics such as written/verbal versus non-written/non-verbal

threats and conditional threats/extortions will be explored. Issues to be examined include the separate categories of threats, the seven primary factors to consider when undertaking a threat assessment, issues relating to escalation, and mental health considerations in anonymous writings. Illustrations will be provided through class exercises and case examples.

CRM670 - Authorial Attribution and Speaker Identification

Every individual has his or her own unique way of communicating. This is known as a person's idiolect – that is, the distinctive features found within an individual speaker's and/or writer's language system. These features can assist in identifying the author of one or more anonymous questioned communications when compared with known communications of other suspected authors. This course will examine the basic concepts, methodologies, and practices in which authorial attribution and speaker identification is used to help identify the author of one or more specific anonymous communications. Multiple real-case examples will be utilized in this course to prepare the student for these applications.

CRM690 - Legal and Ethical Issues in Forensic Linguistics

This course will be divided into two primary sections, legal issues and ethical issues. First, the matter of legal issues will be discussed and how they relate to forensic linguistic analysis and the eventual formal presentation of the results of any such analysis. These concepts are of critical importance for any linguist practicing directly or indirectly in the criminal justice system. Recent and relevant U.S. court decisions will be discussed, including how they apply to an analysis, the design of a written report, and the manner in which testimony from that analysis/ report may be delivered in a courtroom. Second, ethical issues, as related to forensic linguistic analysis, will be discussed in this course. Topics relating to analytical objectivity, identifying known strengths and weaknesses (and knowing when to admit them), advocacy pitfalls, and investigative and testimonial genuineness will be covered. Multiple real-case examples will be utilized in this course to prepare the student for the understanding of both of these critical concepts.

CRM700 - Advanced Criminological Theories

This course will examine the major theories of crime relevant to criminal behavior, crime analysis, research, and criminal justice system policies. Original works of selected theories will be introduced and explained with examples of how theory, research, and policy are applied to crime related issues. Theoretical works such as classical, biological, psychological, social, political, and feminist criminology will be explored in this course.

CRM710 - Advanced Behavioral Crime Analysis Theory

This course provides the theoretical foundation for the behavioral analysis of violent crime associated with applied criminology. Specific course content will examine theoretical underpinnings of criminal behavior, rapist typology, and victimology. A particular emphasis will be on the psychopathology of crime, violent offenders, paraphilias, pedophiles, and crime victims. Accordingly, the course provides students with the behavioral and psychological theories that are needed in the practical courses in applied criminology, such as Criminal Investigative Analysis; Equivocal Death Analysis; and Geographical Crime Analysis.

CRM720 - Research Methods in Criminology

This course explores the design and analysis of experimental and quasi-experimental research in criminology. It explores both quantitative and qualitative techniques as they relate to criminological research. In addition to being able to design and undertake basic research in the field of criminology, an outcome of this course is to develop effective consumers of the research literature.

CRM810 - Violent Crime Analysis

This course provides the basic scientific skills needed to undertake analysis of violent crimes and prepare the student with the necessary tools for other substantive courses in the program: Criminal Investigative Analysis, Equivocal Death Analysis, and Environmental Criminology. In doing so, students learn how to develop logical

and unbiased inferences and conclusions, which play important roles in the analysis and investigation of violent crimes.

CRM820 - Ethics and Legal Aspects in Applied Criminology

This course is an in-depth examination of the ethical considerations that confront investigators, forensic scientists, supervisors, and others involved in applied criminology. Both theoretical and applied applications will be presented with emphasis on the practical courses in the Applied Criminology Track in Social Science. A particular focus will be on ethical issues relating to analysis of various data sets and evidence, preparation of expert reports, discovery and disclosure, exculpatory evidence, and testifying as a lay witness and as an expert witness. Relevant case studies will be reviewed.

CRM830 - Criminal Investigative Analysis

This course builds upon the theoretical framework provided in Advanced Crime Theory and Analysis; and Advanced Theory of Behavioral Analysis of Violent Crime. It provides the applied components of criminal investigative analysis from operational aspects such as the formation of the investigative team, predicting criminal behavior, locating offenders, and methodically collecting, analyzing, and synthesizing relevant evidence. Moreover, the student will learn other practical applications such as interview techniques for suspects, crime victims, and how to minimize occurrences of false confessions.

CRM840 - Equivocal Death Analysis

This course is designed to provide the theoretical and practical applications in determining whether a death was the result of an accident, suicide, homicide, or natural occurrence. The student will be introduced to specific techniques, which are used to disambiguate the manner of death including behavioral and psychological histories

of the decedent. Other techniques covered in the course include the analysis of autoerotic fatalities and staged crime scenes.

CRM850 - Environmental Criminology

understanding of the theoretical and practical applications of environmental criminology and crime analysis. Topics covered include target and predator patterns; predicting crime; locating offenders; and investigative strategies for solving crimes. Students will also be introduced to the scientific and technological aspects of this field and will be expected to critically evaluate the various processes and procedures with the view towards continuous improvement in the field.

CRM855 - Applied Research in Criminology

This course will focus on the application of selected principles of criminological theory and research methods toward understanding and resolving specific problems in the field of applied criminology. It is designed to help students to build upon previous courses in crime theories and research methods. Students will be required to develop and complete a research proposal related to a criminological topic of their choice.

CRM870 - Special Topics in Criminology

This course is a focused examination of an emerging and dynamic problem or issue in the study of criminology. The course will provide the student with the opportunity to apply the knowledge and skills learned in the program to subject matter that will vary each semester.

CRM880 - Criminology Thesis

The thesis consists of a written report of extensive research into a specific area of investigation in applied criminology. Students will demonstrate a mastery of knowledge of the background of the topic, the published literature of the subject, and high standards of original research and presentation.

CRM885 - Criminology Internship

Graduate students in the applied criminology program are placed with a law enforcement agency, forensic science organization, or other entity-public or private-that most nearly approximates employment goals. The intent of the internship is to provide students with practical work experience in an environment in which they will be addressing real problems that require solutions in a relatively short time frame.

CRM890 - Criminology Studies Abroad

This course is intended to provide students of applied criminology with a number of opportunities to study or work in academic or professional settings abroad. Examples include field-based studies with other students and a supervising professor; studying relevant aspects of applied criminology at foreign institutions of higher education where credit is not being awarded by the foreign institution; or pursuing an approved cultural and educational program abroad. Accordingly, students will be able to apply their skills in applied criminology in real-world environments, and at the same time, broaden their intellectual and personal understandings of cultures operating outside of the United States.

CRS-Conflict Resolution

CRS700 - Conflict Resolution Theory and Practice

This course is designed to provide a strong foundation in conflict studies for the scholar or practitioner. It explores various theoretical perspectives that inform appropriate processes to mediate or resolve emerging and existing conflicts. As such, the student will explore origins and conditions of conflict development, the levels of expression, and its intersectional exposure in a variety of disciplines. A context appropriate role of the mediator will be explored along with appropriate interventions. This course sequences from theoretical investigation to utilization of recognized professional approaches to dispute resolution in its various forms.

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CRS710 - Special Topics In Conflict Resolution

This course is designed to assist the student of conflict studies to examine a specific intractable conflict facing our communities, nation, or the world today. Students and faculty will investigate specific areas of conflict that are not covered in other conflict resolution courses. Included in this investigation are the etiology, contributing factors, and more importantly, the stakeholders' inability to productively resolve this conflict. Specifically, students will assess the differences between usual conflict and those that are deemed intractable.

CRS725 - Restorative Justice and Victim Offender Mediation

This course will introduce the conflict resolution student to a specialized area of conflict resolution with a focus on restoration and remediation. The student will explore this perspective and the transformational nature through historic and current examples. Specific emphasis is placed on the cooperative nature of the restorative process and the contributing roles of the stakeholders. Restorative justice can be implemented in a variety of social institutions such as schools, workplace, and communities.

CRS735 - De-escalation and Community Conflict Management

The nature of de-escalation is to reduce the intensity of conflict. This course is designed with a primary focus on interventions aimed to isolate and diminish interpersonal and community conflict that may escalate to violence. Students will be exposed to a variety of interactive competencies that are designed to map potential areas of violence, mitigate aggression and build community consensus. Particular focus will be given to facilitative and negotiation techniques. Students will participate in interactive simulations and conclude this course experience with creating and proposing their own intervention model.

CRS740 - Legal Aspects of Conflict Resolution

This course is designed to compare and contrast legal approaches to conflict resolution. Specifically, the student will examine and differentiate between litigation and other alternative processes to dispute resolution. The role of the professional neutral in reaching settlements will be explored as well as the rationale for non-litigated settlements. Students will focus on and interpret different stages of mediation that interface with the legal system. As part of this process, students will also be exposed to issues of concern for attorney and non-attorney mediators in areas such as discovery, drafting agreements, conflicts of interests, confidentiality, and other ethical dilemmas.

CRS750 - Dialogue, Negotiation, and Persuasion in Conflict Resolution Practice

The primary emphasis of this course is to recognize the role of facilitative dialogue in the resolution of conflict. Specifically, the student will explore elements of negotiation, and persuasion in mitigating various types of disputes. Concepts that are investigated include but are not limited to theories of persuasion, influence, narrative paradigm, verbal and non-verbal communication, active listening, rephrasing, and intra and inter group dynamics. Students will practice simulated mediations to reinforce facilitation and evaluation of negotiation techniques.

CRS765 - Family Mediation Theory and Practice

This student in this course will explore a variety of conflicts that arise in the context of the family. There is an emphasis on the mediation process as it relates to separation, divorce, and custody. Students will develop expertise in the areas of implementing parenting plans, visitation schedules, child focused parenting, and reunification through the mediated process. Special consideration is given to consensus building that is focused on addressing the best interests of the children.

CRS770 - International and Intercultural Conflict Resolution

This course will study all aspects of conflict that occur within the contemporary international system. The course will begin with the nature and form of conflict from war to economic actions to ethnic conflicts and civil wars that impact the international system. Following this, the student will consider various means for preventing conflict and bringing about resolution and reconciliation, from traditional diplomacy to international organizations to cooperative economic frameworks. Finally, detailed study will be given - through the use of a number of case studies – to the actual process of diplomatic mediation and the negotiation process.

CRS780 - Principles in Mediation Practice

This course will provide the student of conflict resolution studies with an understanding of the ethical considerations in conflict resolution and mediation practice. Theoretical underpinnings such neutrality, fairness, and disclosure are examined as they relate to dispute resolution and conduct of the mediation professional. In addition, cross-cultural ethical theories are investigated through case study examples.

CRS790 - Neuroscience and Conflict Resolution.

The student in this course will investigate the neural basis or encoding functions of the brain and how learning, memory, identity, and cognition impact our perception of conflict. This course offers an additional theoretical explanation other than the dominant psycho-social justification for why some conflicts are intractable. Specifically, students will examine conscious and un-conscious processes evident in system one and two thinking that offers insight into new interventions for conflict communication and management.

CRS800 - Research Methods in Conflict Resolution Studies

This course examines the theories and assumptions supporting the practice of mediation and other areas of conflict resolution. Specifically, major schools of thought that inform practice and policy are investigated. Students appraise critical theory, research design, and empirical evidence in evaluating published studies to gain proficiency in professional practice.

CRS810 - Conflict Resolution Graduate Internship

Student interns are placed with an organization, which most nearly approximates employment goals. The intent of the internship is to provide students with practical work experience in an environment in which they will be utilizing skills that are also relevant to professional mediation practice.

CRS819 - Conflict Resolution Applied Research Project

This course is designed to assist the student of conflict studies to address issues of importance that are related to their current or future careers. A creative project will be developed from a variety of student interests that is intended to facilitate application to professional development and practice. Advance of this project will utilize peer reviewed research, analysis, and synthesis to an intervention (proposal). Students are expected to apply suitable analytic methods to their proposal design. The format for the proposal will be proposed by the student and approved by the instructor. This project must demonstrate originality and will meet the requirements of the American Psychological Association (APA) Publication Manual.

DHS-Doctor of Health Science

DHS804 - Evidence-Based Practice Theory

This course is designed to provide the student with a systematic method to critically appraise and integrate the results of current scientific literature. Students will participate in discussions and practical writing exercises to articulate clinical questions to be answered through sources of scientific evidence. Students will be exposed to strategies for searching relevant data bases and appraising and evaluating specific sources of evidence.

DHS805 - Health Promotion and Wellness for the Individual

In this course students will be provided with an advanced framework for individual health promotion. Elements of the health and wellness lifestyle will be examined in detail, and students will be provided opportunities to lead and to employ leadership styles into wellness and health promotion for the individual. Students will search the evidence to uncover the most current literature to support individual health promotion, including leadership trends to encourage health and wellness lifestyles.

DHS806 - Community and Corporate Wellness

Students will develop and design community and corporate wellness plans based upon the most current research and evidence. Additionally, the role of effective leadership styles and trends will be studied. Effective leadership in the promotion of healthy lifestyles will be vital in the improvement of health and wellness leading into the future. Great emphasis will be devoted to examining and understanding health and wellness disparities across socioeconomic and cultural lines. Model corporate programs will be examined and dissected to determine overall efficacy in application and leadership.

DHS825 - Research Methods in Exercise Science I

This course will explore general research principles and scientific method. Ethics in research will be fully investigated including training aligned with federal regulations on ethical research practices and protection of human research participants. The process of question formulation, writing the literature review, research design and methodology of the research report will be examined. The student will focus on a research question and begin critically appraising current research for use in writing a literature review.

DHS826 - Research Methods in Exercise Science II

Data collection tools and statistical analysis will be explored as well and validity, reliability, and sampling. The student will begin framing the extended article manuscript that will become the dissertation for the program. The student will construct their dissertation committee, and present an applied research project proposal prior to completing the course.

DHS830 - Leadership in Wellness Education and Professional Practice

Leadership skills, attributes, theories and styles will be examined and applied across a wide-range of practice settings. Students will utilize their current place of employment, where appropriate, to examine the leadership

style and tenets. Students will explore the most current as well as foundational literature to synthesize best practices in effective leadership to include, but not limited to topics such as foundations of leadership, emotional intelligence, conflict resolution and consensus building, intercultural competence, project/group facilitation, and motivation and accountability within the constructs of an academic environment.

DHS835 - Values, Ethics and the Promotion of Health and Wellness

The application of personal values and theoretical ethics will be applied to the health promotion and wellness milieu. Ethical decision making and ethical dilemmas encountered by organizations will be examined. The process of being interested in one's self, moving to thinking about self and others, and finally being concerned with self, others, and society is a leader's ethical responsibility. Current evidence will be utilized as a basis for arguments and case studies scrutinized to assist students in making sound, ethically grounded decisions driven by contemporary leadership styles and trends.

DHS845 - Advanced Instructional Technology in Evidence-Based Practice

Students will be presented with the latest technologies and adult learning strategies for utilization within educational and private organizational settings. Special attention will be given to research-supported technologies and their application in multiple learning environments, with a focus on Evidence-Based Practice principles. Students will explore the use of a variety of innovative technologies to enhance teaching, enrich learning, and improve assessment.

DHS850 - Theories and Foundation of Adult Learning

Students will be provided with an evidence-based foundation of current theories associated with adult learning including the differences between adults and children as learners. This will include exploration of adult learning

theory, research based principles of learning, learning styles, and other contemporary educational theories that effect and influence learning in the adult.

DHS851 - Learning Concepts for the Adult Learner

Students will explore advances in in adult learning, as well as best-practices and concepts for successful outcomes for the adult learner. A detailed exploration will occur into such topics as teaching strategies, overcoming teaching challenges, adult learning principles and practices. The emergence of technology used as campus-wide technologies, as well as internet and social media as a conduit for learning.

DHS852 - Curriculum and Course Design

This course will build upon the current evidence of effective adult learning, curriculum design and curricular evaluation in conjunction with course design, course development, and evaluation will be the foci of this course. Topics such as curricular instructional planning and design, course organization, instructional delivery, lesson planning, assessment tool creation will be included.

DHS899 - Evidence-Based Project Seminar

All aspects of the research project process will be addressed by conducting the steps necessary for a complete dissertation proposal. The process will include committee formation, presentation and approval of the research prospectus, development and defense of the dissertation proposal with IRB approval readiness.

DHS900 - Evidence-Based Capstone I

This is the culminating activity for the completion of the degree program. Students will have three academic terms (Spring, Summer, Fall) to execute all activities to complete the evidence-based dissertation including data collection, data analysis, defense, and presentation. Students will develop a poster suitable for presentation at

professional conferences. Students are required to travel to campus to defend the dissertation and present the poster.

DHS901 - Dissertation

This is the culminating activity for the completion of the degree program. The student will complete all activities to complete the dissertation including data collection, data analysis, defense, and presentation. Students will develop a poster suitable for presentation at professional conferences. Students are required to travel to campus to defend the dissertation and present the poster.

DHS915 - Evidence-Based Doctoral Portfolio I

This is the first course of three evidence-based doctoral portfolio courses culminating in the completed e-portfolio. The doctoral portfolio constructed by the candidate will reflect and actively influence learning, as well as demonstrate a high level of understanding, growth, proficiency, long-term achievement, and highlight significant accomplishments. The portfolio will focus on a common real-world workplace research problem that was selected by the candidate earlier in year one of the DHSc curricula. The research problem will remain as a common thread throughout the three portfolio courses. The portfolio conception over the three courses will create a community of practice in the workplace, the university, and/or the profession of health science, exercise science, wellness and/or fitness.

DHS925 - Evidence-Based Doctoral Portfolio II

In the second of the three evidence-based doctoral portfolio courses, the doctoral candidate will carry out activities to continue the process of a coherent, structured doctoral portfolio development, including additional artifact collection with regard to personal reflection, self-awareness, scholarship/research, teaching, and leadership. The underlying focus of the second portfolio course will be a synthesis of the first portfolio course contents, experiences, and artifacts to further mature the professional development in the community of

practice the candidate selects based on future plans and aspirations in a university, workplace, or professional communities.

DHS950 - Evidence-Based Doctoral Portfolio III

This is the third and culminating course for the completion of the degree program and the professional doctoral portfolio process. The underlying focus of the third portfolio course will be the continuation of the portfolio development by aligning life-long learning and continued professional development. The doctoral candidate will evaluate the portfolio course contents, experiences, and artifacts in total. The doctoral candidate will defend their professional doctoral portfolio in front of the collected advisory panel members as well as members of the university community. The candidate will develop a poster suitable for presentation at professional conferences. Students are required to travel to campus to defend the professional doctoral portfolio and present the poster to the university community at large. The candidate will be encouraged to disseminate key aspects of the portfolio into the scientific literature of health science, exercise science, wellness and/or fitness, as well as present the works to various communities, including but not limited to universities, workplace, and professional organizations.

DPT-Doctor of Physical Therapy

DPT735 - Geriatric Physical Therapy

This course involves the physical therapy examination, evaluation, and management of the older adult patient. Normal age-related changes as well as pathological age-associated changes, in addition to end of life care as related to the practice of physical therapy will be studied.

EAL-Educ Admin & Leadership

EAL701 - Leadership 1

This course examines various issues in educational leadership. Students will explore topics in leadership related but not limited to leadership roles and responsibilities, change management, technology, student populations, and staff development. A focus on fiscal responsibility and its role in various leadership areas will be emphasized.

EAL702 - Leadership 2

This course introduces doctoral students to current research, models and theories on leadership. Students will examine their own leadership beliefs and how this connects with leadership in the educational setting. Students will personally reflect and identify individual leadership strengths and limitations.

EAL703 - Qualitative Research in Educational Leadership

This course focuses on qualitative research for doctoral students. It will examine important theories and practices in planning and designing qualitative research in educational environments. Students will develop the skills, techniques, and knowledge necessary to undertake independent research using appropriate methodologies, key research strategies, and principles for research design in qualitative research.

EAL704 - Quantitative Research in Educational Leadership

This course focuses on quantitative research for doctoral students. It will examine important theories and practices in planning and designing quantitative research in educational environments. Students will develop the skills, techniques, and knowledge necessary to critically understand, critique, and apply quantitative research methodologies to educational environments.

EAL705 - Introduction to the Capstone Research

The Education Administration Leadership Capstone is a series of four courses whereby students demonstrate mastery of required competencies through the completion of a final culminating independent applied research project. The Education Administration Leadership Capstone: Introduction to Capstone Research, the first course in the series, is designed to introduce, guide and support candidates as they learn about the doctoral research expectations and processes that will inform their work as education researchers.

EAL706 - Capstone 1 – Research Question/Review of Literature

The Education Administration Leadership Capstone is a series of four courses whereby students demonstrate mastery of required competencies through the completion of a final culminating independent applied research project with a focus on fiscal responsibility. The Education Administration Leadership Capstone I: Research Question/ Review of the Literature, the second course in the series, will engage candidates in the identification of a research topic, the development of the research question(s) and conduct a review of the relevant professional literature that will be utilized to inform their work as education researchers.

EAL707 - Capstone 2: Methods/Data Collection

The Education Administration Leadership Capstone is a series of four courses whereby students demonstrate mastery of required competencies through the completion of a final culminating independent applied research project with a focus on fiscal responsibility. The Education Administration Leadership Capstone I: Research Question/ Review of the Literature, the second course in the series, will engage candidates in the identification of a research topic, the development of the research question(s) and conduct a review of the relevant professional literature that will be utilized to inform their work as education researchers.

EAL708 - Capstone 3: Data Analysis/Results/Recommendations

The Education Administration Leadership Capstone is a series of four courses whereby students demonstrate mastery of required competencies through the completion of a final culminating independent applied research project with a focus on fiscal responsibility. The Education Administration Leadership Capstone 3: Data Analysis/Results/Recommendations, the fourth course in the series, will guide and support candidates in their data analysis methodologies, formulation of findings/conclusions and identification of implications/recommendations as an education researcher.

EAS-Earth Science

EAS511 - DataStreme Atmospheric Studies

A collaborative learning course in conjunction with the American Meteorological Society (AMS) designed to focus on principles of meteorology from analysis of digitally delivered near real-time environmental data and learning activities. The course utilizes the display and analysis of atmospheric data with applications designed to be modified for use in other instructional formats. The analysis of weather maps is an integral part of the investigations component of the course. Students are expected to visualize, interpret, and interrogate various weather phenomena as they relate to the current state of the atmosphere. Basic prediction of future weather conditions is one of the culminating experiences of the course, after extensive online investigations. The course relies on data and support of the American Meteorological Society.

EAS512 - DataStreme Ocean Studies

A collaborative learning course in conjunction with the American Meteorological Society (AMS) designed to focus on principles of oceanic analysis of digitally delivered near real-time environmental data and learning activities. The course utilizes the display and analysis of oceanic data with applications designed to be modified for use in other instructional formats. Specifically, it is designed to be a study of the four main branches of oceanography:

1) geology of the oceanic basins (origins of the oceans, structure and geomorphology of the ocean's floor, methods of investigation); 2) chemistry of the ocean waters; 3) physics of the oceans (currents, waves, tides, etc.); 4) biology of the oceans (marine plants and animals). The course relies on data and support of the American Meteorological Society.

EAS513 - DataStreme Climate Studies

A collaborative learning course in conjunction with the American Meteorological Society (AMS) designed to focus on principles of climate analysis of digitally delivered near real-time environmental data and learning activities. The course utilizes the display and analysis of climatic data with applications designed to be modified for use in other instructional formats. In this course the elements and controls of climate are analyzed in a systematic fashion. The physical parameters controlling climate are reviewed, as they relate to physics and chemistry. Climate science is concerned not only with the most frequently occurring types, the average weather, but the infrequent and unusual types as well. Climates of the past and potential future states of climate will be discussed and the impacts thereof. The student will be able to make an informed decision in the framework of a Citizen Scientist given the nature of a changing climate through data analysis utilized in this course. Near the conclusion of the course, human energy needs, policy implications and political ramifications are discussed based upon our best understanding of the impacts of the quickly changing climate. The course relies on data and support of the American Meteorological Society.

EAS514 - Selected Topics in Atmospheric Studies

A collaborative learning course in conjunction with the American Meteorological Society (AMS) designed to focus on principles of atmospheric science analysis of observed environmental data and learning activities. Students learn about research initiatives from a variety of scholars and professionals employed in various sectors of the weather enterprise. The course employs a seminar format to facilitate interdisciplinary and cross institutional networking opportunities and leverages the existing institutional connections between Cal U, AMS and the National Oceanic and Atmospheric Administration (NOAA). These connections allow professionals to engage

students in the seminar format where engagement is maximized. Professional focus is from the nationals centers (e.g., Weather Prediction Center, Storm Prediction Center, National Center for Environmental Prediction, Local National Weather Forecast Office, Space Weather Prediction Center, & National Weather Service Training Center). Learning modules are presented and students are tasked with engaging each other as they navigate course materials. Near the conclusion of the course, students are required to synthesize course materials and learning modules in a deliverable format for peers or other students at various learning capacities. Students then conduct their own peer-to-peer collaborations utilizing the learning tools presented in the course. The course relies on data and support of the American Meteorological Society.

EAS515 - Selected Topics in Ocean Science Studies

A collaborative learning course in conjunction with the American Meteorological Society (AMS) designed to focus on principles of atmospheric science analysis of observed environmental data and learning activities. Students learn about research initiatives from a variety of scholars and professionals employed in various sectors of the weather enterprise. The course employs a seminar format to facilitate interdisciplinary and cross institutional networking opportunities and leverages the existing institutional connections between Cal U, AMS and the National Oceanic and Atmospheric Administration (NOAA). These connections allow professionals to engage students in the seminar format where engagement is maximized. Professional focus is from the nationals centers (e.g., Weather Prediction Center, Storm Prediction Center, National Center for Environmental Prediction, Local National Weather Forecast Office, Space Weather Prediction Center, & National Weather Service Training Center). Learning modules are presented and students are tasked with engaging each other as they navigate course materials. Near the conclusion of the course, students are required to synthesize course materials and learning modules in a deliverable format for peers or other students at various learning capacities. Students then conduct their own peer-to-peer collaborations utilizing the learning tools presented in the course. The course relies on data and support of the American Meteorological Society, NOAA, United States Naval Academy, Naval Meteorology and Oceanography Command, and by the Office of Naval Research.

EAS710 - Water in the Earth System

A collaborative learning course utilizing curricular materials from the American Meteorological Society (AMS) designed to focus on principles of water analysis of digitally delivered near real-time environmental data and learning activities. Water in the Earth System (WES) is modeled after the DataStreme Project, a highly successful program that trains teachers in the use of real-time geoscience data in the precollege classroom. The primary focus of WES is to investigate the flow of water and energy in the global water cycle from an Earth system science perspective. Through a unique paradigm, WES integrates and applies fundamental concepts of meteorology, oceanography, and hydrology in examining mass and energy transfer in the hydrologic cycle. A central theme of WES is society's response to and impact on the global water cycle. As with other Cal U-AMS DataStreme courses, WES instruction is delivered online, providing students with highly motivational experiences in a robust online platform as they access and interpret nearreal time environmental data. The course relies on data and support of the American Meteorological Society.

EAS720 - Sustainability in a Changing Climate

The principle focus of the course elaborates on how the Earth system functions interacts amongst its subdomains, but also addresses how humans interact within these sub-systems and how those sub-systems impact humans. The course integrates the approach of Sustainability and explores how today's human societies can devise adaption and mitigation strategies in a rapidly changing climate. The concept of climate resilience is stressed with the challenges of ecosystem degradation and resource limitations. Sustainability is a multi-disciplinary field, requiring a broad understanding of Earth systems as well as human motivations. Sustainable practices and theories are introduced and are inclusive of but not limited to population dynamics, ecosystem science, global change, energy, water, environmental economics and policy, ethics, and cultural history. A rapidly changing climate necessitates the importance of identifying suitable Sustainable practices and their implications in both the natural and social sciences as well as the technical challenges and limitations available at present. The student should have been exposed to a background in the Earth sciences and/or other core science concepts (e.g.,

Biological Sciences, Physics/Chemistry). The course will present realworld examples and/or case studies allowing the students to be exposed to contemporary challenges in environmental management.

EAS730 - Environmental Hazards in a Changing Climate

This course focuses on weather- and climate-related natural hazards from physical science perspective but also explores their socioeconomic impact on human societies. The concept of climate resilience is elucidated by examples of climate adaptation and mitigation from the past, as well as proposed strategies for the future.Trends in frequency and intensity of hazard events are discussed within framework of socioeconomic conditions to explain how vulnerable groups are identified. Impact of how a social group's or individual's personal views, perceptions of environment, or risk averse attitudes will also be explored.

ECE-Early Childhood Education

ECE700 - Early Childhood Curriculum and Assessment

Based on the premise that curriculum, instruction and assessment are inextricably intertwined, this course is designed to help prospective teachers of young children conduct informal and formal assessments and develop an assessment system that draws information from various sources. Teachers will develop knowledge and understand the principles and components of preschool curricula and strategies of learning for preschool children. Curriculum and assessment, content, strategies, and examples appropriate for the development and learning of young children are emphasized. The course communicates the mindset that comprehensive, reliable and valid assessment data pave the way for meaningful, relevant and engaging learning opportunities for children.

ECE702 - Advanced Childhood Development

This online course provides teachers with the opportunity to review recent research and theory concerning advanced child growth and development. The course examines the nature and process of child development

with a focus on infancy and early childhood years. The primary goal of the course is the integration of information generated from empirical research, both classic and current, into explanatory systems (theories) of child development. The emphasis in this course is less on learning the "facts" of child development and more on learning why child development research is conducted (theories), how it is conducted (methodology), what it means for the field (conclusions) and how research is evaluated (critical thinking).

ECE703 - Literacy Development

This online course provides teachers with the opportunity to review recent research and theory concerning literacy development. The study of different areas of literacy development, specifically oral language, writing and reading, are encompassed in the course. The theory and research is translated into practical strategies, assessment materials and preparation of rich literacy environments. The course provides teachers with an effort to reflect upon current issues in early literacy, specifically early intervention programs to assist struggling readers, language and diversity, teaching skills in developmentally appropriate settings, organization and management of literacy programs, and family literacy partnerships.

ECE704 - Special Topics in Early Childhood Education

A focused examination of an emerging and dynamic problem or issue in the study and practice of early childhood education. Special subject matter not ordinarily covered in the existing curricula can be presented by faculty. Examples include but are not limited to: design and accreditation of early care settings, adapting instruction for diverse learners, cultural diversity in the early care setting, parent and community involvement, advocacy and ethics, inquiry-based learning, or content specific topics.

ECE705 - Science and Math in Early Childhood Education

This course provides practicing teachers with the opportunity to attain an advanced conceptual understanding of and skill in using numerous teaching strategies for science and math content. As the result of this course,

teachers will be able to increase their understanding of science and math content; select, plan and teach integrated constructivist-based lessons for diverse learners in their early childhood years.

ECE707 - Leadership and Management in Early Childhood Settings

Early childcare settings should provide a supportive and encouraging environment. This course addresses planning for child care and education facilities including staffing, regulations and licensing, organizing space and equipment, nutrition and health policies, and parent and community relations. Teachers will examine the importance and application of developmentally appropriate practices and programs that are nationally recognized. Careful attention will be given to standards, ethical practices and advocacy in the development of future leaders of Pre-K programs.

ECO-Economics

ECO710 - Advanced Microeconomics

This course covers microeconomics with an emphasis on the skills needed to evaluate economic models, tools, and ideas as they apply to the modern economy. Basic tools of game theory, constrained optimization, and general equilibrium are introduced and applied to various topics, including consumer and producer choice, decision under uncertainty, and resource allocation under different market structures.

ECO716 - Applied Economic Analysis

This course applies microeconomic and macroeconomic principles to analyze and explain various events in the business environment. Students will develop an appreciation for how and when economics is relevant to the complex and practical problems of the business world. The first half of the course reviews certain microeconomic principles, which are then applied to real situations in which managers must make specific decisions. This includes a diagnosis of the problem, analysis of the economic choices, and development of a plan of action to

help the enterprise reach a decision. The second half of the course reviews macroeconomic principles which are used to gain understanding of the aggregate behavior of different sectors of the economy, and how changes in behavior in each of these sectors are caused by various factors, including actions taken by policymakers to influence the overall level of economic activity. The course also focuses on the importance of international trade in output and input markets to the modern economy.

ECO720 - Applied Macroeconomics

Students in Applied Macroeconomics will develop and apply models of the economy as a whole, in both the short and long run, to explore the macroeconomic environment in which firms operate. The course will focus on the drivers of key macroeconomic variables that affect business decision making, including inflation, interest rates, unemployment, exchange rates, and productivity. Throughout the course an emphasis will be placed on understanding and evaluating economic policy and how businesses both shape and are shaped by economic conditions, monetary policy, and fiscal policy.

ECO730 - Applied Econometric Analysis

This course covers the use of fundamental econometric tools and the estimation causal economic relationships. The focus is on the practice of econometrics using extensive applications to a variety of real-world problems in many areas of economics and the social sciences. Topics addressed include linear and non-linear regression models, testing of hypotheses about new and existing economic theories, panel data methods, multicollinearity, heteroskedasticity and autocorrelation.

ECO765 - Health Economics

This course will apply economic principles, methods, and models to problems in health, health care, and health policy. The learner will analyze the behavior of consumers, health care providers, health insurers and public policy makers to understand and enhance business decision making.

EDE-Elementary Education

EDE701 - Standards Aligned Curriculum, Instruction and Assessment

Development and Organization of School Curriculum- This course is designed to provide a complete understanding of the history, organizational patterns, and resources available for the development of the school curriculum. Emphasis is on recent developments in curricula for infant/toddler programs, pre- kindergarten, kindergarten and grades one through twelve. Students receive an introduction to the many facets of curriculum development. Varied opportunities are provided for the students to apply, synthesize and evaluate information through cooperative and interactive learning experiences.

EDE750 - Foundations of Integrative STEM Education K-12

This course provides practicing teachers with the conceptual and practical knowledge to enhance their current professional instruction through providing integrative STEM teaching and learning experiences. Candidates will explore current perspectives of how integrative STEM is taught in schools, engage in rich collaborative inquiry projects, and investigate how integrative STEM teaching and learning can enhance their classroom instructional practices while meeting the needs of all learners. The nature of STEM education disciplines, effective STEM pedagogy and teaching strategies, integrative STEM learning, and innovative problem-based instruction utilizing the engineering and design process will be examined.

EDE751 - Building Scientific Literacy and Understanding Through Inquiry

Through this course, candidates will explore the nature of science and scientific literacy, which has become an integral part of the STEM education movement. Candidates will discover how to design lessons that increase children's/learners' understanding of scientific concepts as well as their ability to apply this knowledge in authentic, real-world settings. Candidates will expand their knowledge of science pedagogy (meaningful

engagement in scientific practice) and transform lessons to promote student-centered teaching and inquiry while helping children/learners build valuable science process skills. Candidates will develop a repertoire of scientific practices to facilitate labs, demonstrations, discussions, fieldwork, and a variety of science activities through the lens of scientific literacy and inquiry-based instruction while exploring the importance of integrating science, mathematics, engineering, and technology.

EDE752 - Mathematics as Problem Solving

Through this course, candidates will explore how to utilize authentic problem solving and inquiry-oriented learning environments to integrate elements of mathematics across disciplines. Candidates will examine best practices in developing curriculum to foster student learning in mathematics, focusing on the content, pedagogical, and curriculum knowledge teachers need to be effective teachers of integrative problem-solving methods, moving away from low level, routine tasks and engaging learners in those that more closely mimic authentic, real-life situations. Candidates will discover how to design integrative lessons that teach mathematics through problem-solving as learners build mathematical dispositions, habits, and practices, while also developing new content understandings. Candidates will learn how to produce the mathematics achievement needed to be competitive in the global economy of the 21st century while also exploring the importance of integrating science, mathematics, engineering, and technology.

EDE753 - Integrative STEM Pedagogy and Instructional Design

This course is designed as an investigation of continually evolving integrative STEM instructional and pedagogical approaches. This includes the examination and application of state and national science, technology, engineering, and mathematics standards; an exploration of existing STEM curricular initiatives; an opportunity to investigate and evaluate STEM curriculum; and an investigation of continually evolving STEM pedagogies. Candidates will plan, design, implement, and reflect on an integrative STEM instructional unit that incorporates an integrative STEM learning cycle approach and developmentally appropriate methodology.

EDE754 - Creating Innovative Measures of Learning for Integrative STEM Learning Communities

This course is designed to investigate continually evolving approaches for developing innovative and inclusive student-centered learning environments that support hands-on, minds-on STEM learning. This includes an exploration of learning networks and communities of practice that contribute to STEM-based learning. Candidates will also explore methods for developing innovative and accessible measures of learning for integrative STEM education, to include an examination of continually evolving digital technologies that can be utilized in transformative ways to assess students' authentic STEM learning experiences.

EDE755 - STEM Teachers as Leaders

This course is designed to prepare STEM educators to serve as teacher leaders who possess collaboration skills along with the knowledge, skills, and dispositions needed to support a STEM education vision and plan and are effectively prepared to guide school-wide implementation of STEM initiatives that develop and deliver high-quality STEM education to all students. Candidates will explore the various roles that instructional leaders engage in such as instructional design and implementation, facilitating professional learning for colleagues, and contributing to the school or district-wide strategic plan for implementing the STEM vision. Candidates will examine theoretical perspectives and research associated with teacher leadership that enable teachers to engage in meaningful transformation that promotes change in a digital age. Candidates will investigate funding opportunities for STEM programs and will design and implement a STEM professional development project that leads to significant instructional or organization-wide innovation.

EDE768 - Teacher Education Internship

The internship experience requires learners to participate in a supervised experience in an early childhood/ preschool setting under the supervision of a sponsoring organization and the University. The number of hours will be dependent upon the learner's prior experiences and may include up to 60 hours in an early childhood setting.

Valid and current teacher clearances or clearances for your state are required. Individual internship locations will be arranged based on prior educational experiences and the educational program.

EDE769 - Integrative Project in STEM Education

This course is designed as the capstone experience in which candidates synthesize the knowledge, skills, and dispositions developed across the Integrative STEM Education Program through a major culminating project. Candidates may develop a variety of tangible academic products or deliverables which enhance or contribute to the existing STEM-based needs of their local school or community. The goal of this course is for candidates to plan, develop, implement, present, and reflect upon a comprehensive individually produced project that contributes to their personalized growth in STEM education.

EDE795 - Student Teaching Internship

The student teaching experience provides the opportunity for the teacher candidate to engage in pedagogy which embraces the constructivist model. During the course of this assignment, students work in two public school classrooms and attend weekly practicum. Discussions focus on current research and best practices, constructivist teaching strategies and techniques, technology in the classroom, and Pennsylvania school laws relevant to the work of the classroom teacher. The teacher candidate will conduct an action research project and share with colleagues during practicum sessions. In addition to these school-based experiences, the teacher candidate is encouraged to engage in a series of community and cultural events with the surrounding school community.

EDP-Professional Education

EDP600 - Statistical Methods

This course introduces the student to statistical concepts and techniques that are essential for valid and reliable field research. Emphasis is placed upon statistical reasoning and thinking as well as an understanding the

logic behind variance inference procedures and their correct use. A heavy emphasis will be placed on proper interpretation including contextual interpretation. Numerous statistical methods will be discussed including: graphical techniques for both qualitative and quantitative variables, numerical summaries for both qualitative and quantitative variables, hypotheses tests, confidence intervals, regression techniques, one-way and two-way analysis of variance, and analysis of covariance. At the conclusion of the course, the student is expected to be able to identify, describe and critique the statistical methods used in published research studies and correctly apply the appropriate statistical methods in his or her own research. SPSS will be used throughout the course.

EDU-College of Education

EDU650 - Supporting English Language Learners

The purpose of this course is to help prospective teachers in all initial certification areas develop an understanding of how to modify mainstream course materials and instructional strategies so that English language learning students can engage in course content while simultaneously developing their new language.

EDU704 - Foundations of ESL Education

The five domains of teaching English language learners are explored: culture, language, planning instruction, assessment and professionalism. Emphasis is placed on the Teachers of English to Speakers of Other Languages (TESOL) teaching standards and ESL K-12 standards. Teachers will examine research-based practices in relation to the five domains and identify their role as an English as a Second Language (ESL) teacher. Field experience may be required per Pennsylvania Department of Education ESL program specialist requirements.

EDU709 - Sociolinguistics

Teachers across the country are finding their classrooms increasingly diverse, therefore, this course will provide an examination of theory, diversity, and pedagogy constructs for explicit applications to practice in classrooms with English Language Learners. This course introduces students to Sociolinguistics, a field of study which ties language and communication to the context in which the language is being used. The variations of language use that are found in relation to age, gender, ethnicity, geographical location and social structure are some of the areas for investigation in the course. Field experience may be required for this course per Pennsylvania Department of Education ESL program specialist requirements.

EDU712 - Content-Based ESL Instruction

Teachers will examine the theories, principles, and practices that assist English language learners in achieving academic proficiency in the content areas. Planning standards-based instruction and adapting instruction in the content areas is emphasized. To promote the academic success of English language learners, teachers will involve the family and community, and analyze the learner to establish learning goals and assessment measures that are appropriate for the individual student. Field experience may be required for this course per Pennsylvania Department of Education ESL program specialist requirements.

EDU713 - Language Acquisition and Development

Second Language Learners of any age undergo certain processes to be able to learn a new language. In this course, candidates will be exposed to these processes. They will learn and conduct research on the structure and nature of language with a view to assisting their students to adjust to the challenges of learning a new language. They will also learn the theories of second language acquisition, styles and strategies in language learning as well as the socio-cultural and cross-linguistic influences of language learning. Field experience may be required for this course per Pennsylvania Department of Education ESL program specialist requirements.

EDU714 - Language Assessment

Assessing English Language Learners can be a challenge to not only teachers but also the students themselves. As ESL students in K-12 are taught English, there needs to be proper instruments in place of assessing their progress in language learning. These tools should be appropriate and should take into account the proficiency level of the learner. In this course, student teachers will gain exposure to the tools necessary to be able to assess English Language Learners appropriately and in a timely way. The course will offer knowledge on benchmarks for different proficiency levels. Field experience may be required for this course per Pennsylvania Department of Education ESL program specialist requirements.

EDU719 - Supporting Second Language Learners, Family, and the Community

Most second language learners are from another country. They come in with anxieties and go through phases of cultural adjustments. Without the necessary support, it might be hard for them to transition smoothly and thus be able to learn English well and fast. This course is geared toward equipping ESL teachers with the necessary tools to give ESL students the support they need while they undergo the challenges of transition. Issues that may arise concerning the support of students in the classroom, school and the community will be addressed. Field experience may be required for this course per Pennsylvania Department of Education ESL program specialist requirements.

ELE-PreK thru Grade 4 Educ

ELE621 - Instructional Strategies

This course is designed to provide teacher candidates with the knowledge, skills, and dispositions necessary to create developmentally appropriate and responsive instruction and assessment for learners in K – 4 classrooms. Topics covered include K through grade 4 curriculum models, developmentally appropriate practices, lesson planning, writing objectives, instructional strategies, and assessment of student learning. Through various

teaching and learning methodologies, the teacher candidates will learn how to plan for and utilize strategies based on evidence-based research, Pennsylvania Department of Education Learning Standards and standards set forth by the National Association for the Education of Young Children.

ELE701 - Teaching & Assessment in Language Arts

This course examines the development of literacy and assessment practices in Pre#K to grade 4. Candidates are taught how to teach and assess reading, writing, listening, and speaking skills with an emphasis on developmentally appropriate practices particularly in the area of language arts, and through the use of an integrated/balanced approach consistent with the constructivist theory of teaching and learning. Research#based effective practices and theories to literacy instruction and assessment are introduced, analyzed, and evaluated.

ELE702 - Teaching & Assessment in Reading

This course examines the development of literacy and assessment practices in Pre#K to grade 4. Candidates are taught how to teach and assess reading, writing, listening and speaking skills with an emphasis on developmentally appropriate practices associated with an integrated and balanced approach to literacy instruction consistent with the constructivist theory of teaching and learning. Candidates learn research-based best practices that cultivate early literacy development so that young children through grade four develop skill in phonemic awareness, phonics, vocabulary, comprehension, and fluency. Candidates learn how to assess, make instructional decisions, and provide interventions that will meet the needs of a diverse classroom population. Teacher candidates participate in classroom and field-based experiences that provide them with the knowledge, pedagogy, and dispositions needed to support early literacy and to teach early literacy skills to preschool and early elementary children in a variety of classroom settings. In the required performance assessment project, candidates plan and implement a guided reading lesson in a K-4 classroom.

ELE703 - Field Experience

This course is designed to provide students with a field experience in an elementary classroom for a minimum of 45 hours. Students will function as teacher's aides and develop and teach five lesson plans.

ELE711 - Teaching & Assessment in Mathematics

This course will allow students to develop the understanding, knowledge, and skills necessary to teach mathematics to young children. Students will become proficient in the problem-solving process and will come to understand mathematical reasoning in order to teach problem-solving and mathematical reasoning to young children. Lastly, students will plan, implement, and reflect on standards-based mathematics lessons which will be taught to young children in a local elementary school.

ELE721 - Teaching & Assessing Students' Science Learning

This course provides teacher candidates at the graduate level opportunities to acquire the science education knowledge, skills and dispositions expected of beginning early childhood teachers in self-contained classrooms. The course provides an overview of the nature of science, scientific inquiry and focuses on science process skill teaching strategies. Candidates learn and practice science teaching skills such as: creating a classroom environment conducive to scientific inquiry, designing science instruction, assessing student attainment of academic standards, and using the local community as a location and topic of classroom science instruction. The course assignments introduce students to the professional community of science education professionals and resources. Teacher candidates participate in university classroom and field experiences that provide them with the knowledge, pedagogy, and dispositions needed to teach in a variety of educational contexts.

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ELE731 - Teaching & Assessment in Social Studies

The foundations of the social studies are critiqued. Instructional strategies, best practices and resources for the constructivist social studies classroom will be researched, discussed and demonstrated. Attention will be given to current trends, use of technology in the curriculum, literacy instruction in social studies, and the present status of social studies in the pre K-4 classroom.

ELE741 - Diverse Culture and Arts in Prek-4 Education

This course focuses on diversity, culture and expressive arts in the context of Prek-4 Education. The course content includes: creativity, aesthetics, and the teaching and integration of visual art, music, movement, and creative dramatics within the curriculum. In addition, students will engage in practical experiences in identifying and working with diverse populations in a Prek- 4 classroom. The dimensions of diversity include race, ethnicity, gender, sexual orientation, language, culture, religion, mental and physical ability, class, and immigration status. This course was designed with the commitment to recognizing the importance of diversity, culture, expressive arts

and their importance for the individual student, the community, and the world. The arts satisfy the human need to respond to life experiences. This was evident by the pervasiveness of these special areas throughout history in all cultures. Research confirms that all persons have innate potential in these subjects. Instruction in all three areas must be integrated into the school curriculum to enable all students to realize this potential and more fully participate in the human experience. Current teaching technology and strategies to meet the needs of children in grades Prek-4 will be researched, observed, and discussed. At least 30 hours of field experiences in a Prek or K-4 setting will be included in the course.

ELE795 - Student Teaching and School Law

The student teaching experience provides the opportunity for the teacher candidate to engage in pedagogy which embraces the constructivist model. During the course of this assignment, students work in two public school classrooms and attend weekly practicum. Discussions focus on current research and best practices, constructivist teaching strategies and techniques, technology in the classroom, and Pennsylvania school laws relevant to the work of the classroom teacher. The teacher candidate will conduct an action research project and share with colleagues during practicum sessions. In addition to these school-based experiences, the teacher candidate is encouraged to engage in a series of community and cultural events with the surrounding school community.

ENP-Entrepreneurship

ENP701 - Entrepreneurship

This course focuses on the characteristics of an entrepreneur and framework to develop and lead a successful entrepreneurial business. The impact of emotional intelligence in the workplace and sources of entrepreneurial finance are discussed. Students will learn how to develop and manage the human capital in the workplace.

ENP705 - Entrepreneurial Finance

This course is designed to expose students to the process of financing and investing in a new venture. The focus of the course is on the key analytical thinking and skills which are needed for financing of new venture and for making investment decisions. Students are introduced to the knowledge and financial tools needed by an entrepreneur for a successful business venture.

ESP-Special Education

ESP602 - Life Skills Planning & Instruction

This course prepares students to work with children and/or adults who require ongoing support in order to participate in one or more major life activity. Students are required to do design and implement an instructional program with a person who needs this type and level of support.

ESP603 - Assessment and Prescriptive Teaching

This course teaches students how to administer, score, and interpret both norm- referenced and criterion referenced assessment devices and how to prescribe programs of remediation based on the results of these devices.

ESP606 - Transition Planning and Instruction

This course deals with special education programs for senior high school students as well as those persons who reside in the community. Emphasis is placed on vocational preparation and training. Specific techniques for task analysis of jobs, daily living skills, and social adaptation constitute a major portion of this course. Emphasis is placed on the development of functional skills that contribute to normalized development.

ESP607 - Early Intervention Special Education

The course is designed to provide future educators with knowledge of history, theories, legislation and litigation associated with early childhood special education. In addition, students will develop learning environments, implement research-based curriculum, conduct developmental assessments and establish educational teams, as well as enhance skills in communicating with team members and facilitating consultation with the targeted population and family members. (Field experience: 30 hours.)

ESP610 - Special Education Foundations and Collaboration

This course is designed to provide information and skills necessary for accommodating exceptional learners in a variety of school arrangements. The primary focus is foundations and characteristics of special education and students with exceptionalities and collaboration/consultation for the successful inclusion of students with exceptionalities into the inclusionary classroom.

ESP612 - Evidence-Based Practices for PreK-8 Inclusion

Evidence-Based Practices for Elementary Inclusion is offered to Elementary Education majors the semester prior to their student-teaching experience and is a methodology course for pre-service education teachers. The purpose of the course is to prepare elementary pre-service teachers to provide evidence-based language arts and math instruction to students with disabilities in inclusion settings. An emphasis is placed on results of research and proven methods of instruction for teaching beginning reading and math to children with learning difficulties. The course stresses a behavioral approach to teaching, as well as the development and implementation of intervention strategies for various populations of children with exceptionalities in inclusion settings. Additional topics include modifications and adaptations of materials, effective teaching, learning strategies, lesson planning, assessment, and individualized education programs.

ESP613 - Evidence-Based Practices for Secondary Inclusion

Evidence-Based Practices for Secondary Inclusion is offered to Secondary Education majors the semester prior to their student-teaching experience and is a methodology course for pre-service education teachers. The purpose of the course is to prepare Secondary pre-service teachers to provide math language arts instruction to students with disabilities in secondary inclusion settings. An emphasis is placed on results of research and proven methods of instruction for teaching reading and math to secondary students with learning difficulties. The course stresses a behavioral approach to teaching, as well as the development and implementation of intervention strategies for various populations of children with exceptionalities in inclusion settings. Additional topics include modifications and adaptations of materials, effective teaching, learning strategies, lesson planning, assessment, and individualized education programs.

ESP620 - Special Education History, Theory & Exceptionality

This course is designed to provide information and skills necessary for individuals interested in the philosophy found within special education identification and practices. The course also serves to provide information regarding the definition, prevalence, etiology, characteristics, and general educational practices as they relate to individuals with exceptionalities.

ESP622 - Advanced Evidence-Based Practices for PK-8 Inclusion

This graduate course is designed to provide future educators with knowledge of research based practices that may be employed in PK-8 academic and nonacademic educational settings. The course will focus the future educator on techniques that will be beneficial for developing skills in core areas such as mathematics, language arts, science and social studies along with those skills that are necessary for navigating non-instructional periods. Specifically, this course will provide future educators with intensive, Tier 3, evidence-based interventions for

students with exceptionalities. This course is a continuation of ESP 612 in that it provides more intensive, individualized teaching methods for those students who do not adequately respond to Tier 1 & 2 interventions.

ESP623 - Advanced Evidence Based Practices for Secondary Inclusion

This course serves to provide and prepare special education teachers to use research and strategy based interventions and plan instruction of adolescents in grades 7-12 who receive special education services and may be included in the general education classroom. The course focuses on how to effectively apply the use of evidence-based practices in several curricular areas with an emphasis on the critical areas of English, Mathematics, Science, and Social Studies.

ESP639 - Field Experience Seminar in Special Education

A means for graduate students to obtain needed experiences with various groups of children with exceptional learning needs in such settings as special classes, an institution, a sheltered workshop, an activity center, a summer camp, a community MH/MR facility or by doing a specific piece of research with a population of students. Specific requirements for individual graduate students are developed by those students and the supervising professor.

ESP661 - Student Teaching Practicum

The student teaching program is designed to ensure that PreK – 4 and Special Education K – 8 majors, seeking dual certification are exposed to the full range of children covered under the comprehensive special education certification, i.e., intellectually disabled, emotionally disturbed, learning disabled, traumatic brain injury, physically handicapped, autism and other disabilities, along with children within the general education classroom. The major practicum provides an intensive experience for the student in two placements over the period of 15 weeks. The student will have an experience under the direction of a special education teacher and also a placement

with a general education teacher. The practicum seminar component meets bi-weekly to provide PreK – 4 and

Special Education K – 8 majors with an opportunity to discuss current topics within the field. Students may be

provided with opportunities to demonstrate the effectiveness and functionality of their teacher-made devises, and

curriculum materials used in their classrooms.

ESP700 - Foundations of Measurement and Experimental Design in Applied Behavior Analysis

Participants learn the fundamentals of measurement, data displays, and interpretation of data for behavior change

procedures. Participants are also introduced the various experimental designs used within applied behavior

analysis. Content is drawn from the BACB Fifth Edition Task List. This course serves as one of the courses within

the series that prepares students to apply for the Board Certified Behavior Analyst exam.

ESP701 - Introduction to Behavior Analysis

The basic learning principles of operant and classical conditioning, with the application of these principles with

individuals with disabilities. Content is drawn from the BACB Fifth Edition Task List. This course serves as one of

the courses within the series that prepares students to apply for the Board Certified Behavior Analyst exam.

ESP740 - Seminar on Nature of Autism Spectrum Disorders

This introductory course provides a foundation in understanding and addressing the unique and complex

challenges individuals on the autism spectrum face in their learning, development and social experiences.

ESP741 - Communication, Behavior and Instruction: Autism

This course offers preparation in the design and delivery of communication, behavior and instructional supports for diverse learners with autism spectrum disorders (ASD) and includes data-based assessment and intervention; Applied Behavior Analysis (ABA); functional communication; Augmentative Alternative Communication (AAC); environmental supports; structured teaching; differentiated instruction; and cognitive, developmental and sensory-based approaches.

ESP742 - Life Transitions and Partnerships: ASD

This seminar is designed to offer rigorous exploration and critical analysis of contemporary issues influencing the lifelong learning, development and socio-cultural experiences of people on the autism spectrum. The course addresses core professional competencies in autism-related knowledge and practice: (1) transition, vocational and independent living; (2) sexuality; (3) family support and partnerships; (4) school and community partnerships; and (5) professional literacy and leadership.

ESP743 - Navigating the Social World: ASD

This seminar is designed to provide preparation in methods to enhance socialization, communication and imagination in diverse learners with ASD. The course merges the theoretical understanding of the "triad of impairments" as defining features of autism with practical modes of assessment and intervention.

ESP750 - Concepts, Principles, Assessment ABA

This course covers behavioral principles and procedures including the assessment and training of verbal behavior. Participants learn to identify behaviors appropriate for change using behavioral assessment, selecting behavioral outcomes, and ethical and professional issues relevant to the practice of behavioral assessment. Content is drawn from the Behavior Analysis Certification Board (BACB) Fourth Edition Task List. This course

serves as the second in a series of courses that prepares students to apply for the Board Certified Behavior Analyst exam.

ESP751 - Applied Behavior Analysis Intervention 1

Participants learn the fundamental elements of behavior change and specific behavior change procedures. Content is drawn from the Behavior Analysis Certification Board (BACB) Fourth Edition Task List. This course serves as the third in a series of courses that prepares students to apply for the Board Certified Behavior Analyst exam.

ESP752 - Applied Behavior Analysis Intervention 2

Examination of the process used to conduct a functional behavioral analysis along with designing behavior change procedures for educational purposes, and the supervision of parents and educational personnel. Content is drawn from the BACB Fifth Edition Task List. This course serves as one of the courses within the series that prepares students to apply for the Board Certified Behavior Analyst exam.

ESP753 - Professional Ethical Practice Behavior Analyst

This course prepares students for the ethical and professional practice of applied behavior analysis. Students will learn about the foundations of professional and ethical behavior needed to ensure a high quality of practice in behavior analysis. Included will be discussions of professional representation of oneself and the field of behavior analysis, dissemination of professional values, evaluating behavior change, collaborating with other professionals, and relationships with clients and colleagues. Content is drawn from the (BACB) Professional Disciplinary and Ethical Standards and the BACB Guidelines for Responsible Conduct for Behavior Analysts. This course serves as the fourth course in a series of six courses that prepares students to apply for the Board Certified Behavior Analyst exam.

ESP754 - Applied Behavior Analysis Practicum Training

The purpose of this practicum course is to ensure that each student applies clinical skills to address problem behaviors of social importance and to teach prosocial, adaptive behaviors. Student will practice under the supervision of a Board Certified Behavior Analyst.

ESP800 - Seminar in Advanced Behavior Analysis and Research Design

The Seminar in Advanced Behavior Analysis and Research Design was designed for graduate students who have completed ESP 701 (Introduction to Behavior Analysis or a similar course) and who have a thorough understanding of the principles of behavior and their application within applied educational settings. The purpose is to serve as a capstone experience in the Masters degree in mentally and physically handicapped education. In this course students will integrate professional knowledge and skills gained throughout the program and learn (1) how to design and implement action research; (2) apply and critique behavior analytic techniques in education; and (3) reflect on how best to deliver and evaluate empirically supported interventions for students with or at-risk for special needs.

FIN-Finance

FIN711 - Corporate Finance

An introduction to the role of the financial manager in executive decision-making. Topics include valuation models, financial planning, analysis and control, capital budgeting, cost of capital, capital structure, and dividend policy.

FIN721 - Investment Management

Evaluation of debt and equity security alternatives for the use of investment funds and the theory and techniques basic to control of investment risks and optimization of investment returns.

GRA-Graduate Studies Research

GRA800 - Graduate Internship

Student interns are placed with an organization, which most nearly approximates employment goals. The intent of the internship is to provide students with practical work experience in an environment in which they will be addressing real problems requiring real solutions in a relatively short time frame.

GRA810 - Special Topics in Graduate Studies

This course provides students the opportunity to explore and research graduate-level topics of interest as a capstone experience.

HRM-Human Resource Management

HRM711 - Human Resource Management

This course discusses the key role that Human Resource Management plays in determining the survival, effectiveness, and competitiveness of US businesses; it addresses how effective HR practices help companies gain market share; and how these practices support the general business strategy and provide services the customer values.

LAW-Law

LAW600 - Law and Public Policy

The cornerstone course of the graduate degree comprises this program of study. Exactly how law plays out in a multitude of settings, from political and legal institutions, to schools and educational entities, to business and free enterprise forms, in social structures and cultural institutions, should be a perpetual concern for the

policymaker. How the law impacts individuals also receives some needed attention and course participants will weigh and gauge the effects of proposed and implemented legislation in a wide array of contexts including: police and the citizenry, correctional institutions and the incarcerated, government benefit plans and targeted recipients, entitlement programs and the public treasury, tax policy and the incentive based model, charitable giving and the law?s role in fostering giving, to name a few. Measuring impacts and effects on individuals and institutions stands in the forefront of course delivery.

LAW601 - Law and Ethics

An inquiry into the interplay of law, morality, ethical reasoning and Western Legal tradition. The course exposes the tradition and foundations of the American legal system with special emphasis on its jurisprudential foundations. Questions of right, justice, equity, law as moral command and order, natural law reasoning and the dignity of the human person are central to the instruction. The course delivers a critical look at how our legal and justice institutions have come about and provides a method for dealing and delving into perennial legal and moral problems that plague cultures. Overview of the major legal theories about the nature of law and its place in the political system. Among the issues considered is the origin of law, its relationship with divine law, obligations of obedience and disobedience, and the relationship between political sovereignty and law.

LAW602 - Law, Civil Liberties and the Constitution

The place of the Constitution and Supreme Court in American policy, using both empirical and case materials is the primary purpose of this course. Focus also includes the structure and powers of national government, with special emphasis on the Supreme Court as a policy-making institution. Civil liberties and corresponding constitutional protections will be examined in depth including a close up of the Bill of Rights and Civil War Amendments. Issues of jurisdiction, search and seizure, police powers, free speech, privacy and its penumbras, state action, eminent domain, states rights, and other constitutional issues will be fully analyzed. Even more attention will be given to questions involving discrimination whether based on race, disability or gender.

LAW603 - Law and Legal Method

A review of the American legal system, including the courts and the legislatures, role and functions of its personnel, form and substance of law from a procedural and substantive perspective, and primary and secondary sources of the law. Students will be exposed to federalism, the function of law making, and dispute resolution in the judicial system. The course also surveys the processes of the judicial, legislative, and executive branches and the role of administrative agencies. Another facet of the course is dedicated to the mastery of legal method and the research tools essential to that success including: judicial reports, including federal and state court reports and citation forms; case finding aids, including federal, state and Supreme Court digests and encyclopedias; citators such as Shepard's Citations; digests; annotated law reports; legal periodicals, including periodical indexes and research procedure; the nature, function and characteristics of treatises; research procedures; state and federal administrative law; federal, state and local court rules; miscellaneous research aids and non-legal research aids. The student will also be exposed to the various types of law including crimes, civil actions, contract and business actions as well as other typologies of law. Course participants will have ample opportunity to hone and develop critical legal skills by argument, advocacy, interpretation and preparation of legal documents.

LAW605 - Law and Police Process

A comprehensive examination of the role of police as gatekeepers in the justice system with particular attention given to their role, function and responsibilities inside the legal system commences the course analysis. How police and law enforcement carry out their duties in a free society will be the subject of debate and advocacy as will the perennial issues surrounding police behavior - police misconduct, police abuse of discretion and police alienation from communities. An equally important aspect of the course will relate to the legal issues that surround police practice on a day-to-day basis. Police search and seizure, confessions and witness cooperation, identification and investigative field practices, and the law of arrest and detention will be assessed from a professional, statutory and constitutional perspective. Attention will be given to the efficacy of judicially ordered remedies in the conduct of police and whether other methods of intervention may generate better results. A

comprehensive view of litigation tactics and strategies in police misconduct cases from initial investigation to appeals, receive significant coverage.

LAW607 - Law and Criminal Conduct

A comprehensive analysis of the law of crimes from a historical, philosophical, moral and statutory perspective is the chief end of the course. Topics include criminal responsibility, criminal liability and criminal defenses. Students will be adept at understanding the roots of criminal conduct and just as capable in the analysis of criminal legislation. Aside from dissecting the fundamental elements of each crime, the participant will become learned in more than simple definition and delineation of crimes, but able to pose and advocate defense tactic as well. How constitutional and social issues interplay with criminal proscription will be central to course delivery. The course will include a study of criminal litigation process and procedure with a particular emphasis on appeal strategy.

LAW608 - Law and Civil Litigation

A comprehensive review of civil action and remedies that are part and parcel of the American legal system is the central focus of this course. Civil actions, in the law of torts and contracts, and in the arena of administrative process, impact the justice system in varied ways. From litigation to court docketing, to enforcement and fines, as well as other legal responses, civil litigation consumes the resources of the justice model. In the law of torts and damages, the civil system provides intentional causes of action, from assault to defamation, from invasion of privacy to false imprisonment, to injured parties. Negligence delivers remedies to those injured by a lack of due caution and expected behavior from the reasonable person. Covered, too, will be the principles of strict, product and vicarious liability in particular relationships such as employer/employee, parent/child or product manufacturer/consumer. Methods and issues of damage awards will be fully critiqued, as well as the current debate over reform in the law of torts, workers compensation and other no-fault claim processes.

LAW609 - Law and Society

An interdisciplinary survey of the functions of law in society is the prime end of this course. Course not only analyzes law and legal theory, as well as legal and social institutions, but also evaluates the interplay and interdependence between law and the social order it resides within. The study delivers special emphasis on issues of justice, fairness, and equality. The relationship between law and the legal system and political/economic institutions and ideologies is continually emphasized. Law and the legal systems are viewed from a critical perspective, including the relationship between the legal and the individual as to matters of inequality, race, class, and gender. Issues relating to art, free expression, religion and its practice, media, censorships, concepts of pornography and obscenity, sexual activity, association and political action will also be analyzed.

LAW610 - Law, Justice and the Family

A survey of the law of domestic relations from a statutory and common law perspective is the course's chief aim. Special emphasis will be given to the diverse controversies inherent in the law of the family including annulment, divorce, separation, and other temporary and permanent dissolution agreements. In addition, course coverage weighs and evaluates the controversies and practical difficulties inherent in the division of property, custodial and equitable dissolution awards, and the judicial oversight of parent child relationship. Other topical concerns are visitation, adoption, proof of paternity, questions of incorrigibility and delinquency, adoption, and the diverse forms of litigation tactics so often witnessed in the law of domestic relations. Contemporary dilemmas related to the family will be thoroughly scrutinized and include gay and lesbian adoption, same-sex marriage, the rights of grandparents, state's right to intrude in family life in matters of medical care and worship, and other controversial claims.

LAW700 - Law and the International Community

Course examines the major legal systems of the modern world, commencing with the West, moving to the East and some emerging third world republics. In the era of globalization, knowledge of the legal traditions and legal

systems of the world?s major powers is essential. The course scrutinizes and critiques legal systems as systems, with distinctive components, internal relations and functionalities and includes a review of their respective history, culture, and structure. The purpose of the course is to compare the rules of law in the different legal systems in an effort to discern the general principles of law, and gain insight and understanding into the emerging globalization of legal principles and ideas. Serious assessment will also be provided relative to human rights questions, definitions of ?political prisoner? and the principles defined by treaty and agreement as to the protection of individuals in a global context.

LAW701 - Law and the Administrative Process

Course exposes participants to administrative law theory and the practical aspects of administrative law practice, both within and outside the administrative agency. Coverage equips the student with the necessary skills to understand, apply, and research relevant statutory and regulatory provisions at the federal and state level; to read, interpret and draft proposed rules and regulations; to become familiar with the process known as the administrative law hearing, the concept of administrative discretion and corresponding remedies. Preliminary drafts of documents, briefs, and opinions relative to the appellate stage of an administrative law proceeding will also be covered.

LAW702 - Law, Science and Forensic Applications

An interdisciplinary course covering law, criminal justice, technology in the evidentiary arena. Coverage in the course provides a broad based assessment of expert witnesses, microanalysis, pathological evidence, admissibility and investigatory practice, ballistics, fingerprints, vascar/radar, and photographic techniques. Contrasted with criminalistics, subject matter of this course is primarily evidentiary. More particularly, course will delve into the rules of evidence that guide the admissibility of forensic evidence in a court of law. Examination includes threshold tests for reliability and admissibility, qualification of witnesses competent to testify; scientific rigor required for admission and case law determinations on the use and abuse of scientific evidence.

LAW703 - Law and the Environment

Surveys the major federal statutes and regulatory schemes relating to environmental quality and analyzes and compares the contrasting approaches to regulation that have been used in judicial settings. Focuses on the interaction of law and policy and considers the role of Congress, the regulatory agencies, and the courts in defining and implementing environmental mandates. Focused attention is given to air quality and its regulation, water and pollutants, the control and dissemination of toxic substances, management of hazardous materials, and the debate around the government's role as protector of the environment.

LAW704 - Law, Business and the Workplace

Course content includes the various business entities and the steps necessary for creation and operation, from initial and amended articles of incorporation, state filing requirements, stock certificates and securities, stock ledgers and books, resolutions, dividends and stock splits, employment agreements, as well as introducing other business forms from partnerships to limited liability corporations. In the employment sector, coverage will examine constitutional and statutory protection related to employee rights from benefits and pensions to discrimination remedies. Collective bargaining and other labor questions will be keenly assessed as well as emerging workplace questions involving maternity and family leave, wages and compensation, COBRA, free expression and religious rights and novel forms of disability claims.

LAW730 - Independent Study in Law and Public Policy

A traditional outline is not applicable since the research activity is independent and individualized. All students will be required to adhere to some uniform standards throughout the duration of the course. A minimum of five independent online meetings with the faculty mentor will be required for project discussion and advisement. Consultations involving drafts, format, style of authority and footnoting are mandatory. Finished projects will contain the traditional elements of a scholarly work, which include; cover page, table of contents, outline, and end and/or footnotes.

MAT-Mathematics

MAT601 - Advanced Data Preparation and Cleaning

This course provides students with an introduction to the need for and methods for data cleaning. The course presents methods for locating and handling invalid values, out-of-range values, and missing values along with methods for managing datasets. The course uses SAS® software.

MAT602 - Data Visualization

This course explores techniques and tools for creating effective data visualizations. The course covers the creation and exploration of visualizations for categorical data, time series data, spatial and geospatial data. SAS® software will be used for this course.

MAT603 - Advanced Big Data Tools

This course covers an introduction to big data analysis tools. The course provides an overview of SAS®, Hadoop and other big data tools. The course covers the structure and framework of data analytic tools and covers the use of these tools to perform various analyses.

MAT604 - Advanced Big Data Analytics

This course is intended to provide the student with an introduction to big data, big data analytics and several methods useful in big data analytics such as clustering, association rules and various forms of regression. SAS® statistical software will also be introduced and used to solve data problems.

MAT605 - Advanced Data Analysis Capstone Project

This course is designed for the certificate in Data Science to provide hands-on experience in the area of data science. This experience will enable students to apply their knowledge of data science and provide valuable experience in the application of methods studied within the program that should enhance their job opportunities upon graduation. Students will receive experience with real world data. Analysis will be completed using SAS®.

MAT611 - Optimization and Operations Research I

A first course of a sequence to the applied field of Operations Research. The first course starts by giving a general and broad overview of Operations Research. The course focuses on deterministic models, especially linear programming, integer programming, network optimization and non-linear programming.

MAT671 - Advanced Multivariate Statistics

Covers the basics for several multivariate statistical analyses. The course begins with a review of univariate and bivariate statistics and continues on to cover regression, multiple regression, multivariate analysis of covariance, discriminant analysis, logistic regression and survival analysis.

MAT723 - Advanced Nonparametric Statistics

This course provides an introduction to and in-depth development of nonparametric statistics. It includes the introduction of nonparametric inference testing including the Wilcoxon Test, the Mann-Whitney test, the Ansari-Bradley test, the Kruskal-Wallis test, the Kendall test and the Theil test along with their associated estimators. Students will also learn how to run analyses within a statistical software program.

MBA-Master Business Admin

MBA700 - Business Foundations

This course builds the foundation for all Cal U MBA students at the outset of the program. It is designed to refresh and/or introduce essential aspects of business management, including: economics, accounting, finance, operations management, quantitative research techniques, business law, marketing, and statistics. Throughout the course students will practice APA writing format, create research-based documents and formulate a plan for academic success within the MBA program. MBA 700 is considered the starting point for all MBA students at Cal U.

MBA710 - Quantitative Reasoning and Analysis

This course is designed to provide students with an introduction to the field of management science and a conceptual understanding of the role that quantitative methods play in the decision making process. The focus of the course is the application of the scientific method to problem solving. Whenever possible, concrete examples, real-world applications and case studies are used to practice concepts. Through the course, students will learn a number of mathematical and statistical tools that can be used by the decision maker and learn to recognize the appropriate technique for the situation.

MBA720 - Leading the Enterprise

Students in Leading the Enterprise will evaluate management from multiple perspectives. They will examine management in context in an effort to understand the ethical, legal, interpersonal, and organizational expectations placed upon today's leaders. Within the course students will evaluate different companies to determine the leadership style that would be best suited for success. Additionally, students will look at contemporary organizations for examples of leadership success and failure. A critical component of the course is the ability to communicate strategies as well as execute change successfully.

MBA730 - Managerial Decision Making

This course aims to improve the student's decision-making ability by addressing common biases and inferential errors. Students will be challenged to consider the various components of decision-making, such as the inputs of analysis, appropriate decision-making frameworks (from numerous disciplines) and how the outputs of analysis should guide the enterprise. Students should expect to leave the course, not with a set of "cookbook" solutions to problems, but with a set of new, powerful ways of thinking about business problems and their solutions.

MBA740 - Business Government and Society

This integrative MBA core course examines the social, political, economic and regulatory environments surrounding business today. Today's global marketplace is more competitive, more culturally and politically diverse, and more dynamic than ever before. Future business leaders will need to be able to navigate the economic and ethical demands of government and society. The course will introduce the concepts of globalization, sustainability and corporate social responsibility along with tools to help organizational managers address many of the challenging issues facing our society.

MBA750 - MBA Capstone

The capstone is the final course taken by all MBA students. The purpose of this course is to evaluate student achievement throughout their program. Utilizing a combination of simulations, case studies, literature reviews, business and development plans, students will verify that they are adequately prepared to lead today's organizations with excellence. Students will be tasked with simulated leadership experiences to allow them to make ethical decisions regarding organizational strategy.

MBA790 - Special Topics in Business

This is a topics course and, as such, the outline of the course will vary considerably, depending on the instructor leading the course and the topic being covered. However, all programs will include a combination of learning experiences for students, including the transmission of information via lectures and opportunities to practice the information learned through a variety of activities, and the opportunity for students to participate in an original research project.

MBA795 - Internship

This is an elective course in the Master of Business Administration program. Internships are intended to provide students academic credit for experiential learning where the focus in on applying skills learned through the MBA coursework to real-world situations.

MGT-Management

MGT710 - Leadership Dynamics

The leadership course tasks students with examining leadership within different organizational contexts. Additionally, students will be asked to examine organizational scenarios that require leadership intervention. This examination includes the ability to identify both good and bad leadership behaviors and explain why. As a

component of the course students will also write a personal development plan outlining their professional and personal goals.

MGT720 - Leveraging Diversity

The impact of globalization on all areas of management cannot be overstated and should not be ignored. This course tasks students with examining the cultural impact of a global workforce. Students will be given the tools to ethically utilize diversity to the benefit of the company and its strategies. As a part of this study, students will evaluate how power is an important dynamic when executing human resource strategy.

MGT720 - Leveraging Diversity

The impact of globalization on all areas of management cannot be overstated and should not be ignored. This course tasks students with examining the cultural impact of a global workforce. Students will be given the tools to ethically utilize diversity to the benefit of the company and its strategies. As a part of this study, students will evaluate how power is an important dynamic when executing human resource strategy.

MGT721 - Production and Operations Management

This graduate course addresses topics of management related to the production of goods and the management of service organizations. Students taking this course will apply quantitative techniques to cases and to settings requiring evaluation, assessment, and quantification. Inventory, space, capital, labor, technology and related values will be included in specific calculations.

MGT730 - Organizational Problem Solving

Issues are unavoidable in leadership. To address this fact, students will evaluate situations when research is necessary in order to support the decision making process. In so doing, students will compare different

approaches to management research in an effort to identify solutions that are applicable in given scenarios. The course will show students why research is a critical skill for leaders during the problem solving process.

MGT740 - Managing Projects

Well-managed projects help organizations get results and meet goals on time and within budget, so it is no wonder that project management skills are in high demand. The course provides students with tools and techniques to differentiate among levels of complexity in projects and interconnect the activities needed to bring projects to successful completion. Students will refine their skills in practical project applications.

MGT751 - International Business Management

This is a graduate course designed to address global trade and to allow students to explore the global business world. Student are provided with information about trading and how global shipping organizations move tons of cargo globally with little cost. Foreign exchange is addressed as a changing model and students are taught to calculate changing values, and apply that to export and import increases and decreases. Students measure the effects of culture, unemployment, cultural practices, quantity differences, and the effects of metric differences on shipments and packaging.

MGT761 - Healthcare Policy

This course is designed to provide students with an overview of U.S. healthcare system, various organizations institutions that make the U.S. Health care system work, its components, and the policy challenges. The course will cover the Health Care Costs, history and financing of Medicare, and Medicaid. The role of government in U.S. Healthcare and status and implementation of Affordable Care Act at the state and federal levels will be discussed.

MGT763 - Health Systems Management

This course is designed to provide students with an understanding of the conceptual foundations and practices of management in healthcare organizations. The course analyzes theories, strategies and systems of managing healthcare organizations. Various tools of planning and control, such as budget preparation and justification, training design, and labor union contracts will be explained. An analysis of administrative practices and procedures in healthcare organizations will be covered. The course will explore the continuous process improvement and healthcare quality management.

MGT766 - Healthcare Information Systems

This course describes the historical and current environment of healthcare information systems used to deliver cost-effective and high quality healthcare through a deeper understanding of information technology and management concepts. It concentrates on the theories behind data management, strategic planning, knowledge management, change management, decision support coupled with privacy and ethical aspects related to healthcare informatics and clinical information systems.

MIS-Management Info Systems

MIS720 - Business Analytics for Big Data

This course will help students understand the current and emerging trends and practices for working with big data and large-scale database systems used throughout business and social networking services. Information is growing exponentially growing and analyzing these data needs new methods and processes. Business decision making is highly data intensive and require heavy read/write workloads. Topics in this course will cover understanding big data, storing and transforming this data, and technologies used to analyze these datasets.

MIS730 - Decision Support Systems

This course will discuss Decision Support Systems (DSS) used in business and the theory behind different DSS techniques, enabling students to understand today's competitive business environment. Students will learn modeling, decision processes, data mining, expert systems, and executive information systems used in organizations to support datadriven business decisions. Additionally, students will be provided with the needed skills and knowledge of various decision-making models based on logical and mathematical models under different circumstances like uncertainty, lack of information, or certainty. As an outcome, students will be able to discuss the design, development, and operation of decision support systems allowing them to apply and integrate their knowledge into the business environment aiding management in better decision making.

MIS766 - Healthcare Informatics

This course describes the historical and current environment of healthcare information systems used to deliver cost-effective and high-quality healthcare through a deeper understanding of information technology and management concepts. It concentrates on the theories behind data management, strategic planning, knowledge management, change management, decision support coupled with privacy and ethical aspects related to healthcare informatics and clinical information systems.

MKT-Marketing

MKT711 - Marketing Management

This course focuses on the description and analysis of the nature, strategies, and techniques used in marketing management. These tasks are undertaken in most companies at the strategic business unit level. The marketing management process is important at all levels of the organization, regardless of the title applied to the activity. Typically, it is called corporate marketing, strategic marketing, or marketing management. The course provides students with a systematic framework for understanding marketing management and strategy. The course

emphasizes primary and changing perspective on marketing management in leading companies, the impact of interactive media on marketing management, and international focus in developing marketing management and strategy, and the interrelationships among critical elements of the marketing mix, advertising mix, and the internal and external environmental factors impacting the firm.

MKT741 - International Marketing

The course is designed to introduce students to role of international marketing in the global economy. Students are exposed to the dynamic environment of International Trade and various opportunities and challenges faced by those who are involved with international marketing. Topics cover the cultural environment of global markets, assessment of global market opportunities and marketing strategies to deal with these global market challenges.

MSE-Master of Arts Teaching

MSE641 - Orientation to 7-12 Education

A course for prospective teachers designed to begin their professional development. Different instructional activities will allow the student to become proficient in the theories of modern secondary education instructional development, basic history and philosophy of secondary education, and pedagogy in general.

MSE642 - Standards-Based Instruction in 7-12 Education

The Pennsylvania Standards Aligned System (SAS) is a collaborative product of research and good practice that identifies six distinct elements which, if utilized together, will provide schools and districts a common framework for continuous school and district enhancement and improvement. There are many intangible components; however, research supports the notion that great schools and school systems tend to have six common elements that ensure Student Achievement: Clear Standards, Fair Assessments, Curriculum Framework, Instruction, Materials & Resources, and Interventions.

MSE643 - Content Area Literacy in 7-12 Education

The purpose of this course is to help the prospective teachers of the secondary education academic subject areas develop an understanding and appreciation of the necessary reading skills needed by their students. Methods of establishing awareness of general reading needs as well as the special skills unique to their subject area will be stressed.

MSE644 - Instructional Strategies in 7-12 Education

This course is for prospective teachers designed to begin their professional development. Different instructional activities will allow the student to become proficient in the the theories of modern secondary education instructional development, basic history and philosophy of secondary education and of pedagogy in general. Students will participate in observation at selected field sites, grades 7-12. Students will begin development of their professional portfolio.

MSE645 - Technology Integration in 7-12 Education

The purpose of this course is to help the teacher candidates learn how to effectively analyze, select, and integrate current educational technologies into the design, implementation and assessment of learning experiences to engage a diverse student population.

MSE646 - Assessments and Inverventions in 7-12

Part of this course is designed to provide insight into the design, implementation, and analysis of assessment instruments used in 7-12 education. The second part of this course is to allow the secondary education candidate to become aware of, and to gain experience in, the contemporary interventions that teachers use to prevent, minimize, or eliminate negative behaviors in the classroom.

MSE647 - Classroom Management in 7-12 Education

This course will allow the Master of Arts teaching, track I major to explore different methods of classroom management, from the physical set-up of the classroom, classroom rules and procedures for secondary education to dealing with problem students in the classroom.

MSE651 - Methods of English Teaching 7-12

This course is designed to provide insight into the teaching of general English, writing, literature, public speaking, communication, media and theater in grades 7 through 12. Students become aware of and use the resources and methods of instruction for teaching English at the secondary level.

MSE652 - Methods of Mathematics Teaching 7-12

This course is designed to provide insight into the teaching of general mathematics, algebra, geometry, probability, and statistics in grades 7 through 12. Students become aware of and use the resources and methods of instruction for teaching mathematics at the secondary level.

MSE653 - Methods of Science Teaching 7-12

This course is designed to provide insight into the teaching of Biology, Chemistry, Earth and Space Science, and Physics in grades 7 through 12. Students become aware of and use the resources and methods of instruction for teaching science at the secondary level.

MSE654 - Methods of Social Studies Teaching 7-12

This course is designed to provide insight into the teaching of general social studies, history, political science, geography, economics, anthropology, psychology, and world cultures in grades 7 through 12. Students become aware of and use the resources and methods of instruction for teaching social studies at the secondary level.

MSE655 - Methods of Art Teaching K-12

This course is designed to provide insight into the teaching of general art, art history, ceramics, crafts, drawing, painting, and printmaking in grades 7 through 12. Students become aware of and use the resources and methods of instruction for teaching art at the secondary level.

MSE656 - Methods of Foreign Language Teaching 7-12

This course is designed to provide insight into the teaching of foreign language in grades 7 through 12. Students become aware of and use the resources and methods of instruction for teaching languages and cultures at the secondary level.

MSE657 - Methods of Technology and Computer Science Teaching

This course is designed to provide insight into the teaching of technology education and computer science for students in K-12 schools. Students become aware of and use the resources and methods of instruction related to their subject area.

MSE661 - Student Teaching and School Law

This is the final and most extensive clinical experience. Students are assigned to a supervising teacher or teaching team at one of our clinical sites. The students spend full time in classroom teaching for a semester of fifteen weeks.

MSE720 - Advanced Standards-Aligned Instruction 7-12

This course focuses on planning instructional units and lessons that are aligned with state standards. Using the Standards Aligned System (SAS), teachers will develop a thorough understanding of curriculum planning and the

importance of diagnostic and formative assessment. All aspects of the SAS: Clear Standards, Fair Assessments, Curriculum Framework, Instruction, Materials & Resources, and Interventions will be utilized to provide a common framework for the design of instruction and assessment.

MSE740 - Advanced Instructional Technology

This course will prepare the learner to integrate technology into instructional practices through development of skills, knowledge and dispositions. The course focuses an exploration of research, trends, tools, and models of integration. Through active participation, the learner will learn new technologies as well as develop instructional modules for classroom integration.

MSE745 - Managing Learning Environments

This course will explore ways that effective teachers establish productive learning environments as well as the research that demonstrates the different methods of classroom management, from the physical set-up of the classroom, classroom rules and procedures for secondary education to dealing with problem students in your classroom.

MSE750 - Strategies in Teaching Online

The course provides a model of online instruction and the participants will practice online teaching strategies, course design, and assessment strategies. The course is recommended for educators who are or will be teaching online courses. The course introduces strategies and tips in designing and teaching an online course.

MSE755 - Constructivist Instructional Strategies

This course emphasizes strategies that engage students in active inquiry, collaboration with peers and acquiring and using tools of learning in an experiential learning environment. The approach of the course is experiential, inquiry-oriented and reflective.

MSE760 - Reflective Practitioner

This course provides guidelines for teachers to continually engage in the cycle of review and adjustment for the purpose of professional growth and improvement of instruction. Students will develop a research paper or a reflective analysis of their teaching using National Board Standards.

MSE761 - Assessment

This course examines the role that assessment plays in the instruction of students in both a traditional and an eLearning environment. The characteristics and uses of both formal and informal assessment instruments and procedures will be studied with an emphasis on the eLearning environment. Student Learning Objectives and how they are aligned with teacher evaluation is discussed. Students will create assessment instruments for traditional and eLearning environments.

MSE766 - Instructional Design

This course develops knowledge of instructional design competencies appropriate for use in the development of traditional and eLearning applications. Students will experience both theory and best practices from the areas of education and training. Students will explore and acquire instructional design skills and knowledge associated with identification methodologies, learner analysis, task analysis, instructional objectives, teaching strategies and instructional evaluation.

MSE771 - Strategies for Inclusive Classrooms in 7-12

This course focuses on instructional strategies for the inclusive classroom. Teachers will develop a thorough understanding of differentiation and instructional techniques used to maximize learning for all students. It will address research-proven strategies to help special learners and to manage the inclusive classroom. Teachers will use assessment to identify students' needs, plan differentiated instruction, and assess student achievement.

NUR-Nursing

NUR601 - Theory and Research in Nursing

This course explores the relationships between theory, nursing research, and nursing practice. The use of theory and research in the construction of a scientific knowledge base for nursing practice will be examined. Emphasis will be on the importance of research as a process for developing and examining practice-based questions, and evidence- based practice. The research process, with emphasis on the logic and processes of inquiry, design, data collection and analysis, and the interpretation, dissemination, and application of findings appropriate to nursing practice, will be reviewed. A critical analysis of nursing research and the methodological approaches utilized in the practice of nursing administration and leadership in health care will be conducted. Students will develop proposals for individual or group research projects relevant to their areas of interest.

NUR602 - Health Policy in Nursing

This course is intended to familiarize graduate nursing students with current healthcare policy and the roles and responsibilities, processes and strategies, which create and support policy-based initiatives in healthcare today, and the impact of policy on health care. Students will apply the concepts gained in this course in advocacy and leadership roles in search of creative solutions to pervasive issues in health care to culturally diverse populations.

NUR603 - Information Systems for Nurses in Health Care Organizations

This course is designed to introduce students to information systems in health care organizations. Students will examine, evaluate, and utilize a variety of information systems available to the nurse administrator and leader in health care organizations. Use of information systems, standardized databases, and statistics needed for population analysis is presented. During the course, students will compare and interact with information management applications related to administration, education, practice and research. Multimedia technology and software will be used for projects related to the student's area of interest.

NUR604 - Population Health Promotion and Disease Prevention

This course explores the role of the master's-prepared nurse in integrating broad scientific, client-centered and culturally appropriate concepts in the planning, delivery and evaluation of evidence-based health promotion and prevention services and care to individuals, families, aggregates/identified populations and global communities. Models and principles from a wide variety of sources and disciplines are examined to assist students in the exploration and evaluation of existing programs and services and in proposing new interventions and strategies to meet identified needs.

NUR711 - Nursing Organization and Leadership Theory

This course is designed to provide nurse administrators and leaders with an understanding of organization, management, and leadership theories as they apply to today's healthcare delivery systems. In addition students will explore leadership skills and decision making in the provision of culturally responsive, high-quality nursing care, healthcare team coordination, and oversight and accountability for care delivery and outcomes. Students will demonstrate the ability to develop a strategic plan and incorporate a collaborative team.

NUR712 - Nursing Administration & Leadership Role

This nursing administration and leadership specialty course focuses on health care knowledge and transformational leadership skills and competencies essential to the role development of nurse leaders and administrators for the 21st century. Students discover how to develop high-performance practice areas and how the leadership role is advanced through mentorship and career development. Contemporary studies and models for leadership competency are explored, and students critically self-assess their own competence, developing action plans in those areas they perceive as deficient. The role of managing one's personal resources in developing leadership competency is addressed. Students also gain competence in managing human resources. Concepts, models and principles of continuous quality improvement, tools and techniques for improving quality

and performance are broadened. Students identify a quality topic and plan in preparation for completing the practicum project in NUR 813.

NUR714 - Legal Aspects of Health Care Administration

This course includes an introduction to the laws, regulations and court decisions covering the employment relationship, including labor-management relations, OSHA, EEOC, ERISA, ADA, etc. Health care law and an overview of practical ways to improve the quality and safe delivery of nursing care in health care organizations will also be reviewed. This course explores the most pressing legal and ethical issues and concerns related to the delivery of patient care and the administration of nursing services. This course is structured to present theories of ethical practice, as well as issues of the law related to health care delivery.

NUR715 - Financial Management in Non-Profit Healthcare Organizations

This course is intended to prepare the student to effectively interact with financial management staff and participate in various aspects of financial control and planning. Included will be a historical perspective of financial management in health care, identifying trends in the industry and the forces that influence the financing of health care organizations. Financial statements, the interpretation and analysis of financial reports, and topics such as cost-benefit analysis, budgeting and capital management will also be addressed. Consideration will be given to the cost effectiveness and financial future of healthcare organizations.

NUR721 - Foundations of Nursing Education

This course provides students with underlying content and information essential in the development, implementation, and evaluation of education programs, curricula and courses within academic and healthcare agency settings. The roles and competencies of nurse educators are reviewed and theoretical foundations education, teaching and learning are examined. Learning environments for nursing education are compared

specific to achieving learning outcomes. Diversity of student learning needs are discussed and creating an inclusive learning environment is addressed. Legal and ethical issues with respect to both the educator and student implications are identified. Facilitating the teaching/learning process for students with disabilities are identified. The models, principles, and products specific to healthcare financing are examined including associated influences on contemporary healthcare delivery.

NUR722 - Curriculum Design in Nursing Education

This course provides students with essential knowledge and experiences in designing and developing nursing education curricula and courses. Students will examine forces, trends, issues, and factors affecting curricular decisions. Curricula models applicable to academic and healthcare organizational settings are presented. The integration of interprofessional education and collaborative practice in designing curriculum is discussed. Organizing frameworks and components of curricular design are analyzed with student development of a nursing education curriculum applicable to either an academic or healthcare organization setting.

NUR723 - Teaching and Instructional Strategies in Nursing Education

This course provides students with essential knowledge and experiences in designing and developing teaching and instructional strategies applicable in the academic and healthcare organization settings. Promotion of the learner as an engaged and active participant in the learning process is threaded throughout the content and creating an inclusive learning environment is emphasized. The roles and application of simulation, digital technology, distance and online learning in choosing and developing instructional strategies is examined. Students will develop instructional strategies from their course development project completed in NUR 722 Curriculum Development.

NUR724 - Assessment and Evaluation Methods in Nursing Education

This course is designed to provide students with essential knowledge and skills in developing, implementing, and evaluating assessment and evaluation tools commonly utilized in nursing education including interpretation and analysis of results. Students will explore measurement tools for evaluation of learning in the cognitive, affective, and psychomotor domains for both the classroom and clinical learning environments. The use of rubrics in evaluating learning outcomes is emphasized. Clinical evaluation methods are explored including the use of simulation. Issues related to testing and evaluation in nursing education are examined. Students will develop evaluation tool(s) from their course development project from NUR 722 Curriculum Development.

NUR725 - Advanced Clinical Practice for Nurse Educators

Building on prior education and clinical area of practice, this course will provide students with opportunities to develop advanced clinical knowledge and clinical proficiency within his/her specialty area of clinical practice. By integrating knowledge of pathophysiology to manifestations of disease/illness and pharmacologic management of patients, students will apply clinical inquiry through the processes of clinical judgement and diagnostic reasoning to develop expertise within their nursing practice specialty. Through the use of case studies and clinical practice experiences, students will develop comprehensive health databases, differentiate patient acute/chronic conditions, design evidence-based plans of care, evaluate healthcare outcomes, and plan health teaching for identified health issues.

NUR813 - Nursing Administration Role Practicum

This course provides students with the opportunity to synthesize and apply their understanding of nursing administration and leadership within and across complex integrated organizational and institutional boundaries. In this culminating experience, students plan, execute, and evaluate nursing practice within the context of the practice setting(s) or among a specific population of interest within the organization or in communities. Within

the practice situation, students enact leadership roles to expand, enhance, and optimize positive outcomes. The learning experience consists of an administrative practicum and online seminars. This culminating experience of the graduate program is designed to provide students with an opportunity to apply the knowledge and competencies acquired throughout the program of study to actual and simulated practicum situations.

NUR814 - Nursing Administration Role Practicum

This course provides students with the opportunity to synthesize and apply their understanding of nursing administration and leadership within and across complex integrated organizational and institutional boundaries. In this culminating experience, students plan, execute, and evaluate nursing practice within the context of the practice setting(s) or among a specific population of interest within the organization or in communities. Within the practice situation, students enact leadership roles to expand, enhance, and optimize positive outcomes. The learning experience consists of an administrative practicum and online seminars. This culminating experience of the graduate program is designed to provide students with an opportunity to apply the knowledge and competencies acquired throughout the program of study to actual and simulated practicum situations.

NUR823 - Nursing Education Role Practicum

This course provides students with the opportunity to synthesize and apply the role of a nurse educator within an academic setting or healthcare agency. The course consists of online seminars and a 150-hour education practicum. Under the guidance of course faculty and a designated preceptor, students "immerse" themselves in the nurse educator role which includes planning, implementing, and evaluating an education activity.

PCJ-Prof Studies Crim Justice

PCJ747 - Financial Investigations

This course introduces the student to current perspectives dominant in the field of financial investigations. Concepts of law and evidence, sources of information, accounting, methods of tracing funds, banking and financial record keeping, and interviewing tactics will all be covered. Primary emphasis will be placed on legal principles and applications of financial investigation techniques, and the pertinent crimes.

PCJ748 - Criminal Justice Organization and Management

This course is the study of command-level problems and trends in criminal justice organizations and management. These include the functional concepts of the administrative process as well as the principles of organizing, controlling, planning and leadership relating to criminal justice agencies.

PCJ749 - Seminar in Criminal Justice

This course for advanced graduate students allows the opportunity for scholarly research in a specific topic relevant to the justice system. The course is a seminar because it offers students the chance to interact in small groups and meet closely with the instructor. A focused, esoteric examination of a specifically approved research topic is the course's chief purpose.

PCJ750 - Sexual Assault Investigations

The investigation of sexual offenses requires both the humanity of the investigator and the technical expertise of those remaining at the crime scene. How the forensic sciences play out in these forms of investigation is crucial to course purpose and content. How evidence is collected, identified and processed, as well as its suitability for use in the field, and its subsequent admissibility into court, are central themes throughout the course. Students

are also exposed to case law and statutory materials dealing with sexual offenses and actual case studies for application and critique.

PCJ751 - Executive Protection and the Law

This course develops an understanding of the principles, planning, tactics and techniques used in executive protection (EP). This course will teach students fundamentals of EP, such as advance site survey development, protective formations and protective threat assessments. This work provides students with the tools they need to know and appreciate the profession. Students learn what to expect when they are in positions of confidence and trust. Students also examine the full implications of being responsible for the safety and lives of others. The course emphasizes the basic elements of EP and its practical application.

PCJ752 - Forensic Photography, Digital Imaging and the Law

This course will improve the student's knowledge and skill in relation to the use of digital imaging to both document and provide evidence. This will include education of digital imaging and its close relationship to forensic photography as well as familiarization with the operation of associated equipment. The student will examine the role of digital imaging as applied to photography from the crime scene, lab, or otherwise located materials of an evidentiary nature. In addition, the student will study the techniques used in digital imaging to achieve the desired results and in order to better understand how and why it is applied This course will include in depth studies of landmark cases associated with digital imaging to explore not just the theory but also the application of this technology in the legal arena. The student will also study the legal aspects and the process from the crime scene to the courtroom to include the presentation of photos and testimony of the photographer/ technician.

PCJ755 - Polygraph and Lie Detection

Polygraph testing is used for three main purposes: event-specific investigations (e.g., after a crime), employee screening and pre-employment screening. This course explores the different uses involved in the search for different kinds of information. This exploration includes how the polygraph measures several physiological processes (e.g., heart rate) and changes in those processes. It also includes examination of the charts of those measures in response to questions on a polygraph test. This course focuses mainly on validity because a test that is reliable (i.e., produces consistent outcomes) has little use unless it is also valid (i.e., measures what it is supposed to measure). It evaluates available scientific evidence on polygraph test validity coming from studies of specific-event investigations.

PRF-Perf Enhance Injury Prev

PRF700 - Orientation to Exercise Science and Health Promotion

This course is designed to provide an overview of online learning and the graduate program in Exercise Science and Health Promotion. Discussion will include various exercise science and health promotion models. The course will also introduce the student to various types and styles of learning via online education, and will orient the student to feature used in online courses.

PRF701 - Advanced Topics in SAQ and Endurance Training

This course will provide students with advanced knowledge regarding the topics of speed, agility, and quickness (SAQ) and endurance training. Students will be prepared for the Speed and Explosion Specialist Certification offered by the National Association of Speed and Explosion (NASE). Advanced topics of training will be explored, including body mechanics, sports training protocols and program design. Detailed sport performance training programs, focused on SAQ and endurance, will be covered.

PRF704 - Golf Performance Training

Golf fitness professionals have to be able to reduce the risk of injury, improve player performance, and create a higher quality of life for the diverse population that participates in golf. This requires the golf performance professional to understand and identify shortfalls in mobility, stability, strength, balance, flexibility, mental approaches and golf swing mechanics to best help clients. This course provides the evidence-based theory that can be applied during the Golf Performance Training Program Design course.

PRF705 - Industrial, Clinical, & Corporate Wellness

This course is designed to develop knowledge and awareness of the major issues in the field of work site health promotion and clinical care. The focus of the course is on planning, administering and evaluating wellness and fitness programs based in clinical, industrial and corporate environments. The cost of unhealthy lifestyle choices for the individual and employer and their relationship to the workplace will be explored. Topics include "The Wellness Revolution," "The Industrial Athlete Model," benchmark programs and outcomes assessment strategies.

PRF710 - Performance Enhancement and Physical Activity

This course offers a comprehensive discussion of functional anatomy, functional biomechanics and motor learning as they relate to functional rehabilitation and athletic reconditioning. The student will be introduced to integrated, functional rehabilitation techniques, including core stabilization, neuromuscular stabilization, reactive

neuromuscular stabilization, integrated flexibility, integrated strength, speed training, foot training and vision training. The student will also be taught a comprehensive kinetic chain assessment to determine myokinematic, arthrokinematic and neuromuscular deficits. After completing this course and Performance Enhancement Program Design, students will be eligible to sit for the National Academy of Sports Medicine (NASM) examination for Performance Enhancement Specialist certification.

PRF711 - Integrated Approach to Wellness & Fitness

This course will introduce the revolutionary exercise programming strategies of the Optimum Performance Training model. The student will receive detailed insight into designing exercise programs for any personal training client. Students will be shown how this systematic approach to program design uniquely blends the science of acute variables with the concepts of flexibility, core stabilization, balance, reactive training, speed, agility and quickness, and strength training to develop safe and effective exercise programs for all individuals. After completing this course and Program Design in Fitness and Wellness, students will be eligible to sit for the National Academy of Sports Medicine (NASM) examination for Certified Personal Trainer certification.

PRF712 - Corrective Exercise in Rehabilitation

This course will introduce the student to corrective exercise theory based on the pathokinesiological model. The student will be introduced to a systematic evaluation approach based on the pathokinesiological model. The pathokinesiological model will examine human movement systems in regard to key regions of the human body. These regions will be recognized as potential sites for integrated corrective exercise programs.

PRF713 - Special Topics in Sport Psychology

This course is designed to cover a diverse range of professional issues related to sport psychology. Various organizations (Division 47 of the American Psychological Association and the Association for the Advancement of Applied Sport Psychology) affiliated with sport psychology and ethical concerns will be addressed.

PRF714 - Health and Wellness Coaching Competencies

Students will learn to help health and wellness coaching clients develop the mindsets needed to navigate the difficult path of changing lifestyles for good. Students will utilize evidence-based coaching competencies, grounded in the science of positive psychology, to help people make lasting improvements to their health and well-being.

PRF715 - Business & Entrepreneurship in the Fitness Industry

This course offers a comprehensive discussion of the practical aspects of starting and running a business in performance enhancement and fitness. The course focuses on launching new ventures, as well as business and management practices for individuals who are already in business but want to learn how to improve their operations. Specific topics include management theory, financial management, personnel management, record keeping, risk management and technology issues.

PRF716 - Advanced Techniques in Human Movement and Recovery

The purpose of this course is to explore theory and application of assessments, corrective exercise, and physical and physiological recovery strategies in the prevention or reduction of musculoskeletal injuries. Emphasis will be placed on system-based solutions that promote optimal human movement, performance, recovery, and readiness. Scientific evidence supporting design and implementation of musculoskeletal injury prevention programs are discussed.

PRF717 - Strength and HIIT Training in Group Fitness Exercise

This course will introduce a scientific approach to group exercise, specifically focused on strength and High Intensity Interval Training (HIIT) programs. The student will receive detailed insight into the concepts, principles, and procedures necessary to understand and implement strength and HIIT group exercise classes for all populations.

PRF718 - Health Behavior Change in Nutrition Education

This course examines health behavior change theories and practices utilized to facilitate healthful behavior change in a variety of nutrition-related settings. The design and evaluation of behavior change counseling and program development will also be explored.

PRF719 - Advanced Techniques in Tactical Strength and Conditioning

Tactical careers involve extreme challenges that differ from the more controlled setting of sport. This course discusses unique tactical job demands and the strength and conditioning coach's role in preparing tactical athletes to effectively mitigate them. The student will learn how to operate within a high performance team of professionals to generate holistic training solutions that optimize bio-mechanics and metabolic processes to provide a better physical platform on which to proficiently demonstrate tactical specific skills. This course provides the student with the evidence-based theory that can subsequently be applied during the Program Design for Tactical Strength and Conditioning course.

PRF720 - Essentials of Human Movement Science

This course will introduce a scientific approach to the essentials of human movement science. The student will receive a detailed insight into the independent and interdependent function of the muscular, articular and nervous

systems during human force production, stabilization and force reduction. The course will also introduce the student to various types and styles of learning via web-based technologies, and will orient the student to web based methods of learning. This course is a dually listed course applicable to the Master of Science, Exercise Science and Health Promotion, and to the Doctor of Health Science, Health Science and Exercise Leadership, within the department of Exercise Science and Sport Studies.

PRF750 - Performance Enhancement Program Design

This course requires the student to integrate knowledge learned from the course Performance Enhancement in Physical Activity with professional experience and prior learning in fitness and rehabilitation. Students will work in teams to prepare performance enhancement program proposals, including program elements, rationale, innovative design and supporting research. Each week, cohort members will professionally analyze and critique new proposals, resulting in high-level discussion and exchange. After completing this course and Performance Enhancement in Physical Activity, students will be eligible to sit for the National Academy of Sports Medicine (NASM) examination for Performance Enhancement Specialist certification.

PRF751 - Program Design in Wellness & Fitness

This course will introduce the revolutionary exercise programming strategies of the Optimum Performance Training model specifically for the fitness and wellness professional. Students will receive detailed insight into designing exercise programs for any personal training client. They will be shown how this systematic approach to program design uniquely blends the science of acute variables with the concepts of flexibility, core stabilization, balance, reactive training, speed, agility and quickness, and strength training to develop safe and effective exercise programs for all individuals.

PRF752 - Corrective Exercise Program Design

This course will introduce corrective exercise strategies based on loss of function. The student will receive detailed insight into the design of corrective exercise programs. The systematic approach of an integrated corrective exercise design uniquely blends the variables of available flexibility, isolated and integrated corrective strengthening, and corrective exercise design to provide the student with the necessary foundation in designing and developing safe corrective exercise programs.

PRF753 - Psychological Aspects of Sport Injury and Rehabilitation

This course is designed to introduce students to various topics related to the psychological aspects of sport injury. The course focuses on the onset (precursors), experience and treatment of athletic injuries from a biopsychosocial perspective. Course material is based on empirical data and psychophysiology foundation and the role of psychological factors and psychological interventions, which influence rehabilitation and recovery.

PRF754 - Health and Wellness Coaching: Facilitating Change

Expanding on the concepts from PRF-714, "Health and Wellness Coaching Competencies ", students will identify the health and wellness coaching practices that influence long-lasting behavior change. Combine the tools and processes necessary to prepare to become a Certified Health and Wellness Coach and make an impact on the toughest challenges of our times: the epidemics of obesity, sedentary lifestyles, stress, depression, poor nutrition, and ever-rising healthcare costs.

PRF756 - Program Design for Optimizing Human Movement and Recovery

The purpose of this course is to provide an in-depth exploration and application of assessment data and analytics to assist practitioners in the design and implementation of programs focused on improving common human movement impairments, reducing injury-risk, optimizing performance, and enhancing physical and physiological recovery. Emphasis will be placed on system- and technology-based solutions that promote optimal human movement, performance, recovery, and readiness. Scientific evidence supporting design and implementation of musculoskeletal injury reduction programs are discussed.

PRF757 - Cardiovascular and Flexibility Training in Group Fitness Exercise

This course will introduce a scientific approach to group exercise focusing on cardiovascular and flexibility training programs. The student will receive a detailed insight into the concepts, principles, and procedures necessary to understand and implement cardiovascular and flexibility group exercise classes for all populations.

PRF758 - Applied Principles of Human Nutrition

This course covers the basic concepts physiological components and science of human nutrition. Dietary requirements and recommendations, nutrient composition of foods, assessment of nutritional status, physical activity, and relationship of human nutrition to health and disease prevention will be covered.

PRF759 - Program Design for Tactical Strength and Conditioning

This course provides a systematic approach to designing effective strength and conditioning programs for the tactical professional. The student will assess and analyze job demands and athlete capabilities from a bio-mechanical and metabolic perspective. The student will utilize the results of these analyses in conjunction

with principles of strength and conditioning to guide the design of a safe and effective training program. The student will scale and adapt idealistic programs to realistic constraints encountered within the tactical training environment.

PRF760 - Leadership and Professional Development

This course is intended to prepare students for the leadership decisions and actions that are inherent in practice as well as every-day life issues. Professional and personal growth are discussed at great length and principles and applications of personal leadership practices will be explored in depth. Techniques for managing change and empowering others also are included in this course. Topics related to effective leadership are issues of communication, motivation, delegation, team building, and quality improvement. Finally, students will have the opportunity to perform a SWOT analysis on their business or self (whichever is applicable). This culminating activity is designed to strengthen the students' leadership abilities and skills.

PRF765 - Nutrition for Peak Performance

An in-depth examination of contemporary issues such as performance enhancement dietary supplements, dietary lipids and heart disease, dietary fiber and health, influence of lifestyle factors on nutrition. Controversies in nutrition, ergogenic aides, hydration, and eating disorders are also discussed. Energy and nutrient needs for activity with emphasis on particular physical and athletic activities; common myths and fallacies concerning diet and athletic performance; and appropriate dietary approaches for specific activities and active people. This course is a dually listed course applicable to the Master of Science, Exercise Science and Health Promotion, and to the Doctor of Health Science, Health Science and Exercise Leadership, within the department of Exercise Science and Sport Studies.

PRF765 - Nutrition for Peak Performance

An in-depth examination of contemporary issues such as performance enhancement dietary supplements, dietary lipids and heart disease, dietary fiber and health, influence of lifestyle factors on nutrition. Controversies in nutrition, ergogenic aides, hydration, and eating disorders are also discussed. Energy and nutrient needs for activity with emphasis on particular physical and athletic activities; common myths and fallacies concerning diet and athletic performance; and appropriate dietary approaches for specific activities and active people. This course is a dually listed course applicable to the Master of Science, Exercise Science and Health Promotion, and to the Doctor of Health Science, Health Science and Exercise Leadership, within the department of Exercise Science and Sport Studies.

PRF770 - Exercise Physiology: Assessment and Exercise Prescription

This course offers a comprehensive discussion of the knowledge, skills, and abilities needed for American College of Sports Medicine certifications and current clinical practices in sports medicine. Emphasis will be placed on the value and application of exercise testing and prescription in persons with and without chronic disease. Special topics to be addressed include, exercise prescription in children, the elderly, pulmonary patients, cardiac patients, and pregnant women. This course is a dually listed course applicable to the Master of Science, Exercise Science and Health Promotion, and to the Doctor of Health Science, Health Science and Exercise Leadership, within the department of Exercise Science and Sport Studies.

PRF780 - Current Topics in Performance Enhancement and Injury Prevention

The purpose of this course is to increase student understanding of various performance enhancement and injury prevention issues facing America and the world today. This course introduces students to the field of exercise science as a discipline and profession with a specific focus on contemporary topics facing all performance enhancement and injury prevention professionals.

PRF780 - Current Topics in Performance Enhancement and Injury Prevention

The purpose of this course is to increase student understanding of various performance enhancement and injury prevention issues facing America and the world today. This course introduces students to the field of exercise science as a discipline and profession with a specific focus on contemporary topics facing all performance enhancement and injury prevention professionals.

PRF781 - Current Topics in Wellness & Fitness

The purpose of this course is to increase student understanding of various fitness and wellness issues facing America and the world today. This course introduces students to the field of exercise science as a discipline and profession with a specific focus on contemporary topics facing all fitness and wellness professionals.

PRF782 - Current Topics in Rehabilitation

The purpose of this course is to increase student understanding of various rehabilitation issues facing America and the world today. This course focuses students toward the ever-changing contemporary issues that impact direct and indirect client care.

PRF783 - Psychological Perspectives in Sport Performance Enhancement and Intervention

This course is designed to introduce students to various performance enhancement techniques commonly used in sports. Examples of such techniques will be presented. Students will be able to apply the basic features of performance enhancement and intervention to a specific sport or rehabilitation situation. Students will have the opportunity to create their own intervention manuals based on research and course content.

PRF784 - Current Topics in Health and Wellness Coaching

The purpose of this course is to increase student understanding of various fitness and wellness issues facing America and the world today. This course introduces students to the field of health and wellness coaching as a discipline and profession with a specific focus on contemporary topics facing all fitness and wellness professionals.

PRF786 - Current topics in Human Movement and Recovery

The purpose of this course is to increase student awareness and understanding of the various musculoskeletal health and performance issues facing America and the world today. This course introduces students to the field of performance healthcare as a discipline and profession with a specific focus on contemporary topics and trends facing professionals who focus on optimizing human movement, human performance, and human recovery.

PRF787 - Key Concepts in Group Fitness Exercise

This course will focus on key concepts that will benefit individuals who are group exercise leaders and group fitness instructors. Students will be exposed to topics that impact fitness instruction, including skill development, coaching development, and the development of a healthy lifestyle. Special emphasis will be placed on pre-choreographed group fitness classes, effective coaching techniques for today's group fitness participants, and instructor development.

PRF788 - Nutrition Through the Lifecycle

This course covers nutrition needs necessary for growth, development and normal functioning throughout the life cycle. Pregnancy, lactation, infancy, childhood, adolescence and aging will be studied. Specific concerns for each life cycle stage will be emphasized. Common chronic diseases during Adult nutrition and their corresponding interventions will be explored in depth.

PRF788 - Nutrition Through the Lifecycle

This course covers nutrition needs necessary for growth, development and normal functioning throughout the life cycle. Pregnancy, lactation, infancy, childhood, adolescence and aging will be studied. Specific concerns for each life cycle stage will be emphasized. Common chronic diseases during Adult nutrition and their corresponding interventions will be explored in depth.

PRF789 - Current Topics in Tactical Strength and Conditioning

This course investigates the latest needs and trends of the tactical strength and conditioning field, and empowers students with a system for analyzing challenges and developing solutions that comply with the principles of strength and conditioning. The student will combine research findings with strength and conditioning knowledge to yield informed opinions and decisions regarding the effectiveness of various methods and technologies to solve performance related problems in the unique tactical setting.

PRF800 - Research in Fitness and Wellness

This course is designed to introduce the student to various research sources, creating skills for investigation of topics of interest in the future. Additionally, discuss of selected topics will promote critical thinking and enhance skills for critical review of content.

PRF810 - Research in Performance Enhancement and Injury Prevention

This course is designed to immerse the student in injury prevention research, focusing on current clinical outcomes research, psychology and physical activity research, and performance enhancement research. Topics include research in resistance training, core stabilization, reactive training, posture, supplementation and sport

vision training. Injury prevention research is discussed related to special populations, such as athletes at opposite ends of the performance spectrum.

PRF816 - Research in Human Movement and Recovery

The purpose of this course is designed to introduce the student to various research sources, creating skills for investigation of topics of interest in the future. Additionally, discussion of selected performance health (human movement and recovery science) research topics will promote critical thinking and enhance skills for critical review of content.

PRF820 - Research in Rehabilitation

This course is designed to introduce the student to various research sources, creating skills for investigation of topics of interest in the future.

PRF830 - Research in Sport Psychology

This course is designed to provide the student with knowledge of research in the sport psychology arena. Students will be introduced to psychometric properties of research and interpretation of results published, enabling them to critically analyze published material specific to the area of sport psychology.

PRF840 - Research in Health and Wellness Coaching

This wellness coaching course is designed to introduce the student to various research sources, creating skills for investigation of topics of interest in the future. Additionally, discussion of selected wellness coaching research topics will promote critical thinking and enhance skills for critical review of content.

PSA-Prof Sci Applied Math

PSA611 - Optimization and Operations Research I

A first course of a sequence to the applied field of operations research. The first course starts by giving a general and broad overview of operations research. The course focuses on deterministic models, especially linear programming, integer programming, network optimization and non-linear programming.

PSA671 - Advanced Multivariate Statistics

Covers the basics for several multivariate statistical analyses. The course begins with a review of univariate and bivariate statistics and continues on to cover regression, multiple regression, multivariate analysis of covariance, discriminant analysis, logistic regression and survival analysis.

PSA711 - Optimization and Operations Research II

The second course of a sequence to the applied field of operations research. The second course continues the in-depth study of operations research. The course focuses on non-deterministic models, decision analysis and games, probabilistic inventory models, Markov chains, queuing systems, simulation modeling, non-linear programming algorithms, probabilistic dynamic programming and Markovian decision processes.

PSA715 - Advanced Time Series and Stochastic Processes

This course provides an introduction to stochastic processes. The course covers Poisson processes, renewal theory, Markov chains and continuous-time Markov chains, martingales, random walks, and Brownian motion.

PSA723 - Advanced Nonparametric Statistics

This course provides an introduction to and in-depth development of nonparametric statistics. It includes the introduction of nonparametric inference testing including the Wilcoxon Test, the Mann-Whitney test, the Ansari-Bradley test, the Kruskal-Wallis test, the Kendall test and the Theil test along with their associated estimators. Students will also learn how to run analyses within a statistical software program.

PSA724 - Advanced Numerical Analysis and Empirical Modeling

This course is designed to introduce students to the fundamentals of numerical analysis and empirical modeling. Topics will include methods for systems of linear equations, matrix eigenvalue problems, interpolation, methods for nonlinear systems, initial value problems, and experimental models.

PSA725 - Data Mining and Simulation Modeling

This course is an introduction to data mining and simulation modeling. The course begins with an introduction to data mining including the preparation of data for mining. Knowledge representations such as tables, models and trees are then discussed before presenting basic algorithms for data mining including simulation modeling. The course concludes with verification of models and advanced mining techniques. Appropriate statistical packages will be presented and used throughout the course to complete analyses.

PSC-Prof Sci Cybersecurity

PSC600 - Operating Systems

This course focuses on fundamental principles in modern operating systems including Windows, Unix/Linux and Mac OS. Students learn about the services provided by operating systems' software, memory management,

process scheduling and communication, storage, input/output, and distributed systems. OS security and data

protection and the interaction between computers will be also covered.

PSC640 - Computer Networking

This course covers concepts in the design and implementation of computer communication networks, their

protocols, the applications, and advanced principles of computer networks. Security issues in communication

networks will be also studied, including secure communication, authentication, firewalls and intrusion detection.

PSC735 - Biometrics

This course concentrates on the unique advantages that biometrics brings to computer security, but also

addresses challenging issues such as security strength, recognition rates, and privacy, as well as alternatives of

passwords and smart cards. Students will gain knowledge in the building blocks of this field: image and signal

processing, pattern recognition, security and privacy, and secure systems design. By the end of the course,

students will be able to evaluate and design security systems that include biometrics.

PSC745 - Cybersecurity Risk Management & Assessment

In business today, risk plays a critical role. Almost every business decision requires executives and managers

to balance risk and reward. This course introduces students to the strategic discipline of assessing, prioritizing,

monitoring and controlling the impact of uncertainty on organizational objectives.

PSC755 - Wireless Networks and Security

This course is designed to provide the student with an understanding of the principles and concepts of wireless

data network and security. Students will study wireless standards (such as IEEE 802.11 a/b/g/n, ZigBee,

2G/3G/4G/LTE). The course will survey the state of the art in wireless networks and security. Students will also

learn security and privacy issues associated with wireless networks. Various attacks against wireless networks and their defense strategies will be analyzed.

PSM- Prof Sci Master Deg Cours

PSM645 - Applied Cryptography

An introduction to cryptography with the number theory portion tied in. The following topics will be covered: Modular Arithmetic, Classical Cryptography, Public Key Cryptography, Introduction to Complexity, and their corresponding implementations in an appropriate computer programming language.

PSM675 - Project Management

This course focuses on the management and change control for both general and IT-related projects. Technical and behavioral aspects of project management are applied within the context of an information systems development project.

PSM721 - Database Systems

This course introduces the graduate student to fundamentals of database design and use. Through the analysis of business processes, students will create conceptual database designs, in MS-Visio – for example, via normalization and entity-relationship modeling. Students will prove their models by implementing them using Oracle's DDL SQL, and manipulate data in those structures using Oracle's DML SQL and PL/SQL (Procedural Language/SQL).

PSM760 - Leadership and Professional Development

This course is intended to prepare students for the leadership decisions and actions that are inherent in practice as well as every-day life issues. Professional and personal growth are discussed at great length and principles

and applications of personal leadership practices will be explored in depth. Techniques for managing change and empowering others also are included in this course. Topics related to effective leadership are issues of communication, motivation, delegation, team building, and quality improvement. Finally, students will have the opportunity to perform a SWOT analysis on their business or self (whichever is applicable). This culminating activity is designed to strengthen the students' leadership abilities and skills.

PSM799 - PSM Capstone Course

This internship course will enable students to apply knowledge and solve problems in the real workplace. This course will consist of the student aligning with a business or entity to complete a specific project of series of projects with the entity. The student will then identify the problem, design a solution and effectively communicate a working solution to the faculty and entity working with the student. During each stage of the process, students will receive feedback from faculty and the entity for which they are working.

PSY-Psychology

PSY702 - Psychopathology of Childhood

Intensive study of the cognitive, emotional and behavioral disorders in children and adolescents. Emphasis is on etiology, early recognition, and approaches to treatment or intervention in schools.

PSY710 - Principles of Instruction and Intervention

This course is designed for the non-teaching educational specialist to assist them in gaining a fundamental understanding of the basic principles of instruction, with an emphasis on evidence-based practices in inclusive settings. Specific academic and behavioral strategies will be examined, as they relate to reading development and instruction, curriculum based assessments, program evaluation, the development of evaluation reports, and the implementation of intervention strategies for various populations of children at risk for or with exceptionalities

in inclusive settings. Students will also examine a variety of theoretical frameworks that focus on the specific components of assessment, instruction and consultation in inclusive settings.

PSY712 - Advanced Psychology of Learning

This course examines the diverse, intricate process of learning. Behavioral and cognitive views of learning are emphasized with special attention given to the educational implications of learning theory.

PSY713 - Psychology of Growth and Development

This course explores how people grow and develop from infancy through old age. Physical growth patterns, along with emotional, intellectual and social development, are emphasized. Maturation and learning and their interrelationships are also examined in terms of their implications for the home, school and community.

PSY720 - Neuropsychology

This course presents the neuropsychological approach to the identification and education of children with learning disorders. The central nervous system and brain regions and their role in learning are studied in depth. Neuropsychological assessment techniques will be introduced to clarify cognitive strengths, weaknesses, processing preference patterns (simultaneous-sequential), and the identification of neuropsychological deficits in children. This course focuses on issues related to children with learning disorders, including: etiological factors, epidemiological studies, gender differences, subtyping, emotional concomitants of learning disorders, diagnostic instruments, and remedial techniques. The intent of this course is to provide the necessary theoretical framework from which more effective remedial programs can be developed for learning disordered children.

PSY721 - Advanced Tests and Measurements

This course is designed to provide the graduate student with an understanding of the use of tests for diagnostic studies of children, adolescents and adults in a diverse society. It explores the ways in which tests are

constructed, evaluated, administered and interpreted. In addition, the course provides a survey of some representative tests of achievement, aptitude, personality, intelligence and occupational interests. Students also receive practice in administering, scoring and interpreting such tests through a practicum involving an evaluation of themselves and at least one other person.

PSY722 - Individual Psychological Evaluation I with Practicum

Emphasizes theory and competence in the administration, scoring and interpretation of the Stanford-Binet Intelligence Scale V and the Bender Visual Motor Gestalt Test. Extensive supervised practice in the administration, scoring and interpretation of these tests with subjects age 2 to adult. Theory and experience with other infant and child measures of intelligence such as the Bayley III and the K-ABC II are included. Ethics and cultural diversity in assessment are included. Psychological report writing, working with diverse populations, and generation of research-based and data-driven educational interventions are stressed.

PSY723 - Individual Psychological Evaluation II with Practicum

This course emphasizes the theoretical underpinnings of intellectual assessment and the development of competence in the administration, scoring, and interpretation of the Wechsler Scales: WISC-IV, WPPSI-III, and WAIS-III. Attention is directed toward the use of these scales in measuring intellectual levels, identifying cognitive strengths and weakness, and developing research-based interventions. Practicum experiences are an integral component of this course.

PSY728 - Practicum in School Psychology

This course is a practicum in psychoeducational assessment and intervention planning in which students develop competence in the administration, scoring and interpretation of individually administered achievement tests, as well as response to intervention, progress monitoring and the generation of research-based, data-driven

interventions. Under faculty supervision, students conduct comprehensive evaluations of children, including gathering background information, writing reports and consulting with clients in the process of problem-solving in the educational setting. Ethical considerations, as well as the particular problems encountered when working with a diverse population, are included.

PSY734 - Assessment of Personality and Behavior I

An introduction to the assessment of personality and behavior. Experience is given to the student in the administration, scoring and interpretation of the more widely used personality assessment measures. Particular attention is given to assessment techniques used in planning for remediation and treatment.

PSY741 - Theories of Counseling and Psychotherapy

This course is designed to introduce students to the most common therapeutic approaches in use today (e.g., person-centered, cognitive, behavioral, family systems and reality therapy). The course also focuses on the types of issues that school psychologists are likely to be called upon to provide therapeutic intervention. Lectures, classroom demonstrations and role-playing are utilized to illustrate these various orientations. Attention is paid to implementation of counseling that is respectful of ethical boundaries/issues, as well as cultural factors that may be involved in the therapeutic process. Student participation is required. A position paper describing the student's own orientation is required.

PSY742 - Techniques of Counseling and Psychotherapy with Practicum

This course is intended to provide both a didactic and an actual experience in counseling. Graduate students familiarize themselves with the phases, procedures and goals of counseling and therapy through assigned readings, audiotapes and group discussion of case presentations. A major focus involves issues and disorders that school psychologists are frequently called upon to provide therapeutic intervention. This will include

consideration of ethical boundaries/issues and cultural factors that are germane to the therapeutic process. Supervision of all cases is provided both in group sessions and on an individual basis. Graduate students are seen outside of regularly scheduled group sessions for individual supervision.

PSY752 - Fundamentals of School Psychology

This course is an introduction to the profession of school psychology. Topics examined revolve around the roles and functions of school psychologists. A partial list of the topics examined includes: school systems, the law and school psychology, and professional ethics. Field experiences in educational settings are required for students enrolled in the school psychology program.

PSY756 - Consultation and Group Processes with Practicum

This course is intended to familiarize the student with the variety of group methods and techniques utilized by the school psychologist in a diverse society. This is accomplished, in part through assigned reading and group discussion. The student is also required to observe and then act as a group leader in an ongoing group activity. The student tapes group counseling sessions for the purposes of evaluation and supervision. This course also explores the variety of consultative techniques that may arise in a school system.

PSY761 - Statistics and Research Methods in Psychology I: Univariate

This course is designed to give students the basic information they need to interpret the univariate research methods and statistics that are used most frequently in psychology. The focus is on acquiring the skills to critically evaluate a research report, analyze and interpret data, and to write a research paper. This course is designed to provide the background for students in Psy 767.

PSY762 - Statistics and Research Methods in Psychology II: Multivariate

This course is designed to give students the information they need to interpret the multivariate research methods and statistics that are used most frequently in psychology. The focus is on acquiring the skills to critically evaluate a research report, analyze and interpret data, and to write a research paper.

PSY773 - Internship in School Psychology

The internship requires a minimum of 1,200 hours of practical work experience under direct supervision of a qualified psychologist. A minimum of 800 hours must be completed in a realistic educational setting (i.e., public school system). The remaining 400 hours may be in a related setting (e.g., clinic, hospital, etc.). The intern is expected to demonstrate all of the competencies of the practicing school psychologist.

PSY774 - Internship in School Psychology

The internship requires a minimum of 1200 hours of practical work experience under direct supervision of a qualified psychologist. A minimum of 800 hours must be completed in a realistic educational setting (i.e., public school system). The remaining 400 hours may be in a related setting (e.g., clinic, hospital, etc.). The intern is expected to demonstrate all of the competencies of the practicing school psychologist.

PSY795 - Seminar in Behavior Modification with Practicum

This course provides the student with the knowledge and skills needed to design, implement, and evaluate behavioral interventions. Interventions applicable to school settings are emphasized and students are required to conduct a functional behavior assessment and to develop/implement a behavior intervention plan.

PSY796 - Seminar in Analysis of Research in School Psychology

This course consists of an examination of current research in school psychology. Critical study and evaluation of empirical research findings applicable to selected topics from current editions of Best Practices in School Psychology are undertaken. The student develops skills in using current databases to access empirically based research reports, as well as the abilities to critically analyze and synthesize the content of these reports as it relates to situations and issues faced by the practitioner school psychologist. Students develop an understanding of the importance of using empirical data in making sound educational decisions.

PSY798 - Seminar in Professional School Psychology

Concepts fundamental to the practice of school psychology are discussed and evaluated in this course. A range of topics are discussed, including the roles and functions of school psychologists, legal and ethical issues, the organization and operation of school systems, student diversity, and community resources. As this course is taken in conjunction with the Internship in School Psychology, discussions tend to be dynamic and framed within the context of actual experiences encountered by interns.

PSY849 - Thesis

The student conducts an independent, scientific research study in a classroom or other structured educational setting. The thesis is presented as a written document that conforms to American Psychological Association style.

RES-Research

RES800 - Research Methods

This course explores the design and analysis of experimental and quasi-experimental research. It explores both quantitative and qualitative techniques. In addition to being able to design and undertake basic research, an outcome of this course is to develop effective consumers of the research literature.

RES810 - Qualitative Research in Social Science

This course will introduce participants to the characteristics and various approaches to designing and conducting qualitative research projects within various social science disciplines. Students will gain hands-on experience in various qualitative methods and analysis techniques while carrying out a research project related to their area of interest.

RES819 - Research Paper

A written report on a specific topic of investigation, based on knowledge of the subject, acquaintance with the published literature on the subject and accurate presentation of findings.

RES829 - Research Project

An advanced study or presentation on a topic related to the student's academic discipline. The research project is more in depth than a research paper but less thorough than a master's thesis. Approval of only the graduate student's adviser is needed. The Publication Manual of the American Psychological Association or other generally accepted style for a particular academic discipline will be used.

RES849 - Thesis

The thesis consists of a written report of extensive research into a specific area of investigation, demonstration of knowledge of the background of the subject, the published literature of the subject, and high standards of original research and presentation. A thesis is often experimental in nature.

RSP-Reading Specialist

RSP700 - Foundations of Literacy: Theory and Instruction

In this course, students will connect foundational knowledge about teaching reading to research based instruction. The major components of reading development and correlating instructional strategies will be examined.

RSP702 - Literacy Assessment and Instruction

The purpose of the course is to provide reading specialist candidates the knowledge of literacy assessment to equip them to serve in the various roles of a reading specialist. Formal and informal assessment will be explored. The candidates will implement several informal assessments, interpret data, and develop an intervention plan based upon the results of those assessments.

RSP703 - Practicum I: Assessment

RSP 703 Practicum I: Assessment and RSP 704 Practicum II: Instruction are to be completed together to create the comprehensive six-credit reading practicum experience. These combined courses provide an opportunity for reading/literacy specialist candidates to serve in the role of a reading specialist, working with students who experience difficulty with reading and writing tasks. During this practicum experience, candidates complete an extended, supervised practicum/clinical experience that includes evidence-based literacy intervention instruction with individual and/or small groups of students to assess students' literacy strengths and needs, develop literacy intervention plans, implement evidence-based instructional intervention plans, create supportive literacy learning

environments, and assess impact on student learning while working collaboratively with peers and experienced colleagues to develop, reflect on, and study their own and others' teaching practices. Candidates receive supervision, including observation (in person, computer assisted, or video analysis) and ongoing feedback during the practicum/clinical experience by a supervisor who understands literacy processes, has literacy content knowledge, understands literacy assessment and evidence-based instructional strategies and, preferably, has experience as a reading/literacy specialist. The setting for this practicum experience may include a candidate's own classroom, literacy clinic, other school setting, or online/remote delivery of instruction.

RSP704 - Practicum II: Instruction

RSP 703 and RSP 704 are taken together. The purpose of RSP 704 is to provide 55 field hours of authentic experience in the role of a reading specialist as a teacher who works with struggling readers. In this course the reading specialist candidate will work with a student to implement the plan of action developed in RSP 703 Action Research I: Assessment. RSP candidates implement the instructional plan of action, provide ongoing progress monitoring to drive ongoing instructional planning, generate a written report to parents/guardians and meet with parents/guardians to report progress and make further instructional recommendations. This course will take place at the University with K-12 students from the surrounding communities and school districts and will immediately follow RSP 703.

RSP705 - Psychology of Reading

Psychology of Reading explores the psychological, sociological, cultural, and historical foundations underlying the development of literacy proficiency. During this course, participants will reflect on their own understanding of literacy, examine relevant literature, and become critical consumers of research.

RSP706 - Literacy Leadership

RSP Candidates are professionals whose goal is to improve reading achievement in schools and/or districts. Reading specialists serve as a resource in reading and writing for educational support personnel, administrators, teachers, and the community, provide professional development based on historical and current literature and research. In this course reading specialist candidates will spend 20 hours in a school district of their choice working collaboratively with other professionals in one school to build and implement reading programs that positively impact student learning.

RSP707 - Creating and Fostering Literate Environments

The purpose of this course is to provide candidates with experience in defining, observing, and making recommendations for a literate environment that fosters reading and writing by integrating foundational knowledge, instructional practices, approaches and methods, curriculum materials, and the appropriate use of assessments.

RSP708 - Literacy Development for English Language Learners

Candidates will explore theories, pedagogical considerations, and current methodology in the teaching, reading, writing, speaking, listening, metacognition, and visualizing for English language learners. The critical components of reading instruction (phonemic awareness, word recognition and vocabulary, fluency, comprehension, and writing) for language development and acquisition are emphasized. Candidates will identify effective, research-based best practices, interventions, and strategies for ELLs, methods for school personnel, and resources to support culturally diverse families.

RSP734 - Content Area Reading

In this course reading specialists candidates are prepared to teach reading in the content areas to students in grades K-12. Reading theory is applied to elementary, middle, and high school across all curriculums. Essential components of reading in the content areas are emphasized: comprehension, vocabulary, reading/ writing connection, study skills, assessment, differentiated and culturally responsive instruction, and integrating technology across the curriculum.

SLE-Edu Studies

SLE701 - Administrative Theory, Organization and Operation

This course offers the participant opportunities to gain competencies in and an understanding of the application of administrative theory relating to the operations of a school district. Through inquiry into the subject of administrative theory, candidates will gain critical and creative attitudes toward humanistic and scientific principles of public school organization and administration. Along with required course activities, each participant will complete a minimum of 15 hours of field experience assignments involving leadership or organization theory and practice. The field experiences will have utility for the participant's home school district or another school district and will be undertaken and completed in concert with the instructor's expectations.

SLE704 - Technology and Facilities Development

The course will offer the student an opportunity to view, understand and execute the planning, acquisition and management of technology and school facilities.The course emphasizes the use of technology for effective school management and instruction, promoting an educational environment that encourages change but also focuses on linking technology with students, and effectively analyzing and operating the management of the school organization as it relates to technology and facilities development.Topics such as reform, empowering students with technology, productivity and technology windows of the future and school facilities for the 21st

century will be included.Participants will be required to demonstrate competencies regarding an understanding of the superintendent's role in the following areas: planning for immediate and future facilities; efficiently managing technology and facilities; acquiring technology and facilities; and planning for immediate and future technology needs.

SLE705 - Curriculum/Instruction and Leadership/ Supervision

This course offers the participant the opportunity to gain an understanding of and skills related to the district level administration of curriculum, instruction, leadership and supervision. The course emphasis is on current practice in the field, state level requirements and national trends that are shifting theory and practice in their regard.

SLE707 - Strategic Planning, Policy Analysis, Board Relations

This course is designed for aspiring school superintendents. Specifically, the course addresses strategic planning and thinking, policy development and analysis, and the value of the relationship between the Superintendent and the School Board, specifically the Board President.The focus is reality-based and draws from experienced instructors. The goal is to prepare aspiring superintendents for the duties and responsibilities they will encounter in the above-mentioned areas, mindful of the fact that the key role of the school superintendent is to ensure a quality education for all students of the district.

SLE708 - SLE Internship

The internship is designed to be a theory into practice experience where formal coursework is applied in a field setting.It provides significant opportunities in the workplace to synthesize and apply the knowledge and to practice and develop skills identified in the program competency areas. Internships with a trained mentor at diverse settings is an important and highly valued part of the program. Each placement will be made in cooperation with the SLE faculty, the participating school district mentor, and the intern. The internship involves field placement

with a carefully chosen and trained superintendent/mentor (field supervisor) in a K-12 school district, who shares

the SLE program philosophy that the superintendent should function as a change agent and facilitator of the

reform process as well as a strong instructional leader. The intern is both a participant and observer under

the direction of the superintendent who should provide the intern with as many supervisory and administrative

experiences as possible. The intern gains valuable work-related experience and is given the opportunity to learn

how academic knowledge and skills can be applied at the worksite with real people, problems and events

SLE720 - District Leadership for Public Relations and Marketing

The objective of the course is to provide students the opportunity to view school public relations and marketing

from the point of view of the school superintendent, through practical, real#life experiences. To become an

effective school superintendent or assistant superintendent requires that an administrator be an effective

communicator and develop positive community relations. It requires networking, knowledge, the ability to market

your "product' and the ability to establish credibility within and outside the school community. One must be able to

make decisions, sometimes quickly, and then be accountable for those decisions. This course will enable students

to learn the theory and practical application of school and community relations with a focus on fiscal responsibility.

All candidates will be required to complete field work/experiences with a focus on fiscal responsibility that are

designed to reinforce and extend upon the learning objectives of the course.

SLE730 - District Leadership for Legal Issues in Education

American public education operates within a complex framework of law. Federal and state constitutional

provisions and statutes, along with administrative regulations and local school board policies, control the daily

operation of our schools. It is imperative that all who are employed by school districts, particularly central office

administrators, are conversant with this myriad of legal mandates and constraints so that they can operate

effectively and efficiently and avoid time consuming litigation and grievances. The purpose of this course is to

familiarize aspiring superintendents with the legal bases for the administration of public schools with a focus on

fiscal responsibility. It is hoped that by the conclusion of this course that the students will possess the knowledge base and research skills necessary to make intelligent and informed educational decisions. In this course, emphasis will be placed on Pennsylvania school law. All candidates will be required to complete field work/ experiences with a focus on fiscal responsibility that are designed to reinforce and extend upon the learning objectives of the course.

SLE740 - District Leadership for Finances

This course provides students with the fundamentals of public school finance. It will review issues that confront superintendents and school districts, and provide insights into resolving finance problems. Students will read, research, problem solve and explore financial issues with a focus on fiscal responsibility. All candidates will be required to complete field work/experiences with a focus on fiscal responsibility that are designed to reinforce and extend upon the learning objectives of the course.

SLE750 - District Leadership for Human Resources

This course examines how to manage human resources effectively in the dynamic political, legal, social, and economic environment currently impacting educational institutions. It includes examination of the acquisition, distribution, cultivation and management of human, fiscal, and time resources in public education, and identification and application of skills necessary for harnessing human and financial resources that further the goals of a school and district. All candidates will be required to complete field work/experiences with a focus on fiscal responsibility that are designed to reinforce and extend upon the learning objectives of the course.

SLE760 - District Leadership Field Project – Fiscal Responsibility

In this course, doctoral candidates will engage in problem-solving activities, field experiences and a field project planned cooperatively with university and school district personnel with a focus on fiscal responsibility. This

practice-centered approach requires students to apply their knowledge and demonstrate proficiency in those skills that contribute to effective performance as a leader with a focus on fiscal resource management challenges faced by school districts.

SPT-Sport Management

SPT700 - Research Methods in Sport

This course is intended to introduce students to methods and design problems specific to research in sport management. It is designed to promote an understanding of the theory, tools and processes involved in designing sport management research studies. Course emphasis will be placed on differentiating between qualitative and quantitative data, data collection, data analysis, data interpretation, and sources of data specific to the sport industry.

SPT710 - Socio-Cultural Aspects of Sport

This course will analyze the sport industry as a social institution, using critical thinking skills to solve controversies and issues related to the sport culture. Discussion will center around the social, political and economic significance of sport in society. Emphasis will also be placed on understanding the positive and negative social effects of sport and physical activity on society.

SPT720 - Sport Marketing

This course will compare and contrast the field of sport marketing with the practices and applications of mainstream marketing. The course will examine the application of marketing principles within the sport industry. Course emphasis will center on linking the marketing plan to an organization's mission statement and core values. Topics will include SWOT analysis, market segmentation, distribution, packaging, promotion, positioning and pricing.

SPT730 - Public Relations in Sports

This course explores theories of communications and public relations management necessary for successfully working with internal and external publics of a sport organization. The course will demonstrate how community relations professionals serve their organizations by meeting social needs and connecting with key publics. Topics will include employee relations, community relations, media relations, customer relations and image enhancement.

SPT740 - Legal Aspects of Sport

This course will examine the law as it applies to sport organizations. An in-depth analysis will be conducted on the topics of contract law, constitutional law, tort law, administrative/statutory law, antitrust law, and collective bargaining as they apply to sport organizations.

SPT750 - Sport Finance

This course will be an in-depth study of financial analysis processes utilized in decision making by sport managers. The focus of the course is on basic principles of macro-economic, micro economics, economic impact analysis, business structures of sport organizations, basic tools of financial management, and interpreting financial statements. Topics include principles of budgeting, practical budgeting, sources of revenue, fundraising methods, financial planning, ecommerce, public stadium/arena finance, and basic accounting principles.

SPT760 - Sport Ethics

This course will focus on the ethical issues impacting sport organization policy formation and practice. Students will recognize and identify moral and ethical problems related to sport in its intrinsic and extrinsic dimensions and develop a personal philosophy regarding social responsibility in the sport management setting. Topics include moral and ethical development theories, models of ethical analysis, code of professional ethics, personal and management values, and situational analysis.

SPT770 - Leadership and Management in Sport

This course is an analysis of leadership and managerial functions, concepts and practices used to foster interpersonal and small-group relations as found in sport organizations. Further, this course is intended to prepare students for the leadership decisions and actions that are inherent in Sports Management and as well as every-day life issues. Professional and personal growth is discussed at length and principles and applications of personal leadership practices will be explored. Techniques for managing change and empowering others also are included in this course. Topics related to effective leadership are issues of communication, motivation, delegation, team building, and quality improvement. Finally, students will have the opportunity to perform a Personal Leadership Development Plan. This culminating activity is designed to strengthen the students' leadership abilities and skills.

SPT780 - Current Trends and Issues in Sport Management

This course is designed to identify, analyze, and evaluate current and future sport industry trends and issues that may affect a sport organization's ability to establish and maintain a competitive advantage.

SPT781 - Sport Analytics

The class will discuss the theory, development, and application of analytics in sports. Students will learn about the application of analytics in sports for purposes of personnel acquisition and management, marketing, finance, communications, and team management among many other topics. The class will consist of lectures, quizzes, threaded discussions, and practical applications.

SPT782 - Economic Analysis in Sport

This course presents an application of economics concepts and issues relevant to the sports industry.Topics include: market structures and outcomes; barriers to entry; contraction and expansion; cooperative, competitive,

and collusive behavior among participants; professional sports; collegiate and amateur sports: public policy, subsidies for new facilities, institutional rules, and tax policies, discrimination; and labor market imperfections.

SPT783 - Strategic Sport Management

This course is designed to introduce the key concepts, tools, and principles of strategy formulation and competitive analysis. It is concerned with managerial decisions and actions that affect the performance and survival of sport industry organizations. It will focus on the theories of strategic management and their applicability to the sport industry, including strategic planning, decision making, implementation and controlling processes, understanding organizational effectiveness, and environmental analysis.

SPT790 - Sport Governance

This course is designed to provide students with a knowledge and understanding of the power and politics of sport organizations that govern intercollegiate athletics. Students will learn and analyze how people involved in governance set the tone of an entire organization and how individual sport governance bodies fit into the greater industry. Emphasis will be placed upon the student's development of a working knowledge of what these organizations do and what their true purpose is in the administration of an intercollegiate athletic department.

SPT791 - Sport Compliance

This course is designed to provide students with a knowledge and understanding of the necessary and mandatory compliance techniques of the major governing bodies of intercollegiate athletics to ensure institutional control. Emphasis will be placed upon an in-depth review and discussion of the various NCAA bylaw manuals, as well as NAIA rules and regulations.

SPT792 - Legal Aspects of Equity in Intercollegiate Athletics

This course is designed to provide students with a knowledge and understanding of an in-depth of gender equity issues that are prevalent in an intercollegiate athletic setting. This course also covers the many legal issues dealing with equity in intercollegiate athletic. Emphasis is placed upon the development of an overall knowledge of Title IX and the various tests that have been implemented to ensure compliance.

SPT793 - Development of Human Resource Strategies in Intercollegiate Athletics

This course is designed to provide students with the latest human resource strategies to successfully address everyday problems that may arise with coaches, staff, and personnel of and intercollegiate athletic department. The student will develop a working knowledge of complex organizations and how this may affect the employees that he/she supervises.

SPT799 - Sport Mentorship

The sport mentorship allows the student to practice sport management theory in the practical setting while under the direct supervision of a recognized leader in the student's chosen area of specialty in the sport industry. Course requirements dictate that students complete a minimum of 300 contact hours.

SWK-Social Work-Grad

SWK701 - Generalist Practice I

Foundation framework for generalist social work practice, including the problem-solving process, social work values/ethics and social work roles as they apply to varying size client systems. Develops specific intervention

skills, such as interviewing, assessment, contracting, goal setting and evaluation for diverse client systems with the emphasis on rural and small communities.

SWK702 - Generalist Practice II

Continues foundation for generalist social work practice and builds on SWK 701, with a focus on the community/ rural content of practice. This course explores basic intervention/advocacy, case management and evaluation of practice. Additionally, this course provides examples from a variety of practice areas.

SWK705 - Human Behavior in the Social Environment

Foundation for working with individuals, families, groups, organizations, and communities. Theories and concepts of human development throughout the life cycle are presented and critiqued within the person-in-environment perspective. The framework is multidimensional, considering the impact of ability, age, class, exploitation, ethnicity, gender, oppression, political belief system, race, religion, sexual orientation, and the social environment on human behavior and development. Students learn to identify multiple determinants of human behavior using examples from all levels of social work practice in local, national, and international rural and small town communities.

SWK707 - Human Diversity

This course provides foundation knowledge about human diversity and an understanding of the emphasis of the social work profession on culturally competent social work practice. Students develop skills to identify strengths, bicultural adaptation, patterns of oppression and both change and continuity during the aging process, with particular emphasis on rural and small town communities. The course assists students in understanding the impact of oppression on human growth and development and social functioning for the integration of individual, family, group, community and organization level interventions to promote or enhance social justice.

SWK709 - Social Welfare Policy and Services

Examination of the history and value base of the social work profession and U.S. social policy with a framework for policy analysis from the definition of a social problem, through legislative adoption to actual program development. Special emphasis on the impact of these policies, and related services on small towns, rural communities, and diverse populations.

SWK715 - Research, Policy and Rural Social Work Practice

Use of research designs to inform and evaluate practice and policy in small town and rural contexts. Development of knowledge and skills for understanding and conducting applied research, with emphasis on research related to social work practices and programs serving small towns, rural communities and diverse populations.

SWK716 - Social Work Research Methodology and Data Analysis

This course examines: the logic of scientific inquiry; the social work research process with an emphasis on problem conceptualization, measurement options, and research design; the use of descriptive and inferential data analyses; and the development of skills needed for understanding and conducting ethical quantitative and qualitative research related to social work practices and programs serving small towns, rural communities and diverse populations.

SWK730 - First Year Practicum

MSW supervised placement in a social agency that provides opportunities for generalist social work practice with individuals, families and groups of all ages from rural and small communities, including advocacy skills to enhance social justice. The minimum hours required in a field agency are 240 for SWK 730, equally a total of 480 hours for SWK 729 and SWK 730 combined.

SWK801 - Advanced Generalist Practice

Builds on the generalist practice skills, knowledge and values taught in Generalist Practice I and II. Integrates the use of advanced individual, family, group and organizational skills within the agency and community settings that serve diverse rural and small town client systems. Addresses practice concerns such as acquiring sanction for work, assessing needed resources, supervision, certification and evaluation of practice.

SWK803 - Differential Assessment

Application of knowledge from foundation courses to social work assessment with clients and integration of a strength's perspective with other social work assessment models to examine human differences and levels of functioning within the context of family, group, institutional, and community systems. Life model assessments, incorporating the Person-in-Environment Classification System, are conducted and students develop advanced generalist intervention plans that are appropriate for diverse client groups from local, national, and international rural and small town communities.

SWK806 - Rural Family/Community Policy

Explores the design, function and impact of community and family policies. Historical development of specific policies and the effects of policy on rural family and community institutions and organizations. Skills in analyzing and synthesizing policy are applied to rural situations and change strategies.

SWK808 - Advanced Practice Evaluation

Prospective social workers require tools to evaluate their own practice and their agencies' programs. This course provides and develops advanced knowledge, skills, and values in the evaluation of social work practice. Building and maintaining effective researcher-practitioner partnerships is also emphasized. Program evaluation is emphasized in this course but single subject design is infused as well.

SWK811 - Practice with Aging In Rural and Small Town Environments

Integration of knowledge about aging, rural aging, services for the aging, and the principles of social work and practice in rural environments.

SWK812 - Practice in Supervision and Administration

Supervision, management, and control in human service organizations. An exploration of theoretical and functional models to assist staff to grow and function competently as professionals. Understanding the elements of programming, budgeting, staffing, communications, and control within the organization. Identifying formal and informal systems, the impact of human diversity, and how all of this functions in the rural setting.

SWK813 - Practice with Health Care and Health Care Planning in Rural and Small Town Environments

Examines roles of the social worker and the place of social work values and practice in health care planning, modern medical ethics and professional practice.

SWK814 - Practice in Mental Health in Rural and Small Town Environments

Overview of MH/MR policies and services; issues of rehabilitation, advocacy and case management; and how treatment approaches (crisis behavioral and chemical) are related to social work roles and values in the context of community needs.

SWK815 - Practice in Juvenile/Adult Justice Systems in Rural & Small Town Environments

Overview of the juvenile and adult criminal justice system in urban and rural communities. Places emphasis on

the development of an understanding of the ever-changing philosophies that undergird the criminal justice system.

In addition, the focus of the course will include an examination of the relationship between human diversity and

aging in the criminal justice system.

SWK816 - Practice In Children and Youth in Rural and Small Town Environments

Examines the major problems and legal and clinical issues encountered when working with children. Special

concern for victimized and at-risk children in rural settings.

SWK821 - Practice in Substance Abuse/Addictions in Small Towns and Rural Environments

This course provides students with a substantive knowledge base and critical skills for planning to work in the

addictions fields as well as for those who will encounter chemical dependency problems in their work with different

age groups in the variety of arenas in which they practice.

SWK829 - Advanced Field Practicum I

First semester advanced MSW supervised placement in a social agency setting for three days a week, requiring

advanced generalist practice with varying sizes and types of client systems, working in rural and small town

communities. Students are required to complete a minimum of 330 hours.

SWK830 - Advanced Field Practicum II

Second of a two-semester advanced MSW supervised placement in a social agency setting for three days a week, providing an opportunity for advanced generalist practice with varying sizes and types of systems for working in rural environments. Students are required to complete a minimum of 330 hours.

SWK840 - Special Topics

Study of selected topics of significance or current importance and interest to the social work profession.

Prerequisite: Permission of Instructor (3 crs.)

TED-Technology Education

TED701 - Issues in Technology Education Curriculum & Instruction

The focus of this course is two-fold. First, students will use state and national standards to develop a technology education curriculum by using various curriculum design processes. The second phase of the class is designed to improve the students' ability to use appropriate standards-based instructional methods. These include cooperative learning, problem-based learning, discovery learning, constructivism, reflection, meta-cognition and others those students research and demonstrate to the class.

TED702 - Assessment in a Constructivist Classroom

Assessment in Technology Education is designed to provide the classroom teacher with a variety of assessment tools that can be used in the classroom. A wide range of assessment techniques, from traditional to authentic, will be analyzed, designed, and evaluated. Finally, students will use basic research techniques to validate the assessments they design and test.

TED703 - Strategic Management in Education

Strategic Management in Education is designed to enable teachers to analyze their opportunities, environment, resources and constraints to develop a prioritized plan of action to maximize their success educating students within a complex political, social and economic system. Students will experience strategic planning, funding proposal development, and various analytical tools.

TED704 - Integrating Math, Science and Technology

This course is focused on integrating the content of mathematics, science and technology education for the purposes of teaching in middle and high schools. Curriculum issues and planning related to integrating mathematics, science and technology according to state and national standards are discussed and practiced. Finally, students will have an opportunity to develop instructional units and carry them out in an activity-based laboratory.

TED705 - Technology and Sustainable Development

This course focuses on the development of understanding of the concepts of development and sustainability and their relationships to technology. Concepts of basic human needs, community development, technology assessment and research into specific technological alternatives will be included. Students will design, produce, test, and assess a relevant technological system.

TED715 - Study in Human Creativity

The primary purpose of this course is to formally introduce the student to the study of human creativity as an academic endeavor. It is specifically designed to establish each person's competence as a creative problem-solving facilitator (a teacher, one who is knowledgeable and skilled at applying creative problem-solving methodologies). Individual, managerial and technical types of problem-solving activities will be engaged. Each student will conduct (facilitate) several problem-solving excursions. Each student will study, administer

and evaluate several standardized tests that evaluate creative problem-solving skills. Students may evaluate themselves, others or both. This is a learning laboratory, action-oriented course intended to simulate real world creative problem-solving techniques.

TED718 - Special Populations in Laboratory-based Programs

The focus of this course is to understand the specific needs, populations, processes, adaptations, funding sources and other factors that affect the success of special populations who will be educated in technology education laboratory-based programs. This course will enable students to explore and develop various instructional methodologies and assessments for student learning. Finally, students will be introduced to a variety of classroom management and discipline issues that classroom teachers encounter each day and taught techniques to handle these situations.

TED725 - Applied Research Science, Technology, Engineering and Mathematics Education

This course is designed to give teachers an opportunity to study real classroom situations and to design a plan of action to improve that situation. Teachers will learn how to conduct a review of the literature and develop an understanding of various research methodologies, especially as they relate to Science, Technology, Engineering and Mathematics (STEM) education. Reflection and analysis of current trends in the STEM disciplines is a key component of action research.

TED775 - Integrating Technology in Elementary/Middle School STEM Curriculum

This course provides elementary and middle level teachers an in-depth, research-based examination of technological literacy education within STEM disciplines. Candidates examine relevant technology education academic standards and design curriculum, instruction and assessment to enhance student achievement of

proficiency in technological literacy. The course focuses on successful instructional strategies for integrating

technology education throughout the existing school curriculum and aligning technology activities to help students

achieve academic standards.

TED807 - Technology Program Development and Improvement

Students will engage in a process to develop or access a district-wide technology standards-based program. They

will develop strategies to facilitate and enhance student learning in all areas of their program, including content,

curricula, instruction, student assessment, learning environment and professional development. They will examine

the current status of a district's program, establish new goals, determine strategies to meet those goals, develop

goals to enhance personnel knowledge and skills, and examine strategies to evaluate their success.

TED850 - Technology Education Major Project

Students interns will produce a major culminating piece of academic work that synthesizes contents from the

Technology Education masters program. This may take the form of a research activity of various types, a major

curriculum development project, or other extensive individually produced pieces or work that is approved by the

internship supervisor. All projects must follow a technological design process.

THE-Theatre

THE502 - Estill Voice Training: Levels 1 & 2 Combined Intensive

This course will provide a focused experience for vocal performers to explore and optimize voice production for

musical and theatrical performance utilizing the Estill Voice ModelTM. By examining the acoustic, physiologic,

and perceptual correlates of voice and by learning to enhance control of the vocal structures that influence vocal

quality, the students will acquire tools offered by the Estill Voice Training™system for adding color, strength, clarity and stamina to the performing voice.

TOU-Tourism

TOU709 - Statistical Applications for Tourism Analysis

TOU 709 Statistical Applications for Tourism Analysis (3 credits). This course will inform students how to use quantitative methods for the assessment of tourism performance and trends. Students will learn statistical methods, procedure, analysis, and interpretation in a tourism context.

TOU777 - Tourism Field Experience

TOU 777 Tourism Field Experience (6-9 credits). Because a student enrolled in the Master of Arts in Tourism, Planning, and Development must engage in a field experience in the period between the successful completion of the first semester until the twenty-fourth month of the program, this course is a required component. For this course, an enrollee acquires practical experiences and applies those experiences according to the student's interest and expertise. The field experience serves as a transition from course work to the Thesis/Master's

UNI-Co Curricular Activities

UNI093 - G0-GR Tentative Schedule

Used by Calu GO for tracking purposes.

UNI094 - GO-GR Schedule Confirmed

Used by Calu GO for tracking purposes.

Office of Diversity, Equity and Inclusion

The Office of Diversity, Equity and Inclusion (ODEI) is committed to infusing diversity and social justice principles throughout every facet of the University. The office strives for an environment that fosters cultural humility, where individuals practice ongoing self-reflection and can express their authentic selves while recognizing others' cultural identities.

ODEI is committed to advancing diversity and inclusive excellence at Cal U through collaboration with University partners and by applying best practices and strategies to develop and maintain policies to prepare our students for a pluralistic world.

Human Resources

The Office of Human Resources supports the University's goal of creating and maintaining a learning environment in which the rights of all are respected. This office encourages the entire University to become personally involved in enriching the campus through support of enhanced equal opportunity and diversity. The Human Resources office reaffirms the University's commitment to equal opportunity through the promotion of understanding, tolerance and respect for others, and ensures that the University community understands and complies with federal and state laws and California University policies with respect to Equal Opportunity, ADA and Title IX.

Services

The Human Resources office helps students and employees resolve concerns and complaints regarding harassment, discrimination and disability. It strives to help any student, faculty member or employee who needs information or assistance or has a concern about Equal Opportunity, ADA, Title IX or Sexual Harassment policies. For more information, visit: https://www.calu.edu/inside/faculty-staff/administrative-offices/human-resources/

The Human Resources office's support services are provided in the following areas in compliance with state and federal laws:

Equal Opportunity, Compliance and Equity

The Director of Equal Opportunity, Compliance and Title IX Coordination (who is also the Title IX Coordinator) strives to enhance opportunities at the University by working with diversity committees/groups, special projects, trainings, etc.

Discrimination and Title IX Complaints

The responsibility for investigating complaints is vested in the Human Resources office under the direction of the Director of Equal Opportunity, Compliance and Title IX Coordination (who is also the Title IX Coordinator). The **Complaint Intake Form** is available at: https://www.calu.edu/inside/forms/_files/human-resources/titleix.pdf

Complete information regarding policies, procedures, and the informal and formal complaint processes can be found in both the **Campus EEO Policy** *(Policy Statements and Compliance Procedures on Equal Education and Employment Opportunity)* and the **Gender-Based/Sexual Misconduct (Title IX) Policy**, which are both available at: https://www.calu.edu/inside/faculty-staff/administrative-offices/human-resources/equal-opportunity/social-equity-policies.aspx

Equal Opportunity: Online Training Programs

Pennsylvania's State System of Higher Education mandates that all universities conduct sexual harassment awareness training with new students. Additionally, the University is committed to providing an environment free from discrimination on the basis of sex. *Title IX of the Education Amendments of 1972* protects persons from gender/sex discrimination in educational programs and activities at institutions that receive federal financial assistance. Cal U provides many resources to administration, faculty and staff, as well as students, to address concerns relating to discrimination on the basis of gender/sex, which includes sexual misconduct, stalking and dating/domestic violence. To this end, Cal U also offers through the Human Resources office an online training program(s) regarding Title IX legislation. In addition to the Title IX online training program, the Human Resources office is requiring that **all personnel** *(administration, faculty and staff) and* **all students** complete the required E.O./discrimination prevention training courses annually.

Location and Hours

Human Resources is located in Dixon Hall, Room 408, 724-938-4427. Office hours are 8 a.m. to 4 p.m. Monday through Friday.

Nondiscrimination Statement

California University of Pennsylvania is an academic community dedicated to the ideals of equal opportunity for all. In compliance with federal and Pennsylvania state laws, the University is committed to providing equal educational and employment opportunities for all persons without regard to race, color, sex, sexual orientation, religion, national origin, age, disability or status as a veteran or disabled veteran. The University will not tolerate any type of discrimination, harassment or violence. Sexual harassment is considered by law to be a form of sexual discrimination and is, therefore, unacceptable, which includes stalking and domestic/dating violence.

Direct **discrimination/sexual harassment, equal opportunity, and Title IX inquiries or complaints** to the Director of Equal Opportunity, Compliance and Title IX Coordination, Office of Human Resources, Dixon Hall 408, 724-938-5425.

Direct **student ADA inquiries** regarding services or facilities accessibility to the ADA/504, Compliance Officer, Office of Student Affairs, Carter Hall G-52, 724-938-1603, or a message can be left at the Counseling Center, Carter Hall G-53, 724-938-4056.

Direct **faculty and staff ADA inquiries** regarding services or facilities accessibility to the Director of Human Resources, Office of Human Resources, Dixon Hall 408, 724-938-4427.

Policies

The Office Human Resources' policies are available at: https://www.calu.edu/inside/faculty-staff/administrative-offices/human-resources/ and you can access the complaint form at: https://www.calu.edu/inside/faculty-staff/administrative-offices/human-resources/equal-opportunity/complaint-form.aspx

Equal Opportunity

Our equal opportunity statement is available at: https://www.calu.edu/inside/faculty-staff/administrative-offices/human-resources/equal-opportunity/index.aspx

The campus EEO policy, *Policy Statements and Compliance Procedures on Equal Education and Employment Opportunity*, is available at: https://www.calu.edu/inside/faculty-staff/administrative-offices/human-resources/equal-opportunity/social-equity-policies.aspx. This document also includes Cal U's *Anti-Discrimination Policy.*

Sexual Harassment

The *Gender-Based / Sexual Misconduct (Title IX) Policy* is available at: https://www.calu.edu/inside/policies/_files/social-equity/TitleIX.pdf

ADA/504

Services for students with disabilities are provided through the Office for Students with Disabilities (OSD). For more information, visit the OSD at Carter Hall G-35, or call 724-938-5781, or view online at: https://www.calu.edu/inside/student-resources/disabilities/. This page includes information on ADA compliance.

Contact Information

Direct discrimination/sexual harassment, equal opportunity and Title IX inquiries or complaints to the Director of Equal Opportunity, Compliance and Title IX Coordination, Office of Human Resources, Dixon Hall, Room 408, 724-938-5425.

Direct student ADA inquiries regarding services or facilities accessibility to the ADA/504, Compliance Officer, Office of Student Affairs, Carter Hall G-52, 724-938-1603, or a message can be left at the Counseling Center, Carter Hall G-53, 724-938-4056.

Office of Human Resources

Direct faculty and staff ADA inquiries regarding services or facilities accessibility to the Director of Human Resources, Office of Human Resources, Dixon Hall, Room 408, 724-938-4427.

Military and Veterans Affairs

The Office of Military and Veterans Affairs offers **comprehensive support** for veterans, eligible dependents, service members of the National Guard and Reserve and active-duty service members.

We understand the unique demands of service members' and veterans' lives. Whether you are attending classes through Cal U's Global Online programs or are pursuing your education on campus, let us help you achieve your best. Connect with diverse and dynamic veterans who are attending Cal U and share many of the same struggles, excitement, concerns and points of pride. Cal U understands the complex challenges of transitioning from combat or the formal structure of the military to the world of higher education. This new journey requires a great deal of determination, dedication, responsibility, perseverance and support to get through. The Veterans Club is also here to give you that support with regular meetings that build a strong community that will assist you throughout your Cal U experience. Please visit the Office of Veterans Affairs website: calu.edu/veterans.

For more information, call California University's Office of Military and Veterans Affairs at 724-938-4076 or email veterans@calu.edu.

State Authorization

Information about current legal authorization for California University of Pennsylvania to offer online education nationwide and the steps that Cal U is taking to achieve necessary authorizations in all 50 states, the District of Columbia and U.S. Territories is located at: https://www.calu.edu/online/state-authorization/index.aspx

Questions may be directed to Doug Hoover, Associate Provost, at 724-938-4096 or hoover@calu.edu.

Global Online Complaint Process

Global Online undergraduate and graduate students who have a grievance, complaint or concern related to Global Online courses (or who have other Global Online concerns unrelated to courses) can follow the steps outlined at: https://www.calu.edu/online/state-authorization/complaint-process.aspx

Questions may be directed to Doug Hoover, Associate Provost, at 724-938-4096 or hoover@calu.edu.

Tuition and Fees

For the most up-to-date information on graduate tuition, fees, and room and board charges, visit:

- https://www.calu.edu/costs-aid/tuition/graduate-tuition.aspx
- https://www.calu.edu/costs-aid/tuition/

Payment of Tuition and Fees for Semester Registration

All fees will be assessed approximately four weeks prior to the beginning of the each term. Payment in full is expected for each term or enrollment in an online payment plan (with initial payment) by billing due date. Cal U accepts American Express, Discover, MasterCard and Visa along with electronic (ACH) check payment online at calu.edu/paymybill. Paper checks and money orders payable to California University of Pennsylvania payable in U.S. dollars should be mailed to:

California University of Pennsylvania
Student Accounts Office
Box 83
250 University Ave.
California, PA 15419

Please include the student's CWID (Campus Wide ID Number) on all correspondence.

Billing Information

Cal U utilizes online e-billing. Students who take advantage of early/rolling registration should receive a Cal U email announcing that the billing statement is available for viewing online through the VIP approximately four weeks prior to the start of the term. Students who enroll within four weeks of the first day of the term should be prepared to make payment at the time of registration. A paper bill will be sent for the initial term billing for each term and last term billing for past due balances only.

Payment Plans

Payment plans are available each term. Payment plans enable students to pay their costs on a monthly basis. Enrollment for the payment plan can be completed online via VIP. For the most up-to-date information on tuition, fees, and room and board charges, visit calu.edu/paymybill and calu.edu/current-students/housing/index.htm.

Third-Party Billing

Some companies and government agencies pay tuition directly to the University. If tuition is to be paid in this manner, authorizing forms or letters must be sent to the Student Accounts Office. This payment must be received by the Student Accounts Office during the semester in which charges originate and cannot be used in lieu of a personal payment for an authorized payment plan. This payment option does not apply to corporate tuition reimbursement policies or when the payment amount is based on grades and received after the term has ended.

Refund Policy

Tuition and fees are adjusted for class withdrawals during the first week of the fall and spring semesters. After the add/drop period ends, adjustments are made ONLY if a student withdraws from all enrolled classes. Refunds are made to the amount of the charge, not the amount that has been paid to date. The refund policy is available online and in the Student Accounts Office.
Financial aid recipients should refer to "refund/repayment policies" on the Cal U website for the financial aid adjustment policy.

Housing Application Service Fee

An application is required in order to reserve a room for the following academic year. This fee is nonrefundable and is not deducted from room charges. Additional information regarding the housing application process is located on the housing website: www.calu.edu/current-students/housing/index.htm.

Late Payment Fee

A late payment fee of $50 per month will be assessed when a student fails to pay the required fees by the due date or when a student fails to pay according to an approved payment plan. (The structure of fees is subject to change without prior notice and such changes shall take precedence over existing charges set forth in this catalog.)

Return Check Charge

A $25 fee will be charged for any check (paper or ACH) that is made payable to California University of Pennsylvania and returned by the bank because funds are unavailable for any reason or incorrect bank account information (numbers) were entered by the student. (The structure of fees is subject to change without prior notice and such changes shall take precedence over existing charges set forth in this catalog.)

Proxy

A completed Proxy Access form is required by University offices to release account information via phone. Proxy Access Management is available through the Vulcan Information Portal - Academic/Banner Self Service/Proxy Access.