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Graduate Catalog
VOLUME 36

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or by request to the
Office of Admissions

UNIVERSITY OF HOUSTON-CLEAR LAKE

2700 Bay Area Boulevard
Houston, Texas 77058-1098

Telephone: 281-283-2500

Important dates and Quick Reference Guide
are available at:
www.uhcl.edu/records

DIRECTORY

	Office	*Phone
Academic Records	S1109	283-2525
Admissions	S1101	283-2500
Alumni Relations	B1604	283-2021
Bookstore	B1206	283-2180
Business, Dean	B2239	283-3100
Academic Advising	B2111	283-3110
Administration	B2239	283-3100
Career Services	S3109	283-2590
Cashier and Collections	S1103	283-2170
Communications	B2519	283-2015
Community Relations	B1604	83-2021
Counseling Services	S3103	283-2580
Dean of Students	S1201	283-2567
Development	B1604	283-2021
Distance and Off-Campus Education	B1406	283-3031
Education, Dean	B1237	283-3501
Academic Advising	B1231	283-3615
Center for Educational Programs	A190	283-3530
Center for Professional Development of Teachers	B1231	283-3612
Teacher and Professional Certification	B1231	283-3618
Health and Disability Services	S1301	83-2626
Human Sciences and Humanities, Dean	B1529	283-3300
Academic Affairs	B1539	283-3400
Academic Advising	B1539	283-3333
Administration and Finance	B1617	283-3350
Intercultural and International Student Services	S1203	283-2575
International Initiatives	B1402	283-2531
Library	B2402	283-3900
Parking Permits	B1636	283-2222
Police	B1636	283-2222
Registrar	S1109	283-2525
Science and Computer Engineering, Dean	B3611	283-3703
Academic Affairs	B3611	283-3711
Academic Advising	B3611	283-3700
Student Assistance Center	S1102	283-2722
Student Financial Aid	S1105	283-2480
Student Information and Assistance (Bayou Bldg)	B1632	283-2614
Student Life	S1204	283-2560
Student Publications	B1239	283-2570
Student Services	B2525	283-3025
Support Center	B2300	283-2828
Computing Information	B2300	283-2828
Online Course Support	B2300	283-2828
Media Services	B2300	283-2828
Telephone Registration	S1101	212-8425

***Area Code for all numbers is 281.**

A = Arbor Building B = Bayou Building D = Delta Building

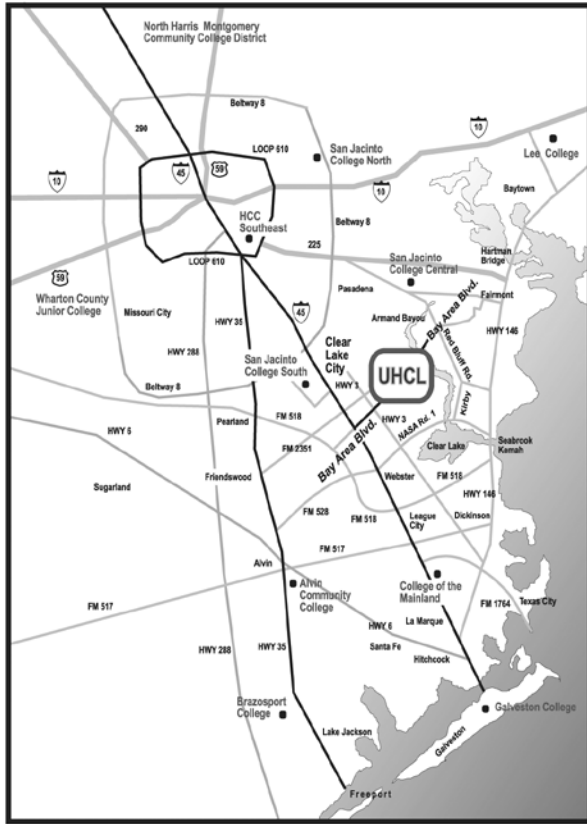
S = Student Services and Classroom Building

Requests for information should be directed to the offices or persons above.

The university's address for all inquiries is:

2700 Bay Area Boulevard, Houston, Texas 77058-1098

Main Operator Phone: 281-283-7600.



Directions

From North on I-45

Travel south on I-45 to the Bay Area Blvd. exit. Continue east on Bay Area Blvd. Follow the signs four miles to UHCL. Enter Entrance 1 and follow the signs to the Bayou Building. Park in visitor parking.

From South on I-45

Travel north on I-45. Exit at Bay Area Blvd. Right on Bay Area Blvd. four miles to UHCL. Enter Entrance 1 and follow the signs to the Bayou Building. Park in visitor parking.

From Highway 225

Travel to I-45 and follow the directions to “**From North on I-45.**”

From Highway 146

Travel south on Highway 146 to Fairmont Pkwy. Right on Fairmont Pkwy. to Bay Area Blvd. Left on Bay Area Blvd. to UHCL. Left at Brook Forest at Entrance 2. Follow the signs to visitor parking.

From Highway 6

Travel Highway 6 east to FM 528. Right on FM 528. Left on FM 518 to FM 2351. Right on FM 2351. Cross I-45 where FM 2351 becomes Clear Lake City Blvd. Left on Bay Area Blvd. Enter Entrance 1 and follow the signs to the Bayou Building. Park in visitor parking.

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Students enjoy a relaxing time at the pond in front of the Student Services and Classroom Building.



Community engagement opportunities are an important aspect of the UHCL experience. The university received national recognition in 2008 for its curricular engagement, outreach and partnerships throughout Bay Area Houston when The Carnegie Foundation for the Advancement of Teaching selected the university for its Community Engagement Classification.

THE UNIVERSITY

- Overview
- University Services

OVERVIEW

The University of Houston-Clear Lake is an upper-level educational institution with a distinct identity, whose primary role is to provide fair and equitable learning opportunities to graduate and undergraduate students. The university serves a diverse student population from the state, the nation and abroad, particularly from the Houston-Galveston metropolitan area, by offering programs on and off campus.

UHCL offers a variety of programs in human sciences and humanities, education, business and science and computer engineering. The university emphasizes high standards for teaching and learning in its bachelor's, master's and doctoral degree programs, as well as in its professional plans and collaboration in doctoral plans. All offerings are designed to develop creative, quantitative, communication and critical thinking skills of students.

The university's faculty, staff and administrators are committed to providing a humane, responsive and intellectually stimulating environment for productive learning and working. UHCL emphasizes (a) learning through teaching, research, scholarship and professional and community service; (b) the advancement of knowledge; (c) delivery of educational opportunities through new instructional technologies and through distance learning; (d) a commitment to high academic standards; (e) sensitivity to the needs of the students and communities served by the institution; and (f) above all, integrity in all institutional functions.

A METROPOLITAN UNIVERSITY

Located adjacent to the National Aeronautics and Space Administration Johnson Space Center, UHCL is situated in the heart of Clear Lake's high-technology community. The campus is located between downtown Houston and Galveston Island. Its neighbors to the east are Armand Bayou Nature Center and Bayport Industrial Complex. As one of the leading multidisciplinary bachelor's and master's degree-granting institutions serving the Texas upper Gulf Coast, UHCL is a vital component of the surrounding region. The university is committed to enhancing the educational, economic, cultural, scientific, business and professional environment of the region. Because a strong university is essential to the success of the area's industries, UHCL is dedicated to developing and strengthening plans supporting the region's various commercial, engineering, human services and trade sectors, especially in the computing, medical, petrochemical and space industries.

Academic theories are applied and research is conducted through UHCL's centers, institutes, clinics and laboratories. These entities include:

- Advanced Knowledge Transfer Laboratory
- Art School for Children and Young Adults
- Bay Area Houston Technology and Education Center
- Center for Advanced Management Programs
- Center for Autism and Developmental Disabilities
- Center for Behavioral Neuroscience Research

2 The University

- Center for Economic Development and Research
- Center for Educational Programs
- Center for Professional Development of Teachers
- Counseling Clinic
- Diagnostic Reading Clinic
- Environmental Institute of Houston
- Greater Houston Area Writing Project
- High Technologies Laboratory
- Human Performance Institute
- Learning Resources Review Center
- Mathematics Institute
- Psychological Services Clinic
- Research Center for Language and Culture
- Small Business Development Institute

LOOKING BACK

The establishment of the university was authorized by the 62nd Texas Legislature in 1971. The measure was the result of a 1968 report by the Coordinating Board, Texas College and University System (now the Texas Higher Education Coordinating Board) calling for a second University of Houston campus to provide upper-level and graduate programs. In 1973, the Texas Senate authorized construction of a permanent campus at Clear Lake.

Construction began early in 1974 with the first phase of the Bayou Building, the largest of the university's five principal buildings. September 1974 marked the beginning of regularly scheduled classes on the UHCL campus under the leadership of UHCL's founding chancellor, Alfred R. Neumann. Opening day enrollment totaled 1,069 students and 60 professors comprised the charter faculty. Today, the university has approximately 7,500 students and more than 600 full-time and adjunct faculty.

ACCREDITATIONS

UHCL is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelor's, master's and doctoral degrees as listed in the General Program Requirements section of this catalog. The commission is located at 1866 Southern Lane, Decatur, Georgia 30033-4097. The phone number is 404-679-4501.

The university also has individual accredited programs. The School of Business maintains accreditation on its graduate and undergraduate business and accounting programs by AACSB International, Association to Advance Collegiate Schools of Business, and on its graduate healthcare administration programs by the Commission on Accreditation of Healthcare Management Education. The School of Education is accredited by the National Council for Accreditation of Teacher Education (NCATE), 2010 Massachusetts Ave. NW, Suite 500, Washington, D.C. 20036, phone 202-466-7496. This accreditation covers all of the institution's initial teacher preparation and advanced educator preparation programs, including the Doctor of Education in Educational Leadership. The School of Education is also accredited by the Texas State Board for Educator Certification. The School of Human Sciences and Humanities holds accreditation by the Commission of Accreditation for Marriage and Family Therapy Education and the National Association

of School Psychologists. In addition, the Humanities program is a full member of the Association for Graduate Liberal Studies Programs, the Clinical Psychology program is a member of the Council of Applied Master's Programs in Psychology, the Bachelor of Social Work program is accredited by the Council on Social Work Education, and the Psychology program's Applied Behavior Analysis sub-plan is approved by the Behavior Analyst Certification Board Inc. The School of Science and Computer Engineering's undergraduate degree plan in Computer Engineering is accredited by the Engineering Commission of the Accreditation Board for Engineering and Technology (ABET) Inc. The undergraduate degree plans in Computer Science and Computer Information Systems are accredited by the Computer Accreditation Commission of the ABET. The program in Chemistry is accredited by the American Chemical Society, ACS. The Office of Career and Counseling Services is accredited by the International Association of Counseling Services.

UHCL GOVERNANCE

UHCL is one of four institutions with distinct identities and missions that make up the University of Houston System. The universities are governed by the UHS Board of Regents and Chancellor Renu Khator. Administrative responsibility for UHCL is vested in its president, William A. Staples. UHCL's shared governance process includes the Faculty Senate, Professional and Administrative Staff Association, Support Staff Association and Student Government Association, working with the university's administration through various committees and councils including University Council, which is chaired by the university's president. Members of the UHCL Development and Advisory Council serve as business, education, government and non-profit organization advisers on current issues impacting the advancement of the university and as volunteers in helping UHCL acquire private resources.

THE CAMPUS

The university's buildings, which comprise more than a half-million square feet of space, are surrounded by a 524-acre natural environment. The campus features picturesque park-like settings with Horsepen Bayou winding through heavily wooded areas abundant with wildlife.

The Arbor Building houses painting, ceramics, weaving and photography studios, as well as educational centers and laboratories.

The Bayou Building houses the majority of the classrooms, administrative and faculty offices, the library, alumni relations, bookstore, cafeteria, computing services and laboratories, copy services, mail room, university police and the theater.

The Central Services Building is headquarters for building maintenance, grounds and custodial services, scheduling and space planning, vehicle maintenance, printing and graphic services and the animal care facility.

The Delta Building houses student computer laboratories, computing faculty offices and the Research Institute for Computing and Information Systems.

The Student Services and Classroom Building accommodates five categories of functions including academic; enrollment; health, wellness and academic support; programming and general space. The one-stop Student Assistance Center provides enrollment, registration, fee payment, financial aid and scholarship services.

University Forest Apartments is a privately owned and managed apartment complex built in 1995 on the campus of the university. This 136-unit student housing facility is

a two-story complex that includes a central courtyard with clubhouse, laundry facility, swimming pool, jacuzzi, sand volleyball court, barbecue grills and picnic and lounge areas.

UNIVERSITY SERVICES

ALFRED R. NEUMANN LIBRARY

UHCL's Alfred R. Neumann Library, named after the university's founding chancellor, provides students with online access to thousands of books, journals and scholarly resources. UHCL librarians offer personal research assistance to students by telephone or face-to-face at the library reference desk and tips on navigating search interfaces, retrieving information and evaluating information for use in scholarly research.

Visitors can receive help formulating effective search queries, becoming familiar with controlled vocabulary searching and identifying the best online resources out of a collection of more than 150 subscription-only databases, most with full-text articles. Classes are available in research procedures tailored to particular courses. Students may also make appointments with librarians in order to explore more in-depth instruction on library research strategies in a comfortable one-on-one environment.

UHCL students, faculty and staff may also borrow books from UH and UH-Downtown quickly and easily through the shared catalog. The Texshare card, available upon request in Neumann Library, allows a UHCL student to go to any academic or public library in Texas and check out a book, which can then be returned to Neumann Library. The library's interlibrary loan service will borrow requested materials from any library in the country through a national interlibrary loan network. Neumann Library offers 35 fixed computer workstations for student use. The library classroom is equipped with wireless laptops so that students may participate in a hands-on learning environment.

The library occupies approximately 80,000 square feet in the Bayou Building and contains study space for more than 1,000 users. The library contains more than 506,000 volumes, subscribes to more than 3000 print and electronic periodicals, and has approximately 1.8 million items in microform, as well as a collection of DVDs and audiobooks. A curriculum library for education students contains K-12 textbooks, classic children's literature and a review center for recent children's literature. Neumann Library also includes University Archives, which houses the NASA Johnson Space Center History Collection.

COMPUTING AND TELECOMMUNICATIONS

Computing and telecommunications resources available to students, faculty and administrative staff include:

- PC and Macintosh workstations in laboratory environments, with annual replacement cycle of computer technology
- Open academic computer labs for students, days and evenings, seven days per week. For current hours, please see the Web site at www.uhcl.edu/uct
- High performance computer lab for special graphic application usage
- A faculty advisory committee is responsible for recommending academic computing lab annual software purchases and updates
- Fully equipped team-teaching classrooms

- University classrooms electronically equipped with integrated multi-media technology for video and audio presentations by faculty and students
- Electronic mail accounts for all admitted and enrolled students for their classes, faculty and staff communications and other scholarly pursuits. Accounts are provided to students upon their admittance to the university. Accounts stay active as long as students remain enrolled. Students are expected to abide by the University's Acceptable Use Policy

UCT Support Center serves as the first point of contact for all computing and telecommunications needs. The Support Center is available Monday through Thursday, 8 a.m. – 10:30 p.m., Friday and Saturday 8 a.m. – 5 p.m. in the Bayou Building, Room 2300, by phone at 281-283-2828 or by e-mail at supportcenter@uhcl.edu.

Information technology needs and services are available through the UCT Web site at www.uhcl.edu/uct, including documentation, self-help guides, "Today's News," and policies

- Wide variety of technology orientations and software training available to faculty, staff and students
- Industry-recognized software defenses against virus attacks on all university-owned computers
- Industry-recognized software defenses against spam
- Secure remote access to campus resources via VPN (Virtual Private Network)
- Siemen's telecommunications system for voice communications, including phonemail and fax service
- High-speed linkage for data, video and Internet access
- Strong commitment to software engineering and relational database (including Oracle)
- Laptop checkout, in several convenient locations, with wireless access and wireless setup assistance available to students
- High-speed, intra-campus local area network
- Wireless access is available in all campus classroom buildings
- Web pages for the university, schools, programs, faculty and individual courses (<http://www.uhcl.edu>)
- Support for faculty in instructional design of online courses, as well as Web-assisted and Web-enhanced instruction

For more specifics, please tour our Web site at www.uhcl.edu/uct

WRITING CENTER

The Writing Center is an instructional facility where members of the university community (students, faculty and staff) can work with trained tutors on their writing projects. Tutors collaborate with writers as they sort through ideas, analyze assignments and audiences, revise documents by clarifying ideas and structure, and learn stylistic and editing strategies. The Writing Center also offers online tutoring for currently registered students. For more information, contact the Writing Center at 281-283-2910, visit our Web site www.uhcl.edu/writingcenter or e-mail writingcenter@uhcl.edu, or simply drop by SSCB 2105.

UHCL ALUMNI ASSOCIATION

University of Houston-Clear Lake is committed to its alumni. The purpose of the Office of Alumni and Community Relations, and the alumni association as the volunteer leadership component, is to contact, engage, serve, empower and acknowledge alumni through programming, services, events and outreach.

All UHCL graduates and recipients of teacher's certificates are automatically members of the UHCL Alumni Association with no dues necessary. This means that UHCL graduates have access to the entire family of alumni, plus a host of great benefits. To learn more about the UHCL Alumni Association or to get involved, visit www.uhcl.edu/alumni or contact the Office of Alumni and Community Relations, 281-283-2021 or alumni@uhcl.edu.

UNIVERSITY POLICE

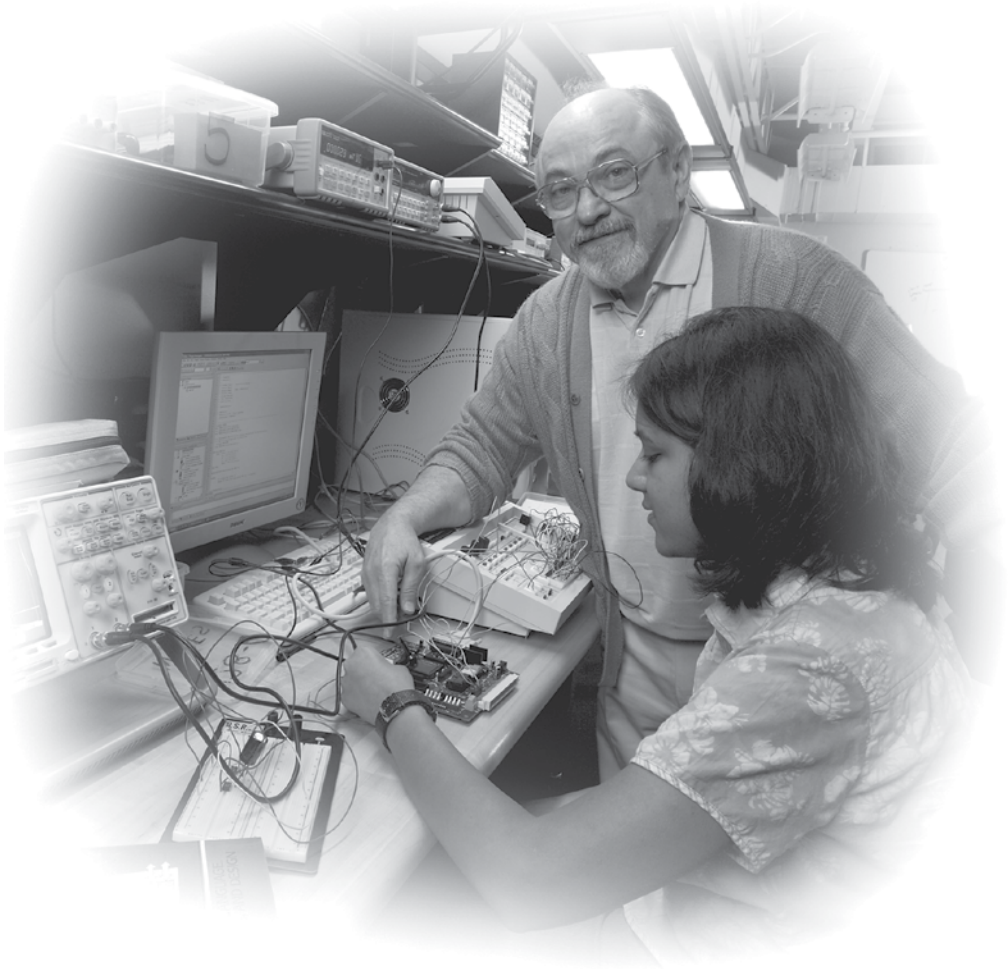
The University Police Department is responsible for law enforcement, security and emergency response at UHCL. The UHCL police serve the university community and visitors alike through law enforcement, crime prevention, traffic control and public assistance programs. The department enforces all university regulations as well as local and state laws.

The department is located in the Bayou Building, Suite 1636 and is operational 24 hours a day, seven days a week. Trained, professional police and communications officers staff the department. Services provided by the university police include: issuance of all parking permits, lock shop services including the issuance of codes and keys, vehicle unlocks, vehicle jump-starts, airing deflated tires and safety escorts to your vehicle.

To report an on-campus crime or any emergency, call the University Police Department at 281-283-2222 from off-campus telephones or 2222 from on-campus telephones. For special announcements, emergency closing and other information, call the UHCL Hotline at 281-283-2221. These numbers are listed on the front cover of the university telephone directory and on all of the department's printed publications and correspondence. For a complete overview of the University Police Department and its services, visit us on the Web at www.uhcl.edu/police.



Built on a 524-acre wildlife and nature preserve, University Houston-Clear Lake serves the Texas upper Gulf Coast. Students may earn bachelor's, master's or doctoral degrees in more than 40 fields of study including healthcare administration, instructional technology, digital media studies and biotechnology. The university, which has awarded more than 49,000 degrees since opening its doors in 1974, delivers outstanding educational opportunities in a traditional classroom setting using the latest instructional technologies, as well as cutting-edge distance learning, to a diverse student population



UHCL's small-class environment enables students to work closely with professors and benefit from individual attention.

NEW STUDENT INFORMATION

- Admissions General Information
- Admissions Policies and Procedures
- Graduate Admissions
- International Admissions
- Academic Advising

ADMISSIONS

General Information

Status Definitions

Admission is defined as permission to enroll in courses for academic credit. Admission to the university does not guarantee admission to a specific major or academic discipline. Graduate applicants may be either degree-seeking or non-degree-seeking. Transient students can only be admitted as non-degree-seeking. For admission purposes, all students are categorized as “new” or “former”. These classifications are defined as follows:

1. New students - students who have never enrolled or have not been enrolled at University of Houston-Clear Lake beyond the census date of any semester.
2. Former students - students who have attended UHCL but have not enrolled during the past three consecutive semesters. These students must re-apply to the university and may be required to resubmit documents from previous transfer institutions if those items are no longer on file.
3. Graduate students - students who have earned a bachelor's degree or higher and meet the university's graduate admissions requirements. These students may pursue a graduate degree, enroll in course work at the graduate level, or pursue teacher certification while completing a graduate degree. Students who will pursue teacher certification, without enrolling in a graduate degree program, should apply as a post-baccalaureate.
4. Degree-seeking applicants - students who are applying for admission to an academic degree program.
5. Non-degree-seeking applicants - students who are applying for admission for reasons other than the pursuit of a degree, (e.g. personal enrichment; or job enhancement). Non-degree-seeking students are not eligible for financial aid and must reapply as degree-seeking in order to pursue a degree at UHCL in a future semester. Credit earned in a non-degree status will not automatically be applicable to a specific academic degree program, and some courses are restricted to only degree-seeking students. Additionally, some academic departments limit the number of hours that can be taken in a non-degree-seeking status and applied to a Candidate Plan of Study (CPS). For specific policies regarding course availability and application, please refer to the appropriate academic department's program section of this catalog.

10 Information for New Students

6. Transient students - students who wish to enroll in a non-degree-seeking status at UHCL for only one semester, generally to transfer course work to another institution. Transient students must prove their eligibility by providing all documents required for their appropriate admission category prior to registration. Transients who wish to enroll in a second semester must obtain permission from the associate dean of their academic school of choice; and, they must reapply by submitting a new application and application processing fee to the Office of Admissions.

Admission Policies and Procedures

Application Fees

The current application processing fees are as follows:

Domestic graduate applicants	\$35.00
Domestic doctoral applicants	\$95.00
International graduate applicants	\$75.00
International doctoral applicants	\$135.00

New students, who do not enroll in classes, are eligible to update their application status within three semesters from the original semester of application. In order to update to a new semester, applicants should submit an Application Update Form. This form can be found on the admission's Web site.

Transcripts, Records and Transfer Work

Accredited Institutions

All transcripts submitted for admission purposes must be from a regionally accredited institution. An acceptable accredited institution is a college or university that has earned accreditation from one of the following recognized regional accrediting commissions: New England Association of Colleges and Schools, Middle States Association of Colleges and Schools, North Central Association of Colleges and Schools, Northwest Association of Colleges and Schools, Southern Association of Colleges and Schools or the Western Association of Colleges and Schools.

Proprietary, vocational-technical, bible and other specialized, single-purpose institutions that are not recognized by a regional accrediting agency are excluded. Credit earned prior to an institution receiving regional accreditation are excluded.

Documentation for Admission from U.S. Institutions

All documents submitted to meet admissions requirements must be official and from an institution that has regional accreditation (see Accredited Institutions). Official transcripts must be mailed directly from the former institution(s) to the Office of Admissions. Hand-delivered transcripts will only be accepted as official if they have been printed within the past 60 days and are received in a sealed envelope from the issuing institution. Unofficial transcripts, student copies of transcripts, or transfer course work shown on transcripts will not be accepted as an official record of course work.

The Office of Admissions must receive all documents by the appropriate deadlines. Applicants who are admitted under concurrent enrollment must be enrolled at another institution and submit a current paid fee statement from that institution's records office. An official transcript of courses that were in progress prior to or during enrollment at University of Houston-Clear Lake should be sent to the Office of Admissions once the grades have been posted. If an applicant knowingly withholds information or submits fraudulent information regarding enrollment at another collegiate institution, his or her application at UHCL will be considered invalid and the students may be administratively withdrawn from classes without a refund of fees paid.

Documentation for Admission from International Institutions

International students must provide the Office of Admissions with official transcripts, mark (grade) sheets and confirmation of degrees or diplomas for all academic studies attempted at other colleges/universities, prior to enrollment. All students should provide official transcripts and/or mark sheets in the original language and an English translation describing all academic studies attempted and completed. This information must be received before the final evaluation can proceed. Transcripts should clearly indicate dates of attendance, subjects taken and marks (grades) earned. They should also reflect any degrees or diplomas awarded.

Official transcripts are to be sent directly to UHCL by the registrar, principal or responsible head of each institution attended. When this is not possible, documents certified by an embassy or consular official as "true copies" may be accepted. Uncertified copies will not be accepted.

The university makes a reasonable determination of courses completed outside of the United States. However, if requested by a specific school, international students may be required to submit an independent evaluation of their course work. This evaluation must be performed by an approved accrediting agency to determine accurate course equivalencies. An evaluation of this type will occur at the student's expense. A list of acceptable agencies can be found on UHCL's International Admissions Web site.

Repeated Transfer Courses

All attempted course work for credit will be counted in determining the transfer grade point average required for admissions to a particular program or plan.

Records Retention and Release

Records from other institutions are kept on file for a period of five years. Former students who have not enrolled during the past five years must resubmit transcripts, documentation, and pay the application fee when reapplying to the university.

Once a document is submitted to UHCL, it becomes the property of the university and will not be returned or otherwise sent by e-mail, fax or mail to another institution or entity. Students may receive a copy of their previously submitted transcripts or scores, in person, by bringing a valid Texas Driver's License or ID to the Office of Admissions and completing a request form to release the information.

12 Information for New Students

Encumbrance Holds or Service Indicators

An encumbrance hold will prevent students from registering for the next enrollment term until all appropriate admissions documentation is received. Failure to provide official documentation will activate holds that will hinder future registration attempts and stop the release of records, including UHCL transcripts. Encumbrances may vary by restriction and type and may also be placed by other offices or departments. Encumbrance holds at another University of Houston system campus (UH, UHV, UHD) will not hinder registration and/or enrollment at UHCL unless the hold is a “Cross Campus B91, B92, B93 or B99” financial hold. A cross campus financial hold must be cleared at the campus that placed the hold, prior to the student being eligible to register at another system campus.

Admissions Communications

E-mail

The university assigned campus e-mail address is the official communication vehicle for all student information and exchanges among academic administrative offices. It is the student’s responsibility to check e-mail regularly to assure they receive important university information in a timely manner. Students who choose to utilize e-mail addresses other than the one assigned to them by UHCL, must log in to E-Services and forward their e-mail to another valid e-mail account to ensure access to important information and requests.

Notification of Admission

Upon receipt of appropriate documentation, the Office of Admissions will determine the eligibility of applicants to the university and will notify them of this determination. After acceptance, applicants will be notified of registration dates and procedures.

Acceptance into a Degree Program

The acceptance of a student into a degree program is determined by the admission standards of each academic school or department. Credit earned at University of Houston-Clear Lake is not automatically counted toward the completion of a degree program. Applicable credit is applied once the CPS has been completed and signed by both the student and an appropriate department representative.

Readmission or Status Change Process

Former UHCL students

Former students seeking readmission should submit the following:

- A completed Admissions Application
- A non-refundable application fee (see Application Fees)
- Official transcript(s) of any course work completed since the last semester of enrollment at University of Houston-Clear Lake. Students who graduate from UHCL and wish to enroll in additional course work must complete a new application and submit the appropriate application fee.

Former students are required to resubmit documents from other institutions for consideration of readmission if it has been more than five years since enrollment or if those items are no longer on file.

Students who leave the university on academic probation will be readmitted on probation. A degree-seeking student whose permission to register was terminated, due to academic deficiency, must be reinstated by the appropriate dean prior to readmission. Non-degree seeking students may be reinstated by the associate vice president of enrollment management.

Changing Classifications

To change academic careers from any undergraduate status to any graduate status (vice versa) or to change from non-degree seeking to degree-seeking, students must submit a new application to the Office of Admission and meet the appropriate admission criteria. Students who enroll in a degree-seeking status and wish to change to non-degree can do so by completing an Academic Records Change (ARC) in the academic advising office of their program. This change will be processed in the Office of Academic Records.

Admissions Requirements

Applicants who have earned a bachelor's degree or higher from an approved regionally accredited institution and who are eligible to return to the last institution attended will be considered for admission to graduate studies. Admission to the university does not ensure admission to degree candidacy in an academic discipline and separate admission criteria must be met within each school.

Admission Procedures

All applicants for graduate admission must present documented evidence that they meet the appropriate admissions requirements. International students have additional documentation requirements (see Documentation for Admission from International Institutions).

Graduate Studies Applicants:

Applicants seeking admission to a graduate program must:

- Submit an application for admission
- Submit a non-refundable application processing fee (see Application Fees)

An applicant, who is degree-seeking, must also submit:

- An official transcript from each institution attended. Transcripts should be sent to the Office of Admissions from the previously attended institution.
- An official graduate score report for the Graduate Management Assessment Test (GMAT), Graduate Records Examination (GRE) or Miller Analogies Test (MAT) per the requirements of the appropriate academic program or department. Score reports should be sent directly to the Office of Admissions.

Transcripts should reach the Office of Admissions by the published deadlines for the semester in which the student plans to enroll. If documentation is not received by this time; or, if the documentation indicates that admission requirements have not been met, an encumbrance hold will be placed on the students' record (see Encumbrance Holds).

Applicants with pending bachelor degrees

Students applying to a graduate program, prior to receipt of a bachelor's degree, must submit official documentation that their application for graduation has not been denied. A letter of standing from the associate dean or registrar at their home institution is required. Students must earn their bachelor's degree prior to enrollment at University of Houston-Clear Lake and an official transcript with the degree posted must be received by the first day of classes.

Non-degree-seeking applicants

Graduate non-degree students are those who wish to enroll for reasons other than the pursuit of a degree. Students wishing to enroll in a graduate non-degree-seeking status must submit an official transcript from the last institution attended and an official transcript showing the highest degree conferred. Credit earned in a non-degree status will not automatically be applicable to a specific academic degree program and some courses are restricted to only degree-seeking students. Additionally, some academic departments limit the number of hours that can be taken in a non-degree status and applied to a Candidate Plan of Study (CPS). Non-degree-seeking students planning to enroll in graduate course work in the School of Business must have permission from the associate dean or designee, prior to registering for classes. For specific policies regarding course availability and application, please refer to the appropriate academic program's section of this catalog.

Graduate Transient Status

Graduate students may be admitted to UHCL as transients for one semester. Students applying as transients generally plan to transfer course work to another institution. These students must submit official transcripts showing proof that a bachelor's degree or higher has been conferred. Students enrolling under this option, who decide to become degree-seeking, are required to reapply and pay the appropriate application fee. They must meet the university and academic program's current admission requirements (see Graduate Studies Applicants). Transients who wish to enroll in a second semester must obtain permission from the associate dean of their academic school of choice. They must then reapply by submitting a new application and application processing fee to the Office of Admissions.

Certificate Programs

Students, who apply to a certificate program without seeking a degree, must apply for admission, pay the application fee and submit transcripts from all previously attended institutions. Graduate test scores are not required. Since certificate programs are considered non-degree-seeking, students in this status are not eligible for financial aid or Dollars for Scholars awards.

Teacher Certification

Applicants for teacher certification, who do not plan to pursue a graduate degree, should apply as a post-baccalaureate student.

Graduate Transfer Credit Information

Transfer of Graduate Credit

Master's degree programs require a minimum of 30 semester hours. The last 24 semester hours must be resident credit earned at University of Houston–Clear Lake. The possibility of transferring credit toward a master's degree is limited to no more than 12 semester credit hours, but in most instances may not exceed six semester credit hours. The Doctoral degree program requires a minimum of 69 hours beyond the master's degree. The possibility of transferring credit toward the doctoral degree is limited to no more than 21 hours, but in most instances may not exceed 12 semester credit hours. Previously earned graduate credit is not necessarily applicable:

- Only graduate courses with grades of “B-” or above are transferable. Grades of “C+” or below are not transferable.
- The dean of the academic program will determine whether the contents of such course-work is pertinent to the degree objective.
- Courses completed more than five years prior to admission into a graduate program at UHCL may not be counted toward fulfilling the required number of hours unless approval is granted by the dean.
- Credit applied to a previous graduate degree may not be used to fulfill requirements of an additional degree.

Graduate Application Deadlines

School of Human Sciences and Humanities

Clinical Programs

Clinical Psychology, Family Therapy, School of Psychology
December 10 through January 25
(Both university and program applications are required).

Applied Behavior Analysis

Fall – March 15; Spring - October 15
(Both university and program applications are required).

School of Education

Counseling

Fall - June 1; Spring - October 1
(Both university and program applications are required).

Doctorate in Educational Leadership, Ed.D

Fall admission only - March 15
(Both university and program applications are required)

All Other New Graduate Students

Fall - August 1; Spring - December 1; Summer - May 1

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Examinations for Graduate Candidacies

All new graduate students must provide standardized test results for the GRE, GMAT or MAT examinations to the Office of Admissions as required by their academic program (refer to the program's section of the catalog). Former students, pursuing a degree in a new academic area or program, may be required to take a different graduate examination prior to being admitted.

Scores must be received directly from the testing agency. Hand-carried or student copies of score results or those that are more than 5 years old at the time of application are considered unofficial and will not be accepted. Students enrolling in a non-degree-seeking status are exempt from the standardized test requirement; however, they are required to meet current admissions requirements and must reapply and pay the application fee before changing to a degree-seeking status.

Exceptions:

1. The university will waive the graduate test score requirement for applicants with an earned doctorate from an accredited U.S. institution, (e.g., Ph.D. or Ed.D). Graduate score exemptions will also apply to applicants who have earned an M.D., D.D.S. (or other appropriate dental degree) or J.D. degree and are licensed to practice in the United States.
2. The School of Business will exempt applicants who have earned a graduate degree from a business school accredited by AACSB International (Association to Advance Collegiate Schools of Business).
3. A Graduate Acceptance Committee in the School of Science and Computer Engineering may request a Dean's exemption for applicants who have earned a graduate degree, in an appropriate field of study, from a regionally accredited institution of higher education.
4. Applicants to the School of Human Sciences and Humanities, who have earned at least a 3.0 GPA on the last 60 hours of undergraduate course work or who hold a master's degree or higher.
5. Applicants to the School of Education who hold a master's degree or higher and have earned at least a 3.0 GPA on the last 60 hours of course work.

Telephone Numbers and Information

GRE, GMAT and MAT test center information is listed below. For more specific examination requirements by college, plan and major, please refer to the appropriate school's section of this catalog.

Graduate Record Examination (GRE) 1-609-771-7670 or 510-654-1200
Institution code = R6916

Miller Analogies Test (MAT) 1-800-622-3231

Graduate Management Admission Test (GMAT) 1-800-717-4628

Select code by program of interest as follows:

- 1FD-BS-78 Master's in Healthcare Administration
- 1FD-BS-76 MBA, Full- Time
- 1FD-BS-08 MBA, Part Time

- 1FD-BS-45 MA in Human Resource Management
- 1FD-BS-29 MS in Accounting
- 1FD-BS-71 MS in Environmental Management
- 1FD-BS-86 MS in Finance
- 1FD-BS-81 MS in Management Information Systems
- 1FD-BS-93 MHA/MBA Joint Degree
- 1FD-BS-97 MS in Computer Information Systems (this majors accepts both GRE and GMAT scores)

INTERNATIONAL ADMISSIONS

The application deadline dates for international applicants are as follows:

Spring	October 1
Summer	March 1
Fall	June 1

Graduate international students must meet general admission requirements as noted in the Graduate Admission Procedures section of the catalog, in addition to the following:

1. An International Graduate Application for admission (for applicants who have earned a bachelor's degree or higher and who wish to pursue a graduate degree)
2. A non-refundable \$75 application fee (\$135.00 for applicants to the Educational Leadership Doctoral Program)
3. An official TOEFL or IELTS score report meeting minimum score requirements or official documentation of successful completion of ESL level 112 intensive English language program (please see the English proficiency requirement for non-US citizens).
4. A signed Sponsor's Affidavit
5. A signed Statement of Understanding
6. An International Student Adviser's Report (if currently attending an institution in the U.S.)
7. A copy of a current I-94 and SEVIS I-20 record (pages 1 and 3), if available

Please note: International students submitting foreign documents must follow University of Houston-Clear Lake procedures for the submission of this documentation (see Documentation for Admission from International Institutions)

Non-degree-seeking status

An international student holding F-1 visa status is not eligible to apply for admission to a non-degree-seeking status. An F-1 visa holder must apply as a degree-seeking student to a specific degree plan or program.

English Proficiency Requirements for Non-U.S. Citizens

All applicants, regardless of immigration status, who are citizens of countries where English is not the native language must demonstrate English proficiency. The intent of this policy is to insure that students for whom English is not a native language have a reasonable chance to succeed academically based on their ability to comprehend and use spoken and written English.

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Applicants may satisfy the English proficiency requirement in one of several ways:

- The applicant can present an official Test of English as a Foreign Language (TOEFL) score. The minimum acceptable scores are 550 on the written exam, 213 on the computer exam or 79 on the iBT TOEFL examination.
- The applicant can present an official International English Language Testing System (IELTS) score of 6.0 or higher.
- The applicant can present official documentation of successful completion of ESL Level 112 intensive English program.

Score reports may not be more than two years old at the time of admission. Only official scores will be accepted.

Procedure to Apply for English Proficiency Waiver

A TOEFL exemption may apply, if at least one of the following requirements is met:

- The applicant has earned a high school diploma from a U.S. high school or earned an associate, baccalaureate or higher degree from a regionally accredited U.S. institution of higher education.
- The applicant was born in a country where English is the native language. This exemption refers to students from Australia, the Bahamas, Belize, the British Isles (England, Ireland, Scotland, and Wales), English-speaking Canadian provinces, the Fiji Islands, Guyana, Jamaica, Liberia, New Zealand, Sierra Leone, South Africa, St. Lucia, Trinidad, The United States, the Virgin Islands, the West Indies and Zimbabwe.*
- The applicant presents qualifying test scores from SAT, ACT, ASSET, ACCUPLACER, COMPASS, TAAS, THEA/TASP and Stanford Achievement Tests (for deaf students only). Specific exemption information can be obtained by contacting the Office of Admissions. All information used to exempt students from TOEFL requirements must be received directly from the appropriate testing agency or posted on an official transcript from a transfer institution.
- The applicant has completed 12 or more semester credit hours of English from a regionally accredited U.S. institution of higher education with grades of “C” or better, with six of the 12 semester credit hours being English composition. English as a Second Language (ESL) courses will count only if they would apply toward a degree at the institution where the courses were taken.
- The graduate applicant who holds a bachelor’s degree or higher from a regionally accredited U.S. institution of higher education or a recognized foreign institution of higher education where English is the medium of instruction and where English is both the native and official language.

* An applicant whose native language is not English, but who has earned a bachelor’s degree or higher from an English-speaking country, may request consideration for a TOEFL waiver. Applicants requesting a waiver of the TOEFL or IELTS examination must submit a petition in writing, with supporting documentation, to the Office of Admissions a minimum of 30 days prior to the term in which they wish to enroll. The appropriate action will be taken only when full documentation is provided.

International Conditional Admission

International students who meet the institution's admissions requirements for their chosen degree program, but who have not yet met the English Proficiency requirement, can be conditionally admitted. To satisfy the English Proficiency requirement and be fully admitted to the university, the student must enroll in and successfully complete an ESL Level 112 intensive English program.

Co-Enrollment (International Students)

International students seeking a degree at University of Houston-Clear Lake may obtain an International Student Adviser's permission to co-enroll at another institution. A concurrent enrollment form must be obtained from a UHCL international adviser prior to registration in the appropriate school/department of concurrent enrollment. Proof of payment for concurrent enrollment at another institution of higher education must be provided to a UHCL international adviser for the current semester.

Health Insurance

All international students on F or J visas are required to have health insurance, including medical evacuation and repatriation coverage. The university provides such insurance and automatically adds the premium to applicable tuition/fee statements. International students with private health insurance comparable to the university's coverage may request a waiver of the university's health insurance. Students must complete a waiver form and provide proof of insurance to the Office of Admissions (the university may request additional information as needed to verify appropriate coverage).

Students may mail or fax coverage information to the attention of International Admissions. Health insurance waiver requests will be accepted until the census date, which is the twelfth class day in spring and fall semesters and fourth class day in regular summer terms. Requests for waivers or refunds after the census date will not be considered.

Check-In

All international students holding F and J visas are required to meet with an international student adviser upon arriving to campus. Students must bring their passport, visa, I-94, I-20 or DS-2019 and official copies of their transcripts and other academic documents showing degree completion and final semester course work. Students should check the International Admissions Web site for dates and times of check-in.

UNIVERSITY POLICY REGARDING DISCRETIONARY AUTHORITY

The university reserves the right to reject any applicant whose record does not indicate potential success at University of Houston-Clear Lake, notwithstanding the completion of other requirements. The university also reserves the right to further evaluate any applicant by using psychological, achievement and/or aptitude tests and personal interviews. Additionally, the university reserves the right to reject any applicant who falsifies information that is submitted for admission consideration or used to determine admissibility to the university. Readmission may be denied to any former students who has falsified university documents or who has used a university official's signature inappropriately, for personal benefit or gain.

ACADEMIC ADVISING

University of Houston-Clear Lake is committed to providing the most appropriate and effective academic direction, assistance and support for all students. At UHCL, the function of academic advising is provided directly through the four schools: Human Sciences and Humanities, Science and Computer Engineering, Business, and Education. Matters affecting degree requirements and graduation are best handled by professional advising staff and faculty working directly within the individual academic areas. Each school within UHCL has developed unique advising procedures to best serve the needs of its students. The relationship between students and their adviser provides the opportunity to learn more about educational choices and objectives, degree requirements, academic policies and procedures, and university resources. All students are strongly urged to contact their academic adviser prior to registering for their first semester at UHCL.

Ultimately, the students are responsible for seeking adequate academic advice, knowing and following degree requirements, noting and meeting important academic deadlines, and enrolling in appropriate courses to ensure timely progress toward a degree. A successful academic experience hinges on partnership and communication shared by the students and the advisers.

What you can expect from your adviser:

- Evaluation of your transcripts
- Adequate office hours and availability throughout the semester
- Assistance with registration course selections
- Accurate information regarding degree requirements and degree plans
- Assistance with evaluation of syllabi/course descriptions to determine acceptability of transfer course work
- Accurate audit of your CPS, upon request, to determine your progress toward graduation
- Assistance identifying solutions to academic difficulties
- Helpful referral to other university resources for additional assistance
- Appropriate confidentiality
- Respect, support and encouragement

What is expected of you as a student:

- Attend New Student Orientation
- Learn who your adviser is and where the advising office for your school is located
- Contact your adviser before deviating from requirements specified on your degree plan
- Contact your adviser when you need help BEFORE your issue is urgent!
- Keep track of your academic progress and your degree plan each semester
- Know university and school requirements and policies that may affect you
- Learn about and make use of all resources on campus
- Keep appointments that you schedule
- Follow through on adviser recommendations

- Be responsible for planning your course of study and fulfilling all requirements and procedures
- Accept ultimate responsibility for your decisions and actions
- Respect and comply with deadlines and requests for needed academic documents

How to Prepare for a Meeting with Your Adviser

- Check to make sure your adviser will be available
- Bring your up-to-date degree plan
- Have a list of questions and/or concerns so time can be used judiciously
- Remind your adviser what has been discussed previously

Become familiar with the advising process in your chosen school. Make sure your adviser has your most current contact information. Plan ahead and ask questions so your academic progress, decision-making and attainment of your university degree can be achieved with utmost success.

Advising Offices/Information

Bayou Building

	Room	Phone	E-mail
School of Business	B2111	281 283-3110	busadvoff@cl.uh.edu
School of Education	B1231	281 283-3600	education@uhcl.edu
School of Human Sciences and Humanities	B1539	281 283-3333	hshadvising@uhcl.edu
School of Science and Computer Engineering	B3611	281 283-3711	SCEAdvising@uhcl.edu
Distance & Off-Campus Education	B1406*	281-283-3031	disted@uhcl.edu

Student Services and Classroom Building

Career and Counseling Services (for non-degree-seeking students)	S3109	281 283-2590	www.uhcl.edu/careerservices
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*for more information go to www.uhcl.edu/disted



Students applying for financial aid can complete the process entirely online.

FINANCIAL AID

- Financial Aid
- Scholarships
- Veterans Benefits
- Vocational Rehabilitation

FINANCIAL AID PROGRAMS

The financial aid programs listed below are available to students seeking a graduate degree at University of Houston-Clear Lake. Students who wish to apply for financial aid should complete the Free Application for Federal Student Aid (FAFSA) online at www.fafsa.ed.gov. More information regarding the types of aid listed below can be found at www.uhcl.edu/finaid.

Program

- Federal TEACH Grant
- Texas Public Educational Grant (TPEG)
- University Competitive Scholarship
- Certified Educational Aides Exemption Program
- Fifth Year Accounting Scholarship
- Resident Graduate Student Assistance Grant
- Federal College Work Study Program (FWSP)
- Texas College Work Study Program (TWSP)
- *Federal Perkins Loan
- *Federal Direct Subsidized Stafford Loan
- Hinson-Hazlewood Loan
- Federal Direct- PLUS Loan
- Federal Direct Grad PLUS Loan
- *Federal Direct Unsubsidized Stafford Loan
- Short Term Loans

*All students applying for their first Federal Direct Loan at UHCL must complete entrance loan counseling at www.dl.ed.gov before loan funds can be disbursed.

Qualifying for Financial Aid Programs

Students must meet these minimum requirements:

- Be a U.S. citizen, U.S. national (includes natives of American Samoa or Swain's Island) or U.S. permanent resident who has an I-151, I-551 or I-551C (Permanent Resident Card)
- Be admitted to a degree-seeking graduate program
- Be enrolled at least half-time at UHCL Be making satisfactory academic progress toward a degree

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- Not be in default on any education loan or owe a refund on a federal or state grant
- Be registered with Selective Service System, if male.

Applying for Financial Aid

Because regulations governing financial aid change each year, students are required to reapply and submit new documentation annually. Funding sources and requirements change from year to year, and the amount and type of aid awarded to students may also change. All financial aid applicants are required to submit the following:

- 2009-2010 Free Application for Federal Student Aid (FAFSA) Available online at www.fafsa.ed.gov.
- If the FAFSA is selected for verification, signed copies of the student's 2008 Federal Income Tax and 2008 W-2 forms will be requested (along with those of spouse when applicable).

Priority deadline is April 1 of each year. Students applying after April 1 can expect the majority of the grant money to be exhausted.

Awarding of Aid

Financial aid is awarded based on enrollment projections on the applicant's FAFSA. Therefore, eligibility and enrollment must be verified before funds are disbursed to each student's account at the beginning of each semester.

Enrollment must again be verified after classes begin. Awards that are processed after the semester begins are based on the actual number of hours in which students are enrolled, excluding hours of withdrawal.

Students whose files are incomplete should be prepared to pay for their tuition, fees, books and supplies at the time of registration. Financial aid will not be awarded until all financial aid documents have been received and admission requirements have been met.

E-mail as Official Communication

The Office of Student Financial Aid will notify students regarding information needed, awards offered, etc. via e-mail. Students should check their UHCL e-mail accounts regularly to receive information from the Office of Student Financial Aid as well as other university offices. For information regarding UHCL e-mail, or to log in, go to <http://webmail.uhcl.edu>.

Disbursement of Funds

Financial aid disbursements begin approximately ten days prior to the first class day. In some cases, financial aid disbursements may occur after the fee payment deadline. Any student who has anticipated aid showing on their student account in E-Services does not need to make payment arrangements for the fee payment deadline if the anticipated aid will pay their account balance in full. Students whose accounts will be paid in full with anticipated aid will not be charged late fees or dropped for non-payment.

If the financial aid credited to a student's account creates a credit balance, a refund will be issued to the student by the Office of the Cashier after the term begins.

The Office of Student Financial Aid will notify students by e-mail when their financial aid is applied to their account.

Criteria for Satisfactory Academic Progress

Under federal and state statutes all students applying for or receiving federal or state financial assistance must be making satisfactory academic progress (SAP) toward a degree or certification. The Office of Student Financial Aid also uses this requirement for awarding institutional funds.

Review for SAP is done at the time the student first applies for financial aid and after that on a yearly basis (unless the student has been on financial aid probation previously, then SAP is calculated at the end of each semester). SAP is based on the following qualitative and quantitative measures:

Grade Point Average

- The qualitative measure requires that graduate students working on a master's degree or doctoral degree must maintain a cumulative GPA of 3.000 or better. Once a UHCL degree has been posted, SAP begins anew.

Completion Ratio

- The quantitative measure requires that students must have completed 75% of their cumulative attempted UHCL course work. This percentage is derived by dividing the total number of UHCL hours completed by the total number of UHCL hours attempted. Attempted hours are the total number of hours completed plus hours of "WX", "I", "F", and "IP". The percentage derived must be 75% or greater.

Timeframe to Complete Academic Program

- First Master's: within a total of 54 UHCL hours.
- Second Master's: time determined by the Candidate Plan of Study.

Note: Students changing plans are still held to timeframes originally begun with the first major chosen. However, if students require additional time for completion of the new plan, they can petition the Office of Student Financial Aid for review of extended time. Also, the Office of Student Financial Aid will extend the timeframe for students who are enrolled in particularly long programs of study per students request (student must provided Candidate Plan of Study).

Appeal Process for Denial Based on Unsatisfactory Progress

Students who fail to meet the grade point average requirement or the completion ratio requirement will be placed on "financial aid probation" for the following semester. Students will be notified via UHCL e-mail of their probationary status. If students fail to meet SAP the following semester, they will not be eligible to receive financial aid unless they complete a SAP appeal and that appeal is approved.

Students who fail to meet the timeframe requirement are not granted an automatic probationary status and will not be eligible to receive financial aid unless they complete an SAP appeal and that appeal is approved.

Appeals are considered for the following reasons:

- Increase in workload at place of employment because of promotion or overtime. Documentation from the employer on employer's letterhead is required.
- Personal illness or serious illness of immediate family members such as spouse, child, parent or sibling. Documentation from the physician on physician's letterhead is required.

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- Mitigating circumstances. Appropriate support documentation is required pertaining to the individual circumstances. Each appeal is reviewed on its own merit.

Appeal forms are available online at www.uhcl.edu/finaid under Online Forms and Services and must contain the following:

- Why the GPA is below the minimum requirement and how the student plans to bring the GPA up to the minimum requirement.
- Explanation of withdrawal from courses or the reason for not completing the courses, the number of courses or semesters required to complete the degree, and how this will be accomplished.

Appeal forms must be submitted to the Office of Student Financial Aid by the census date each semester. (Appeals received after this date may be reviewed at the discretion of the SAP Committee). Supporting letters must be typed with documentation attached plus a copy of the student's Candidate Plan of Study. Letters must contain the student's name, student id number, number of semesters or credit hours needed to complete degree requirements, the degree objective and the explanation for the unsatisfactory academic progress. Appeals not meeting this format will be returned to the student without consideration. The SAP Committee will review all appeals weekly. All decisions reached by the SAP Committee are final. Students will be notified via e-mail regarding the outcome of their appeal.

Financial Aid Policy for Students withdrawing from the University

Students who receive financial aid and completely withdraw from the University must repay all or part of their financial aid according to the policy explained below.

Financial aid recipients who receive federal student aid who withdraw on or before the 60% point in time of the semester enrolled will have the percentage and amount of Title IV unearned assistance calculated by the university. The unearned funds must be returned to the Title IV programs. The federal formula used to determine the less than 60% portion of enrollment requires that the number of the calendar days in the period of enrollment for which the assistance is awarded be divided into the number of calendar days completed in that period as of the day the student withdrew. The Office of Student Financial Aid will then determine the amount of money to be refunded.

Refund Distribution Priority

Refunds will be applied to the funds received by the student in the following priority:

- Federal Direct Loan Program (DL) - Unsubsidized Stafford Loan
- Federal Direct Loan Program (DL) - Subsidized Stafford Loan
- Federal Perkins Loan
- Federal Direct Grad PLUS Loan
- Federal TEACH Grant
- Other Title IV programs

Dropping From a Class but Retaining Half-Time Status

Financial aid awards are based on the number of hours indicated on the student's FAFSA. Students who change their enrollment status prior to census day will have their awards reevaluated based on their actual enrollment. Students who received funds based on the original enrollment status will be required to make repayment to the appropriate funds.

Students who reduce their course load after census day but remain enrolled at UHCL at least half-time will not have their financial aid adjusted and will not owe a refund. However, dropped courses are considered in the ratio calculation used to determine satisfactory academic progress.

College Work Study

Students awarded a college work-study (CWS) job as part of their financial aid package work on or off campus for up to 20 hours per week and are paid on a biweekly basis. Students who are awarded CWS will receive an e-mail containing a secure link with available jobs. After reviewing the position description students can apply for jobs online.

Exit Interview

When Stafford or Perkins loan recipients complete a degree or drop below half-time federal statutes require those students to have an exit interview to clarify and establish a repayment schedule on any monies owed. Students' academic records will be encumbered if the student borrower does not complete an exit interview.

Stafford exit interviews are completed online at www.dl.ed.gov. Perkins exit interviews may be scheduled through the Cashier's Office.

SCHOLARSHIPS

The Office of Student Financial Aid is committed to awarding scholarships to students consistent with the educational mission of our university. Graduate students (including international students) entering UHCL for the first time may apply for a Dollars for Scholars scholarship award. Additionally, current/continuing UHCL students may apply for university scholarships annually. For information and to apply for scholarships, please visit www.uhcl.edu/scholarships.

VETERANS AFFAIRS

To be certified for VA educational benefits veterans must be accepted for admission at UHCL and submit the following:

- UHCL Application for VA Educational Benefits Certification
- Candidate Plan of Study (CPS) (degree plan)
- VA form 22-1990 or 22-1995 (Application for VA Benefits or Request of Change of Degree/Place of Training)
- DD214, Member 4 Copy
- Copy of Military Transcripts
- Veterans must notify the Office of Student Financial Aid of any change in course load throughout each semester.

Satisfactory Academic progress

Satisfactory academic progress for veterans receiving VA educational benefits is defined by VARO. Graduate students must maintain a cumulative GPA of 3.00.

Veterans failing to achieve the required cumulative GPA will be placed on probation for one semester. At the end of the probationary semester, veterans who:

- Have not achieved the required semester GPA will be reported to VARO as making unsatisfactory academic progress.
- Have achieved the required semester GPA but not the required cumulative GPA will be allowed a second probationary semester.
- Have not achieved the required cumulative GPA at the end of the second probationary semester will be reported to VARO as making unsatisfactory academic progress.

Hazlewood Act

The Hazlewood Act passed by the Texas legislature provides for a waiver of tuition and certain fees for Texas veterans. A veteran may qualify for benefits under Hazlewood Act if he or she:

- Was a Texas resident at the time of entry into the armed forces of the United States.
- Served at least 181 consecutive days of active military duty (calculated as the sum items in 12(c) and 12(d) on Member 4 copy of the DD214) not including training days.
- Received an honorable discharge, a general discharge under honorable conditions, or an honorable release from active duty.
- Has resided in Texas for at least 12 months or otherwise meets the state requirements for being considered a resident of Texas at the time of enrollment at UHCL.
- Has attempted fewer than 150 credit hours of college courses since fall of 1995 using the Hazlewood exemption.
- Is not in default on any educational loans made or guaranteed by the Federal Government or the State of Texas.
- All recipients must complete a statewide application for Hazlewood exemption from Texas Higher Education Coordination Board before the census date of each semester.

Hazlewood benefits are not transferred from one state university to another. Veterans must reapply and provide UHCL with all necessary documents, including a completed Hazlewood Application (available at www.uhcl.edu/finaid under Online Forms and Services), a DD-214 (Honorable discharge, Home of Record, and six months of service must appear on DD-214) and a letter from VARO stating all VA Benefits have been exhausted (unless the veteran has been out of the military for more than ten years).

Hazlewood Exemption Deadline

If the student provides his or her eligibility for the Hazlewood Exemption before the census date of each semester, then the institution must honor the waiver. But, all students must turn in a statewide Hazlewood application to their institution by the census date; all other supporting documentation can have extensions on them. UHCL will not honor Hazlewood requests after the census date. (Hazlewood exemptions are not retroactive to prior terms).

VOCATIONAL REHABILITATION

The Texas Rehabilitation Commission offers assistance for tuition and required fees to students having certain physical or emotional handicaps, provided vocational objectives selected by the handicapped persons have been approved by appropriate representatives of the commission. Through this state agency, other rehabilitation services are available to assist handicapped persons to become employable. Applications for assistance should be made to the nearest rehabilitation office.



Personal help with admissions, registration, student records and scholarship services can make dreams of earning an advanced degree a reality.

REGISTRATION AND RECORDS SERVICES

- Registration
- Tuition and Fees
- Academic Record Services

REGISTRATION

Enrollment is necessary for every period of attendance at University of Houston-Clear Lake. Registrar's announcements specify times and places and give other instructions for completing the enrollment process. Registration materials may be obtained from the The Student Assistance Center, suite 1.102, Student Services and Classroom Building, or by accessing www.uhcl.edu/records. Registration is not complete until tuition and fees have been paid in full. If tuition and fee payments are not received by stated deadlines, payment will be considered late. Questions regarding registration should be directed to the Office of Academic Records.

AVAILABILITY OF COURSES

The university does not guarantee that courses listed in this catalog will be offered in any given term or year. Registration for a particular section will be permitted only until available classroom space has been filled.

The university also reserves the right to cancel any course or section for which enrollment is insufficient, according to state policies, to split classes that are over-enrolled and to change the instructor and/or classroom without advance notice.

DEGREE-SEEKING VERSUS NON-DEGREE-SEEKING STATUS

- Degree-seeking students must select courses complying with provisions of their Candidate Plan of Study (CPS). The university is under no obligation to recognize courses taken prior to approval of a CPS, as applicable to any degree.
- Non-degree-seeking students may register for courses on a space available basis. Several programs, however, restrict availability of classes to degree-seeking students. Contact the advising office in each school for additional information. The university is under no obligation to recognize credits earned by non-degree-seeking students as applicable to any degree. Non-degree-seeking students are subject to the university's academic standards and do not differ from degree-seeking students in regard to the requirements of any other university policies.

LATE REGISTRATION

Final schedule revisions (drop/add) and late registration will be permitted during the first week of classes of a specific term. Times and dates will be announced by the Office of Academic Records. No registrations or schedule changes will be permitted after Late Registration. A late registration fee will be charged to students who register during late

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registration. Students who have not paid by the payment deadline date will be charged a late payment fee.

CANCELLATION OF REGISTRATION

Students may cancel their registration and be entitled to a full refund of tuition and refundable fees if they follow proper procedures through the Office of Academic Records before the first class day of the term. (Refer to the Refund Policies section of this catalog.) Requests for cancellations may be done through E-Services or in writing and received by the Office of Academic Records prior to the first class day of the term. Such notices may be faxed to the office at 281-283-2530.

REGISTRATION DISCREPANCIES

If students become aware of registration discrepancies, (i.e., they are not listed on the official class roster or their class schedules do not reflect the classes being attended), they must contact the Office of Academic Records in order to correct any discrepancies. Only the Office of Academic Records is authorized to make official changes in students' registration status.

CLASS ENROLLMENT

Enrollment in a class is achieved only through proper registration or schedule revision procedures. Instructors receive students' names only by official notice from the Registrar. Students will not receive credit for courses for which they are not registered. Students are responsible for insuring that they have met any prerequisites prior to enrolling in any course. International students (F and J student visa holders) are limited to three credit hours, per semester, of online coursework that may be counted toward full-time enrollment per the Department of Homeland Security. The UHCL catalog provides a complete listing of courses with descriptions that include prerequisites. Course prerequisites are also shown in the class schedule. Students who enroll for courses without having met the prerequisites will be dropped from the course.

CENSUS DATE

As defined by the Texas Higher Education Coordinating Board (THECB), the census date is the date for official enrollment reporting. For long semesters (fall and spring), the census date is the 12th class day for regular sessions and is adjusted in accordance with THECB for all other sessions. It is used for the last day to drop without a record and the last day to request a change on residency status for that semester. Official verifications of enrollment for a semester will begin on the day following the census date.

AUTOMATIC ENROLLMENT-MASTER'S OPTION COURSE WORK

Students' first semester of registration for master's thesis, project, internship or residency must be done in person. After the initial semester of registration in master's thesis, project, internship or residency, students will be automatically enrolled in the same course work each long semester (fall and spring, but not summer) until a final grade is awarded. This registration will be processed during Open Registration, and students are expected to meet the fee payment deadline for Open Registration. Students wishing to be enrolled for summer semesters must notify the Office of Academic Records prior to the beginning of the summer semester.

TIME CONFLICT ENROLLMENT

Students are not permitted to enroll in two different courses that are scheduled to meet at the same or overlapping times.

AUDITING COURSES

Application forms to audit a course may be obtained from the appropriate associate dean's office. Registration to audit a course is on a space-available basis. Individuals may be given permission to audit courses only after the conclusion of the regular registration period and the determination that the student is eligible and space is available. Auditing status provides the privilege of class attendance only and does not include taking examinations, submitting papers, participating in laboratories, field work or receiving a grade in the course. Individuals auditing courses will pay the regular tuition, student services fees, specific course fees and other applicable fees indicated in this catalog. Individuals with audit status will not be given credit status after having registered on an audit basis. Records of individuals who have audited courses will not be maintained by the university.

Fee Waiver for Senior Citizens to Audit Courses

As provided in the Texas Education Code senior citizens, 65 years of age or older, may audit, on a space-available basis, any course offered without payment of tuition or fees. Applicants need to provide evidence of age to the Cashier when requesting waiver of fees.

The Office of Academic Records, suite 1.101, Student Services and Classroom Building, will be responsible for assisting senior citizens to determine course availability, approval of instructor, registration procedures and general auditing regulations.

TUITION AND FEES

The tuition and fee information provided is not intended to be comprehensive and is subject to change pending action taken by the Texas Legislature or University of Houston Board of Regents. Changes become effective on the date of enactment. The following information should be used only as a guide for estimating tuition and fee charges.

DEFINITIONS AND REGULATIONS

Students are responsible for knowing the current financial regulations of the university. Current regulations are applicable to all students regardless of the date of enrollment. Interpretation or explanations contrary to the regulations of this catalog are not binding upon the university. The university reserves the right to modify any statement as required by unforeseen conditions or by legislative actions.

TUITION

Students are assessed tuition according to residence classification and the number of semester credit hours for which they register, subject to the statutory provisions of House Bill No. 43, 62 Legislature:

- Residents of Texas will be charged tuition at the rate of \$100 per semester credit hour for graduates.
- Non-residents of Texas and foreign students will be charged tuition at the rate of \$377 per semester hour for graduates.

An alien who has been lawfully admitted for permanent residence in the United States shall be considered for residency based on the same regulations in effect for U.S. citizens. Aliens who are present in the United States on a temporary or student visa shall not be eligible for classification as residents.

Tuition Residence Regulations and Appeals

It is important for students to know whether they will be classified as residents of the state of Texas. Students who do not qualify as bona fide residents at the time they register must pay the non-resident tuition fee.

An official determination of the residence status of students is made in the Office of Admissions at the time the application for admission and support documents are received. If students expect a change in residence status prior to first registration, this should be indicated on the application. If a change in residence status occurs after submitting the application, students must inform the Office of Admissions. Students have a continuing responsibility to register under and to maintain the correct residence classification.

If there is any question concerning eligibility for classification as a resident of Texas at the time of registration, or any time thereafter, it is the responsibility of students to consult with the Office of Admissions. All requests for reclassification should be submitted at least 30 days prior to the registration period in question, but no later than the census date. Requests or documents received after the census date of a given semester will be considered for the next semester.

Students who believe they have been misclassified may petition the Office of Admissions for reclassification. Students may be required to furnish evidence in support of an appeal.

General Residency Requirements

Summarized below are the general rules for meeting eligibility requirements in the state of Texas. Exceptions to these rules for military personnel, teachers of higher education and their dependents, scholarship recipients and other special programs are discussed in an online booklet titled “Rules and Regulations for Determining Residence Status” published annually by the Texas Higher Education Coordinating Board. The information may be viewed online through www.collegefortexans.com/residency.

Residence of a Minor or Dependent: An individual who is 18 years of age or under or is a dependent and whose family has not resided in Texas for the 12-month period immediately preceding the date of registration shall be classified as a non-resident student regardless of whether he/she has become the legal ward of residents of Texas or has been adopted by residents of Texas while he/she is attending an educational institution in Texas, or within a 12-month period before attendance, or under circumstances indicating that the guardianship or adoption was for the purpose of obtaining status as a resident student. The legal residence of minors or dependent children is usually that of the parent with whom the individual spends the principal amount of time. Upon divorce of parents, residency is based on the residence of the parent who has legal custody or has claimed the minor for federal income tax purposes both at the time of enrollment and for the tax year preceding enrollment.

Individuals over 18: An individual who is 18 years of age or older, who is a legal U.S. permanent resident, who has come from outside Texas and who is gainfully employed in Texas for a 12-month period immediately preceding registration in an educational

institution shall be classified as a resident student as long as he/she continues to maintain a legal residence in Texas. If such 12-month residence, however, can be shown not to have been for the purpose of establishing legal residence in the state but to have been for some other purpose, the individual is not entitled to be classified as a resident. A student enrolling in an institution of higher education prior to having resided in the state for 12 months immediately preceding time of enrollment will be classified as non-resident for tuition purposes.

FEES

Student Service Fee

The Student Service Fee, as authorized by state law, is required of all students. The income from this fee supports recreational activities, health and hospital services, artist and lecture series, cultural entertainment series, student publications, student government and other student services as authorized by state law.

Tuition Designated Fee

The Tuition Designated Fee, as authorized by state law and approved by the Board of Regents, is required of all students and is pledged to the retirement of bonded indebtedness for building construction.

Parking Fee

A Parking Fee of \$75 for an annual permit, or \$40 for each fall and each spring, and \$25 for the summer semester, will be assessed to students who operate motor vehicles on the campus or on properties leased by the university. Proof of ownership (current license receipts or titles for the vehicles) may be required. Refer to the Parking and Traffic Regulations issued by the University Police Department for additional information.

Any vehicle not having a valid UHCL permit will be ticketed unless special arrangements have been made with University Police to park on campus without such permit.

Lost or stolen parking permits must be reported to the University Police immediately so that a replacement permit may be issued. There is no charge for the first replacement permit, but an administrative fee or replacement of second and subsequent permits may be charged.

Computing Fee

The proceeds from the Computing Fee shall be used to provide students with access to computing facilities for activities and uses that are part of regularly scheduled academic functions of the university, and which are related to instructional activities, lectures, homework projects and provisions of the learning environment.

Extended Access and Support Fee

The University of Houston Board of Regents has authorized the UH System universities to charge a fee to support Distance Education and Off-Campus Instructional programs. The revenue from the Extended Access and Support Fee will support these programs, including Web-enhanced, Web-based courses, and marketing. The charge will be \$6 per credit hour, up to a maximum of \$54 per semester for all students registering for classes.

Publication and Transcript Fee

A Publication and Transcript Fee of \$15 is required of all students to cover the costs of university publications (Quick Reference Guide, catalogs, etc.) and reproduction of transcripts.

E-Services Fee

An E-Services Fee of \$13 is required of all students to cover the costs of maintaining on-line and telephone registration and other voice response registration system components.

Student Center Fee

A fee charged for the sole purpose of financing, constructing, operating, maintaining and improving a student center for UHCL. This fee will pay for expanded student organizational space, more informal space for students (i.e., lounges, study rooms, gathering spaces), multifunctional space, space for meditation, recreational/exercise facilities, maintenance and operation of the new building and renovations to existing spaces.

Graduate Programs Research Capability Fee (BUS)

Additional revenue will be used to purchase and support research databases befitting AACSB International accredited graduate business programs.

Designated Differential Tuition

The Designated Differential Tuition charged by the School of Business will be used to hire a minimum of four full-time tenure-track faculty in the school. These new faculty will facilitate the school in meeting the faculty sufficiency standards for AACSB International accreditation.

School of Education Doctoral Program

The Designated Differential Tuition charged by the School of Education applies to doctoral-level courses only and will be used as excellence funding to support faculty development and research initiatives.

Writing Center Support Fee

The Writing Center Support fee will be used to provide administrative and support services for the Writing Center. Located in the Student Services and Classroom Building in SSCB 2105, this facility offers writing tutoring for all university students, faculty and staff. The charge will be \$9 per semester.

International Education Fee

The International Education Fee of \$2 is assessed to each student in order to provide scholarship support for those who participate in study abroad programs.

Utility Surcharge

This fee will be used to fund utility increase. The charge will be \$10 per semester if enrolled in less than 6 credit hours and \$18 per semester if enrolled in more than 5 hours.

INSTALLMENT PAYMENT OF TUITION AND FEES

At the time of original registration UHCL students may pay their tuition and fees in full or they may elect a three-payment option (one half of tuition and fees at time of registration and the remaining one half in two equal installments). There is a \$15 non-refundable fee for the multiple payment plan. The installment plan is not available for summer semesters. Courses added after the original registration period must be paid for when added and cannot be applied to the installment plan. Payments due at the time of registration include:

- One-half of tuition and fees
- Non-refundable fee for installment plan
- Parking Fee
- Alumni donation (optional)
- E-Services Fee
- Late Registration Fee

Subsequent dates of payments will be listed on the fee statement. Students are responsible for all installment payments being made on time. Additional payment notices are not mailed. A \$10 late fee is charged for each late installment. Students who do not meet installment payment deadlines will have their records encumbered until all fees and penalties have been paid. At semester's end, any students who have not fulfilled their financial obligation on the installment contract will have their records encumbered and no grades or transcripts will be issued. There will be a \$50 default fee attached to the existing debt. In order for students to be eligible for enrollment in subsequent semesters and have the encumbrance removed from their records, all penalties and contract balances must be paid in full.

SCHEDULE OF CHARGES AND SPECIAL FEES

The following Schedule of Charges and Special Fees shall apply, where applicable, to all students at UHCL. These tuition and fee charges are assessed according to the number of semester credit hours for which students enroll and are payable at the time of registration. Students are not registered and are not entitled to university privileges until their tuition and fees have been paid in full. If payment is made by check or money order, such check or money order must be payable to the University of Houston-Clear Lake.

The charges quoted are those authorized at the time of publication of this catalog but are subject to change without notice as necessitated by university or legislative actions. Questions should be directed to the Office of the Cashier.

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FEE SCHEDULE

CR HR	RES GRAD	NR/F GRAD	TUI DES GD	TUI DES NR/F GD	ST SVC	P/T FEE	COM USE	LIB FEE	ID CD
1	100	377	153	190	30	15	16	6	3
2	200	754	306	380	60	15	32	12	3
3	300	1,131	459	570	90	15	48	18	3
4	400	1,508	612	760	120	15	64	24	3
5	500	1,885	765	950	150	15	80	30	3
6	600	2,262	918	1,140	180	15	96	36	3
7	700	2,639	1,071	1,330	180	15	112	42	3
8	800	3,016	1,224	1,520	180	15	128	48	3
9	900	3,393	1,377	1,710	180	15	144	54	3
10	1,000	3,770	1,530	1,900	180	15	160	60	3
11	1,100	4,147	1,683	2,090	180	15	176	60	3
12	1,200	4,524	1,836	2,280	180	15	192	60	3
13	1,300	4,901	1,989	2,470	180	15	192	60	3
14	1,400	5,278	2,142	2,660	180	15	192	60	3
15	1,500	5,655	2,295	2,850	180	15	192	60	3
16	1,600	6,032	2,448	3,040	180	15	192	60	3
17	1,700	6,409	2,601	3,230	180	15	192	60	3
18	1,800	6,786	2,754	3,420	180	15	192	60	3
19	1,900	7,163	2,907	3,610	180	15	192	60	3
20	2,000	7,540	3,060	3,800	180	15	192	60	3
21	2,100	7,917	3,213	3,990	180	15	192	60	3
22	2,200	8,294	3,366	4,180	180	15	192	60	3
23	2,300	8,671	3,519	4,370	180	15	192	60	3
24	2,400	9,048	3,672	4,560	180	15	192	60	3
25	2,500	9,425	3,825	4,750	180	15	192	60	3
26	2,600	9,802	3,978	4,940	180	15	192	60	3
27	2,700	10,179	4,131	5,130	180	15	192	60	3
28	2,800	10,556	4,284	5,320	180	15	192	60	3
29	2,900	10,933	4,437	5,510	180	15	192	60	3
30	3,000	11,310	4,590	5,700	180	15	192	60	3

CODE:

CR HR -Semester Credit Hour	TUIDES -Tuition Designated	P/T FEE - Publication and Transcript Fee
RES - Texas Residents	COM USE - Computing Fee	ID CD - Identification Card
EXT ACC - Extended Access Support	ID EDU - International Education	ST SVC – Student Service
UTL SURCG - Utility Surcharge	ST CENT -Student Center	E-SER - E-Services
NR/F - Non-residents	LIB FEE - Library Fee	GR, GRAD -Graduate

EXT ACC	INT EDU	ST CENT	E SVCS	UTL SURCG	WRT CTR	R-GR TOTAL	NR/F GRAD TOTAL
6	2	30	13	10	9	393	707
12	2	30	13	10	9	704	1,332
18	2	30	13	10	9	1,015	1,957
24	2	30	13	10	9	1,326	2,582
30	2	30	13	10	9	1,637	3,207
36	2	30	13	16	9	1,954	3,838
42	2	30	13	16	9	2,235	4,433
48	2	30	13	16	9	2,516	5,028
54	2	30	13	16	9	2,797	5,623
54	2	30	13	16	9	3,072	6,212
54	2	30	13	16	9	3,341	6,795
54	2	30	13	16	9	3,610	7,378
54	2	30	13	16	9	3,863	7,945
54	2	30	13	16	9	4,116	8,512
54	2	30	13	16	9	4,369	9,079
54	2	30	13	16	9	4,622	9,646
54	2	30	13	16	9	4,875	10,213
54	2	30	13	16	9	5,128	10,780
54	2	30	13	16	9	5,381	11,347
54	2	30	13	16	9	5,634	11,914
54	2	30	13	16	9	5,887	12,481
54	2	30	13	16	9	6,140	13,048
54	2	30	13	16	9	6,393	13,615
54	2	30	13	16	9	6,646	14,182
54	2	30	13	16	9	6,899	14,749
54	2	30	13	16	9	7,152	15,316
54	2	30	13	16	9	7,405	15,883
54	2	30	13	16	9	7,658	16,450
54	2	30	13	16	9	7,911	17,017
54	2	30	13	16	9	8,164	17,584

*The University may change tuition rates and other charges without notice when so directed by the Board of Regents. All students are charged, per semester, a Transcript/Publication fee, ID card fee, and Writing Center Support fee. Additional base fees include a Student Center fee of \$30 and an E-Services fee of \$13 for registration purposes. Graduate students within the School of Business will be charged, per semester, a Graduate Programs Research Capability fee of \$57.

Special Fees

In U.S. Dollars

Alumni Donation.....	1
Certificate, Teacher.....	.75
Certificate, Professional.....	.75
Computer Use Fee (maximum of \$192 for each semester).....	16/hr
Cooperative Education.....	.75
Differential Designated Tuition (BUS) - Graduate.....	.35
Differential Designated Tuition - SOE Doctoral Program.....	.20
Extended Access Fee.....	.6/hr - 54/max
Doctoral Program Application.....	.60
Duplicate Fee Statement, each.....	.3
Duplicate Diploma.....	.25
E-Services.....	.13
Field trip, each, when required for any given course; variable amount sufficient to defray the cost of the trip.	Variable
Former Student File Reactivation Application (not enrolled for at least one year).....	.35
Graduate Program Research Fee (BUS only).....	.80
Graduate Studies Application.....	.35
Graduation Application (includes diploma but not cap/gown).....	.65
ID Card.....	.3
International Student Insurance (annual).....	.850
International Student Application/Evaluation.....	.75
International Student Records Processing (per semester).....	.65
Internship.....	.30 - 72
Laboratory, per course.....	Variable
Late Registration.....	.50
Library Fee (maximum \$60 per semester).....	.6/hr
Matriculation (for withdrawal prior to first class day).....	.15
Parking (annual).....	.75
Parking (per long term).....	.40
Parking (summer).....	.25
Returned check charge, per check.....	.20
Special course fee, when required; an amount sufficient to defray the cost of materials and/or supplies required. May include malpractice insurance.	Variable
Student Center Fee.....	.30
Student Service Fee (max of \$180).....	.30/hr
Thesis binding, per volume.....	.20
Thesis copyright.....	.65
Thesis microfilm.....	.45
Transcript/Publication.....	.15
Tuition Recovery.....	.130
Utility Surcharge.....	.10/hr
Writing Center Support.....	.9

Rebates or Exemptions from Tuition and Fees

The statutes of the state of Texas describe certain instances in which students may be exempted from tuition and/or fees. The various types of exemptions and the Tuition Rebate Program are described below. In the case of exemptions, students have the responsibility to initiate the action of applying for an exemption through the Office of the Cashier and to provide evidence that all conditions required for the exemption have been met. Until such time as the exemption is established, students will be required to pay all tuition and fees. Students should apply to the Office of the Cashier at least one month prior to registration for the term in which they plan to utilize the exemption provision, but in all

cases such requests must be received no later than the census date of any semester to be effective for that semester. For more information contact the Office of the Cashier. In the case of a rebate, the student must apply for the rebate at the time of graduation in the Office of Academic Records. Once the rebate is verified by the Office of Academic Records, the refund will be issued by the Office of the Cashier.

Texas Veterans (Hazlewood Act)

Legal residents of Texas may be exempted from tuition and certain required fees under the Hazlewood Act. Texas veterans must meet the eligibility criteria listed in the Financial Aid section of this catalog. UHCL Hazlewood applications should be submitted to the UHCL Office of Financial Aid and Veterans Affairs 30 days prior to registration.

Children of Texas Veterans

Exemption from payment of tuition and certain fees extends to children of members of the armed forces who were killed in action or died while in service in World War II or in the Korean conflict or in any subsequent actions, and to orphans of members of the Texas National Guard and the Texas Air National Guard killed since January 1, 1946 while on extended active duty.

Children of Disabled Public Employees

Children of certain eligible firefighters, peace officers, employees of the Texas Department of Criminal Justice and game wardens who have suffered injury resulting in death or disability sustained in the line of duty may, under certain conditions, be exempted from payment of tuition and certain fees.

Deaf or Blind Students

Deaf or blind persons who are Texas residents may, under certain conditions, be exempted from payment of tuition and certain fees.

Children of Prisoners of War or of Persons Missing in Action

Dependent children under 18 years of age, or persons under 25 years of age who receive the majority of their support from their parent(s) may be exempted from the payment of tuition and certain fees if they are the dependent children of any person who is a domiciliary of Texas on active duty in the armed forces of the United States, and who at the time of registration is classified by the Department of Defense as a prisoner of war or as missing in action.

REFUND POLICIES

Refunds on Withdrawals

Students who pay tuition and fees for any term and who subsequently cancel their registration through the Office of Academic Records prior to the first day of classes for that term as specified in the academic calendar are entitled to a full refund minus a \$15 matriculation fee and the \$13 E-Services Fee and any other non-refundable fees.

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Students who officially withdraw from the university after classes begin may be eligible for a partial refund of tuition and fees. The applicable refund is based upon the courses in which students are enrolled on the date of official withdrawal. Applications for official withdrawal from courses or from the university must be made to the Office of Academic Records, through E-Services prior to the deadline stated in the academic calendar. Withdrawals in writing are effective on date of receipt. Letters can be faxed to the Office of Academic Records at 281-283-2530. The university reserves the right to deduct from the refund any outstanding financial obligations to the university.

In order to obtain a refund of parking fees, the parking permit must be returned to the Office of the Cashier at the time of withdrawal. If the Parking Fee has been paid and the permit has not been issued, the fee statement must be returned to the Office of the Cashier at the time of withdrawal.

No refund will be made to students who leave the university without officially withdrawing. Refunds are made in accordance with this schedule:

Fall and Spring Semesters (Regular Session)

- Prior to the 1st class day - 100%
- On or before the 5th class day - 80%
- 6th through 10th class day - 70%
- 11th through 15th class day - 50%
- 16th through 20th class day - 25%
- 21st class day and thereafter - No Refund

All Semesters (Eight and Nine Week Sessions)

- Prior to the 1st class day - 100%
- On or before the 3rd class day - 80%
- 4th through 6th class day - 50%
- 7th day and thereafter - No Refund

Summer Semester (Three, Four, and Five Week Sessions)

- Prior to the 1st class day - 100%
- On the first class day - 80%
- On the 2nd class day - 50%
- 3rd class day and thereafter - No Refund

Class days, including Saturdays, are counted from the first day that classes begin at the university as indicated in the academic calendar for that semester. Refunds are not made immediately upon official withdrawal. They will be processed after completion of all university registrations for that semester. Refunds will be processed through Higher One.

Refunds on Dropped Courses

Students who drop classes within the first 12 class days of a 15-week session; within the first four class days of an 8-week or 9-week session or within the first two class days of a 3-week, 4-week and 5-week session and who remain enrolled in the university for that semester may be refunded the applicable tuition and fees for classes dropped. No refunds will

be made for courses dropped after the 12th class day during a 15-week session, the 4th class day of an 8-week or 9-week session, or the 2nd class day of a 3-week, 4-week and 5-week session. Refunds will be processed through Higher One. UH-Clear Lake has partnered with Higher One to provide disbursement services for financial aid and tuition refunds. The refunds quoted are those authorized at the time of publication of this catalog but are subject to change without notice as necessitated by the university or legislative action.

STUDENT FINANCIAL RESPONSIBILITY

Students must meet financial responsibilities to the university. Writing checks on accounts with insufficient funds and failure to meet all financial obligations are considered a lack of financial responsibility.

Students forfeit check writing and cashing privileges for the balance of the academic year if they write two bad checks (unless due to bank error) to the university for tuition and fees, to the university offices for payment of other university obligations or for check cashing purposes.

Students who have written a bad check to the university (unless due to bank error) will be assessed a \$20 service charge. It is the responsibility of students to present evidence of bank error. Encumbrances and returned checks must be cleared by cash or cashier's check. Returned checks will not be re-deposited.

The university will not accept two-party checks for payment or check cashing privileges.

Students must be in good financial standing with the university at all times. Failure to meet financial responsibilities to the university may subject students to withdrawal and disqualification for registration for a subsequent term. Transcripts will not be given to or on behalf of students until all financial responsibilities have been met. Failure to clear outstanding debts could result in the debt being placed for collection procedure and reported to the Credit Bureau of Greater Houston.

ACADEMIC RECORD SERVICES

Official student records reside and are maintained in the Office of Academic Records. Students are responsible for insuring the accuracy of their records. Such records include, but are not limited to, personal information, home address and phone number, degree status, career (level), major and grades.

ACADEMIC RECORD CHANGES

Students wishing to change their major must obtain the Request for Academic Record Change form from the office of the associate dean in the school from which they are earning their degree. Students wishing to change their career (level) or degree status should contact the Office of Academic Records for the appropriate application. Changes made after the census date will be applicable to the next semester.

PERSONAL INFORMATION CHANGES

University records of students' names and addresses are based on information given on the Application for Admission. Subsequent changes must be reported to the Office of Academic Records. Requests for name changes must be accompanied by supporting

documentation including driver's license, marriage license, divorce decree or official name change document.

Any communication from the university mailed to the name and address on record is considered to have been properly delivered.

TRANSCRIPTS

Students may request official copies of their transcript from the Office of Academic Records. There is no additional charge for a transcript. Transcript requests must be in writing with the name of the student, student ID or social security number, the number of copies, the address it is to be mailed to or if it will be picked up, a phone number where the student may be reached and the signature of the student whose record is requested. Fax requests will be accepted. The fax number is 281-283-2530. Transcripts can also be requested online through E-Services. Telephone requests or e-mails will not be honored. Students whose permanent records have been placed with a service indicator will be denied transcript services until the specific obligations have been met.

UHCL transcripts contain only academic information and course work pursued at UHCL. Requests are limited to 10 copies per request form.

Transcripts from other institutions submitted to UHCL become the university's property and will not be reproduced and/or mailed to other institutions. Students may not obtain copies of their transcripts from other institutions. Transcripts from other institutions are destroyed five years after the last term of attendance.

GRADE REPORTS

Students can access their semester grades online at www.uhcl.edu/records/eservices. The student's password is required for this confidential access. Grades can also be obtained by requesting a transcript. Grade reports are not mailed.

Grade Discrepancies

Students with suspected grade discrepancies on their grade report should check with the appropriate office of the associate dean for clarification.

POLICY ON RELEASE OF STUDENT RECORDS

The Family Educational Rights and Privacy Act of 1974 is a federal law stating (a) that a written institutional policy must be established and (b) that a statement of adopted procedures covering the privacy rights of students be made available. The law provides that institutions will maintain the confidentiality of student education records.

UHCL accords all the rights under the law to students who are declared independent. No one outside the institution shall have access to, nor will the institution disclose, any information from students' education records without the written consent of students except to personnel within the institution, to officials of institutions in which students seek to enroll, to persons or organizations providing students financial aid, to accrediting agencies carrying out their accreditation function, to persons in compliance with a judicial order and to persons in an emergency in order to protect the health or safety of students or other persons. All these exceptions are permitted under the act.

Within UHCL, only those members individually or collectively acting in students' educational interest are allowed access to student education records. These members in-

clude personnel in the office of the president, senior vice president and provost, vice president for administration and finance, deans, associate deans, student services, computing services, cashier, accounting, career and counseling services, student life, health center, financial aid, member of academic, grade and honesty appeal committees and academic personnel within the limitations of their need to know.

At its discretion, the institution may provide directory information in accordance with the provisions of the act to include: student name, address, telephone number, university e-mail address, verification of date and place of birth, major field of study, dates of attendance, courses attended, classification, hours enrolled, date of graduation, degrees and awards received, the most recent previous educational agency or institution attended by the student, participation in officially recognized activities and sports.

Students who do not wish that public information (including their name, address and phone number) be released are responsible for notifying the Office of Academic Records during the first week of classes to insure that information is not released by the university or published in the student directory. A request made to withhold public information remains in effect until revoked in writing. Students may also choose to withhold public information online through E-Services.

The law provides students with the right to inspect and review information contained in their education records, to challenge the contents of their education records, to have a hearing if the outcome of the challenge is unsatisfactory and to submit explanatory statements for inclusion in their files if they feel the decisions of the hearing panel to be unacceptable. Information about this inspection and review process can be obtained in the Office of Academic Records.



Graduate business student Alvin San Miguel is excited about future possibilities provided by his education at UHCL.

STUDENT SERVICES

- Associate Vice President
- Career and Counseling Services
- Dean of Students
- Health and Disability Services
- Intercultural and International Student Services
- Student Housing
- Student Life
- Student Publications
- Writing Center

OFFICE OF THE ASSOCIATE VICE PRESIDENT

The Office of the Associate Vice President for Student Services provides support and direction for the offices of Career and Counseling Services, Dean of Students, Health and Disability Services, Intercultural and International Student Services, Student Housing, Student Life, Student Publications and the Writing Center.

The Office of the Associate Vice President provides students with advocacy, information and help with any phase of campus life. The Associate Vice President is responsible for interpreting and implementing student life policies, resolving disputes and disciplinary problems and handling student complaints. The rights and responsibilities of students are published in Student Life Policies. Standards of student conduct are enforced to ensure the safety of individuals, protection of property and the continuity of the educational process. Copies of Student Life Policies are available from the offices of the Associate Vice President, Student Life, Dean of Students and online at www.uhcl.edu under the Students tab.

	Office	Phone
Associate Vice President	Bayou 2523	281-283-3025
Career Services	SSCB 3109	281-283-2590
Counseling & Testing Services	SSCB 3103	281-283-2580
Health and Disability Services	SSCB 1301	281-283-2626
Disability Coordinator	SSCB 1302	281-283-2632
Intercultural and International Student Services	SSCB 1203	281-283-2575
Student Housing		281-286-5959
Dean of Students	SSCB 1201	281-283-2567
Student Life	SSCB 1204	281-283-2560
Student Publications	Bayou 1239	281-283-2570
Writing Center	SSCB 2105	281-283-2910

CAREER AND COUNSELING SERVICES

Career Services

Career Services assists students in establishing and/or advancing careers in their degree fields and in finding jobs while they are enrolled in school. Some services are available to alumni for a fee. Information on Alumni Career Services is available in SSCB 3.109 or at 281-283-2590. Career Services offers:

- Job search assistance
- Mock interviews and résumé critiques
- Resume referrals with career services registration
- On-line job listings
- On campus interviewing
- Multiple job fairs and networking events
- Cooperative Education

Cooperative Education (Co-op) is a planned learning experience designed to prepare students for careers by integrating work experience with academic study. Cooperative Education offers:

- Enriched student learning through experience gained from performing actual work assignments and developing professional skills in a work setting.
- Two work plans. The alternating plan allows students to alternate semesters of full-time classes with cooperative education work experiences. The parallel plan allows students to work part-time while attending classes.

Students must be degree seeking and meet academic eligibility requirements as defined by individual schools. When enrolled in a cooperative education course, students will be considered full-time for purposes of enrollment verification, but not for purposes of determining eligibility for veterans' benefits or financial aid.

Before participating in on-campus job interviewing, using job lines or cooping, students are required to complete a Career Services or Co-op registration. Individual assistance is available by appointment and during drop-in hours. All other services are available during office hours from 8:30 am to 7:00 p.m. Monday through Thursday and 8:30 am to 12:00 p.m. Friday.

Counseling and Testing Services

Counseling and Testing Services are designed to help students improve personal, academic and professional skills related to academic success. The professional staff helps students meet these needs by providing short-term individual counseling sessions, seminars, workshops and small group experiences.

Most services, including individual and group counseling, are free of charge and strictly confidential. The following services and resources are available to UHCL students:

- Individual and group counseling
- Academic skills training
- Entrance Exams (MAT, THEA)
- Vocational testing and counseling

DEAN OF STUDENTS

The Office of the Dean of Students (ODOS) provides a variety of programs and services designed to support students in achieving both academic and personal success. The ODOS staff is committed to fostering human dignity through acts of civility and respect; providing student-centered services and developing ethical leaders who work to create an inclusive community. The ODOS staff seeks to create student learning opportunities beyond the classroom that inspire intellectual, personal, and civic growth for all our students. The office staff serves as both an advocate and liaison for all students; and is here to assist faculty, staff and parents in any way possible. Their primary purpose is to help students and the university community in the following areas:

- Academic Resources for Student Success
- Campus Information Desk
- Community Building
- Conflict Resolution
- Emergency Resource
- Student Advocacy and Referral
- Student Assistance Center (SAC)
- Student Conduct
- Student Judicial Services
- Student Retention

Student Assistant Center

The Student Assistance Center (SAC) is a function of the Dean of Students Office and provides assistance relating to registration, student financials, admissions, financial aid, student records, transcripts, E-Services, and help with resolving academic and administrative issues. SAC provides support and general information to students, faculty, staff, and UHCL constituency.

Student Advocacy

The Office of the Dean of Students provides referral and support for students experiencing difficulties. This includes assisting students in resolving concerns and conflicts, making needed referrals, implementing student life policies and resolving disputes and disciplinary problems, including the Academic Honesty Policy.

Student Travel Policy

The University of Houston System has a policy that guides and directs all student travel. This policy, entitled “Travel by Students to Component University Funded Activity” (University of Houston System Administrative Memorandum - 03.E.08), is administered by the Office of the Dean of Students.

The Purpose of the policy is stated as follows: This document outlines the policy to minimize risks of liability connected with travel by Students of component universities. This policy applies to travel in excess of 25 miles that is undertaken by one or more students presently enrolled in a component university that is organized and sponsored by

the component university and that is travel funded by the institution and using vehicles owned or organization registered at the institution.

Copies of the policy can be obtained upon request at the office, or by accessing the Dean of Students Web site at www.uhcl.edu/deanofstudents.

HEALTH AND DISABILITY SERVICES

Health Services

The Health Center provides a wide range of professional services for UHCL students. It is dedicated to promoting good health and to providing emergency services and short-term medical treatment to any student who becomes ill or injured.

The Health Center has a women's health care clinic and a medical clinic that are supervised by a licensed Family Nurse Practitioner and physicians, which are available on an appointment-only basis. Complete laboratory services and a limited pharmacy are available and students may receive flu shots, immunizations, TB screening and routine injections. Nurses are readily available to answer health questions on a walk-in basis.

Prevention programs include screenings and health education on various medical issues. Acupuncture is available by appointment.

The Health Center encourages student health insurance for all currently enrolled students who are enrolled in 6 or more hours. Literature detailing the approved health insurance plan is available at our office. International students are required to have health insurance and are charged automatically at the beginning of each semester. International students may have this insurance waived if appropriate documentation has been noted.

Disability Services

The goal of Disability Services is to provide full participation and a fully integrated university experience for all members of the campus community. Services include academic accommodations, alternative testing, technological and adaptive resources, peer mentoring, resource material, scholarships and advocacy. The Coordinator of Disability Services facilitates referrals to other offices, which provide students with counseling, advising, financial assistance and tutoring, as needed. To be eligible for services, a student must have recent comprehensive documentation of disability. Prior to the beginning of the semester, students should contact the Disability Office to ensure the availability of timely and appropriate accommodations.

INTERCULTURAL AND INTERNATIONAL STUDENT SERVICES

The mission of the Intercultural & International Student Services (IISS) Office is to provide leadership, advocacy and support, which facilitates the development of successful, well-rounded, educated and accepting individuals. IISS promotes and enhances awareness of cultural pluralism through programming and serves as a platform that empowers underrepresented, first-generation and international students.

IISS offers a variety of programs and activities at no cost to all UHCL students.

- Student Advocacy - all students with concerns, problems, or students seeking advice may request assistance from the IISS staff. The staff serves as resources and advisors to all individuals and all groups of students, including underrepresented, first generation, marginalized, international, LGBT and women populations.
- Student Ambassador Program - IISS Student Ambassadors serve as peer mentors and advocates for all students.
- Cultural and International Resource Center - IISS maintains a collection of periodicals, books, training manuals, newsletters, audiotapes, and videos on a variety of cultural topics
- Cultural Programs/Festivals - IISS celebrates diversity on our campus with a variety of cultural programs designed to enhance the campus community members' understanding of different cultural practices, belief, and histories.
- Student Organizations - we provide support to ethnic and cultural student organizations and their events.
- External Scholarship Resources - extensive information on external scholarships is available.
- Volunteer Services - are available for students to become active participants in a variety of community services projects.
- Strictly Speaking - is a program offered to assist international students in improving their spoken English skills by pairing international students with U.S. students.
- Total Success Plus (TS+) is a mentoring program for all students. Selected students are paired with UHCL faculty and staff to provide extra support and encouragement.

Orientation

New International Students Orientation is offered prior to each Fall, Spring and Summer semester. A comprehensive program is offered to all new international students to the university. The orientation provides information regarding health insurance, visa regulations, cross-cultural adjustment, academic and peer advising. Airport Pickup services are offered for first time international students.

Women's and LGBT Services

Women's Services program is offered to women and others interested in women's issues. Programming is designed to promote gender equality and awareness. Advocacy and support are available for female students and others who need it.

UHCL-NCBI Campus Affiliate

National Coalition Building Institute's (NCBI) prejudice reduction/conflict resolution model is for students, staff and faculty. This program is a proactive systemic approach to sustain an effective diversity-training program. The training is intended as a university-wide ongoing mechanism for the UHCL community to provide an institutional response

to racial and inter-group conflict. This is best accomplished by recruiting and training a leadership team of student leaders, administrators, staff and faculty who act as a fully empowered team to address campus issues.

STUDENT HOUSING

University Forest Apartments is the only housing located on the UHCL campus. This 136-unit student housing facility is a two-story complex, which houses 288 students, faculty and staff. University Forest was built to provide comfortable living while providing students the opportunity to experience on-campus life. Three different types of apartments are available, allowing students to choose different living options. Individual leasing allows students the opportunity to have roommates and the financial security of only having to worry about their own rent. University Forest also has a twelve member staff that is on-call 24 hours a day to help in any way it can. The caring staff also provides a variety of programming that makes everyone at University Forest feel like he or she belongs to a great community. University Forest is ideal for the student who wants to meet lots of people. To receive information on how to apply, call 281-286-5959 or e-mail UFA@UHCL.edu. The Student Housing office is open Monday - Thursday 8:30 a.m. - 6:30 p.m., Friday 8:30 a.m. - 5:00 p.m., and Saturday-Sunday 11:00 a.m. - 3:00 p.m.

STUDENT LIFE

The Office of Student Life provides programs and services that enrich and support students' educational experiences by giving them the opportunity to express ideas, develop leadership skills and meet new people. Services provided include locker rentals, student ID cards, ticket sales to various university events and posting approval. The Student Life Office is comprised of the following components.

Orientation

A comprehensive orientation to UHCL is offered prior to each fall and spring semester for both undergraduate and graduate students. New students are strongly encouraged to attend this four-hour program, which addresses such topics as how to register for classes, how to make the most of campus life and how to utilize the available resources. Students are also given the opportunity to tour the campus, as well as meet with faculty, staff and other students. International students are encouraged to attend both this orientation and the New International Student Orientation sponsored by Intercultural and International Student Services.

Student Organizations & Student Government Association

There are approximately 70 student organizations recognized at UHCL, which represent most academic program areas and majors as well as social, recreational and religious interests. The Student Government Association (SGA), with representation from each organization, funds and assists student organizations. The SGA also appoints students to university committees and conveys student concerns and initiatives to the university administration.

The Office of Student Life supports the varied activities of the organizations through leadership development programs, space allocations and fund disbursement. All students are encouraged to participate in the activities of these organizations.

Special Events Program

The Special Events Program provides cultural arts and special events, which enhance the artistic environment of the university and the region it serves. Activities include theater, music and dance productions, visual arts exhibitions, distinguished lecturers, Welcome Week Activities and the Chili Cook-Off.

Fitness Center

The UHCL community can be active by becoming a member of the Fitness Zone. The 3,000 square foot fitness center is located in the Student Services-Classroom Building. This center includes aerobic machines and free weight equipment while activities include different athletic tournaments, educational programs and the 100 Mile Run/Walk Challenge.

Honor Societies

UHCL's honor societies recognize students' academic excellence and achievement. UHCL honor societies are affiliated with national societies, and invite students to membership based on the nationally recognized standards of their chartering organization. Some societies recognize accomplishments within specific disciplines while Alpha Chi, Phi Kappa Phi and Omicron Delta Kappa honor students from all academic disciplines.

UHCL honor societies are:

Alpha Chi	All Disciplines
Alpha Kappa Delta.....	Sociology
Alpha Iota (local).....	Legal Studies
Alpha Phi Sigma.....	Criminology
Beta Alpha Psi	Accounting
Beta Gamma Sigma.....	All Business Disciplines
Financial Management Honor Society.....	Finance
Kappa Delta Pi.....	Education
Omicron Delta Kappa.....	Leadership
Phi Alpha Delta.....	Pre-Law
Phi Alpha Theta	History
Phi Kappa Phi	All Disciplines
Pi Alpha Alpha.....	Public Affairs
Psi Chi	Psychology
Sigma Iota Epsilon	Management
Sigma Tau Delta.....	Literature

STUDENT PUBLICATIONS

Students enrolled in Newspaper Publication and Magazine Publication classes publish the student newspaper and magazine out of the Office of Student Publications. The student newspaper, *The Signal*, is published throughout the fall and spring semesters to provide news, feature, entertainment and opinion pieces concerning university events and issues. The newspaper serves as a public forum and encourages students, faculty and staff to submit story ideas and comments. The university's literary art magazine, *Bayosphere*, is produced during the spring semester and published in the fall. The magazine accepts works of fiction, non-fiction, photography, poetry and digital media from students, faculty, staff and members of the community. Both publications have received numerous awards in state and national collegiate competitions from the Texas Intercollegiate Press Association and the Columbia Scholastic Press Association.

WRITING CENTER

The Writing Center, located in SSB 2105, is an instructional facility designed to assist the university community with writing skills. Peer tutors are trained to work with writers by teaching a range of strategies for understanding assignments, planning texts, organizing discussions, writing strong arguments, revising for meaning, learning documentation styles, and developing editing skills. Tutors use collaborative techniques to explore with writers the requirements and possibilities of academic discourse. The Writing Center also offers COLT, an online tutoring service with phone chat, IM chat, and e-mail response options for currently registered students. For more information, please contact the Writing Center at 281-283-2910 or writingcenter@uhcl.edu.



Students show off their dancing skills at the UHCL Chili Cook-Off. This annual event is held every spring. Student organizations compete against each other in chili tasting and booth decorating events. The event also offers food and games for the entire family.



Graduation day represents a lifetime achievement that is celebrated throughout the university.

GENERAL PROGRAM REQUIREMENTS

- Degrees Offered
- Enrollment and Grading Policies
- University Graduate Degree Requirements

DEGREES OFFERED

The University of Houston-Clear Lake (UHCL) is authorized by the Texas Higher Education Coordinating Board to confer six degrees in 45 graduate majors.

- Graduate DEGREES CONFERRED
- Doctor of Education (EdD)
- Master of Arts (MA)
- Master of Business Administration (MBA)
- Master of Healthcare Administration (MHA)
- Master of Healthcare Administration/Master of Business Administration (MHA/MBA)
- Master of Science (MS)

GRADUATE MAJORS OFFERED

School of Business

- Accounting (MS)
- Business Administration (MBA)
- Environmental Management (MS)
- Finance (MS)
- Healthcare Administration (MHA)
- Healthcare Administration/Business Administration (MHA/MBA)
- Human Resource Management (MA)
- Management Information Systems (MS)
- Professional Accounting (MS)

School of Education

- Counseling (MS)
- Curriculum and Instruction (MS)
- Early Childhood Education (MS)
- Educational Leadership (EdD)
- Educational Management (MS)
- Instructional Technology (MS)
- Multicultural Studies in Education (MS)
- Reading (MS)
- School Library and Information Science (MS)

School of Human Sciences and Humanities

- Behavior Analysis (MA)
- Behavioral Sciences (MA)
- Clinical Psychology (MA)
- Criminology (MA)
- Cross-Cultural Studies (MA)
- Digital Media Studies (MA)
- Family Therapy (MA)
- Fitness and Human Performance (MA)
- History (MA)
- Humanities (MA)
- Literature (MA)
- Psychology (MA)
- School Psychology (MA)
- Sociology (MA)

School of Science and Computer Engineering

- Biological Sciences (MS)
- Biotechnology (MS)
- Chemistry (MS)
- Computer Science (MS)
- Computer Engineering (MS)
- Computer Information Systems (MS)
- Engineering Management (MS)
- Environmental Science (MS)
- Mathematical Sciences (MS)
- Physics (MS)
- Software Engineering (MS)
- Statistics (MS)
- Systems Engineering (MS)

STUDENT RESPONSIBILITY

Students are responsible for knowing their degree requirements and enrolling in courses appropriate for chosen degree programs. Students also are responsible for knowing all university regulations regarding student affairs and course work standards required for study undertaken in the university. While this catalog was prepared on the basis of the best information available at the time, all information including statements of fees, course offerings, admissions and graduation requirements is subject to change without notice or obligation. The most recent information regarding degree requirements and academic standards may be obtained from the appropriate dean's office. Student affairs information may be obtained by contacting the Office of the Dean of Students, or by contacting the individual student services offices.

ENROLLMENT AND GRADING POLICIES

In conjunction with academic performance standards, the policies listed below are utilized by the university in monitoring the academic progress of students.

COURSE LOAD

Students should be aware that academic work will be at advanced levels and should consider individual abilities when determining an appropriate course load. Course load limits may be set as terms of probation or readmission to the university after suspension. The university limits course loads to a maximum of 15 hours for graduate students during the fall and spring semesters. For the summer semester, the limit is 9 hours.

In evaluating their ability to carry a certain course load, students should consider:

- Time available for class preparation
- Whether an excessive load might endanger academic standing
- Physical and mental stamina
- Financial factors of commuting costs, tuition, fees and personal budget.

Under the Department of Homeland Security (DHS) regulations, international students are required to maintain full-time enrollment during each fall and spring semester. In addition, no more than three credit hours per semester taken online may be counted towards full-time enrollment for F and J student visa holders.

FULL-TIME/PART-TIME STATUS COURSE LOAD

Term	Full-Time	$\frac{3}{4}$ Time	$\frac{1}{2}$ Time
Fall and Spring Semesters	9 hours	6 hours	3 hours
Nine-Week Summer Sessions	5 hours	3-4 hours	2 hours
Five-Week Summer Sessions	3 hours	2 hours	1 hour

When enrolled in a cooperative education course, students will be considered full-time for purposes of enrollment verification. Students enrolled in at least three hours of master's option course work will be considered full-time for the purposes of enrollment verification for loan deferment.

RESIDENT CREDIT

Resident credit is defined in two ways:

- Credit awarded for successful completion of academic work undertaken at UHCL or
- Credit awarded for successful completion of academic work undertaken at another college or university provided that
 - Students are candidates for degrees at UHCL and
 - Students have written approval of their faculty advisor and their appropriate associate dean before undertaking academic work elsewhere.

Students should be aware that credits earned elsewhere without prior approval from UHCL are not considered credits "earned in residence" for the purpose of fulfilling general degree requirements.

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CLASS ATTENDANCE

Regular class attendance is expected of all students. What constitutes an acceptable rate of class attendance is a matter between students and their instructors, although the university expects instructors to maintain reasonable standards. Whenever instructors determine that students' absences have been excessive, they have the right to request that the appropriate associate dean withdraw the students from the course.

Drop/Withdrawal Mark

Students who drop classes or withdraw from all classes by the deadline date as stated in the academic calendar will receive one of the following grades: WQ (Student-initiated drop, No Evaluation) or WX (Administrative Drop or Withdrawal, No Evaluation). These marks imply no evaluation of students' performance prior to drop/withdrawal. Students may retain auditing privileges with the instructor's consent.

Student-Initiated Withdrawals

Students' applications for official withdrawal from courses or from the university must be made to the Office of Academic Records or through E-Services prior to the deadline stated in the academic calendar. Withdrawals in writing can be made by mail or by fax to 281-283-2530 and are effective on the date of receipt. Student-initiated drops and withdrawals are irrevocable. Retroactive drops or withdrawals are not permitted. Students lose all university privileges on the date the withdrawal from the university is effective.

Administrative Withdrawals

The university reserves the right to withdraw students from a class or all classes if, in the judgment of the appropriate university officials, such withdrawals are in the best interests of the students and the university. Students may be withdrawn for reasons of health, irresponsible financial conduct, unacceptable personal conduct, Honesty Code violations or other academic infractions or disregard of official summonses to respond to official requests.

DESCRIPTIONS OF LETTER GRADES

- Performance in the range of "A" represents exceptional scholarship and intellectual initiative in accomplishing graduate level course goals and objectives.
- Performance in the range of "B" represents competent achievement in accomplishing graduate level course goals and objectives.
- Performance in the range of "C" represents the minimally acceptable performance in accomplishing graduate level course goals and objectives.
- A "D" or "F" performance represents unsatisfactory or below minimally acceptable performance in accomplishing graduate level course goals and objectives.

Grades of "+" or "-" are refinements of the letter grades, represent grade point variations and may be used at the discretion of the instructor.

GRADING SYSTEM

Grade Points Per Semester Hour	Grade
4.000.....	A
3.667.....	A-
3.333.....	B+
3.000.....	B
2.667.....	B-
2.333.....	C+
2.000.....	C
1.667.....	C-
1.333.....	D+
1.000.....	D
0.667.....	D-
0.000.....	F
WQ.....	Student Initiated Drop, No Evaluation
WX*.....	Withdrawal or Administrative Drop, No Evaluation
NG*.....	No Grade Submitted, Contact Instructor
I*.....	Incomplete-No Credit, unless work is not completed on time, then an F is given
CR*+.....	Credit
NC*+.....	No Credit
IP*++.....	In Progress-No Credit

*These grades are not included in computing the grade point average
 +CR/NC awarded only for CLEP, master's option and TexES course work
 ++IP awarded for master's option course work

GRADE POINT AVERAGE (GPA)

This average is computed by multiplying the semester hours of each course attempted by the grade points earned in the particular course and then dividing the total number of grade points by the total number of hours attempted excluding those hours for which grades are shown with asterisk (*) above. GPAs will round at three decimals.

Cumulative GPA is based on the grade points earned since admission to UHCL or since the last UHCL degree awarded. All UHCL undergraduate and graduate courses taken by graduate students are calculated in the graduate GPA. Courses transferred in do not calculate in the UHCL GPA.

Incomplete Grade and Incomplete Grade Contract

A grade of Incomplete ("I") may be given at the discretion of the instructor to students who are making satisfactory progress in a course. Incompletes are typically given for emergency situations which occur after the withdrawal date but prior to the end of the semester, and which prevent the student from completing course requirements. When assigning the grade of "I," instructors provide students with an Incomplete Grade Contract that outlines the work to be accomplished before the "I" can be converted to a final grade and specifies a deadline date; this contract constitutes an agreement between instructors and students. A grade of "I" must be resolved within the time limit set by instructors;

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however, such limits may not be extended beyond the grade submission deadline for the next long semester following the semester in which the “I” was assigned. Failure to resolve an “I” will result in its conversion to a final grade of “F” on students’ permanent records. An “I” can be converted to a final grade only. A statement denoting the lapse will appear on the transcript.

Students should not re-register for a course to complete a grade of “I.” Incomplete grade contracts are submitted to the appropriate associate dean’s office.

Students on academic probation, who have outstanding “I” grades, will remain on probation until all incompletes are resolved. “I” grades are not calculated in the GPA. An “I” which has been changed to a grade or has been converted to an “F” will be recorded and academic action taken during the semester of the grade change.

In Progress Grade

Master’s Thesis, Project and Residency require continuous enrollment. A grade of In Progress (“IP”) will be recorded until final grade assignment for completion of the master’s option. Not all internships require continuous enrollment but those that do are eligible for “IP” grades. The “IP” grade will not automatically convert to “F” if not resolved within a specified time. At the time final grades for master’s option course work are assigned, outstanding “IP” grades will be converted to Credit (“CR”) or No-Credit (“NC”). If the final grades are “C” or better, six hours of the letter grade assigned will be recorded and the remaining “IP” grades will be converted to “CR.” If the final grades are “C-” or below, six hours of the letter grade assigned will be recorded and the remaining “IP” grades will be converted to “NC.” Faculty, with the approval of the associate dean, may change an additional three hours of “IP” to a final letter grade. Students enrolled in master’s option course work are automatically enrolled in the same course each fall and spring semester until a final grade is assigned (see Automatic Enrollment). Students must complete an application for graduation by the stated deadline during their last semester of enrollment. Failure to do so will result in a delay of graduation to a future semester.

Grade Changes

Grade changes are allowed for only one of the following three reasons:

- Removal of an incomplete grade.
- Result of a formal grade appeal or hearing process.
- Correction of instructor error.

Other than removing an incomplete, grades will not be changed on the basis of extra work submitted after final grades are assigned.

Only the course instructor may assign grades for students in a course. Grade changes may be made by the instructor or the associate dean in the absence of the instructor. After one long semester, a grade change submitted by an instructor must be approved by the associate dean for the program in which the course is taught. Grade changes must be filed in the Office of Academic Records within one year after the original grade is posted. Grade changes resulting from the completion of In Progress (“IP”) or Incomplete (“I”) work may only be initiated by the instructor of record or the associate dean. When the grade change is processed, students will be notified by mail by the Office of Academic Records. Academic action that results from a grade change will be taken during the semester of the grade change. The changed grade will be the final grade used to compute the GPA.

Repeated Courses

If students repeat a course, it is with the understanding that the last grade earned in the course is the one counted toward fulfillment of degree requirements and hours earned. Only the hours and grade points earned on the last attempt will be counted in the Grade Point Average (GPA) calculation and in determining academic standing. With prior approval of the appropriate associate dean, students may repeat courses at another college or university to raise a grade, including “F,” earned at UHCL. However, the original grade earned at UHCL will remain a part of the academic record. Courses repeated at other institutions are treated as transfer credit. They will not be considered resident credit and will not be included in the UHCL GPA. Only grades earned on repeated courses taken at UHCL will be counted in the UHCL GPA.

ACADEMIC STANDARDS

The university expects students to meet certain standards of academic performance in order to maintain good standing and degree candidacy. The academic performance standards stated in this catalog apply to all students regardless of the catalog under which they entered the university.

Graduate Academic Status

Graduate students must maintain a cumulative GPA of 3.000 or better in course work at UHCL. Each school may establish standards beyond the university’s minimum cumulative GPA requirement. A minimum of 3.000 cumulative GPA is required to graduate. All course work taken as a graduate student will be used in calculating the grade point average and determining academic status even when those courses are not counted toward degree requirements.

Academic Probation

Graduate students whose cumulative GPA falls below 3.000 will be placed on academic probation. Graduate students who are on academic probation must earn a minimum 3.000 semester GPA on course work each subsequent semester until the grade point deficiency is removed. Only course work taken at UHCL will be applied toward the grade point deficiency. Students on academic probation, whose cumulative GPA meets minimum requirements, will remain on probation until all incompletes are resolved. Students who leave the university on academic probation will be readmitted on academic probation. Academic probation will be noted permanently on students’ academic records.

Academic Suspension

Graduate students who are on academic probation and earn less than a minimum 3.000 semester GPA will be suspended from the university. During academic suspension, students may not enroll, audit or visit classes at the university. Academic suspension will be noted permanently on students’ academic records.

Reinstatement

Students who are suspended from the university for the first time may apply for reinstatement after one semester of non-enrollment. Students on suspension for the second time are eligible to apply for reinstatement after one year of non-enrollment. Students

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who have been suspended three times are suspended indefinitely. All academic suspensions are career specific (UGRD and GRAD). The suspension count is reset to zero for undergraduate students who pursue a UHCL graduate degree. Reinstatement following suspension is not automatic. Students who are eligible and seek reinstatement must submit to the associate dean of the school to which they wish to return a written petition justifying their readiness to resume satisfactory academic work at the university. Students who are non-degree-seeking [major codes NONDEGREGR] petition the Office of the Provost. At the time of application for reinstatement from academic suspension, students desiring to change their major from one school to another must submit a Request for Academic Record Change (ARC) form along with a petition for reinstatement to the associate dean of the school to which they wish to be admitted. Courses taken at another college or university while students are on suspension from UHCL may not fulfill UHCL graduate degree requirements. Such courses may only be used with special permission from the associate dean. If a student has completed additional lower-level requirements during the suspension, it is advisable to include a transcript with the petition, in addition to having an official transcript sent to the Office of Admissions. Students petitioning for reinstatement over five years after their last term of attendance at UHCL must also resubmit official transcripts from universities and colleges previously attended. Records from previous institutions are destroyed after five years of academic inactivity.

Petitions for reinstatement must be submitted by the following dates:

Summer Semester	April 1
Fall Semester	July 1
Spring Semester	November 1

Students who have not been enrolled for at least one year must file an admissions application with the Office of Admissions and meet the requirements for readmission of former students after reinstatement has been granted.

If students are allowed to enter the university after academic suspension, they enter on academic probation and will remain in that status until their cumulative GPA meets the minimum requirement of 3.000 for graduates. A student who is reinstated must undergo mandatory advising until such time that he/she returns to academic good standing. Disciplinary suspensions are not covered by this policy. For details of the UHCL disciplinary policy, see the Student Life Policy Handbook.

STANDING

Graduate standing is given to those students who have earned a bachelor's degree and have indicated their intent to study in the graduate level or pursue teacher certification at UHCL by submitting a graduate studies application.

MISSED EXAMINATIONS AND ASSIGNMENTS

Students are expected to be present at all announced examinations, including final examinations. Unless satisfactory alternate arrangements are made with instructors, missed examinations will be considered as failed. Students who must be absent from classes for the observance of a religious holy day (as defined by the Texas Education Code) will be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. Students needing to reschedule an examination or

assignment for a holy day should submit a letter of request or appropriate form to each instructor within 15 days from the first class day of the semester. An instructor should acknowledge receipt where indicated on the form and return a copy to the student. A new date for taking an examination or completing an assignment missed for a holy day shall be set by the instructor. Should an instructor not honor the request for rescheduling examinations or assignments for holy days by setting reasonable new due dates, students may appeal the decision to their associate dean. The instructor or associate dean may require a letter of verification of the observed holy day from the religious institution.

GRADUATE COURSES

Graduate courses are defined as those courses with course numbers in the 5000,6000, 7000, and 8000 range. 7000 and 8000 range courses are restricted to doctoral students.

Graduate courses taken as an undergraduate will only calculate in the undergraduate hours earned and in the undergraduate GPA. Undergraduate and post-baccalaureate non-degree-seeking students are not eligible to enroll in graduate courses.

ACADEMIC APPEALS

Academic appeals include those appeals related to grades and academic programs or degree requirements. Specific instructions are provided below for each type of academic appeal. In all instances, the university expects that every attempt will be made initially to resolve such disputes informally through discussions by all relevant parties prior to initiating formal procedures.

GRADE APPEALS

All appeals relating to specific course grades require that students first seek a satisfactory solution with the instructor. If this is not possible or the instructor cannot be reached, the student must send a written statement detailing the grounds for the appeal to the associate dean of the school in which the grade was earned. This written request must be received by the associate dean within 45 days from the calendar date when grades are available as reported in the UHCL class schedule for that semester. The associate dean will then initiate the appropriate procedures to review the appeal. The student will be notified in writing of the decision. The student may appeal this decision in writing to the dean within 15 working days of notification. The dean's decision is final on all grade appeals.

APPEALS OF ACADEMIC PROGRAM OR DEGREE REQUIREMENTS

All appeals relating to specific program requirements (e.g., residency requirements, master's degree option decisions) require that students submit a written petition to the associate dean of the degree-granting school detailing the grounds for the appeal. The associate dean will respond in writing with a decision. The student may appeal this decision in writing to the dean within 15 working days of notification. The dean's decision is final.

ACADEMIC HONESTY POLICY

Preamble and Code

Academic honesty is the cornerstone of the academic integrity of the university. It is the foundation upon which the student builds personal integrity and establishes a standard of personal behavior. The university can best function and accomplish its mission in an atmosphere of the highest ethical standards. The university expects and encourages all students to contribute to such an atmosphere by observing all accepted principles of academic honesty. This policy is designed to encourage honest behavior and is jointly administered by faculty and students.

HONESTY CODE: The Honesty Code is the university community's standard of honesty and is endorsed by all members of the University of Houston–Clear Lake academic community. It is an essential element of the university's academic credibility. It states:

I will be honest in all my academic activities and will not tolerate dishonesty.

Section I: Responsibilities

Joint Responsibility: Students and members of the faculty are jointly responsible for maintaining the academic integrity of the university by following the Academic Honesty Code and by refusing to participate in or tolerate scholastic dishonesty.

Student Responsibility: All students at the University of Houston–Clear Lake are expected to maintain complete honesty and integrity in all academic work attempted while enrolled at the university. This standard of conduct includes reporting incidents of alleged violation of the honesty policy to the instructor involved or, if necessary, to the appropriate academic dean. Each student acknowledges, by the mere act of turning in work for a grade, that he or she has honored the Academic Honesty Code.

Faculty Responsibility: Faculty are responsible for helping students comply with the Academic Honesty Policy by noting the Honesty Code on the class syllabus. Instructors should help minimize student temptation to violate the code by enacting adequate security precautions in the preparation, handling and administering of graded work. Instructors are responsible for discussing incidents of alleged violation of the Honesty Code with the student involved, outlining authorized penalties for violation of the Honesty Code and notifying the student's academic dean of record and the Dean of Students when a determination has been made that a student has violated the Honesty Code, regardless of which type of academic sanction the instructor chooses to administer.

While all students are expected to maintain the highest standards of personal academic honesty, it is recognized that some students may not meet these standards. This policy is designated to address, in a uniform manner, cases of alleged violation of the Honesty Code.

Section II: Violations

Honesty Code Violations: Any conduct or activity by a student intended to earn or improve a grade or receive any form of credit by fraudulent or dishonest means is considered an Honesty Code violation. In addition, engaging in any conduct including the following examples which a reasonable person in the same or similar circumstances would recognize

as academic dishonesty is considered a violation. Examples of violations of the Honesty Code include, but are not limited to, the following:

1. Acquiring information:
 - a. Acquiring information for any assigned work or examination from any source not authorized by the professor.
 - b. Working with another person or persons on any assignment or examination when not specifically permitted by the instructor.
 - c. Observing the work of other students during any examination.
 - d. Using, buying, selling, stealing, soliciting, copying or possessing, in whole or part, the contents of an unadministered examination.
 - e. Purchasing, or otherwise acquiring and submitting as one's own work, any research paper or other writing assignment prepared by others.
 - f. Providing information:
 - g. Providing answers for any assigned work or examination when not specifically authorized by the instructor to do so.
 - h. Informing any person or persons of the contents of any examination prior to the time the examination is given.
2. Plagiarism:
 - a. Incorporating the work or idea of another person into one's own work without acknowledging the source of that work or idea.
 - b. Attempting to receive credit for work performed by another person, including papers obtained in whole or part from individuals or other sources.
 - c. Copying copyrighted computer programs or data files belonging to someone else.
 - d. Conspiracy - agreeing with one or more persons to commit any act of academic dishonesty.
3. Fabrication of information:
 - a. Falsifying the results obtained from a research or laboratory experiment.
 - b. Presenting results of research or laboratory experiments without the research or laboratory experiments having been performed.
 - c. Substituting for another student to take an examination or to do any academic work for which academic credit will be received. Changing answers or grades after an academic work has been returned to the student and claiming instructor error.
 - d. Submitting work for credit or taking an examination and employing a technique specifically prohibited by the instructor in that course, even if such techniques would be acceptable in other courses.

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4. Abuse of resource materials:
 - a. Mutilating, destroying, concealing, stealing or altering any materials provided to assist students in the completion of academic work, including library books, journals, computer files, microfilm and microfiche files, materials placed on reserve by the instructor or any such materials as the instructor may provide or assign.
 - b. Copying any data files or copyrighted computer program(s) for one's own personal use or the use of others.
 - c. Copying without permission of the owner, or mutilating or destroying any copyrighted media, printed or electronic (for example, film, video, music, graphics, art, photography or manuscript).
 - d. Failure to report - failing to report to the instructor any incident in which a student witnesses an alleged violation of the Academic Honesty Code. Details regarding the Academic Honesty Enforcement Procedures, Resolutions, Sanctions and Academic Honesty Council can be found in Student Life Policies in hard copy and on-line at the UHCL Web site and in the Faculty Handbook on-line at the UHCL Web site. Further policies governing alteration or misuse of university documents or furnishing false information to university officials may also be found in Student Life Policies or online at the UHCL Web site.

Records

The dean of students shall retain a copy of all Honesty Code Violation Forms. If the sanction imposed is a final grade penalty, suspension or expulsion, the registrar's office is notified and a record of the notification is maintained in the registrar's office according to the prescribed operating procedures of that office. If the student is found in violation of the Honesty Code and the penalty is anything except suspension or expulsion, the form does not become a part of the student's permanent record or transcript. Instead, it is retained by the dean of students. If the student is found in violation of the Honesty Code and the penalty is suspension or expulsion, the record becomes part of the student's permanent academic file and the notation of "Disciplinary Suspension" or "Disciplinary Expulsion" is placed on the transcript. In the case of suspension, the notation will be removed at the conclusion of the specific suspension period at the written request of the student. In the case of expulsion, the entry is noted permanently.

UNIVERSITY DEGREE REQUIREMENTS

UHCL has established minimum requirements for graduate course work leading to the Doctor of Education, Master of Arts, Master of Science, Master of Business Administration, Master of Healthcare Administration and Master of Healthcare Administration/ Master of Business Administration degrees. All graduate students must have an approved CPS that fulfills all university requirements and all degree program requirements. The university requirements for the doctoral degree are:

- Fulfillment of specific degree program requirements. These requirements are reported in the school section of this catalog.
- At least 69 hours must be selected from courses numbered 7000 or higher.

- 12 hours of dissertation are required.
- The Residency Requirement may be met by taking 9 or more hours in each of two consecutive long terms, in each of three consecutive summer terms, or in each of two consecutive summer terms and in one of the two intervening long terms.

Please see the School of Education section of this catalog for the details of the courses required.

The university requirements for the master's degree are:

- Fulfillment of specific degree program requirements. These requirements are reported in the school section of this catalog.
- At least 30 hours must be selected from courses numbered 5000 or higher.
- At least 24 of the final 30 semester hours must be taken in residence.
- Completion of three or more hours of one of the master's degree option. The individual schools establish the options to be available and set the number of hours in each option.
- Schools may allow no more than 25% of courses at the 3000 or 4000 level, exclusive of any foundation courses, or equivalent to apply toward the total number of hours required for a master's degree.
- A minimum of a 3.000 cumulative grade point average on course work taken at UHCL. No grade lower than a "C" is acceptable towards a graduate degree.
- Correspondence and non-resident credit may not be applied toward a graduate degree.
- Successful completion of at least one of the following requirements: comprehensive examination; thesis, project, residency or internship; or extended course work with a capstone course of a comprehensive nature.

MASTER'S DEGREE OPTIONS

All master's option course work requires continuous enrollment until completion. See Automatic Enrollment - Master's Option Course Work in the catalog. Students enrolled in at least three hours of master's option course work, excluding the capstone course, will be considered full time for purposes of enrollment verification for loan deferment, but not for purposes of determining eligibility for veteran's benefits or financial aid. This deferment is limited to no more than three long semesters of enrollment. Students who plan to graduate at the end of their last semester of Master's Option enrollment must file an application to graduate by the stated deadlines.

Option 1: Master's Thesis

The Master's Thesis requires continuous registration until completion, for a minimum of six hours; some programs may require more than six hours. If a student does not maintain continuous registration in the master's thesis, previously accumulated master's thesis credits will not count toward the master's degree. A grade of In Progress ("IP") will be recorded on the transcript until completion. For details, please consult the appropriate academic advisor. All students registering for thesis must submit a copy of both the "Steps in Completing a Thesis" and the "Thesis Preparation Guide." These may be obtained from the associate dean of their school. Individual schools may provide additional information regarding specific school requirements.

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Objective

The master's thesis must present evidence of:

- A thorough review and understanding of the literature
- The ability to do independent research
- The preparation of a manuscript that conforms to generally recognized standards of scientific and scholarly writing in the discipline. The dean of each school will provide, on request, a copy of the procedures for registering for thesis work, selecting an advisor and thesis committee, writing a proposal in advance of starting work, preparing the manuscript, presenting the thesis for approval and binding copies of the completed thesis.

The thesis will require an abstract of 150 words or less. Students should submit three unbound copies, the fee for binding the thesis and the fee for its placement in University Microfilms Library to the Director of the Library by the deadline specified in the academic calendar. At that time, students may elect to copyright the thesis.

Option 2: Master's Project

The master's project requires continuous registration until completion, for a minimum of six hours; some programs may require more than six hours. If a student does not maintain continuous registration in the master's project, previously accumulated master's project credits will not count toward the master's degree. A grade of In Progress ("IP") will be recorded on the transcript until completion.

Objective

The master's project may be widely and variously conceived but must present evidence of:

- A careful review and understanding of the relevant literature and other knowledgeable sources
- The ability to do independent scholarship and/or field study: to carry out and/or assess a major practical application of theory or methods from the discipline
- The preparation of a report and other materials, as appropriate, which conform to recognized professional and scholarly standards. The dean of the school will provide a copy of the procedures for registering for project work, selecting an advisor, preparing the proposal and the report and presenting it for approval

Option 3: Master's Residency or Internship

- Graduate Residency: Requires continuous registration until at least six semester hours of residency have been completed; some programs may require more than 6 hours. A grade of In Progress ("IP") will be recorded on the transcript until completion. For details, please consult the appropriate academic advisor.
- Graduate Internship: Depending upon the program, a minimum of three semester hours will be required. A grade of In Progress ("IP") may be assigned for internship programs. For details, please consult the appropriate academic advisor.

Objective

The master's internship and residency are designed to provide important learning experiences complementary to the academic preparation gained in course work. In general, the residency must represent application of master's level instruction to materials or situations that are new to students. The internship should provide an opportunity for students to evaluate the relevance of theoretical or academic perspectives to the work environment.

Option 4: Extended Course Work

The extended course work option requires at least six semester hours of course work in addition to the minimum of 30 semester hours required for graduation. Option 4 also requires successful completion of a capstone course or a comprehensive examination.

Appeals

Students may appeal previous academic actions or decision by faculty members regarding master's degree options 1, 2 or 3 by following the academic appeals process.

Requesting and Repeating Comprehensive Examination

Students who have selected degree programs requiring comprehensive examinations are responsible for requesting the examinations in writing from the dean of the school at least ten days prior to the examination. Associate deans and/or chairpersons of students' degree committees offer guidance concerning students' readiness for the examination and the form of the request. Students who have been reported to a dean for failing a comprehensive examination may request a second comprehensive examination no sooner than one long semester after the semester in which the examination was failed. Normally, comprehensive examinations will not be administered more than two times. Appeals to this policy will follow the normal academic appeals process.

TIME LIMITATION ON PAST COURSE WORK

Courses completed more than five years prior to the most current admission to graduate study at UHCL may not be counted toward fulfillment of the required number of hours unless approval is granted by the appropriate dean.

LIMITATION ON COURSES IN THE SCHOOL OF BUSINESS FOR GRADUATE STUDENTS

Degree-seeking graduate students outside the School of Business must limit their programs of study to less than 50 percent of their course work in the School of Business.

ADDITIONAL MASTER'S DEGREES

Students possessing a master's degree from UHCL or another accredited college or university may earn an additional master's degree in a different degree program by satisfying the general requirements for the master's degree. Under certain circumstances, credit from one UHCL graduate degree may be applied towards a second UHCL graduate degree. The following provisions apply only to masters programs of 36 hours or more. Students should be aware that a course taken more than five years earlier cannot be applied towards a degree, unless approval is granted by the dean of the school. With respect to the provisions which follow, schools choosing to offer additional masters degrees reserve the right

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to set additional requirements for degrees awarded by that school including the right to not offer such degrees. Students should be aware that the faculty of the individual schools as set forth in the schools' procedures determine the approved Candidate Plan of Study in all cases of graduate work.

SIMULTANEOUS UHCL MASTER'S DEGREES

Students pursuing two master's degrees simultaneously, may earn both degrees by completion of a special "Simultaneous Master's Degree CPS" subject to the following provisions:

- Fulfillment of all specific degree program requirements in each degree including a separate master's degree option (i.e. comprehensive exam, thesis, residency, internship or extended course work with a capstone course or a comprehensive exam) for each degree. These requirements are reported in the school section of this catalog.
- At least 60 hours must be selected from the 5000 or 6000 levels.
- At least 30 unique hours must be selected from courses from the 5000 and 6000 level or their equivalents in each degree.
- At least 48 of the final 60 semester hours must be taken in residence.
- Schools may allow not more than 25 percent of courses at the 3000 or 4000 level, exclusive of any foundation courses, or equivalent courses, to apply toward the total number of hours required for each of the master's degrees.
- A minimum of a 3.000 cumulative grade point average on course work taken at UHCL in each degree. No grade lower than a "C" is acceptable towards a graduate degree.
- The faculty of the program areas will determine the appropriate CPS.

Note: Students with the Simultaneous Master's Degree CPS, who wish to complete only one of the two degrees must follow the basic university graduate degree requirements for that degree.

NON-SIMULTANEOUS UHCL MASTER'S DEGREES

Students pursuing an additional master's degree, may earn the additional degree by completion of a special "Additional Master's Degree CPS" subject to the following provisions:

- Fulfillment of all specific degree program requirements in each degree including a separate master's degree option (i.e. comprehensive exam, thesis, residency, internship or extended course work with a capstone course or a comprehensive exam) for each degree. These requirements are reported in the school section of this catalog.
- At least 24 unique hours must be selected from courses from the 5000 and 6000 level or their equivalents in the second degree.
- At least 24 semester hours must be taken in residence.
- Schools may allow not more than 25 percent of courses at the 3000 or 4000 level, exclusive of any foundation courses or equivalent courses, to apply toward the total number of hours required for the additional master's degree.
- A minimum of a 3.000 cumulative grade point average on course work taken

at UHCL in the additional degree. No grade lower than a “C” is acceptable toward a graduate degree.

- The faculty of the program areas will determine the appropriate CPS.

DUAL GRADUATE DEGREE POLICY

(SIMULTANEOUS, NON-SIMULTANEOUS AND DUAL DEGREES)

The University of Houston-Clear Lake has approved a policy that permits schools to apply graduate credit earned at UHCL toward more than one UHCL graduate degree. Specific requirements and approvals are completed by the individual school.

GRADUATION UNDER A PARTICULAR CATALOG

As long as students maintain continuous enrollment, they are entitled to graduate under the degree provisions in effect at the time the Candidate Plan of Study (CPS) is filed. Degree-seeking students should file a CPS during the first semester of enrollment at UHCL. Filing of the CPS is completed when it is signed and dated by the appropriate dean and is effected on that date. Failure to enroll in and satisfactorily complete at least one course in a 12-month period shall break continuous enrollment for the purpose of the CPS. The dean may require revision of the CPS of students who have not maintained continuous enrollment. The revisions may bring the plan into conformance with provisions of any catalog issued after that in effect when the plan was filed or last revised. Students may, with the approval of their advisor or dean, amend their CPS to comply with the provisions of catalogs issued after the initial filing of the CPS. Degree requirements must be completed within five years from the effective date of the CPS. Exceptions may be granted by the appropriate dean. Graduate students exceeding the time limit will automatically come under the provisions of a more recent catalog, the specific edition to be determined by the dean.

Applying for Graduation

Degree candidates must officially apply for graduation in the Office of Academic Records within the first three weeks of the semester in which they plan to graduate, but no later than the date specified in the academic calendar. Students who miss the specified deadline to apply may request to submit a late application for consideration. If approved, there will be a \$20 late fee. To be eligible to apply for graduation, students must have completed or be enrolled in the final courses required to meet graduation requirements. A non-refundable fee of \$65 is required. If students do not graduate at the close of the semester for which they have applied, they will be required to reapply and pay another \$65 fee during the subsequent semester in which they intend to graduate. As there is no graduation ceremony in the summer, students who graduate in August will be eligible to participate in the December ceremony. Diplomas will be mailed to recipients within six weeks after the graduation date. Students who graduate from UHCL must complete a new application and pay \$35 in order to continue taking classes.



Explore your opportunities with Distance Education.

DISTANCE AND OFF-CAMPUS EDUCATION

- General Information
- Course Delivery Formats
- DE Admissions Requirements
- Schedule of Classes
- Registration
- Financial Aid and Scholarships
- Accessible Student Services
- Online Programs and Certificates
- Off-Campus Programs by Locations

GENERAL INFORMATION

In an attempt to meet this need for flexibility, the university offers classes in a variety of formats and in several convenient locations. Students can opt to complete a master's degree at centers close to their home or office. Alternatively, they can choose to take coursework online. Many of UHCL's degree programs offer Web-enhanced classes. Students and faculty can make use of the online environment to supplement traditional classes - decreasing the amount of time students actually spend in the classroom.

Distance and Off-Campus Education at UHCL facilitates and supports the delivery of UHCL courses, degrees and certificate programs as defined by the UHCL catalog.

Office of Distance and Off-Campus Education Bayou Building, Room 1406

General Information	281-283-3031
Distance Education E-Mail	disted@uhcl.edu
Web site	www.uhcl.edu/disted

COURSE DELIVERY FORMATS

Distance Education (DE) is any instruction that takes place outside the UHCL campus classroom setting. University of Houston-Clear Lake offers students the opportunity to supplement their on-campus coursework or even complete entire certificates or graduate degree programs through Distance Education. Classes offered through DE are regular UHCL classes taught by UHCL faculty with the same pre-requisites and requirements as classes taken on campus. Classes are offered in a variety of formats that provide options for students:

- **Online (Internet)** - This format is delivered via the internet using a course management tool called WebCT with all class instruction delivered and course requirements fulfilled online. No face-to-face instructor and student

interaction or face-to-face student group interaction is required. Courses offered online provide an environment for flexible learning and teaching while delivering the same high-quality content as in a traditional setting. UHCL's online classes are NOT open entrance/open exit or traditional correspondence courses. Although students are free to do their work online any time it fits into their weekly schedules, assignments are due as specified in the individual course syllabus.

- **Web-enhanced (Hybrid)** - With this format, classroom instruction is delivered and course requirements are fulfilled via a combination of face-to-face instruction at the UHCL campus and off-campus sites and online. In a web-enhanced class, an instructor can deliver all instruction online but require students to attend mandatory orientation, class presentations, and in-class examinations. The number of face-to-face meetings is determined by the instructor and can be found on the footnotes for the class on the UHCL class schedule. The Web-enhanced format is popular both on the UHCL campus and at the off-campus learning centers.
- **Off-campus courses** - UHCL students have the opportunity to complete degrees close to where they live or work. Courses at our off-campus learning centers may be offered face-to-face in a traditional classroom, online or as a Web-enhanced class. UHCL is committed to using the most current instructional techniques to ensure comparable learning outcomes between course work delivered in a traditional, Web-enhanced, or online format. It is recommended that students have their own computer with access to the Internet prior to registering for an online class. The university and off-campus centers have fully equipped computer labs that students may use.

DE ADMISSION REQUIREMENTS

Admission requirements are identical to those for students participating in degree programs on the UHCL campus. Students interested in participating in a distance education program must indicate so on the UHCL Application for Admissions. With careful planning and close collaboration with the DE Academic Advisors, students can complete their master's degree in two to three years. The DE Academic Advisors are available to assist students with the admissions process.

SCHEDULE OF CLASSES

Each semester, students have the ability to review course offerings via the online search engine on the UHCL Web site. See class schedule available online at www.uhcl.edu. For a detailed listing of classes offered at each off-campus center and online, go to the DE Web site at www.uhcl.edu/disted and click on course list.

REGISTRATION

Upon successful completion of the application process, students can register for classes online through E-Services. Tuition and fees can be paid by credit card or students can arrange to make installment payments. Students that register to take classes at an off-campus location must attend classes at that particular location.

FINANCIAL AID AND SCHOLARSHIPS

UHCL provides quick and easy access to Financial Aid and Scholarship information to students at a distance. Eligibility for this assistance is the same as on campus students. All forms, complete list of scholarships, timelines and instructions are available online at the Financial Aid Web site. Financial assistance is available to distance education students, as it would be for on-campus students. Please refer to www.uhcl.edu/finaid for more information.-

ACCESSIBLE STUDENT SERVICES

The DE office has developed unique advising procedures to best serve the needs of its students. Advisors are available to assist students via face-to-face appointments, telephone or e-mail. Academic advising is available at each of our off-campus locations. To schedule an appointment, please call 281-283-3031.

UHCL also provides assistance with the delivery of student services to off-campus and online students, such as:

- Student photo IDs available at off-campus locations
- Academic advising for students in online programs
- Career exploration
- Online writing tutors
- Online Bookstore
- Online Course Support
- Online study skills assessment
- Live chat services with Student Assistance Center (SAC)
- Online student news publication THE SIGNAL
- Intercultural & International Student Services (IISS) online resources such as the International Student Handbook
- Disability services available online and off-campus
- Virtual Library services

Additionally, UHCL E-Mail is the official method of communication between the university and students. Students will receive official UHCL notifications (i.e. financial aid award packages) through their UHCL E-Mail accounts. It is the student's responsibility to check their accounts regularly.

ONLINE PROGRAMS AND CERTIFICATES

The following degree programs can be completed entirely online:

- MS in Instructional Technology, School of Education
- MS in Software Engineering, School of Science and Computer Engineering
- MA in Human Resource Management, School of Business
- MBA in Business Administration, School of Business
- MS in Finance, School of Business

The following Technology Application Certificates for state of Texas Teachers can be completed entirely online:

- Technology Applications (EC-12) State Certification
- Technology Applications (8-12) State Certification
- Master Technology Teacher State Certification

UHCL also offers Professional Development Instructional Technology Certificates. All course work completed for any of these certificates may be applied toward the MS in Instructional Technology degree:

- UHCL Online Distance Educator Professional Development Certificate
- UHCL Performance Technology Certificate
- UHCL Technology Applications (EC-8) Professional Development Certificate

OFF-CAMPUS PROGRAMS BY LOCATIONS

Distance education off-campus sites in the greater Houston area are also made possible by the collaborative agreements with other educational institutions and school districts. Currently, UHCL provides courses through distance education at four ISDs (Alief, Clear Creek, Dickinson, Pasadena, and Spring Branch) and two community colleges (Alvin and San Jacinto -North).

Alief ISD at Taylor High School

7555 Howell Sugar Land Rd.

Houston, TX 77083

Programs offered:

Masters Program in Educational Management

Certificates in Principalship & PDAS

Masters Program in Counseling with School

Counselor Certification

Alvin Community College

3110 Mustang Rd

Alvin, TX 77511

Programs offered:

Masters Program in Educational Management

Certificates in Principalship & PDAS
Masters Program in Counseling with School
Counselor Certification

E.B. Cape Center

4501 Leeland
Houston, TX 77023
Program offered:
Masters Program in Criminology

Pearland Center

2319 North Grand Blvd.
Pearland, TX 77581
Programs offered:
Masters Programs in Behavioral Sciences

- General Behavioral Science
- Psychology

Masters Program in Criminology

San Jacinto College-North

5800 Uvalde
Houston, TX 77049
Programs offered:
Masters Program in Educational Management

Texas Medical Center

2151 West Holcombe
Houston, TX 77030
Programs offered:
Dual Masters Program in Healthcare Administration/Business Administration

UHS Cinco Ranch Center

4242 South Mason Rd.
Katy, TX 77450
Programs offered:
Masters Program in Educational Management
Certificates in Principalship & PDAS

UHS Sugar Land Center

4000 University Blvd.
Sugar Land, TX 77479
Programs offered:
Masters Program in Behavioral Science-Psychology



Dr. McGlashan, Director of the MBA program and Professor of Management, speaks with international students about applying for the MBA program.

SCHOOL OF BUSINESS

- Accounting
- Business Administration
 - Environmental Management
 - Finance
 - Human Resource Management
 - International Business
 - Management Information Systems
 - Management of Technology
- Environmental Management
- Finance
- Finance with a concentration in Healthcare Administration
- Healthcare Administration
- Healthcare Administration / Business Administration
- Human Resource Management
- Management Information Systems
- Professional Accounting

The mission of the School of Business (BUS) at the University of Houston-Clear Lake is to provide quality lifelong education at the junior, senior and master's level for the Houston/Galveston metropolitan population. Undergraduate business programs primarily serve the region's community college systems by providing transfer students the opportunity to complete a four-year degree. Graduate programs serve both full-time students and working professionals in the region. Instruction is designed for small classes and flexible hours and fosters development of business skills with global applicability. Faculty pursue a blend of research contributing to knowledge in professional practice, innovative pedagogy and discipline-based scholarship.

	Office	Phone
Office of Academic Advising	Bayou 2111	281-283-3110
Office of the Dean	Bayou 2239	281-283-3100
Web Site	http://bus.uhcl.edu	

The graduate and undergraduate accounting and business administration degrees in the School of Business are accredited by the AACSB International - The Association to Advance Collegiate Schools of Business. The school's graduate degree in Healthcare Administration is accredited by the Commission on Accreditation of Healthcare Management Education. A variety of undergraduate and graduate degrees are offered in the business and public administration disciplines. Students are eligible to apply for jobs through the Cooperative Education Program, which is designed to prepare students for careers by integrating paid work experience with academic study.

GRADUATE REQUIREMENTS FOR ALL BUSINESS AND PUBLIC ADMINISTRATION DEGREES

GENERAL DEGREE REQUIREMENTS

Students applying for one of the School of Business graduate plans must have a bachelor's degree. Applicants whose undergraduate degrees are in fields other than the graduate degree they are seeking, or those with business degrees from schools lacking

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AACSB International accreditation, may have graduate level foundation courses added to their plan requirements. All 5000- and 6000-level courses, including foundation courses, are reserved exclusively for graduate degree-seeking students.

All graduate plans require the completion of a minimum of 36 hours, including a required capstone course, which is designated in the plan listing.

Students seeking a master of science (MS) degree in Accounting, Finance, Management Information Systems, or Environmental Management, the master of business administration (MBA) degree, the master of healthcare administration (MHA), the MHA/MBA, or the master of arts (MA) in Human Resource Management are required to submit applications, transcripts for all prior college coursework, and GMAT scores in accordance with these deadlines:

Fall Enrollment	August 1
Spring Enrollment	December 1
Summer Enrollment	May 1

Deadlines for international students are two months earlier (June 1, October 1 and March 1). Prior to consideration for admission, applicants must submit transcripts.

Students who lack records, transcripts or GMAT scores will not be considered for admission or permitted to register.

In addition, graduate courses taken outside the School of Business, or courses taken in a non-degree-seeking or post-baccalaureate status prior to acceptance into the graduate plan, may not count toward degree credit. Students desiring to apply such courses must petition the associate dean or director of the MBA, depending upon degree objective.

The degrees in business administration prepare students to assume administrative, managerial and professional positions in their respective fields. Graduate degrees in business administration include the master of science degree in Accounting, the master of science degree in Finance, the master of arts degree in Human Resources Management, the master of science degree in Management Information Systems and the master of business administration (MBA) degree.

Pre-Foundation Requirements

In order to function effectively, it is assumed that all students will have completed three hours of College Algebra (evidenced on a college transcript) and have computer skills in the use of database/spreadsheet software, creation of professional looking documents, and exploration of the Internet for business purposes.

Foundation Requirements

Foundation requirements are graduate-level courses designed for BUS graduate students whose prior academic study lacked adequate coverage of specific basic principles critical for advanced studies in business. These courses provide the business background necessary for successful pursuit of the student's chosen plan. Foundation courses eliminate the need for a student to complete undergraduate business courses prior to acceptance into a graduate field of study in the School of Business.

Foundation courses may be waived by presenting equivalent courses taken at an accredited university. Equivalent courses must have a grade of C or better. International students should obtain a subject analysis evaluation from Educational Credential

Evaluators, Inc. (<http://www.ece.org>) and have the results sent to the School of Business prior to matriculation for foundation courses to be reviewed for possible waiver.

Students are strongly urged to contact their academic advisor before registration to verify which foundation courses may be waived to avoid taking classes unnecessarily. Under no circumstances may any of the foundation courses be used as electives or to satisfy the extended course work requirements under Master's Degree Option 4.

Some or all of the following foundation courses may be required for each of the master's degrees in business administration, depending on the plan and the student's academic history. All of the following foundation courses or their equivalents (with the exception of ISAM 5030) are required for the Masters of Business Administration (MBA) degree:

ACCT 5031	Accounting Concepts for Managers ^{2,3}
DSCI 5031	Business Statistics for Decision-Making ^{2,3}
ECON 5031	Economic Principles
FINC 5031	Financial Analysis & Markets
ISAM 5030	Fundamentals of Business Programming ^{1,3}
MGMT 5032	Human Behavior in Organizations ^{2,3}
MKTG 5031	Marketing Essentials for the 21 st Century: Creating Customer Value ²

¹Required of MS in Accounting students with an MIS concentration only.

²Required of MA in Human Resource Management students.

³Required of MS in MIS students.

Students pursuing the master of science degree in Accounting must also meet these requirements or their equivalents:

ACCT 5131	Accounting for Administrative Control
ACCT 5133	Financial Accounting I
ACCT 5134	Financial Accounting II
ACCT 5137	Principles of Auditing
DSCI 5030	Business Calculus

Plan Grade Requirements

A minimum of a 3.000 cumulative grade point average on course work taken at UHCL. No grade lower than a "C" is acceptable toward a graduate degree; this includes foundation work as well as the plan requirements. Grades of "C-" or lower are not acceptable.

PLAN DEGREE REQUIREMENTS

Accounting Plan Requirements

The objective of the master of science degree in Accounting is to provide students with a broad-based background in business, and depth and breadth in accounting. This will provide students with a basis for exercising judgment in accounting-related decisions within administrative, managerial and professional positions and enhance rapid career development. The course of study satisfies the required preparation for the Certified Public Accountant (CPA) examination. In addition, requirements for other professional certifications may be met within this plan. Students planning on taking the

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CPA examination are required to have a 3-semester credit hour ethics course which has been approved by the Texas State Board of Public Accountancy. ACCT 4436 Ethics for Accountants has been approved by TSBPA and satisfies the ethic course requirement.

Students seeking a master of science degree in Accounting must meet the business foundation courses (ACCT 5031, DSCI 5031, ECON 5031, FINC 5031, MGMT 5032 and MKTG 5031) or their equivalents, and the accounting foundation requirements (ACCT 5131, 5133, 5134, 5137) or their equivalents. Students who have not completed a college-level course in either business or applied calculus will have DSCI 5030 added to their plan foundation requirements.

It is anticipated that students with three different academic backgrounds may choose to pursue a master of science degree in Accounting. These differing academic backgrounds are best described as: Category A: No prior academic work in business; Category B: Prior academic work in business, but does not have the equivalent of a major in accounting; Category C: Undergraduate degree in accounting or degree in business with a major in accounting.

The Candidate Plan of Study for all three categories of students will include a minimum of 36 semester hours. Students selecting the master's thesis option will receive six semester hours credit for the thesis. Students in Category A may not elect the thesis option. The availability of the thesis option for Category B students will depend upon their previous academic work in accounting and/or business.

The specific degree requirements vary depending on academic background. The plan requirements are:

Category A

Foundation Requirements as listed above: ACCT 5031, DSCI 5031, ECON 5031, FINC 5031, MGMT 5032, MKTG 5031, ACCT 5131, ACCT 5133, ACCT 5134, ACCT 5137 and DSCI 5030 (if business calculus was not taken previously). Students desiring the Management Information Systems sub-plan must take ISAM 5030 Fundamentals of Business Programming or equivalent. Plan requirements consist of these courses:

ACCT 4436	Business Ethics for Accountants
ACCT 5231	Individual Income Tax
ACCT 5234	Corporate Income Tax
ACCT 5332	Accounting Information Systems
ACCT 5431	Advanced Accounting
ACCT 5432	Accounting for Government & Not-for-Profit
ACCT 6732	Seminar in Auditing Theory & Practice
DSCI 5431	Management Sciences & Operations
ISAM 5330	Management Information Systems
LEGL 5131	Legal Concepts for Business Professionals
MGMT 6731	Strategic Management Seminar (Capstone Course)
BUS	Elective (3 hours)

Course work at the 3000- or 4000-level may not be included.

Category B

The course of study will be designed to meet the student's educational needs in light of previous academic work and career objectives. Students in Category B must meet requirements of Category A. However, courses taken in a student's previous academic work determined to be equivalent to foundation requirements may result in waiver of foundation requirements. If courses taken in a student's previous academic work are determined to be equivalent to degree requirements, other courses may be substituted with approval. Of the 36 semester hours of plan requirements, Category B students must complete at least 15 semester hours of accounting at the graduate level. Course work at the 3000- or 4000-level may not be included.

Category C

The course of study will be designed to meet the student's educational needs in light of previous academic work and career objectives. Category C students must complete 36 semester hours, which must include at least twelve semester hours of accounting at the graduate level. Course work at the 3000- or 4000-level may not be included.

Accounting Sub-plan in Management Information Systems

Students may choose an information systems sub-plan in their Master of Science Degree in Accounting. These students will be required to take ISAM 5030 Fundamentals of Business Programming (waived for students with six hours of college-level programming) and three of the following five courses:

ACCT 5333	Fundamentals of Database Design & Development
ACCT 5334	Advanced Database Applications Development
ACCT 5335	Information Systems Audit & Security
ACCT 5336	System Analysis & Design
ISAM 5030	Fundamentals of Business Programming

Business Administration (MBA) Plan Requirements

The graduate plan in Business Administration leads to the master of business administration (MBA) degree. The Candidate Plan of Study for the MBA degree will include a minimum of 36 semester hours, plus any required foundation course work. The plan requirements consist of these courses:

ACCT 5131	Accounting for Administrative Control
BAPA 5131	The Global Environment of Business
DSCI 5431	Management Science & Operations
ECON 5136	Economic Policy & Applications
FINC 5133	Financial Policy
MGMT 5133	Teamwork & Leadership Skills: Theory in Practice
MGMT 6731	Strategic Management Seminar (Capstone Course)
MKTG 5332	Executive Decisions in Marketing

Twelve hours of electives are required. Electives should be selected from courses taught in the School of Business. Students desiring to use their electives in courses taught by

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other schools in the university must petition the associate dean for approval prior to enrolling. Course work at the 3000- or 4000-level may not be included.

MBA Sub-plans

Students may complete sub-plans (concentrations) within the MBA degree plan. The Candidate Plan of Study for the MBA degree with a sub-plan will contain a minimum of 36 semester hours. In addition to the completion of 24 hours of required MBA course work, all sub-plans require the completion of 12 semester hours of course work in the concentration.

Environmental Management

For the sub-plan in Environmental Management, students will be required to complete 12 hours as follows:

ENVR 5332	Environmental Law
ENVR 6133	Environmental Risk Management

The other two courses (6 hours) can be chosen from any graduate environmental management course listed in the university catalog.

Finance

For the sub-plan in Finance, students will be required to complete 12 hours as follows:

FINC 5331	Financial Administration Practices
FINC 5332	Structure of Financial Statements
FINC Electives	(6 hours) which may be either a master's thesis or six hours of FINC course work excluding FINC 5031 and 5133

Human Resource Management

For the sub-plan in Human Resource Management, students will be required to complete 12 hours as follows:

HMRS 5131	Human Resource Management Processes
HMRS 5231	Legal Environment of Human Resource Management I
HMRS 5435	Employee Planning, Staffing & Selection

One of the following three courses (3 hours):

HMRS 5433	Compensation and Benefits
HMRS 5531	Training & Development
MGMT 5332	Labor Relations

International Business

For the sub-plan in International Business, students must complete 12 hours in a minimum of three different rubrics. Courses may be selected from the following list:

ACCT 5531	International Accounting
FINC 6531	International Finance
FINC 6533	Seminar in International Finance
MGMT 6332	International Marketing
MGMT 6333	Seminar in International Management
MKTG 5532	International Marketing Strategy
MKTG 5533	Seminar in International Marketing

Management Information Systems

For the sub-plan in Management Information Systems, students will be required to take ISAM 5030 Fundamentals of Business Programming (waived for students with six hours of college-level programming) plus 12 hours of graduate level ISAM courses (excluding ISAM 5030).

Management of Technology

For the sub-plan in Management of Technology (MOT), students will complete 12 hours.

MGMT 5636	Management of Technology
MGMT 5638	Managing Technical & Professional People

Two of the following seven courses (6 hours):

HMRS 5131	Human Resource Management Processes
HMRS 5136	Group Processes in Organizations
MGMT 5931	Research Topics in Management (Designated by MOT in the title)
MGMT 6332	International Business Management
SENG 5332	Decision Analysis for Systems Engineering
SENG 5334	Human Factors
SWEN 5230	Software Project Management

Or, students are encouraged to elect courses which will develop their knowledge of a specific science or technology domain such as software engineering, information systems, systems engineering, biotechnology or engineering management. If you want to substitute courses, the faculty coordinating this concentration must approve the 6 elective hours.

Finance Plan Requirements

The Candidate Plan of Study (CPS) for the Master of Science degree in Finance will include up to 18 hours of business foundation course work plus a minimum of 36 semester hours. The plan requirements consist of these courses:

DSCI 5431	Management Science & Operations
ECON 5136	Economic Policy & Applications
FINC 5131	The Financial System
FINC 5133	Financial Policy
FINC 5331	Financial Administration Practices
FINC 5332	Structure of Financial Statements
FINC 6231	Security Analysis
FINC 6531	International Finance
FINC 6731	Seminar in Finance (Capstone course)
BUS Electives	(9 hours)

Course work at the 3000- or 4000-level may not be included. Students selecting master's thesis will receive six semester hours credit for the thesis and will take an additional three hour approved BUS elective.

Concentration in Healthcare Administration

Students may complete a twelve-hour sub-plan in healthcare administration within the MS in Finance. In the graduate course work listed above, FINC 6531 International Finance and electives or Master's Thesis are NOT required for the sub-plan. In their place, the following Healthcare Administration courses are required:

HADM 5233	Financial Management of Healthcare Organizations
HADM 5331	Planning Healthcare Services
HADM 6132	Legal Aspects of Healthcare Systems
HADM 6235	Managed Care

Human Resource Management Plan Requirements

The plan in Human Resource Management leads to the master of arts degree. This plan allows students to prepare for careers in human resource management, personnel administration training and/or human resource planning. The core requirements provide exposure to workforce planning, quality of work life, human resource development and the legal environment of personnel. In addition to any necessary foundation courses, each Candidate Plan of Study requires a minimum of 36 hours, including the master's degree option.

Plan requirements consist of these courses (30 hours):

HMRS 5131	Human Resource Management Processes
HMRS 5231	Legal Environment of Human Resource Management I
HMRS 5433	Compensation and Benefits
HMRS 5435	Employee Planning, Staffing and Selection
HMRS 5437	Human Resource Information Systems

HMRS 5531	Training and Development
HMRS 5931	Project Management in HRM
HMRS 6735	Seminar in Human Resource Management (Capstone course)
MGMT 5133	Teamwork & Leadership Skills: Theory in Practice
MGMT 6331	Organizational Change

Two of the following ten courses (6 hours):

ACCT 5131	Accounting for Administrative Control
ACCT 5531	International Accounting
BAPA 5131	The Global Environment of Business
DSCI 5431	Management Science and Operations
HMRS 6739	Internship in Human Resource Management
INST 5333	Design of Technology-Based Instruction
INST 6337	Motivational Design of Instruction
MGMT 5332	Labor Relations
MGMT 5636	Management of Technology
MGMT 6332	International Management

Management Information Systems (MIS) Plan Requirements

The plan in MIS leads to the master of science degree. The degree coursework prepares students for positions such as system analyst, business application developer, database administrator, web designer, technical support, etc. Students also complete a number of industry-recognized external certifications as part of the coursework requirements.

Plan requirements consist of these courses (30 hours):

ISAM 5330	Management Information Systems
ISAM 5331	Fundamentals of Database Design & Development
ISAM 5334	Application Development ¹
ISAM 5638	Advanced Applications Programming with Java ¹
ISAM 5335	Advanced Applications Programming in Visual Basic
ISAM 5337	Internet Applications Development
ISAM 5338	Advanced Internet Applications Development
ISAM 5339	Fundamentals of Computer Networking
ISAM 5632	Advanced Database Applications Development
ISAM 5635	Systems Analysis & Design
ISAM 5636	Advanced Computer Networking

¹Students can take either ISAM 5334 or ISAM 5638.

Elective Requirements (6 hours)

ISAM Elective	(3 hours) excluding ISAM 5030
General Elective	(3 hours) excluding foundation requirements

Course work at the 3000- or 4000-level may not be included.

Management Information Systems (MIS) Certificate Program Requirements

Five certificate programs are available in Management Information Systems. These certificates are designed for professionals in the aerospace, IT and related industries, who want to (1) refine their IT skills, (2) expand their IT skills, (3) refine/enhance their skills but don't want to pursue a master's degree and (4) refine/expand their IT skills without going for another master's degree.

Certificates can be earned as part of a master's degree. Students earning certificates without being enrolled in a master's degree may request permission to apply certificate courses to a degree program at a later date. Students earning certificates must officially apply to receive their certificates in the Office of Academic Records within the first three weeks of the semester in which they are enrolled in their final certificate course, but no later than the date specified in the academic calendar for applying for graduation.

All graduate grading standards apply to students enrolled in certificate programs. Students without 6 hours of college level programming must take ISAM 5030 in addition to the requirements stated below.

Business Applications Development

Four of the following six courses (12 hours):

ISAM 5334	Application Development
ISAM 5335	Advanced Applications Programming with Visual Basic
ISAM 5337	Internet Applications Development
ISAM 5338	Advanced Internet Applications Development
ISAM 5638	Advanced Applications Programming with Java
ISAM 5931	Research Topics in MIS

Business Computer Networking and Security

Four of the following five courses (12 hours):

ISAM 5339	Fundamentals of Computer Networking
ISAM 5439	Computer Network Security
ISAM 5636	Advanced Computer Networking
ISAM 5731	Information Systems Audit & Security
ISAM 5931	Wireless Computer Networking

Business Database Development and Administration

Four of the following six courses (12 hours):

ISAM 5331	Fundamentals of Database Design & Development
ISAM 5332	Data Warehousing & Data Mining
ISAM 5632	Advanced Database Applications Development
ISAM 5633	Oracle Database Administration
ISAM 5639	SQL Server Database Administration
ISAM 5931	Research Topics in MIS

Information Systems Management

Four of the following six courses (12 hours):

ISAM 5330	Management Information Systems
ISAM 5331	Fundamentals of Database Design & Development
ISAM 5635	Systems Analysis & Design
ISAM 5637	Information Systems Project Management
ISAM 5931	IT Systems Management
ISAM 5931	Research Topics in MIS

Information Technology

Any four MIS required or elective courses as long as their pre-requisites are satisfied.

GRADUATE REQUIREMENTS FOR DEGREES IN HEALTHCARE ADMINISTRATION AND ENVIRONMENTAL MANAGEMENT

GENERAL DEGREE REQUIREMENTS

All graduate degrees require the completion of one of the Master’s Options 1, 2, 3 or 4. In plans where Option 4: Extended Course Work is used, the required capstone course is designated in the plan listing.

Graduate Candidate Plans of Study must contain no more than 50 percent of their course credit hours from the business fields of accounting, BAPA, decision sciences, economics, finance, management, information systems, marketing and decision sciences. Under no circumstances may any of the business foundation courses be used as electives or to satisfy the extended course work requirements under Master’s Degree Option 4.

Plan Grade Requirements

A minimum of a 3.000 cumulative grade point average on course work taken at UHCL. No grade lower than a “C” is acceptable toward a graduate degree; this includes foundation work as well as the plan requirements. Grades of “C-” or lower are not acceptable.

PLAN DEGREE REQUIREMENTS

Environmental Management

The plan in Environmental Management leads to the master of science degree. The graduate degree in Environmental Management requires a minimum of 36 hours including the master’s degree option. Depending on academic background, additional course work in economics, chemistry and statistics may be required.

Foundation Requirements (or equivalent) are:

DSCI 5031	Business Statistics for Decision-Making
ECON 5031	Economic Principles
6 hours of freshman/sophomore chemistry	

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Plan requirements consist of these courses (12 hours):

ENVR 5332	Environmental Law
ENVR 5533	Pollution Control Technology
ENVR 6132	Environmental Impact Assessment (Capstone course)
PPRM 5131	The Study of Administration

Two of the following seven courses (6 hours):

BAPA 5131	The Global Environment of Business
MGMT 5032	Human Behavior in Organizations
MGMT 5133	Teamwork & Leadership Skills: Theory in Practice
MGMT 5636	Management of Technology
MGMT 5638	Managing Technical & Professional People
MGMT 6237	Leadership
MGMT 6331	Organizational Development

The remaining 18 hours of the degree requirements will be chosen in consultation with a faculty advisor to fit the career interests of the students. Course work at the 3000- or 4000-level may not be included.

Healthcare Administration

The graduate plan in Healthcare Administration leads to the Master of Healthcare Administration degree (MHA). In addition to the grade point average and GMAT requirements, entrance into this plan also requires the submission of a résumé, three letters of recommendation, one writing sample, and a statement of career goals. All materials must be received by the application deadline so that the applicant can be considered for admission. Only completed applications will be considered. The résumé, three letters of recommendation, writing sample, and statement of career goals should be sent to the Office of Admissions, University of Houston-Clear Lake, 2700 Bay Area Blvd., Houston, TX 77058-1098.

Foundation requirements are:

DSCI 5031	Business Statistics for Decision-Making
HADM 5032	Leadership & Organizations in Healthcare Services
HADM 5333	Healthcare Economics
MGMT 5032	Human Behavior in Organizations
MKTG 5031	Marketing Essentials for the 21 st Century: Creating Customer Value

Plan requirements consist of these courses:

HADM 5131	Healthcare Human Resource Management
HADM 5132	Managerial Epidemiology & Health Policy
HADM 5232	Financial Management of Healthcare Organizations I
HADM 5233	Financial Management of Healthcare Organizations II
HADM 5331	Planning Healthcare Services
HADM 5431	Healthcare Information Systems

HADM 5531	Group Practice Management ¹
HADM 5731	Organizational Change & Quality Improvement in Healthcare
HADM 6132	Legal Aspects of Healthcare Systems
HADM 6235	Managed Care
HADM 6236	Hospital Operations ¹
HADM 6738	Seminar in Healthcare Policy & Leadership

Electives: HADM 6519, 6 hour Residency plus one 3-hr graduate general elective OR 9 hrs graduate general elective approved by Director. No more than 3 hours of internship credit can be applied toward degree.

Healthcare Administration/Business Administration

The joint degree in Healthcare Administration and Business Administration leads to the Master of Healthcare Administration/Master of Business Administration degree (MHA/MBA). In addition to the grade-point average and GMAT requirements, entrance into this plan also requires the submission of a résumé, three letters of recommendation, one writing sample, and a statement of career goals. All materials must be received by the application deadline so that the applicant can be considered for admission. Only completed applications will be considered. The résumé, three letters of recommendation, writing sample and statement of career goals should be sent to the Office of Admissions, University of Houston-Clear Lake, 2700 Bay Area Blvd, Houston, TX 77058-1098.

Foundation requirements are:

ACCT 5031	Accounting Concepts for Managers
DSCI 5031	Business Statistics for Decision-Making
ECON 5031	Economic Principles
FINC 5031	Financial Analysis & Markets
HADM 5032	Leadership & Organizations in Healthcare Services
HADM 5131	Healthcare Human Resource Management
MGMT 5032	Human Behavior in Organizations
MKTG 5031	Marketing Essentials for the 21 st Century: Creating Customer Value

MHA plan requirements consist of these courses (30 hours):

HADM 5132	Managerial Epidemiology & Health Policy
HADM 5233	Financial Management of Healthcare Organizations II
HADM 5331	Planning Healthcare Services
HADM 5333	Healthcare Economics
HADM 5431	Healthcare Information Systems
HADM 6132	Legal Aspects of Healthcare Systems
HADM 6235	Managed Care
HADM 6738	Seminar in Healthcare Policy & Leadership
HADM Elective (3 hours) To be selected from: HADM 5531 Group Practice Mgmt, OR HADM 6236 Hospital Operations	
Graduate General Elective (3 hours)	

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MHA Practicum Training (6-7 hours)¹:

Option 1: HADM 6519 plus HADM 6539 (2 semesters) Graduate Residency (12 months)

Option 2: HADM 6939 Master's Thesis Research (2 semesters)

Option 3: HADM 5332 Evaluation of Health Services, followed by HADM 6739 Graduate Internship in Healthcare Administration.

MBA plan requirements consist of these courses (24 hours):

ACCT 5131	Accounting for Administrative Control
BAPA 5131	Global Environment of Business
DSCI 5431	Management Science & Operations
ECON 5136	Economic Policy & Applications
FINC 5133	Financial Policy
MGMT 5133	Teamwork & Leadership Skills
MGMT 6731	Strategic Management Seminar (Capstone course)
MKTG 5332	Executive Decisions in Marketing

¹There are three options for the final six or seven hours of degree requirements. Students are expected to fulfill Option 1. Options 2 and 3 allow alternatives for students who already have extensive administrative healthcare work experience. Approval of the Director of Healthcare Administration is required. These options may be started after the completion of 15 hours of course work.

SCHOOL OF BUSINESS COURSE ROSTER

ACCOUNTING

- ACCT 5031: ACCOUNTING CONCEPTS FOR MANAGERS**
For students with no previous training in accounting. Accounting concepts and principles for interpreting and using financial information in business decision making. May not be taken as graduate elective credit by any BUS student.
- ACCT 5131: ACCOUNTING FOR ADMINISTRATIVE CONTROL**
Prerequisite: ACCT 5031 or equivalent. Cost concepts and behavior, performance measurement and analytical uses of accounting data for administrative decisions in merchandising, manufacturing, and service organizations. May not be taken by accounting majors for graduate elective credit.
- ACCT 5133: FINANCIAL ACCOUNTING I**
Prerequisite: ACCT 5031 or equivalent. An in-depth study of conceptual and technical aspects of financial accounting. Emphasis is placed on valuation and measurement problems associated with financial statement preparation. May not be taken by accounting majors for graduate elective credit.
- ACCT 5134: FINANCIAL ACCOUNTING II**
Continuation of Financial Accounting I. Prerequisite: ACCT 5133 or equivalent; An in-depth study of conceptual and technical aspects of financial accounting. Emphasis is placed on valuation and measurement problems associated with financial statement preparation. May not be taken by accounting majors for graduate elective credit.
- ACCT 5136: FINANCIAL ACCOUNTING III**
Prerequisite: ACCT 5134 or equivalent. Continuation of Financial Accounting II. An in-depth study of conceptual and technical aspects of financial accounting.
- ACCT 5137: PRINCIPLES OF AUDITING**
Prerequisites: ACCT 5134 or equivalent. Corequisite/Prerequisite: ACCT 5332 or equivalent. A study of the auditor's attest function with emphasis on auditing theory and standards, legal and professional responsibilities, ethics, risks and planning considerations. May not be taken by accounting majors for graduate elective credit.
- ACCT 5231: INDIVIDUAL INCOME TAX**
Prerequisite: Principles of Accounting or equivalent. Principles of federal income tax as applied to individuals; tax consequences of business decisions and accounting procedures.
- ACCT 5234: CORPORATE INCOME TAX**
Prerequisite: ACCT 5231 or equivalent. Comprehensive examination of federal income tax laws as applied to corporations, including Subchapter S corporations.
- ACCT 5331: ACCOUNTING ANALYSIS FOR MANAGEMENT DECISIONS**
Prerequisites: ACCT 5131 and DSCI 5031 or equivalents. The role of cost systems in aiding short-run and strategic management decisions in manufacturing and service organizations.
- ACCT 5332: ACCOUNTING INFORMATION SYSTEMS**
Prerequisites: ACCT 5031 and ISAM 5330 or equivalents. Concept, design and operational relationships of computerized accounting information systems to the flow of a data in business organizations.
- ACCT 5333: FUNDAMENTALS OF DATABASE DESIGN AND DEVELOPMENT**
Prerequisite: ISAM 3034, or ISAM 5030, or 6 hours of college-level programming. Database concepts used in business systems. Applications, advantages and disadvantages of hierarchical, network and relational database systems are presented from a business perspective. (Crosslisted with ISAM 5331.)
- ACCT 5334: ADVANCED DATABASE APPLICATIONS DEVELOPMENT**
Prerequisite: ISAM 5030 or 6 hours of college-level course work in computer programming, and ACCT 5333 or equivalent. Organization and management of complex business databases and applications such as database design and management, user interface design, application design, database processing and generation of management-oriented reports. Includes numerous hands-on projects using a leading database management system. (Crosslisted with ISAM 5632.)

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- ACCT 5335: INFORMATION SYSTEMS AUDIT AND SECURITY**
Prerequisite: ISAM 5330 or equivalent. Audit of financial statements, financial accounting systems, accounting data flows, segregation of duties in computer environment, general and application controls, data security and access controls, dial-up controls, computer security, application change control, audit of computer programs and data files and computer audit trails. (Crosslisted with ISAM 5731.)
- ACCT 5336: SYSTEMS ANALYSIS AND DESIGN**
Prerequisite: ISAM 3034, ISAM 5030, or 6 hours of programming courses and ACCT 5333 or equivalent. Systems concepts; systems analysis and design techniques; methods used to analyze information requirements; methods used to design, evaluate and implement information systems; and a class project. (Crosslisted with ISAM 5635.)
- ACCT 5431: ADVANCED ACCOUNTING**
Prerequisite: ACCT 5134 or equivalent. Accounting and reporting of domestic and foreign consolidated corporations and branches, governmental and other not-for-profit entities.
- ACCT 5432: ACCT FOR GOVERNMENT AND NOT-FOR-PROFIT ORGANIZATIONS**
Prerequisite: ACCT 5134 or equivalent. The course covers the governmental and not-for-profit environment, fund accounting, budgeting, revenue and expenditure recognition, financial reporting requirements, and current issues.
- ACCT 5531: INTERNATIONAL ACCOUNTING**
Prerequisite: ACCT 5031 or equivalent. Analysis of problems of alternative corporate financial reporting, foreign currency translation principles and managerial control systems in a multinational environment.
- ACCT 5931: RESEARCH TOPICS IN ACCOUNTING**
Identified by specific title each time course is offered.
- ACCT 5939: INDEPENDENT STUDIES IN ACCOUNTING**
Prerequisite: Approval of instructor, Faculty Chair and Associate Dean required. Independent directed study in Accounting.
- ACCT 6731: SEMINAR IN FINANCIAL ACCOUNTING THEORY**
Prerequisite: ACCT 5134 or equivalent. Theoretical approaches to the solution of current problems in financial reporting.
- ACCT 6732: SEMINAR IN AUDITING THEORY AND PRACTICES**
Prerequisites: ACCT 5137 or equivalent and DSCI 5031 or permission of the instructor. Current issues and research in auditing.
- ACCT 6735: OIL AND GAS ACCOUNTING**
Prerequisite: ACCT 5133 or permission from instructor. Accounting for the exploration and production activities of a petroleum company. Major topics include industry background, successful efforts accounting, full cost accounting, tax accounting and required disclosures.
- ACCT 6739: INTERNSHIP IN ACCOUNTING**
Prerequisites: Master's degree candidacy, approval of associate dean and faculty chair, and sponsoring faculty member. Supervised work experience each week in an approved accounting firm, governmental agency, or business. Written work as required by sponsoring faculty member.
- ACCT 6939; 6969 MASTER'S THESIS RESEARCH**
Prerequisite: Master's degree candidacy and approval of advisor and dean.

BUSINESS AND PUBLIC ADMINISTRATION

- BAPA 5131: THE GLOBAL ENVIRONMENT OF BUSINESS**
Prerequisite: ECON 5031 or equivalent. Explores theories, institutions, and tools relevant to understanding and coping with globalization. Topics covered include technological change, national differences in political economy, cultural and ethical issues, trade policy, international capital flows, and the strategy of international business
- BAPA 5636: ENTREPRENEURSHIP AND SMALL BUSINESS CONSULTING**
Prerequisites: ACCT 5031, FINC 5031, MGMT 5032, MKTG 5031 or equivalent. Application of classroom concepts, theories and principles, from all business disciplines to active operating small businesses or new business ventures. This course will qualify as a business elective.

BAPA 5915; 5935 COOP EDUCATION IN BUSINESS

Prerequisites: Approved Candidate Plan of Study, completed cooperative education file and approval of the Director of Cooperative Education. Educational paid work assignment by a student in the field of his or her career interest and course of study. A technical report will be required at the end of the semester. Qualifies as a BUS elective.

DECISION SCIENCES**DSCI 5030: BUSINESS CALCULUS**

Prerequisite: College algebra or permission of instructor. Concepts of derivatives and integrals with applications to business problems. Specific topics to be covered include limits and continuity, logarithmic and exponential functions, differentiation; finding maxima and minima, integration; the definite and indefinite integral. May not be taken as graduate elective credit by any BUS student.

DSCI 5031: BUSINESS STATISTICS FOR DECISION-MAKING

Prerequisite: College algebra or equivalent. An introduction to business statistics including sampling, data measurements, descriptive statistics, probability, probability distributions, confidence intervals, hypotheses testing, correlation, simple and multiple regression, ANOVA, forecasting, and statistical process control. May not be taken as graduate elective credit by any BUS student.

DSCI 5131: ADVANCED DATA ANALYSIS

Prerequisite: DSCI 5031 or equivalent. Additional topics in the analysis of variance and uses of statistical inference; alternative nonparametric tests; testing of assumptions and applications of correlational techniques.

DSCI 5431: MANAGEMENT SCIENCE AND OPERATIONS

Prerequisites: DSCI 5031 and ACCT 5031, or equivalents. The scientific approach to managerial decision making. An applied management science course with applications in production/operations management. The topics covered include: decision analysis; inventory, scheduling and production models; computer simulation; queuing; linear programming; project management (PERT, CPM), and forecasting.

DSCI 5939: INDEPENDENT STUDIES IN DECISION SCIENCE

Prerequisite: Approval of instructor, Faculty Chair and Associate Dean required. Independent directed study in Decision Sciences.

ECONOMICS**ECON 5031: ECONOMIC PRINCIPLES**

The study of human behavior from an economic perspective. Principles and analysis of microeconomic and macroeconomic issues and concepts as applied in a domestic and global setting. May not be taken as graduate elective credit by any BUS student.

ECON 5136: ECONOMIC POLICY & APPLICATIONS

Prerequisite: ECON 5031 or equivalent. Analysis and application of microeconomic and macroeconomic policies including wage and price controls, regulation, anti-trust, minimum wage, tax policy and enforcement, monetary controls, tax and expenditure proposals, international trade agreements, tariffs, import duties and quotas, and the incentive effects of government policies.

ENVIRONMENTAL MANAGEMENT**ENVR 5134: OIL & HAZARDOUS MATERIALS SPILLS**

Regulations, contingency planning and spill prevention in the handling of petroleum and hazardous materials.

ENVR 5331: ENVIRONMENTAL ECONOMICS

Prerequisite: ECON 5031 or equivalent. Interaction of environmental problems and the American economy; compatibility of economic progress with programs of environmental control.

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- ENVR 5332: ENVIRONMENTAL LAW**
Federal and state environmental legislation and case law; concepts of regulation and their application to management decisions.
- ENVR 5333: AIR QUALITY MANAGEMENT**
Prerequisite: DSCI 5031 or equivalent. Standards for air quality; governmental policies and industrial practices in preventing and controlling atmospheric pollution.
- ENVR 5336: SOLID WASTE MANAGEMENT**
Analysis of waste from commercial, institutional and residential sources; emphasis on resource recovery, control and disposal methods.
- ENVR 5337: HAZARDOUS WASTE MANAGEMENT**
Environmental, technical and socioeconomic aspects of legislation and regulation; prevention, treatment and disposal techniques.
- ENVR 5532: WATER MANAGEMENT**
Development and utilization of water resources; effects of ecological change and public policies on the management of water quantity and quality.
- ENVR 5533: POLLUTION CONTROL TECHNOLOGY**
Prerequisite: Introductory chemistry. Applied processes in pollution control; emphasis on process selection factors including efficiency, cost, manpower, energy usage and practical utility.
- ENVR 5534: PERMITS AND PROCEDURES**
Requirements for air, water, solid and hazardous waste and other environmental permits; federal, state and local administrative procedures for obtaining and keeping permits.
- ENVR 5537: MANAGING CONTAMINATED SITES**
This course covers topics related to cleaning up environmental contamination, including: pollution prevention; emergency response and reporting; spill containment and cleanup; site assessment; remedial design; working with the public; contractor management; project management and budget; cleanup technologies; and closure and monitoring requirements.
- ENVR 5931: RESEARCH TOPICS IN ENVIRONMENTAL MANAGEMENT**
Identified by specific title each time course is offered.
- ENVR 5939: INDEPENDENT STUDIES IN ENVIRONMENTAL MANAGEMENT**
Prerequisite: Approval of instructor, Faculty Chair and Associate Dean required. Independent directed study in Environmental Management.
- ENVR 6132: ENVIRONMENTAL IMPACT ASSESSMENT**
Prerequisites: ENVR 5332 and one of ENVR 5333, 5337, 5532, or permission of the instructor. Practice in and analysis of environmental impact assessment, environmental auditing and other planning and decision tools.
- ENVR 6133: ENVIRONMENTAL RISK MANAGEMENT**
A broad approach to risk management, incorporating risk assessment and communication and concentrating on case studies.
- ENVR 6332: ECOLOGICAL ISSUES FOR THE FUTURE**
The relationship between man and environment in the future; limits to the exploitation of natural resources.
- ENVR 6732: ENVIRONMENTAL MANAGEMENT PRACTICES**
Prerequisite: Approval of instructor and advisor. The use of case studies, problems and field work to analyze current practices and situations in environmental management.
- ENVR 6739: INTERNSHIP IN ENVIRONMENTAL MANAGEMENT**
Prerequisites: Master's degree candidacy and approval of advisor and dean. Supervised internship with a public or private environmental agency; written and oral reports required.
- ENVR 6939: MASTER'S THESIS RESEARCH**
Prerequisites: Master's degree candidacy and approval of advisor and dean.

FINANCE

- FINC 5031: FINANCIAL ANALYSIS & MARKETS**
Prerequisites: ACCT 5031, DSCI 5031 and ECON 5031, or equivalents. An introduction to and overview of the world of finance. Study of the analytical skills and quantitative techniques useful in reaching financial decisions. May not be taken as graduate elective credit by any BUS student.
- FINC 5131: THE FINANCIAL SYSTEM**
Prerequisite: FINC 5031 or equivalent. The role of money and banking system in the economy; the implications for policy by the central monetary authority; and the role of financial markets and institutions.
- FINC 5133: FINANCIAL POLICY**
Prerequisites: FINC 5031 or equivalent; and ECON 5136. Develop understanding of the decisions made by financial managers. These decisions are valuation of assets, measuring risk and return, choosing among investment alternatives, financing of operations, capital structure decisions, dividend policy, merger and acquisition decisions, and others.
- FINC 5134: REAL ESTATE INVESTMENT ANALYSIS AND FINANCING**
Prerequisite: FINC 5031 or equivalent. Analytical techniques of evaluating real estate investments and exploration of the methods of financing such investments.
- FINC 5331: FINANCIAL ADMINISTRATION PRACTICES**
Prerequisite: FINC 5031 or equivalent. Managerial methods in financial institutions; planning, acquisition and management of funds; investment projects, capital budgeting and maintaining of credit worthiness.
- FINC 5332: STRUCTURE OF FINANCIAL STATEMENTS**
Prerequisite: FINC 5031 or equivalent. Analyzing, interpreting and forecasting financial statements for credit, investment and internal planning decisions.
- FINC 5532: BUDGET AND CONTROL-GOVERNMENT/SERVICE ORGANIZATIONS**
Principles and practices of effective budgeting and management control in Government and Service Organizations are presented. Among the topics covered in this course are the budget cycle, alternative budgeting frameworks, designing management control structures, cost-benefit analysis, reporting and measurement, and designing management control systems.
- FINC 5733: RETIREMENT AND BENEFITS PLANNING**
Prerequisite: Managerial Finance or equivalent. An examination of the various retirement vehicles, group life and health programs, and government required benefits. Integration into an overall financial planning process is emphasized.
- FINC 5931: RESEARCH TOPICS IN FINANCE**
Identified by specific title each time course is offered.
- FINC 5939: INDEPENDENT STUDIES IN FINANCE**
Prerequisite: Approval of instructor, Faculty Chair and Associate Dean required. Independent directed study in Finance.
- FINC 6231: SECURITY ANALYSIS**
Prerequisite: FINC 5031 or equivalent. Evaluation of capital market theory and rigorous treatment of securities evaluation to determine the probability distribution of expected returns.
- FINC 6233: OPTIONS AND FUTURES**
Prerequisite: FINC 5031 or equivalent. Study of the principles governing the use and valuation of options, swaps and financial futures. Emphasis will be placed on using these derivative securities for hedging.
- FINC 6234: PORTFOLIO SELECTION**
Prerequisite: FINC 6231 or equivalent. Selection of stock portfolios, measuring returns and performance. Application of concepts acquired in security analysis.
- FINC 6531: INTERNATIONAL FINANCE**
Prerequisite: FINC 5031 or equivalent. International financial operations, including foreign trade financing, risk and credit evaluation, letters of credit and bankers' acceptances; role of political and social pressures.

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- FINC 6533: SEMINAR IN INTERNATIONAL FINANCE**
Meetings in the field are conducted with the chief financial officers of both financial and non-financial corporations operating in other countries. Discussions will concern long and short-term financial planning, including the impact of exchange rate fluctuations on planning operations.
- FINC 6731: SEMINAR IN FINANCE**
Prerequisite: FINC 5133 or equivalent. Investment and financing decisions of individuals and businesses in the presence of taxes and uncertainty—a microeconomic approach.
- FINC 6739: INTERNSHIP IN FINANCE**
Prerequisite: Master's degree candidacy, approval of associate dean, faculty chair, and sponsoring faculty member. Six hours of supervised work experience each week in an approved financial institution or firm.
- FINC 6939: MASTER'S THESIS RESEARCH**
Prerequisite: Master's degree candidacy and approval of advisor and dean.

HEALTHCARE ADMINISTRATION

- HADM 5032: LEADERSHIP AND ORGANIZATION IN HEALTH SERVICES**
To provide the student with an understanding of the leadership, organization and financing of health services in the United States, to help the student begin to become a healthcare leader, and to identify and discuss current trends in health care delivery, management and operation of hospitals, physician practices, and managed care companies.
- HADM 5131: HEALTHCARE HUMAN RESOURCES MANAGEMENT**
Prerequisite: HADM 5032 or equivalent. To acquaint the student with concepts and methods needed to plan and forecast, recruit, train, develop and evaluate health manpower. Also to provide an understanding of the impact of licensing, regulation and labor relations activities on health care institutions.
- HADM 5132: MANAGERIAL EPIDEMIOLOGY AND HEALTH POLICY**
Introduction to the concepts of public and personal health and disease. Problems in the measurement, analysis, organization and administration of intervention programs will be highlighted. An analysis of individual, community and institutional health efforts will be conducted.
- HADM 5133: HEALTH POLICY**
Analysis of health policymaking, health policy and contemporary issues in health policy with emphasis on the U.S.
- HADM 5232: FINANCIAL MANAGEMENT OF HEALTHCARE ORGANIZATIONS I**
This course is designed for students with no accounting training. Topic areas covered are accounting concepts and principles, financial statements, financial statement analysis, forms of business organizations, budgeting, cost analysis, activity based accounting, and accounting for financial decisions. This course cannot be taken by accounting majors or MBA students.
- HADM 5233: FINANCIAL MANAGEMENT OF HEALTHCARE ORGANIZATIONS II**
Prerequisites: HADM 5032 and either HADM 5232 or FINC 5031 or equivalents. Emphasis is placed on financial concepts and practices, sources and uses of funds, fiscal policies, internal and external controls, financial statistical reporting and definition of terms.
- HADM 5234: HEALTHCARE ETHICS, VALUES, AND SOCIAL RESPONSIBILITIES**
Prerequisites: HADM 5032 and 5132, or equivalents. Emphasis is placed on resolving ethical issues in healthcare as well as business ethics, biomedical and research ethical issues, services to be offered, distribution of resources and developing a personal value system, and relating that system to the needs of the community.
- HADM 5331: PLANNING HEALTHCARE SERVICES**
Prerequisites: HADM 5032 and 5132, or equivalents. Analysis of the requisites, demands, processes and methods of planning health services. Community planning, program evaluation, setting objectives for health service, and business planning are examined.
- HADM 5332: EVALUATION OF HEALTH SERVICES**
Analysis of the methods and techniques of evaluating the performance of health services and programs, including the qualitative and quantitative study of program options.

- HADM 5333: HEALTHCARE ECONOMICS**
Examines the health care industry, production of health, insurance, government programs, supply, and demand for physicians, nurses, drugs, and technology, hospitals, legal issues, and international comparisons.
- HADM 5431: HEALTHCARE INFORMATION MANAGEMENT**
Provides the student with knowledge and skills needed to successfully perform in a leadership role in the current information systems dependent environment. Prepares the student for management oversight; administrative design; acquisition, installation, and implementation; and operation of healthcare management information systems.
- HADM 5531: GROUP PRACTICE MANAGEMENT**
Prerequisite: HADM 5032 or equivalent. Introduces the student to the concepts of physician practice management including procedure coding, diagnosis coding, insurance billing and documentation, personnel management, marketing, patient relations, financial management, venture planning, risk management, physician agreements, legal/tax/professional liability.
- HADM 5731: ORGANIZATIONAL CHANGE AND QUALITY IMPROVEMENT IN HEALTHCARE**
Provides the student with knowledge and skills in organization development and change in healthcare facilities as well as total quality management and quality improvement in healthcare organizations. Prepares student for productivity improvement efforts, organization redesign and reengineering in healthcare. Also prepares student for developing and strengthening or redesigning quality improvement programs. Provides coverage of case management and care pathways.
- HADM 5911: SPECIAL TOPICS IN HEALTHCARE MANAGEMENT**
One hour credit special topics in healthcare management to be identified each time the course is offered.
- HADM 5931: RESEARCH TOPICS IN HEALTHCARE ADMINISTRATION**
Identified by specific title each time course is offered.
- HADM 5939: INDEPENDENT STUDIES IN HEALTHCARE ADMINISTRATION**
Prerequisite: Approval of instructor, Faculty Chair and Associate Dean required. Independent directed study in Healthcare Administration.
- HADM 6132: LEGAL ASPECTS OF HEALTHCARE SYSTEMS**
To acquaint the student with the legal issues in health services administration by study of the legal system, licensing, liability and professional ethics.
- HADM 6133: HEALTHCARE FACILITY PLANNING, DESIGN AND CONSTRUCTION**
Prerequisite: HADM 5032. Designed to introduce the student to concepts of health facility planning, design and construction and an understanding of the vocabulary and process employed by planners, architects and consultants.
- HADM 6136: EMERGING ISSUES IN HEALTHCARE**
Acquaints the student with emerging issues in healthcare relating to the organization, financing, and delivery of healthcare services.
- HADM 6235: MANAGED CARE**
Acquaints the student with managed care terminology, contracting for providers and payors, utilization review, case management, direct contracting, structuring and organization structure.
- HADM 6236: HOSPITAL OPERATIONS**
Prerequisite: HADM 5032 and one other HADM course, or permission of the HADM Director. Management, clinical professional and supporting staff must recognize their core competency is providing a specific portfolio of healthcare services to a set of managers of patient populations. The learning objectives for the course include strategies for: repositioning medical services for managed care; expanding market programs to meet target customers' needs and reporting outcomes to prove the organization's value to its customers; operations strategies for managed care; and performance measures information management.
- HADM 6237: HEALTHCARE CONSULTING AND ENTREPRENEURSHIP**
Prerequisites: HADM 5132, HADM 5233 and HADM 6132. Application of all academic business and healthcare concepts, theories and principles to consulting and new business ventures. Topics will include economic feasibility studies, business plan writing, practice valuations, practice evaluations, operations assessments, reengineering studies and other consulting and business startup projects. The course will utilize healthcare consultants, public accounting firm partners, turnaround consultants and other practitioners.

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HADM 6519: SEMINAR IN HEALTHCARE COMPETENCIES

Prerequisites: Permission of program director and instructor. This course is designed to introduce students to the professional requirements necessary for success in the healthcare field. Students will be familiarized with the professional competencies, including skills and behaviors required of the healthcare executive. Focus is on healthcare executive leadership development and personal effectiveness relating to the external environment of healthcare organizations. Emphasizes relationships with physicians, governing boards, regulatory bodies, donors, and other key stakeholders.

HADM 6539: GRADUATE RESIDENCY IN HEALTHCARE ADMINISTRATION

Prerequisites: Master's degree candidacy, HADM 6519, approval of dean and approval of instructor. Permission of instructor dependent upon language requirement, Oral TOFEL (if student does not hold a Bachelors degree from a U.S. institution), minimum GPA of 3.3, current MHA or MHA/MBA student, one semester of Internship or healthcare work experience, and other criteria (see HADM program list). Supervised residency with an approved health agency or organization: written and oral reports required.

HADM 6738: SEMINAR IN HEALTHCARE POLICY AND LEADERSHIP

Prerequisite: All other degree requirements prior to the residency. Designed to provide the student with an opportunity to apply and integrate previous courses, readings and research in a problem-solving environment. By the use of case studies, problems, field work, case presentations and simulation students will analyze situations and present their findings orally and in written form.

HADM 6739: INTERNSHIP IN HEALTHCARE ADMINISTRATION

Prerequisite: Master's degree candidacy and approval of advisor and dean. Must have completed at least one semester in the program. Supervised internship with position or project in a healthcare facility. Written and oral reports required. No more than 3 hours of internship credit can be applied toward degree.

HADM 6939; 6969: MASTER'S THESIS RESEARCH

Prerequisites: Master's degree candidacy and approval of advisor and dean.

HUMAN RESOURCE MANAGEMENT

HMRS 5131: HUMAN RESOURCE MANAGEMENT PROCESSES

Theory and processes of effective development and management of human resources in organization.

HMRS 5136: GROUP PROCESSES IN ORGANIZATIONS

Understanding the complexities of social interaction, group behavior and interpersonal influence in organizational environments. Topics include intragroup and intergroup behavior, leadership, power, conflict and decision-making.

HMRS 5231: LEGAL ENVIRONMENT OF HUMAN RESOURCE MANAGEMENT I

The constitutional and procedural aspect of the employee/employer relationship with special reference to discrimination, wages and hours, pensions, unemployment insurance, health and safety and workers' compensation.

HMRS 5433: COMPENSATION AND BENEFITS

Review and analysis of traditional and nontraditional compensation benefit systems.

HMRS 5434: PERFORMANCE REVIEW AND PRODUCTIVITY

Overview of productivity measurement and analysis as applied to organizations and introduction to performance appraisal, job analysis and measurement techniques used in assessing individual work performance.

HMRS 5435: EMPLOYEE PLANNING, STAFFING AND SELECTION

Prerequisite: HMRS 5131. Techniques for planning and recruiting human resource needs in the context of organizational requirements. Staffing and selection techniques and practice relative to organizational strategy, legal concerns, and labor market considerations.

HMRS 5437: HUMAN RESOURCE INFORMATION SYSTEMS

Principles and procedures used in the development of information systems to aid human resource decision making.

- HMRS 5531: TRAINING AND DEVELOPMENT**
An overview of personnel training and development in organizations to include program development.
- HMRS 5931: RESEARCH TOPICS IN HUMAN RESOURCES**
Identified by specific title each time course is offered.
- HMRS 5939: INDEPENDENT STUDIES IN HUMAN RESOURCES**
Prerequisite: Approval of instructor, Faculty Chair and Associate Dean required. Independent directed study in Human Resources.
- HMRS 6735: SEMINAR IN HUMAN RESOURCE MANAGEMENT**
Prerequisites: HMRS 6733 and Last Semester. The concepts and practices of strategic human resource management including the development of frameworks to integrate human resource functions and the relationship between human resource strategies and business strategy with a focus on ethical and international issues.
- HMRS 6739: INTERNSHIP IN HUMAN RESOURCES**
Prerequisites: Master's degree candidacy and approval of advisor and dean. Supervised internship with a public or private agency; written and oral reports required.
- HMRS 6839: MASTER'S PROJECT RESEARCH**
Prerequisite: Master's degree candidacy and approval of advisor and dean.
- HMRS 6939: MASTER'S THESIS RESEARCH**
Prerequisite: Master's degree candidacy and approval of advisor and dean.

INFORMATION SYSTEMS ADMINISTRATION AND MANAGEMENT

- ISAM 5030: FUNDAMENTALS OF BUSINESS PROGRAMMING**
Common program logic and structures inherent in business application programs; programming using a business-oriented high-level language; overview of program design and development methodologies; management and control of program design and development activities. Includes numerous hands-on class projects. Cannot be taken as ISAM or BUS elective. May not be taken as graduate elective credit by any BUS student.
- ISAM 5330: MANAGEMENT INFORMATION SYSTEMS**
Prerequisite: MGMT 5032 or equivalent. Principles and procedures used in the development of information systems to facilitate the management functions of planning, integrating, measuring and controlling. (Previously ISAM 5631.)
- ISAM 5331: FUNDAMENTALS OF DATABASE DESIGN AND DEVELOPMENT**
Prerequisite: ISAM 5030 or 6 hours of college-level programming. Database concepts used in business systems. Applications, advantages and disadvantages of hierarchical, network and relational database systems are presented from a business perspective.
- ISAM 5332: DATA WAREHOUSING AND DATA MINING**
Prerequisite: ISAM 5331 or equivalent. This course provides the knowledge and skills necessary to design and develop a data warehouse as well as extract strategic business intelligence through the application of data mining tools and techniques. Students will examine all phases and tasks of the data warehouse design process, including data structure, dimensional modeling such as star schema, data cube, and data aggregation. They will also perform hands-on exercises with the latest data warehouse and data mining tools to load existing data, preparing data marts, and apply On-Line Analytical Processing (OLAP) tools to obtain business intelligence.
- ISAM 5333: BUSINESS DATA COMMUNICATIONS**
Telecommunications hardware and infrastructure, global telecommunications systems, roles and uses of telecommunications systems and computer networks in modern business management.
- ISAM 5334: APPLICATION DEVELOPMENT**
Prerequisite: ISAM 5030 or equivalent. This is an application development course featuring the .NET computing platform. This course will cover .NET Framework fundamentals, data structures and storage mechanisms, application security issues and other interfaces between programs and operating system components.

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- ISAM 5335: ADVANCED APPLICATIONS PROGRAMMING WITH VISUAL BASIC**
Prerequisite: ISAM 5030 or 6 hours of college-level course work in computer programming. Tools, techniques, and management methodologies used in the development of client-server-based business software, graphic user interface, and business reports. Includes numerous hands-on class projects.
- ISAM 5337: INTERNET APPLICATIONS DEVELOPMENT**
Use and control of Internet systems in business; development of HTML-based Web site creation tools; roles/functions of TCP/IP, cabling systems and servers in Internet connectivity. Includes numerous hands-on class projects.
- ISAM 5338: ADVANCED INTERNET APPLICATIONS DEVELOPMENT**
Prerequisite: ISAM 5331, ISAM 5335 and ISAM 5337, or equivalents. Client-Server applications development for the World Wide Web using the latest tools and technologies such as setting up a Web Server, development of server-side and client-side scripts, Web forms processing, XML documents processing, use of DTD and XHTML, development of ASP.NET pages with HTML and Web controls, and Web-database applications development. Numerous hands-on projects.
- ISAM 5339: FUNDAMENTALS OF COMPUTER NETWORKING**
Prerequisite: ISAM 5030 or 6 hours of college-level course work in computer programming. Basic concepts of networking, OSI and TCP/IP architectures, data link layer protocols, LAN technologies, serial link protocols, WANs, network layer issues, protocols, connection oriented and connectionless protocols, transport layer protocols, internetworking concepts, fundamentals of application layer protocols. Hands-on exercises on protocols, protocol analysis, LANs, WANs, etc.
- ISAM 5439: COMPUTER NETWORK SECURITY**
Prerequisite: ISAM 5339. Fundamental computer network security concepts and secure network implementations, security threats to computers and computer networks. Methods to counter security threats, concepts of firewalls, their design and implementation, pre-emptive hacking tools, intrusion detection systems, some aspects of host security using computers with Unix operating systems.
- ISAM 5531: CLIENT/SERVER SYSTEM ADMINISTRATION**
Prerequisite: ISAM 5339 or ISAM 5636 or equivalent. Exploring and determining how emerging client-server technology, Internet-based technology, tools and techniques work and how they can be integrated in modern business management.
- ISAM 5632: ADVANCED DATABASE APPLICATIONS DEVELOPMENT**
Prerequisites: ISAM 5030 or 6 hours of college-level course work in computer programming, and ISAM 5331 or equivalent. Organization and management of complex business databases and applications such as database design and management, user interface design, application design, database processing and generation of management-oriented reports. Includes numerous hands-on projects using a leading database management system.
- ISAM 5633: ORACLE DATABASE ADMINISTRATION**
Prerequisite: ISAM 5632 or equivalent. This course introduces students to Oracle Database Administration. The topics covered include components of a database, creating a database, database backup and recovery, database performance tuning and database administration. The course also includes extensive hands-on exercises related to Oracle database administration.
- ISAM 5635: SYSTEMS ANALYSIS AND DESIGN**
Prerequisite: ISAM 5030 or 6 hours of programming courses and ISAM 5331. Systems concepts; systems analysis and design techniques; methods used to analyze information requirements; methods used to design, evaluate and implement information systems; and a class project.
- ISAM 5636: ADVANCED COMPUTER NETWORKING**
Prerequisite: ISAM 5339 or equivalent. The course covers serial and shared link layer protocols, principles of transport and network layer design and analysis, principles of routing in computer networks, routing algorithms, routing protocols, analysis of application level protocols, basic concepts of network security, packet filters, network address translation, port address translation, virtual local area network, etc. Hands-on exercises on building and implementing LANs and WANs, internets, routing protocols, filters and network, advanced protocol analysis, etc.

- ISAM 5637: INFORMATION SYSTEMS PROJECT MANAGEMENT**
Prerequisite: ISAM 5635 or equivalent. This course is a follow-up of the systems analysis and design course. It combines theory and practice to present an understanding of the concepts, skills, tools and techniques involved in an information technology project management. The course includes nine knowledge areas of project management-project integration, scope, time, cost, quality, human resource, communication, risk and procurement management.
- ISAM 5638: ADVANCED APPLICATIONS PROGRAMMING WITH JAVA**
Prerequisite: ISAM 5030 or at least 6 hours of programming courses. This is an advanced programming course using the JAVA programming language. Students learn how to design and construct Interactive Java programs for business applications. This course covers program design, coding for Applets and Applications, etc.
- ISAM 5639: SQL SERVER DATABASE ADMINISTRATION**
Prerequisite: ISAM 5331 or equivalent. Microsoft SQL Server is a prime relational database management system. This course introduces students to topics such as creating, interacting with, administering, backing up, recovering, and troubleshooting a database using Microsoft SQL Server in a hands-on environment.
- ISAM 5731: INFORMATION SYSTEMS AUDIT AND SECURITY**
Prerequisite: ISAM 5330 or equivalent. Audit of financial statements, financial accounting systems, accounting data flows, segregation of duties in computer environment, general and application controls, data security and access controls, dial-up controls, computer security, application change control, audit of computer programs and data files and computer audit trails.
- ISAM 5732: FUNDAMENTALS OF WINDOWS ADMINISTRATION**
This course introduces students to various windows operating system platforms and integrating these platforms to build domains that serve the needs of an organization. The topics covered include domain designs, domain trees and forests, user administration, file system administration, registry management, file and printing performance management, etc. The course includes extensive hands-on components.
- ISAM 5733: ADVANCED WINDOWS ADMINISTRATION**
Prerequisite: ISAM 5732 or equivalent. The topics covered include Windows server maintenance and tuning concepts, active directory design and operation, designing and administering windows client server systems, and building a comprehensive networked Windows environment. The course includes comprehensive hands-on exercises and projects.
- ISAM 5931: RESEARCH TOPICS IN INFORMATION SYSTEMS**
Identified by specific title each time course is offered.
- ISAM 5939: INDEPENDENT STUDIES IN INFORMATION SYSTEMS**
Prerequisite: Approval of instructor, Faculty Chair and Associate Dean required. Independent directed study in Information Systems.
- ISAM 6739: INTERNSHIP IN MANAGEMENT INFORMATION SYSTEMS**
Prerequisite: Master's degree candidacy, completion of foundation courses and at least 18 hours of MS in MIS required courses, and approval of academic advisor, faculty chair and associate dean. Supervised work experience related to management information systems with an approved business, industrial firm, or governmental agency; written and oral reports as required.

LEGAL STUDIES

- LEGL 5131: LEGAL CONCEPTS FOR THE BUSINESS PROFESSIONAL**
This course examines the legal implications of business transactions and will be of particular value to students seeking degrees in accounting, finance and business. Explores legal issues emphasized by the AICPA and other national professional organizations.
- LEGL 5931: RESEARCH TOPICS IN LEGAL STUDIES**
Identified by specific title each time course is offered.

MANAGEMENT

- MGMT 5032: HUMAN BEHAVIOR IN ORGANIZATIONS**
Behavioral problems associated with innovation, resistance to change and the development of complex organizations and administrative processes. Formerly MGMT 5132; Credit may not be received for both MGMT 5132 and MGMT 5032. May not be taken as graduate elective credit by any BUS student.
- MGMT 5131: BUSINESS AND SOCIETY**
Prerequisite: MGMT 5032 or equivalent. Role of the firm in society; business responsibilities to society from ethical, political, economic and societal points of view.
- MGMT 5133: TEAMWORK AND LEADERSHIP SKILLS: THEORY IN PRACTICE**
Prerequisite: SHOULD be taken early in the MBA program. Focus on knowledge-based skill and competency development in effective teamwork, teambuilding, and leadership as well as diagnosing and intervening effectively in problematic team situations. Formerly MGMT 5031; Credit may not be received for both MGMT 5031 and MGMT 5133.
- MGMT 5135: CORPORATE ORGANIZATIONAL DESIGN**
Prerequisite: MGMT 5032 or equivalent. Surveys theory and research on organizational factors affecting the design and management of complex corporate systems.
- MGMT 5331: PERSONNEL MANAGEMENT**
Prerequisite: MGMT 5032 or equivalent. The employment, understanding and management of people, aspects of employee morale and productivity.
- MGMT 5332: LABOR RELATIONS**
Prerequisite: MGMT 5032 or equivalent. Relationships between unions and management and the structure of industrial bargaining; legal dimensions of employee relations, strikes and settlements.
- MGMT 5636: MANAGEMENT OF TECHNOLOGY**
Prerequisite: MGMT 5032 or equivalent. This course is designed to introduce a broad range of topics and issues related to the management of technology and technological innovation. The course includes discussions of technology development in industry, academia and government; the process of innovation; the drivers of innovation in a global environment; organizing and leading innovation; and incorporating technology change into company structure and strategy.
- MGMT 5638: MANAGING TECHNICAL AND PROFESSIONAL PEOPLE**
Prerequisite: MGMT 5032 or equivalent. This course discusses issues in managing and leading scientists, engineers, and other professionals. It provides ideas on the most effective methods for increasing individual invention and organization innovation. Topics include knowledge management, creativity, leadership, cultural diversity, negotiation, organizational design, global virtual teaming and work/life issues for professionals.
- MGMT 5931: RESEARCH TOPICS IN MANAGEMENT**
Identified by specific title each time course is offered.
- MGMT 5939: INDEPENDENT STUDIES IN MANAGEMENT**
Prerequisite: Approval of instructor, Faculty Chair and Associate Dean required. Independent directed study in Management.
- MGMT 6237: LEADERSHIP**
The course will examine and focus on proven executive leadership best practices across a range of complex organizations.
- MGMT 6331: ORGANIZATIONAL DEVELOPMENT**
Prerequisite: MGMT 5032 or equivalent. Measures for guiding change in the industrial setting; impacts on the labor force and the production process. Change models, diagnostic techniques, intervention strategies and the ethics of change agent client system relationship.
- MGMT 6332: INTERNATIONAL MANAGEMENT**
Prerequisite: MGMT 5032 and BAPA 5131, or equivalents. The course focuses on the challenges of international management including topics of global strategy, organizational design, cross-cultural communication, and human resources.
- MGMT 6333: SEMINAR IN INTERNATIONAL MANAGEMENT**
Meetings in the field are conducted with the officers of companies operating in other countries. Sessions will be concerned with cultural and legal considerations that make labor relations, resource coordination and other management considerations different from the American experience.

- MGMT 6731: STRATEGIC MANAGEMENT SEMINAR**
Prerequisites: Other degree requirements and LAST SEMESTER. Introduction to corporate-level and business-level strategy. Study of the strategic management process and factors necessary for competitive success in industries.
- MGMT 6739: INTERNSHIP IN MANAGEMENT**
Prerequisites: Master's degree candidacy and approval of advisor and dean. Supervised internship with an approved firm or with an industrial or governmental agency; written and oral reports required.

MARKETING

- MKTG 5031: MARKETING ESSENTIALS FOR THE 21ST CENTURY: CREATING CUSTOMER VALUE**
Explores how product, distribution, promotion and pricing strategies are determined in a dynamic environment to create customer value. May not be taken as graduate elective credit by any BUS student.
- MKTG 5332: EXECUTIVE DECISIONS IN MARKETING**
Prerequisites: ACCT 5031, MGMT 5133, and MKTG 5031, or equivalents. Making information-based strategic and tactical marketing decisions related to target market selection, product, price, distribution and promotion that increase the probability of success in a competitive marketplace.
- MKTG 5333: ENTREPRENEURSHIP AND SMALL BUSINESS CONSULTING**
Prerequisite: ACCT 5031, FINC 5031, MGMT 5032 and MKTG 5031, or equivalents. Application of classroom concepts, theories and principles from all business disciplines to active operations of small businesses or new business ventures.
- MKTG 5532: INTERNATIONAL MARKETING STRATEGY**
Prerequisite: MKTG 5031 or equivalent, and BAPA 5131. Begins with a discussion of incentives for and barriers to international trade, and foreign market selection and entry strategies. Then examines product, price, distribution, and promotion decisions in an international context. Involves secondary marketing research and developing a marketing plan for product introduction into a foreign market.
- MKTG 5533: SEMINAR IN INTERNATIONAL MARKETING**
Meetings with the chief marketing people at major firms in several countries are conducted. Sessions will concentrate on their approaches to market development and analysis. Emphasis will be placed on problems and on solutions to those problems that are peculiar to other cultures.
- MKTG 5534: ADVANCED PROFESSIONAL SERVICES MARKETING**
Prerequisite: MKTG 5031 or equivalent. Central issues involved in planning, implementing and controlling professional services marketing strategies. Examines positioning and use of information technology as a means of achieving differential.
- MKTG 5931: RESEARCH TOPICS IN MARKETING**
Identified by specific title each time course is offered.
- MKTG 5939: INDEPENDENT STUDIES IN MARKETING**
Prerequisite: Approval of instructor, Faculty Chair and Associate Dean required. Independent directed study in Marketing.

POLITICAL SCIENCE (formerly GOVT)

NOTE: POLS courses have been transferred to the School of Human Sciences and Humanities. Please see that school's Course Roster section of the Catalog.

PUBLIC AND PRIVATE MANAGEMENT

- PPRM 5131: THE STUDY OF ADMINISTRATION**
Management theory applied to organization, staffing, planning and control in government and in organizations where public-private cooperation is important.
- PPRM 5132: TRANSFORMING DATA INTO INFORMATION**
Techniques for analyzing and evaluating performance; information and power in public-private organizations; qualitative and quantitative study of policy consequences.
- PPRM 5133: DECISION SUPPORT SYSTEMS**
Principles and procedures used in the development of information systems to aid decision-making in public-private organizations.
- PPRM 5231: BUDGET AND CONTROL-GOVERNMENT/SERVICE ORGANIZATIONS**
Principles and practices of effective budgeting and management control in government and service organizations are presented. Among the topics covered in this course are the budget cycle, alternative budgeting frameworks, designing management control structures, cost-benefit analysis, reporting and measurement, and designing management control systems.
- PPRM 5535: GOVERNMENT AND BUSINESS**
Prerequisite: PPRM 5131. Government strategies for shaping business operation in the United States. Effect of government business interrelations on decision-making in both the public and private sectors.
- PPRM 5931: RESEARCH TOPICS IN PUBLIC AND PRIVATE MANAGEMENT**
Identified by specific title each time course is offered.
- PPRM 5939: INDEPENDENT STUDIES IN PUBLIC AND PRIVATE MANAGEMENT**
Prerequisite: Approval of instructor, Faculty Chair and Associate Dean required. Independent directed study in Public and Private Management.



Faculty in the School of Business work with students to help them meet their academic goals.



Dr. Gary Schumacher engages in a lively exchange with doctoral students (l to r) Delonda Johnson, Arnold Adair, and Araceli Delacruz during the EDLS 8130 Strategic Planning and Systems Alignment class.

SCHOOL OF EDUCATION

- Doctor of Education (EdD)
 - Educational Leadership
- Master of Science
 - Counseling
 - Curriculum and Instruction
 - Early Childhood Education
 - Educational Management
 - Instructional Technology
 - Multicultural Studies in Education
 - Reading
 - School Library and Information Science
- Master Teacher Certification
 - Master Mathematics Teacher
 - Master Reading Teacher
 - Master Technology Teacher
- UHCL Certificates
 - Online Distance Educator
 - Performance Technology
 - Technology Applications (EC-8)

Building on a solid base of liberal arts and general studies, the School of Education (SoE) seeks to produce thoughtful, skilled and humane educators. Numerous plans are available to help students develop into highly qualified professionals.

The SoE offers an extensive choice of certification plans in graduate specializations. Many alumni find employment in a variety of educational settings, while others pursue careers in industry, government, independent practice or consulting. Plans in the SoE are fully approved by the State Board for Educator Certification (SBEC)/Texas Education Agency (TEA), and the University of Houston-Clear Lake is accredited by the National Council for Accreditation of Teacher Education (NCATE).

	Office	Phone
School of Education	Bayou 1231	281-283-3600
Center for Professional Development of Teachers	Bayou 1231	281-283-3612
Center for Educational Programs	Arbor 190	281-283-3530
Office of Academic Advising	Bayou 1231	281-283-3615
Office of Educator Certification	Bayou 1231	281-283-3618
Office of State Assessments	Bayou 1231	281-283-3609
Research Center for Language and Culture	Bayou 1325	281-283-3580
Learning Resources Review Center	Bayou 3402	281-283-3900
Office of the Associate Dean	Bayou 1231	281-283-3620
Office of the Dean	Bayou 1237	281-283-3501
Web site	http://www.uhcl.edu/soe	
National Council for Accreditation of Teacher Education (NCATE)	http://www.ncate.uhcl.edu	
New Teachers Online (NTOL)	http://www.uhcl.edu/soe/ntol	
SoE E-mail Address	education@uhcl.edu	

In the School of Education we believe that teaching, learning and educational leadership should be learner-centered. Whether we are referring to university pre-service teachers, in-service teachers pursuing advanced studies, others in professional educator roles or the learners influenced by these educators, the focus of teaching and learning is on the learner. The SoE conceptual framework guides the way in which we structure our university courses and degree plans. This is reflected in the SoE Mission Statement quoted below. It is also the central theme that is reinforced in our classes. The vision of the School of Education is a learner-centered community in which success for all students is paramount.

The mission of the School of Education is to prepare outstanding educators and leaders in education through achievement of the highest standards of knowledge, skills and dispositions to assist all students to learn. The mission is accomplished by promoting:

- excellence and innovation in learner-centered teaching and learning for all
- the value and understanding of all types of diversity
- professional and personal integrity
- effective use of technologies
- partnerships with and service to the community
- ongoing assessment for both candidate and program improvement
- research to expand the knowledge base for teaching and learning.

Although each of these is critically central to the goals and directions of the School of Education at the University of Houston-Clear Lake, the first, "...promoting excellence and innovation in learner-centered teaching and learning for all...", is the most succinct statement of what we value as a professional higher education faculty.

ACCOUNTABILITY AND ACCREDITATION

The University of Houston-Clear Lake (UHCL) is accredited by the Southern Association of Colleges and Schools (SACS). Unique to education itself are other accrediting and accountability bodies with strict guidelines and standards that must be met in order for the School of Education (SoE) at UHCL to recommend educators for teaching certificates, supplemental certificates, master teacher certificates and certificates requiring a master's degree. Below is a brief description of the accountability and accreditation measures of the U.S. Department of Education (USDE), the National Council for Accreditation of Teacher Education (NCATE) and the State Board for Educator Certification (SBEC)/Texas Education Agency (TEA), and how our university measures up to those criteria and standards.

DEPARTMENT OF EDUCATION ACCOUNTABILITY

In 1998, Congress reauthorized Title II of the Higher Education Act. The Act established a reporting system for the U.S. Department of Education (USDE) to collect information annually on the quality of the teacher training programs of states and institutions of higher education. Within Title II, the USDE mandates federal accountability measures to determine how well all higher education institutions prepare teachers, what states require of individuals before they are allowed to teach and how institutions and states are raising their standards to provide "highly qualified" educators. The USDE administers Title II and gathers information from all the states each October for distribution in April

of the following year. Institutions are ranked on aggregate and summary pass rates. The rankings show the percentages of program completers who demonstrated subject-matter competency by passing a required state assessment. In Texas, SBEC/TEA collects all data for Title II.

The pass rates of the 2006-2007 academic year cohort of teacher certificate program completers at UHCL were evaluated and compared to the pass rates of the state and national groups of program completers. At UHCL, our students from the 2006-2007 cohort had an overall passing rate of almost 100% on all of their state assessment.

Our pass rates during 2006-2007 included the following:

Basic Skills Assessment	100%
Academic Content Areas	100%
Professional Knowledge	100%
Teaching Special Populations	100%
Summary Pass Rates (Overall)	100%

The Texas statewide pass rates in each of those areas in 2006-2007 included the following:

Basic Skills Assessment	100%
Academic Content Areas	95%
Professional Knowledge	96%
Teaching Special Populations	93%
Summary Pass Rates (Overall)	95%

For a complete summary of all pass rates see the federal Title II reporting Web site and click on, “View State Reports Here” at: <https://title2.ed.gov/default.asp>.

Title II also collected the following numeric data about our students and faculty for the 2006-2007 cohort. Title II requires that all higher education institutions publicly share the following data about their institution:

Students enrolled in teacher preparation programs	1330
Students in supervised student teaching (internships)	214
Full-time faculty in professional education	53
Supervising faculty for the teacher preparation program	27
Students to faculty ratio	9.73:1
Average number of hours per week required of students’ participation in supervised teaching	24
Total number of required weeks of supervised student teaching (internships)	21
Total number of hours required of a supervised student teacher	504

NCATE ACCREDITATION

NCATE is the largest and most recognized accrediting body for teacher education in the United States. The University of Houston–Clear Lake is one of only 13 Texas higher education institutions to be accredited by NCATE. NCATE has rigorous academic guidelines for initial and advanced levels of educator certification. The NCATE Board of Examiners conducted a site visit of UHCL in spring 2007, and the NCATE Accrediting Board awarded UHCL continuing accreditation at both the initial and advanced levels. NCATE cited no areas for improvement.

SBEC/TEA ACCREDITATION

The University of Houston-Clear Lake is one of 159 educator preparation programs in the State of Texas that are accredited to recommend educators for certificates. SBEC/TEA implements stringent guidelines and standards for initial and advanced levels of educator certification. These standards are evaluated by the pass rates of our students on the SBEC/TEA state assessments. TEA's last announcement of UHCL's overall final pass rate on all State Assessments was 100%.

The administrative functions for the certification process are conducted by the Educator Certification and Standards Division of the Texas Education Agency (TEA). Licensing authority remains with SBEC/TEA.

POLICY ON PROFESSIONAL DISPOSITIONS

Students who are seeking teacher certification or are enrolled in the SoE are required to read The Statement on Professional Dispositions, which is provided to define the standard of behavior the School of Education expects of its students. Just as students may be withdrawn from their program for not meeting the academic requirements, students may be withdrawn from their program for not meeting the professional disposition standards. The Statement on Professional Dispositions is found at http://prtl.uhcl.edu/portal/page/portal/SOE/Forms/form_files/DISPOSITIONS.pdf

FIELD EXPERIENCE COURSES

In the School of Education Course Roster there are many courses which have descriptions which end with "Field experiences required." Students in these courses are required to spend part of their time off campus, in most cases, in school classrooms. The State of Texas requires each of these students to pass a criminal background check before being allowed in the classroom for the field experience.

CRIMINAL BACKGROUND CHECKS

As required by Texas Senate Bill 9, the district will conduct a criminal background check on each student before the student is allowed in the school for a field experience. In order for the criminal background check to be conducted, each student must complete all required documentation. Part of the documentation will require that each student provide his/her social security number and driver's license number. If a student does not have a driver's license, then, at the discretion of the school district, other official numbers (visa, passport, etc.) may be required. The criminal background check is conducted for each field-experience course each semester and for each district in which the student is completing a field experience. If a student is denied access to a district based on the criminal background check, the student cannot get credit for the course. The student will not be able to register for any further field experience course until the situation has been corrected.

CENTERS AND OFFICES

CENTER FOR PROFESSIONAL DEVELOPMENT OF TEACHERS

The School of Education has been designated a Center for Professional Development of Teachers (CPDT). The teacher preparation plan has been restructured to provide extensive school-based experiences for prospective educators. These expanded experiences include a two-semester internship, field-based courses, and close cooperation with a number of schools, which have been designated as professional development school sites. These sites operate under the philosophy that every staff member is a mentor, providing a rich and supportive environment for the preparation of professional educators. The CPDT coordinates field experiences and works with the Center for Educational Programs (CEP) in providing a wide array of professional development opportunities. The CPDT also provides technological support and professional development.

Field-based experiences and graduate internships take place in a variety of settings in 22 local area school districts. Forty-five schools have been designated as professional development schools (PDS) and provide pre-service internships and professional mentoring. In addition, the SoE has an additional 124 contracts with other businesses and other school districts to provide both graduate internship placement and field experiences.

PROFESSIONAL DEVELOPMENT LABORATORY SCHOOL

The University of Houston-Clear Lake and the Clear Creek Independent School District (CCISD) have entered into a partnership to create and maintain a professional development laboratory school (PDLS). The PDLS is located in what was McWhirter Elementary School in Webster, Texas, and opened at the beginning of the 2002 - 2003 school year.

The School of Education acts on behalf of the University to oversee the PDLS. UHCL faculty provides instructional leadership, conducts research, and engages in professional development. In addition, some SoE courses are taught at the PDLS. The main focus of the PDLS is to provide educational opportunities for UHCL and CCISD faculty, students, and the school community. Faculty and students interested in being involved in the PDLS should contact the SoE Associate Dean.

CENTER FOR EDUCATIONAL PROGRAMS

The Center for Educational Programs (CEP) provides academic and outreach services to students, faculty, schools, school districts, other educational entities and members of the community. The CEP coordinates the SoE's clinical services, provides facilities and coordination for laboratory experiences, supports a broad range of programs for children and youth, offers non-credit courses for area educators, assists local schools and school districts in emerging and ongoing professional development activities and promotes and supports various projects of the SoE.

OFFICE OF ACADEMIC ADVISING

This office provides information about the SoE degree requirements, advises all post-degree teacher certification students who seek initial teaching certificates, analyzes transcripts, performs student audits prior to admission to Pre-service Internship I and the Alternative Certification Program (ACP) and prepares degree and certification plans for these students. The office also advises prospective graduate students in the various SoE plans and assigns them faculty advisers.

OFFICE OF EDUCATOR CERTIFICATION

Questions about state educator certification policies and regulations should be directed to this office. It maintains all official certification records for the SoE. This office also approves applications for admission to the Teacher Education Program; audits for practica, graduate internships, the Master's Comprehensive Examination and graduation; recommends students for educator certificates; prepares deficiency plans and tracks Title II data.

OFFICE OF STATE ASSESSMENTS

The Office of State Assessments advises and disseminates information to students about the state exams, called TExES (Texas Examinations of Educator Standards). Candidates must pass their required TExES in order to become public school educators in the state of Texas. This office receives exam scores from the state and records the scores in the appropriate students' files. It also houses and distributes literature pertaining to state assessments, including registration instructions, practice test information, and notification of any changes or updates from the State Board for Educator Certification regarding the TExES. The office offers opportunities for UHCL students and alumni to take practice tests to help prepare them for their actual exam(s). The SoE State Assessments Coordinator networks with UHCL faculty and staff, as well as Educational Testing Services (ETS) and the State Board for Educator Certification (SBEC)/Texas Education Agency (TEA), to ensure accurate testing procedures and requirements.

RESEARCH CENTER FOR LANGUAGE AND CULTURE

This center supports initiatives in research and development of educational programs for students working with second language learners and their families. Funded projects have included teacher training, bilingual counselor training and bilingual administrator training.

LEARNING RESOURCES REVIEW CENTER

This center is jointly sponsored by the Alfred R. Neumann Library and the SoE and houses current children's books furnished by the generosity of publishers and producers of books and materials. The primary function of the center is to encourage review activities.

CERTIFICATION

ALTERNATIVE CERTIFICATION PROGRAM

The UHCL School of Education Alternative Certification Program (ACP), in cooperation with UHCL member school districts, is a training program that provides the opportunity for initial teacher certification students who have earned a bachelor's degree to be employed as full-time teachers while they complete their certification. The length of the program may be from one to three years, depending on the students' qualifications. The ACP meets the requirements of the U.S. Department of Education's (USDE) definition of "highly qualified" under the No Child Left Behind Law (NCLB). According to the USDE and NCLB, each school district must ensure that all teachers hired who teach core academic subjects funded by Title I funds are "highly qualified." An uncertified educator is able to meet this "highly qualified" definition by:

- Holding a bachelor's degree or higher from an approved institution
- Being admitted to an SBEC approved ACP
- Passing the content state assessments required for the certification area being sought.

Admission Requirements

Students must have the following:

- Degree - Must have an earned bachelor's degree or higher from an approved accredited institution. Must be conferred by May for fall entry and August for spring entry into the program.
- State Assessment - Must pass the appropriate TExES content area state assessment.
- UHCL Enrollment - Must be admitted to UHCL by the Office of Admissions before the ACP application deadline in order for the SoE Office of Academic Advising to obtain transcripts from the Office of Admissions to calculate GPA. Enroll as either a Graduate Teacher Certification student or a Post-Baccalaureate Teacher Certification student.
- Teacher Education Program (TEP) Admission - Must be formally admitted by letter to the SoE Teacher Education Program by the end of first 12 months of enrollment in ACP. Admission requires completion of EDUC 5130; SILC 6030; TCED 6031; THEA/TASP (Reading 260, Writing 230, Mathematics 230) or an approved master's degree or higher; a college-level public speaking course with "C-" or better or Speech Competency form; a GPA greater than 2.500 overall or in the 60 most recent semester credit hours; completion of a minimum of 12 semester credit hours in the subject-specific content area for the certificate being sought; and the TEP application form. Submit the TEP application form and all supporting documentation to the SoE Certification Office in B1231.
- GPA - Must have at least a 2.500 overall Grade Point Average (GPA). This overall GPA includes all course work from all collegiate institutions attended

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- not just UHCL. If students do not have at least a 2.500 overall GPA, then at least a 2.500 GPA in the last 60 hours of course work may be accepted (includes all course work in the semester of the 60th hour).

- Application - Must complete the ACP Application (will be available at the informational meetings with Academic Advising or in the Office of the Center for Professional Development of Teachers (CPDT), B1231-4. Application must be submitted to the CPDT office by the deadline posted on the CPDT bulletin board. The deadline date is based on the paper-based TExES administration schedule. Mailed applications must be postmarked at least 5 days prior to deadline date. Faxes and late applications will not be accepted.
- Fees - \$60 ACP fee, which is paid to the CPDT office, is non-refundable, and is valid for 12 months from the date of application. \$120 state assessments fee, which is paid to Educational Testing Service (ETS) during online registration. Partial refunds will be made for state assessments cancelled during regular or late registration periods. No refunds will be made for cancellations after the late registration period.
- Acceptance Letter – A letter of acceptance sent by the CPDT confirming the student has met the above requirements for entry into the UHCL ACP.

The teaching position must be with one of the UHCL CPDT Teacher Center Board member districts. The following is a list of member districts.

Alvin	Angleton	Brazosport	Channelview
Clear Creek	Columbia-Brazoria	Danbury	Deer Park
Dickinson	Friendswood	Galena Park	Galveston
Goose Creek	Hitchcock	Houston	La Marque
La Porte	Pasadena	Pearland	Santa Fe
Sheldon	Texas City		

Qualified Alternative Certification Program Students

Upon acceptance, qualified students will complete the following steps:

- Probationary Certificate – Students must apply online for a Probationary Certificate issued by SBEC/TEA, at <http://www.sbec.state.tx.us/sbeonline> under “Applications and Probationary Certification.” There is a \$52 fee for the certificate and a \$42.25 fee for fingerprinting and a background check, both of which are paid online at the SBEC Web site. Students must have a professional fingerprinting service digitally scan their prints and send them to SBEC/TEA. SBEC/TEA will conduct its criminal background check using these scans by running them through the FBI and DPS databases. A maximum of three probationary certificates may be issued by SBEC/TEA per student (one per academic year), and students must reapply for them each year. SBEC/TEA may or may not issue a probationary certificate to anyone formerly on an emergency permit or other permit. Students should have the school district contact SBEC/TEA if the district has a concern with this issue.

- **Alternative Certification Program Fee** –A non-refundable fee of \$3,000 (subject to change) will be deducted from each ACP student's annual salary by the school district. This fee supports the administration of the program, the university supervisor, the public school mentor, and the student's release time classroom substitute. Students who require a second or third year to complete the program will have a fee of \$900 deducted from their salary each semester for the same reasons stated above. Three years is the maximum allowed to complete the program. Students will register for the ACP Internship course every semester, in addition to any remaining courses required for completion of their certification.
- **Certification Plan** - Students' transcripts will be analyzed during the first semester at UHCL, and the SoE Office of Academic Advising will create Candidate Plans of Study for all students. (Deficiency plans are not used by the ACP.) Students will receive a card in the mail with instructions to come to B1231 to sign the plan. See Graduate Teacher Certification or Post-Baccalaureate Teacher Certification sections of catalog, the bulletin board at B1231 and SoE Web site for additional details on the SoE plans.
- **Plan Completion** - Students will assume all tuition, fees and other costs for required university course work, and complete all the requirements listed on the plan. Students must then apply for the Standard Classroom Teaching Certificate online and pay SBEC a \$77 fee. UHCL then recommends the students for the certificates at SBEC Online.

GENERAL CERTIFICATION INFORMATION

In accordance with the rules of the State Board of Education, students applying for a teaching certificate in the State of Texas must meet the requirements for a bachelor's degree with an academic major (other than education) or an interdisciplinary academic major. The major must be related to the public school curriculum as defined by Chapter 74 of the Texas Administrative Code.

Students seeking a certification recommendation must have at least a 3.000 overall grade point average (GPA) in Professional Development course work and at least a 2.500 overall GPA in the content area for which the recommendation is sought. Grades of "C-" or better are necessary for all UHCL course requirements. Pre-Service Internship I requires a grade of "B-" or better. Graduate students must maintain a cumulative GPA of 3.000 or better in course work.

A State Board for Educator Certification rule (Title 19, Part 7, Chapter 249) gives the board the authority to suspend or revoke a teaching certificate or refuse to issue a teaching certificate to a person who has been convicted of a felony or misdemeanor which directly relates to the duties and responsibilities of the teaching profession. For additional actions that may be taken by the board, see Rule 249.15.

STATE ASSESSMENTS INFORMATION

The State Board for Educator Certification (SBEC)/Texas Education Agency (TEA) has developed assessments for each educator certificate, called TExES (Texas Examinations of Educator Standards). All initial certification students must pass at least two state exams: a content, or generalist, exam, and a pedagogy exam. Students seeking bilingual

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certification must take either the Texas Oral Proficiency Test (TOPT) or the Bilingual Target Language Proficiency Test (BTLPT) in addition to their content and pedagogy exams. Note: The TOPT will not be administered after August 2010. Students seeking special education certification must take two content exams, and a pedagogy exam. To determine which state assessments are required for a certificate, students should check their degree or certification plan, view the SoE bulletin board in the hallway outside Bayou 1231, or ask an SoE Academic Adviser.

Initial certification students at UHCL may register to take their state assessments on any of the test administration dates under the following conditions:

- Students must have an approved degree or certification plan on file in the School of Education that matches the state assessments for which they are registering.
- Students must be formally admitted to the Teacher Education Program.
- Students must be enrolled in or have completed a semester in either TCED 4010 or TCED 4012: Senior Seminar.

Students who meet the above conditions may register for the state assessments by completing the following steps:

- Set up an SBEC account at www.sbec.state.tx.us. This account will follow the student throughout his/her Texas public school educator career, so it should be updated whenever needed, such as for name and address changes.
- Make a note of TEA ID number from SBEC account.
- Log onto the Educational Testing Service (ETS) Web site at www.texas.ets.org and set up a New User account. Use the exact personal information for this account as in the SBEC account. Follow directions for registering for an exam, using TEA ID number retrieved from SBEC account.

All test registrations are to be done online, unless test taker has no way of paying the test fees electronically, in which case registration may be done by telephone.

The following items are available to students to prepare for the state assessments:

- **Study Guides.** Free preparation manuals for every certification area are available through Educational Testing Service, at <http://www.texas.ets.org>.
- **Library.** The UHCL Neumann Library has the ETS TExES study guides on reserve and in the stacks for students' use. The library also has TExES study guides other than those published by ETS in the stacks. The curriculum library contains textbooks for all grade levels and most subject areas, which students may find useful in preparing for content exams.
- **Review Sessions/Tutoring.** Faculty often work with students to help prepare them for the state assessments through individual tutoring sessions.
- **Practice Assessments.** Practice tests are administered in the courses TCED 4010 and TCED 4012 (Senior Seminar). SoE's Office of State Assessments also gives practice tests several times a year. Contact the SoE Advising Office for more information.

STATE BOARD FOR EDUCATOR CERTIFICATION (SBEC)/TEXAS EDUCATION AGENCY (TEA)

For additional information on State certification, contact SBEC/TEA at their Web site <http://www.sbec.state.tx.us/> or at their Information and Support Center toll-free number, 1-888-863-5880. Any changes made by the State and UHCL in interpreting the rulings on educator certification plans in Texas may supersede the requirements of existing certification plans, degree plans, alternative certification plans or deficiency plans.

APPLYING FOR CERTIFICATION

All students completing requirements for certificates must apply for certification and pay the required fee at the “SBEC Online” Web site: <http://www.sbec.state.tx.us/>. Verification of certification will automatically be issued electronically by SBEC/TEA as soon as all requirements have been completed by an educator.

POST-DEGREE TEACHER CERTIFICATION PLANS

Students seeking initial teacher certification who hold at least a bachelor’s degree from an accredited university may choose from two sets of programs. Students wishing to combine their pursuit of initial teacher certification with the pursuit of a master’s degree can follow a graduate teacher certification program. Students who do not wish to pursue a master’s degree can follow a post-baccalaureate teacher certification program (see undergraduate catalog). Students pursuing a second bachelor’s degree are also considered to be post-baccalaureate teacher certification program students and should consult the UHCL Undergraduate Catalog.

GRADUATE TEACHER CERTIFICATION PLANS

To be eligible for admission to a graduate teacher certification plan, students must have a bachelor’s degree from an accredited university and also be pursuing a master’s degree at UHCL. Students must meet the graduate admissions requirements for both the university and the School of Education. These requirements are described in the graduate plan section of this catalog.

Graduate teacher certification students are considered graduate students; therefore, they must maintain graduate academic standards and pay graduate tuition rates. Some courses listed on the graduate teacher certification plans can also be applied to the pursuit of a master’s degree.

At UHCL a graduate student can pursue the following Graduate Teacher Certificates:

- EC-6 Generalist
- EC-6 Bilingual Generalist
- EC-6 ESL Generalist
- 4-8 English Language Arts and Reading
- 4-8 English Language Arts & Reading/Social Studies
- 4-8 Generalist
- 4-8 Mathematics

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- 4-8 Science
- 4-8 Social Studies
- 8-12 English Language Arts and Reading
- 8-12 History
- 8-12 Life Sciences
- 8-12 Social Studies
- 8-12 Mathematics
- EC-12 Special Education (All Level)

Graduate Teacher Certification Plan EC-6 Generalist

This certification may also be combined with a master's degree in Early Childhood Education. Please refer to master's degree plans.

Check prerequisites before enrolling in any courses.

Required Courses:

ECED 5031	ECED 5033/TCED 4033	ECED 5131/ECED 4032
ECED 5132/ECED 4131	ECED 5331/ECED 4134	ECED 5335/ECED 4335

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130	SILC 6030/SILC 4135	TCED 6031/INST 3133
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Pedagogy Courses:

TCED 5231/TCED 4231	TCED 5232/TCED 4232	TCED 5233 ² /TCED 4233 ²
TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769		

Other required courses:

LLS 5131/LLS 4434	LLS 5533/LLS 4435	SPED 5030/SPED 4030
TCED 5010/4010		

Graduate Teacher Certification Plan EC-6 Bilingual Generalist

Check prerequisites before enrolling in any courses.

Required Courses:

ECED 5132/ECED 4131	ECED 5331/ECED 4134	SILC 5032/SILC 4133
SILC 5130/SILC 4130	SILC 5134/SILC 4134	

Choose one course from:

SILC 5031/SILC 4136	SILC 5531/SILC 4531
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Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130	SILC 6030/SILC 4135	TCED 6031/INST 3133
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Pedagogy Courses:

TCED 5231/TCED 4231	TCED 5232/TCED 4232	TCED 5233/TCED 4233
TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769		

Other required courses:

LLLS 5131/LLLS 4434 SPED 5030/SPED 4030 TCED 5010/4010

Graduate Teacher Certification Plan EC-6 ESL Generalist

Check prerequisites before enrolling in any courses.

Required Courses:

ECED 5132/ECED 4131 ECED 5331/ECED 4134 SILC 5032/SILC 4133
SILC 5130/SILC 4130 SILC 5134/SILC 4134

Choose one course from:

SILC 5033/SILC 4132 SILC 6032/SILC 4032

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130 SILC 6030/SILC 4135 TCED 6031/INST 3133

Pedagogy Courses:

TCED 5231/TCED 4231 TCED 5232/TCED 4232 TCED 5233²/TCED 4233
TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769

Other required courses:

LLLS 5131/LLLS 4434 SPED 5030/SPED 4030 TCED 5010/4010

Graduate Teacher Certification Plan 4-8 English Language Arts and Reading

Check prerequisites before enrolling in any courses.

This plan has a content waiver option based on passing the content state assessments on the first attempt. See an SoE adviser for details.

Required Courses:

LITR 3631 LITR 4031 LLLS 4436
LLLS 5135/LLLS 4131 LLLS 5531/LLLS 4531 LLLS 5533/LLLS 4435

Choose two courses from:

LITR 3334 LITR 3731 LITR 4034
LITR 4035 LITR 4131 LITR 4132
LITR 4133 LITR 4134 LITR 4238
LITR 4331 LITR 4533 LITR 4534
LITR 4535 LITR 4537 LITR 4632

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130 SILC 6030/SILC 4135 TCED 6031/INST 3133

Pedagogy Courses:

TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769

Other required courses:

SPED 5030/SPED 4030 TCED 5010/4012 TCED 5431

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Graduate Teacher Certification Plan 4-8 English Language Arts, Reading and Social Studies

This plan has a content waiver option based on passing the content state assessments on the first attempt. See an SoE adviser for details.

Check prerequisites before enrolling in any courses.

Required Courses:

HIST 3230	HIST 4035 ¹	LITR 3631
LITR 4031	LLLS 5131/LLLS 4434	LLLS 5135/LLLS 4131
LLLS 5531/LLLS 4531		

Choose two courses from:

LITR 3334	LITR 3731	LITR 4034
LITR 4035	LITR 4131	LITR 4132
LITR 4133	LITR 4134	LITR 4238
LITR 4331	LITR 4533	LITR 4534
LITR 4535	LITR 4537	LITR 4632

Choose two courses from:

GEOG 3137 ²	GEOG 4030	GEOG 4136
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Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130	SILC 6030/SILC 4135	TCED 6031/INST 3133
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Pedagogy Courses:

TCED 4331	TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769
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Other required courses:

SPED 5030/SPED 4030	TCED 5010/4012	TCED 5431
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¹Course has lower-level equivalent.

²Students entering UHCL with GEOG 1303 have met the GEOG 3137 requirement.

Graduate Teacher Certification Plan 4-8 Generalist

This plan has a content waiver option based on passing the content state assessments on the first attempt. See an SoE adviser for details.

Check prerequisites before enrolling in any courses.

Required Courses:

LITR 3631	LLLS 5531/LLLS 4531	LLLS 5533/LLLS 4435
MATH 3037		

Choose one course from:

LITR 4031	WRIT 3037
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Choose one course from:

GEOG 3137 ¹	GEOG 4030	GEOG 4032
GEOG 4033		

Choose one course from:

HIST 3230	HIST 3331	HIST 3332
HIST 4034	HIST 4035 ²	HIST 4036
HIST 4037	HIST 4038	HIST 4133
HIST 4137	HIST 4138	HIST 4139
HIST 4230	HIST 4333	

Nine hours of upper-level science courses required - one course from each of the following areas: Biology, Earth Science and Physics/Chemistry/Astronomy.

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130	SILC 6030/SILC 4135	TCED 6031/INST 3133
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Pedagogy Courses:

TCED 4331	TCED 5332/TCED 4332	TCED 5333/TCED 4333
TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769		

Other required courses:

SPED 5030/SPED 4030	TCED 5010/4012	TCED 5431
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¹Students entering UHCL with GEOG 1303 have met the GEOG 3137 requirement.

²Course has lower-level equivalent.

Graduate Teacher Certification Plan 4-8 Mathematics

This plan has a content waiver option based on passing the content state assessments on the first attempt. See an SoE adviser for details.

Check prerequisites before enrolling in any courses.

Required Courses:

CALCULUS I (4 hours)		
CALCULUS II (4 hours)		
MATH 3034	MATH 3131	MATH 4030
MATH 4434		

Choose four courses from:

MATH 3231	MATH 4031	MATH 4132
MATH 4135	MATH 4136	MATH 4231
MATH 4232	MATH 4235	MATH 4435

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130	SILC 6030/SILC 4135	TCED 6031/INST 3133
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Pedagogy Courses:

TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769		TCED 5333/TCED 4333
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Other required courses:

LLS 5531/LLS 4531	LLS 5533/LLS 4435	SPED 5030/SPED 4030
TCED 5010/4012	TCED 5431	

Graduate Teacher Certification Plan 4-8 Science

Check prerequisites before enrolling in any courses.

This plan has a content waiver option based on passing the content state assessments on the first attempt. See an SoE adviser for details.

Required Courses:

Botany and lab (4 hours)

Zoology and lab (4 hours)

Physics (4 hours)

BIOL 3037

BIOL 3333

BIOL 3431

Choose one course from:

GEOL 3034

GEOL 3035

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130

SILC 6030/SILC 4135

TCED 6031/INST 3133

Pedagogy Courses:

TCED 5332/TCED 4332

TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769

Other required courses:

LLLS 5531/LLLS 4531

LLLS 5533/LLLS 4435

SPED 5030/SPED 4030

TCED 5010/4012

TCED 5431

Graduate Teacher Certification Plan 4-8 Social Studies

This plan has a content waiver option based on passing the content state assessments on the first attempt. See an SoE adviser for details.

Check prerequisites before enrolling in any courses.

Required Courses:

GEOG 3137¹

GEOG 4030

GEOG 4136

HIST 3230

HIST 4035²

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130

SILC 6030/SILC 4135

TCED 6031/INST 3133

Pedagogy Courses:

TCED 4331

TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769

Other required courses:

LLLS 5531/LLLS 4531

LLLS 5533/LLLS 4435

SPED 5030/SPED 4030

TCED 5010/4012

TCED 5431

¹Students entering UHCL with GEOG 1303 have met the GEOG 3137 requirement.

²Course has lower-level equivalent.

Graduate Teacher Certification Plan 8-12 English Language Arts and Reading

Check prerequisites before enrolling in any courses.

This plan has a content waiver option based on passing the content state assessments on the first attempt. See an SoE adviser for details.

Required Courses:

LITR 3631	LITR 4031	LLLS 5135/LLLS 4132
LLLS 5531/LLLS 4531	LLLS 5532/LLLS 4532	

Choose two courses from:

LITR 3334	LITR 3731	LITR 4034
LITR 4035	LITR 4131	LITR 4132
LITR 4133	LITR 4134	LITR 4238
LITR 4331	LITR 4533	LITR 4534
LITR 4535	LITR 4537	LITR 4632

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130	SILC 6030/SILC 4135	TCED 6031/INST 3133
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Pedagogy Courses:

TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769	LLLS 5634/LLLS 4634
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Other required courses:

SPED 5030/SPED 4030	TCED 5010/4012	TCED 5530
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Graduate Teacher Certification Plan 8-12 History

This plan has a content waiver option based on passing the content state assessments on the first attempt. See an SoE adviser for details.

Check prerequisites before enrolling in any courses.

Required:

GEOG 3137 ¹	HIST 4036	HIST 4133
HIST 4333		

Choose two courses from History electives: Please see School of Education academic adviser.

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130	SILC 6030/SILC 4135	TCED 6031/INST 3133
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Pedagogy Courses:

TCED 5234/TCED 4631	TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769
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Other required courses:

LLLS 5135/LLLS 4132	LLLS 5531/LLLS 4531	SPED 5030/SPED 4030
TCED 5010/4012	TCED 5530	

¹Students entering UHCL with GEOG 1303 have met the GEOG 3137 requirement.

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Graduate Teacher Certification Plan 8-12 Life Sciences

This plan has a content waiver option based on passing the content state assessments on the first attempt. See an SoE adviser for details.

Check prerequisites before enrolling in any courses.

Required Courses:

Botany and lab (4 hours)

Zoology and lab (4 hours)

Chemistry (8 hours)

BIOL 3431

BIOL 4011

BIOL 4031

Choose one course from:

BIOL 3036

BIOL 4738

Choose one course from:

BIOL 3333

BIOL 4131

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130

SILC 6030/SILC 4135

TCED 6031/INST 3133

Pedagogy Courses:

TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769

TCED 5235/TCED 4632

Other required courses:

LLS 5135/LLS 4132

LLS 5531/LLS 4531

SPED 5030/SPED 4030

TCED 5010/4012

TCED 5530

Graduate Teacher Certification Plan 8-12 Mathematics

This plan has a content waiver option based on passing the content state assessments on the first attempt. See an SoE adviser for details.

Check prerequisites before enrolling in any courses.

Required Courses:

CALCULUS I (4 hours)

CALCULUS II (4 hours)

MATH 3034

MATH 3035

MATH 3131

MATH 4434

Choose five courses from:

MATH 3231

MATH 4031

MATH 4131

MATH 4132

MATH 4135

MATH 4136

MATH 4231

MATH 4232

MATH 4235

MATH 4435

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130

SILC 6030/SILC 4135

TCED 6031/INST 3133

Pedagogy Courses:

TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769

TCED 5236/TCED 4633

Other required courses:

LLS 5135/LLS 4132	LLS 5531/LLS 4531	SPED 5030/SPED 4030
TCED 5010/4012	TCED 5530	

Three hours of scientific programming language (C++, C, Java, Visual BASIC, BASIC, Fortran or Pascal).

Graduate Teacher Certification Plan 8-12 Social Studies

This plan has a content waiver option based on passing the content state assessments on the first attempt. See an SoE adviser for details.

Check prerequisites before enrolling in any courses.

Required Courses:

GEOG 3137 ¹	GEOG 4132	GEOG 4136
HIST 4036	HIST 4133	HIST 4333

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130	SILC 6030/SILC 4135	TCED 6031/INST 3133
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Pedagogy Courses:

TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769	TCED 5234/TCED 4631
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Other required courses:

LLS 5135/LLS 4132	LLS 5531/LLS 4531	SPED 5030/SPED 4030
TCED 5010/4012	TCED 5530	

¹Students entering UHCL with GEOG 1303 have met the GEOG 3137 requirement.

Graduate Teacher Certification Plan EC-12 Special Education (All-Level)

Check prerequisites before enrolling in any courses.

Required Courses:

SPED 5030/SPED 4030 ¹	SPED 5131/SPED 4131 ¹	SPED 5132/SPED 4132 ¹
SPED 5133/SPED 4133	SPED 5233/SPED 4231	SPED 5331/SPED 4331
SPED 5332/SPED 4332		

Prerequisite Courses for Admission to Teacher Education Program:

EDUC 4130	SILC 6030/SILC 4135	TCED 6031/INST 3133
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Pedagogy Courses:

TCED 4738 and TCED 4798 or TCED 4768 and TCED 4769
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Other required courses:

LITR 4031 ² or WRIT 3037 ²	LLS 5131/LLS 4434 ²	LLS 5134/LLS 4131 ²
LLS 5533/LLS 4435	LLS 6732	TCED 4010
TCED 5030	MATH 3031	MATH 3032

¹These courses must have been taken after 1997.

²These courses may be waived. See Adviser.

Notes Regarding the No Child Left Behind (NCLB) Highly Qualified Teacher Requirements

To be “Highly Qualified” for employment with an EC-12 Special Education teaching certificate to teach at the Elementary level (Grades EC-6) teachers must also earn an EC-6 Generalist, 4-8 Generalist or a 4-8 content specific teaching certificate. The UHCL undergraduate program includes the EC-6 Generalist certification. Those following a post-degree teacher certification plan will need to earn an additional certification by taking the appropriate TExES after having completed the UHCL EC-12 Special Education program. Fully certified teachers can register for the additional TExES as “By Exam Only.”

To be “Highly Qualified” for employment with an EC-12 Special Education teaching certificate to teach at the Secondary level (grades 7-12) teachers must also earn the 4-8 Generalist, a 4-8 content specific, or an 8-12 content specific teaching certification. Fully certified teachers can register for the additional TExES as “By Exam Only.”

As of Fall 2008, the federal government is allowing Texas school districts some flexibility in the above requirements by allowing for High Objective Uniform State Standard of Evaluation or “HOUSE” points within the first two years of employment for elementary teachers. For secondary teachers, the federal government is allowing use of passing an additional content test or holding an additional academic major, graduate degree, or hours of course work to be considered Highly Qualified. For information pertinent to a Special Education job within a specific school district, contact the Texas Education Agency’s No Child Left Behind (NCLB) representative at, 512-463-9374, or view their Web site: <http://www.tea.state.tx.us/nclb/hqteachers.html> . See the section called “Guidance for Implementation of NCLB Highly Qualified Teacher Requirements.”

ADMISSION TO PRE-SERVICE INTERNSHIPS I AND II

TCED 4738- Pre-service Internship I and TCED 4798- Pre-service Internship II, and TCED 4668- Pre-service Internship II- Generalist are the capstone experiences for the UHCL approved Teacher Education Program, and students must enroll in consecutive long semesters (fall/spring or spring/fall) to complete these two experiences. The rules governing TCED 4798 and TCED 4668 are identical. Pre-service Internship I is every Wednesday of the public school semester. Pre-service Internship II is every day of the public school semester. Enrollment in Pre-service Internship I should not be considered until almost all courses have been successfully completed, since the number of semester hours in the Pre-service Internship II semester is restricted to 15 hours. Specific requirements for Pre-service Internships I and II are listed below.

Students must apply for Pre-service Internships I and II through the CPDT. Applications for Pre-service Internships I and II must be received in the CPDT by March 1 for fall and October 1 for spring. Mailed applications must be postmarked by February 24 for fall and September 26 for spring. No faxes or late applications will be accepted. Pre-Service Internships I and II are not offered during the summer.

Informational meetings are held in early September and February each year. Dates and times are posted on the bulletin board outside Suite B1231. TCED 4738 Pre-service Internship I applications are available at the informational meeting, after the informational meeting or by contacting CPDT.

Pedagogy courses must be taken prior to or concurrently with Pre-service Internship I. The Office of Academic Advising will perform audits to establish students’ eligibility for

these experiences. Audits are work copies only. The degree and/or certification Candidate Plan of Study (CPS) is the official documentation of requirements.

Pre-service Internship I

All students must meet the following requirements for admission to Pre-Service Internship I:

- Formal admission to Teacher Education Program (see above).
- Verification of written and spoken proficiency in English. Evidence of successful completion of a speech and composition courses (if the course requires public speaking in English) will satisfy this requirement.
- Pedagogy courses and LLLS 5131/LLLS 4434 must be satisfactorily completed prior to or taken concurrently with Pre-service Internship I. Students are not allowed to take more than two courses which include field experience concurrently with Internship I. Courses offered before 7:00 p.m. on Wednesdays may not be taken during Internship I, as they may interfere with Internship I course requirements.
- For those certifications requiring TCED 4233, successful completion of MATH 3032 is a prerequisite. For those certifications requiring TCED 4333, successful completion of MATH 3037 is a prerequisite, unless otherwise noted in the catalog. See catalog prerequisites for all pedagogy courses.
- Applications for Pre-service Internship I must be received in the CPDT (B1231-4) before the close of business on March 1 for fall and October 1 for spring. Mailed applications must be postmarked by September 26 for spring and February 24 for fall. If the application deadline falls on a weekend or a university holiday, applications will be accepted before the close of business on the following working day. Faxes and late applications will not be accepted.
- Upon acceptance into TCED 4738, a student will be required to be placed on the district's substitute list. As required by Texas Senate Bill 9, the district will conduct a criminal background check on each student. In order for the criminal background check to be conducted, each student will be required to complete all required documentation. Part of the documentation will require that each student provide his/her social security number and his/her driver's license number. If a student does not have a driver's license number, the state identification number must be provided.

Admission to Pre-service Internship I is contingent upon eligibility for entering Pre-service Internship II the following consecutive long semester. Students will be informed of their public school internship assignment before Pre-service Internship I begins.

Pre-Service Internship II (TCED 4798 or TCED 4668)

Students must meet the following requirements for admission to Pre-service Internship II:

- Successful completion of Pre-service Internship I (grade of "B-" or better).
- Successful completion of all field experiences courses.
- GPA of 3.000 or better in pedagogy courses, with a grade of B- or better in Pre-service Internship I.

- GPA of 2.500 or better in specialization courses, with grades of “C-” or better in each. Grades of “C-” or better are required for all other course work at UHCL.
- Maximum course load during Pre-service Internship II is 15 semester hours; therefore, no more than six additional semester hours may be taken during Pre-service Internship II, and they must meet no earlier than 7 p.m. See adviser for acceptable course work.
- Applications for Pre-service II Internship must be received in the CPDT (B1231-4) before the close of business on March 1 for fall and October 1 for spring. Mailed applications must be postmarked by September 26 for spring and February 24 for fall. If the application deadline falls on a weekend or a university holiday, applications will be accepted before the close of business on the following working day. Faxes and late applications will not be accepted.

If students denied admission to Pre-service Internships I or II want to reapply, they must do so by stated deadlines in subsequent semesters.

ADMISSION TO THE TEACHER EDUCATION PROGRAM FOR POST-DEGREE TEACHER CERTIFICATION STUDENTS

In order to enroll in pedagogy course work, students must be formally admitted to the Teacher Education Program. Enrollment in the SoE Teacher Education Program is contingent on the following:

- Achieving the following passing scores on the three sections of the basic skills test (THEA/TASP) before applying to the program: Reading 260, Mathematics 230, and Writing 230, or have earned the equivalent of a U.S. master’s or doctoral degree. Only THEA/TASP or Quick THEA/Quick TASP will be accepted.
- Participating in the “ABC Workshop Presentation” (online at http://b3308-adm.uhcl.edu/School_of_Education/SoE/ABCWoksp/presentation/ABCWksp.htm).
- Submitting the Teacher Education Program application with all required documents to the Office of Educator Certification. Faxes will not be accepted.
- Achieving grades of “C-” or better in prerequisite courses EDUC 4130, SILC 4135 and INST 3133. Completing a college-level public speaking course with a grade of “C-” or better, or submitting a Speech Competency form signed by a UHCL instructor who has observed the public speaking skills of the students.
- Achieving a GPA of ≥ 2.500 overall or in the last 60 semester credit hours. GPA will be calculated by the School of Education after application is submitted.
- Completing a minimum of 12 semester credit hours in the subject-specific content area for the certificate being pursued. This requirement may be waived by achieving a passing score on a TEA-approved content exam.
- Being evaluated for certificate appropriateness by completing a written instrument of why the student wants to teach in this area of certification, and what makes the student a good candidate.
- Receiving formal approval of the application for Admission to the Teacher Education Program.

Upon acceptance to the Teacher Education Program, SoE will establish an initial profile for each student with the State Board for Educator Certification (SBEC). All educator candidates in Texas are required to open an account upon entering a program. Students will receive an e-mail message from SBEC prompting them to activate their accounts and complete their profiles.

The final authority for admission and retention in the Teacher Education Program resides with the Dean of the SoE.

CONTENT COURSES WAIVED FOR POST-DEGREE TEACHER CERTIFICATES

Post-degree teacher certification students who pass the required Academic Specialization state assessment on the first attempt while approved by UHCL may have all of their respective academic specialization course work waived by UHCL, if they are pursuing one of the following certificates:

- 4-8 English Language Arts and Reading
- 4-8 English Language Arts and Reading/Social Studies
- 4-8 Mathematics
- 4-8 Science
- 4-8 Social Studies
- 8-12 English Language Arts and Reading
- 8-12 History
- 8-12 Life Sciences
- 8-12 Mathematics
- 8-12 Social Studies

Important Points to Know:

- If the students do not pass the content area state assessment specified on the plan on the first attempt, then all the academic specialization courses will remain on the plan and must be completed before certification recommendation will be made by UHCL.
- The following teaching certificate programs are NOT included in the course waiver policy: EC-6 Bilingual Generalist, EC-6 Generalist, EC-6 ESL Generalist, EC-12 Special Education.
- For the 4-8 Generalist program only: For each domain (English, Mathematics, Science and Social Studies) passed by the students on the first attempt on the 4-8 Generalist state assessment, the respective content courses will be waived.

SUPPLEMENTAL CERTIFICATES

A supplemental certificate is an area of concentration added to an existing certificate. A supplemental certificate gives educators the ability to teach the supplemental subject only at the grade level and in the area of their already existing teaching certificate. UHCL offers the following supplemental certificates:

- Bilingual Education
- English as a Second Language
- Gifted and Talented
- Special Education

BILINGUAL SUPPLEMENTAL CERTIFICATE (15 HOURS)

A supplemental certificate gives educators the ability to teach the supplemental subject only at the grade level and in the area of their already existing teaching certificate. Students seeking the Bilingual Supplemental Certificate must hold a valid Texas teaching certificate and must complete the following required courses:

SILC 5031/SILC 4136	SILC 5032/SILC 4133	SILC 5130/SILC 4130
SILC 5134/SILC 4134	SILC 5531/SILC 4531	TCED 5010 ¹

¹Students not passing the Bilingual Education State Assessment by the final semester of this plan must also enroll in and successfully complete this course.

Students must pass the following State Assessments: Bilingual Education Supplemental-Spanish TExES, and the TOPT – Spanish or BTLPT- Spanish.

ESL SUPPLEMENTAL CERTIFICATE (15 HOURS)

A supplemental certificate gives educators the ability to teach the supplemental subject only at the grade level and in the area of their already existing teaching certificate. Students seeking the ESL Supplemental Certificate must hold a valid Texas teaching certificate and must complete the following required courses:

SILC 5032/SILC 4133	SILC 5033/SILC 4137	SILC 5130/SILC 4130
SILC 5134/SILC 4134	SILC 6032/SILC 4032	TCED 5010 ¹

¹Students not passing the ESL state assessment by the final semester of this plan must also enroll in and successfully complete this course.

Students must pass the English as a Second Language Supplemental TExES.

GIFTED AND TALENTED SUPPLEMENTAL CERTIFICATE (9-12 HOURS)

A supplemental certificate gives educators the ability to teach the supplemental subject only at the grade level and in the area of their already existing teaching certificate. Students seeking the Gifted and Talented Supplemental Certificate must hold a valid Texas teaching certificate and complete the following required courses:

TCED 5010 ¹	TCED 5630	TCED 5632
TCED 5634	TCED 5637 ²	

¹ Students not passing the Gifted and Talented state assessment by the final semester of this plan must also enroll in and successfully complete this course.

² This course is required unless two years of full time experience teaching Gifted and Talented students can be verified.

Students must pass the Gifted and Talented Supplemental TExES.

SPECIAL EDUCATION SUPPLEMENTAL CERTIFICATE (15 HOURS)

A supplemental certificate gives educators the ability to teach the supplemental subject only at the grade level and in the area of their already existing teaching certificate. Students seeking the Special Education Supplemental Certificate must hold a valid Texas teaching certificate and must complete the following required courses:

SPED 5030	SPED 5131	SPED 5132
SPED 5133	SPED 5233	SPED 5331 or SPED 5332
TCED 5010 ¹		

¹Students not passing the Special Education state assessment by the final semester of this plan must also enroll in and successfully complete this course.

Students must pass the Special Education Supplemental TExES.

MASTER TEACHER PLANS

A Master Teacher certificate added to an existing Texas teaching certificate designates the educator as having mastery of a particular subject area. It is the intent that the master teacher will serve as a resource to fellow teachers. UHCL offers the following Master Teacher certificate plans:

Master Mathematics Teacher	Master Reading Teacher	Master Technology Teacher
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MASTER MATHEMATICS TEACHER CERTIFICATE (19 HOURS)

The Master Mathematics Teacher certificate program provides 19 credit hours of graduate courses, which is equivalent to 285 hours of continuing education units. Successful completion of course work related to the appropriate grade level will prepare students to pass the corresponding Master Mathematics Teacher state assessment, serve in a mentoring role, and serve as a resource for other teachers.

Each student’s academic record will be audited to determine if any of the listed courses can be waived. Courses include:

EC-6 Level	4-8 Level	8-12 Level
MATH 3031	MATH 3033	MATH 4132
MATH 3032	MATH 3034	MATH 4434
MATH 3034	MATH 3035	MATH 5031
MATH 3038	MATH 3038	MATH 5033
MATH 5031 or MATH 3036	MATH 5031 or MATH 3036	MATH 5034
TCED 5010 ¹	TCED 5010 ¹	TCED 5010 ¹
TCED 5014	TCED 5014	TCED 5014
TCED 5233	TCED 5333	TCED 5236

¹Students not passing the corresponding Master Mathematics Teacher state assessment by the final semester of this plan must enroll in and successfully complete this course.

To be recommended for this certificate, students must successfully complete the required courses, successfully pass the Master Mathematics Teacher state assessment, provide a copy of a valid Texas teacher certificate and provide proof of three years of full-time teaching as Teacher of Record in a TEA-approved or out-of-state approved school.

MASTER READING TEACHER CERTIFICATE- FOR TEACHERS (13 HOURS)

The Master Reading Teacher certificate program for teachers provides 13 credit hours of graduate courses, which is equivalent to 195 hours of continuing education units. Courses include:

LLLS 5534	LLLS 5738	LLLS 6331
LLLS 6732	TCED 5010 ¹	TCED 5014

¹Students not passing the Master Reading Teacher state assessment by the final semester of this plan must also enroll in and successfully complete this course.

To be recommended for this certificate, the educator must successfully complete the above courses, successfully pass the Master Reading Teacher state assessment, provide a copy of a valid Texas teacher certificate and provide proof of three years of full-time teaching as Teacher of Record in a TEA-approved or out-of-state approved school.

MASTER READING TEACHER CERTIFICATE- FOR READING SPECIALISTS (1 HOUR)

The Master Reading Teacher certificate program for Reading Specialists provides a 1 credit hour graduate course, which is equivalent to 15 hours of continuing education units. It is designed for students who already hold a Reading Specialist certificate. The course is TCED 5014.

TCED 5014

To be recommended for this certificate, educators must successfully complete the above course(s) and provide a copy of a valid Texas Teacher certificate showing proof of a Reading Specialist certificate.

MASTER TECHNOLOGY TEACHER CERTIFICATE (2-17 HOURS)

The Master Technology Teacher certificate provides 2-17 credit hours of graduate courses that are equivalent to 30-255 hours of continuing education credits. Successful completion of course work will prepare students to pass the Master Technology Teacher state assessment, to serve a mentoring role and support technology integration. Courses include:

Check prerequisites before enrolling in any courses.

INST 5011	INST 5035 ¹	INST 5130 ¹
INST 5333 ¹	INST 6031 ¹	INST 6037 ¹
TCED 5014	TCED 5010 ²	

¹Course will be waived for students who already hold the 8-12 Technology Applications Certificate, EC-12 Technology Applications Certificate or a M.S. in Instructional Technology from UHCL.

²Students not passing the Master Technology Teacher state assessment by the time they successfully complete TCED 5014 must enroll in and successfully complete TCED 5010.

To be recommended for the certificate, the students must successfully complete the required courses, successfully pass the Master Technology Teacher state assessment, provide a copy of a valid Texas Teacher Certificate and provide proof of three years of full-time teaching as Teacher of Record in a TEA-approved or out-of-state approved school.

OTHER CERTIFICATES

UHCL CERTIFICATES (NOT STATE CERTIFICATES)

UHCL Bilingual Counselor Certificate (6 Hours)

Successful completion of this specialized certification will prepare students to work with English Language Learners (ELLs). This program will follow the standard school counseling sequence plus an additional six hours. Individuals who complete this program will be eligible to apply for school counseling certification from SBEC and receive a UHCL Bilingual Counselor certificate. The UHCL Bilingual Counselor certificate is not a state certificate.

Check prerequisites before enrolling in any courses.

Prerequisites:

Acceptance into the Counseling Program

Proof of fluency in English and a language other than English

Required:

COUN 5034

COUN 5035

UHCL Online Distance Educator Professional Development Certificate (9 Hours)

Successful completion of the three course sequence (plus prerequisites, if required) will prepare students to systematically design, develop and deliver online courses and training programs. This certificate is offered through UHCL. It is not a state certificate.

Check prerequisites before enrolling in any courses.

Required (9 hours):

INST 5135

INST 6137

INST 6437

UHCL Technology Applications (EC-8) Professional Development Certificate (3 Hours)

Successful completion of TCED 6031/INST 6031 will prepare students for the technology portion of the Pedagogy and Professional Responsibilities TExES state assessment which is required of all teachers. This certificate is offered through UHCL. It is not a state certificate.

Check prerequisites before enrolling in any courses.

Required (3 hours):

TCED 6031/INST 6031

UHCL Performance Technology Professional Development Certificate (12 Hours)

Successful completion of the four course sequence (plus prerequisites, if required) will prepare students to apply human performance improvement tools and techniques to identify performance problems and select potential solutions. The certificate is offered through UHCL. It is not a state certificate.

Check prerequisites before enrolling in any courses.

Required (12 hours):

INST 5130

INST 5233

INST 5333

INST 5433 or INST 5131

“ADD-ON” CERTIFICATES

The State Technology Certificates have been approved by the Texas Higher Education Coordinating Board and are available to students who already hold a Texas teaching certificate.

EC-12 Technology Applications (12 Hours)

This program prepares students for the EC-12 Technology Applications TExES state assessment that will be required to teach technology application courses for grades EC-12.

Check prerequisites before enrolling in any courses.

INST 5035

INST 5130

INST 6031

INST 6037

TCED 5010¹

¹Students not passing the state assessments by the final semester of this plan must also enroll in and successfully complete this course.

8-12 Technology Applications (9 Hours)

This program prepares students for the 8-12 Technology Applications' TExES state assessment that will be required to teach technology application courses for grades 8-12.

Check prerequisites before enrolling in any courses.

INST 5035

INST 6031

INST 6037

TCED 5010¹

¹Students not passing the state assessments by the final semester of this plan must also enroll in and successfully complete this course.

GRADUATE PLANS

Master's degree plans are offered in the areas listed below. In several instances, certification plans requiring a master's degree are combined with master's degrees so that requirements for both can be achieved within a coordinated plan of studies.

Master of Science:

Counseling	Instructional Technology
Curriculum and Instruction	Multicultural Studies in Education
Early Childhood Education	Reading
Educational Management	School Library & Information Science

GENERAL REQUIREMENTS FOR GRADUATE STUDIES IN EDUCATION**Graduate Admissions Requirements**

All students planning to pursue a master's degree or a certification plan which requires a master's degree; must hold a bachelor's degree from an accredited university and submit official scores from either the Graduate Record Examination (GRE) or Miller Analogies Test (MAT). The GRE or MAT is not required of any students who already hold a master's or doctoral degree upon entry to the program, provided they have an overall GPA of 3.000 or greater in their last 60 hours. The last 60 hours chronologically, including the full semester in which the 60th hour appears, will be used to calculate the overall GPA.

Students who wish to be admitted to the counseling program must complete a special admission process described under the heading "Master of Science in Counseling" later in this section.

Students who wish to be admitted to the educational management program must meet additional admissions requirements described under the heading "Master of Science in Educational Management with Principal Certification" later in this section.

Students, including those who already hold a master's or doctoral degree, with an overall GPA of 2.500 or above, but less than 3.000 in the last 60 hours, may pursue a master's degree or certification plan requiring a master's degree by obtaining one of the following:

- A combined score of 900 or greater on the quantitative and verbal portions of the GRE and a 3.5 or greater on the analytical writing portion of the GRE.
- A score of 390 or greater (36 or greater on the old scale) on the MAT.

Students with less than an overall 2.500 GPA in the last 60 hours, or 2.500-3.000 but not meeting the GRE or MAT requirements listed above, will not be allowed to pursue a master's degree or a certification plan requiring a master's degree, except by sponsored admissions. A full-time SoE faculty member may sponsor four students a year for admission to a master's degree or a certification plan requiring a master's degree. To be considered for sponsored admission, students must have submitted a GRE or MAT score, but no minimum score requirements are specified. The faculty member's recommendation for sponsorship will be based on consideration of the students' previous academic record, standardized test scores, leadership potential, professional experiences and such other factors as the individual faculty member may deem predictive of potential success in a graduate plan at UHCL. The "Request for Sponsorship" form is available in the SoE Office of the Associate Dean. A sponsoring faculty member must complete and sign the form. In sponsoring students, faculty members agree to provide advisement support for those students to enhance the likelihood of success in the students' academic plans.

In addition to the other admission criteria listed above, international graduate students whose primary language is other than English must meet the UHCL admission requirement on the Test of English as a Foreign Language (TOEFL).

Credits earned prior to formal admission to a master's degree or a certification plan requiring a master's degree as defined under this policy may not be credited toward that degree or certificate.

Assignment of Graduate Advisers

Faculty advisers are assigned at the time of admission to a graduate degree or a certification plan requiring a master's degree. Students should contact their faculty advisers as soon as possible following admission to the SoE to obtain a graduate candidate plan of study.

Graduate Candidate Plan of Study (CPS)

Graduate degree-seeking students in the SoE must have on file in the Office of Educator Certification an approved CPS, which will include a minimum of 36 hours of course work. The CPS will be developed jointly by the students and their advisers and approved by the Associate Dean. These documents specify the course work that must be completed in order to fulfill the requirements for the graduate degree or the certification plan requiring a master's degree.

Age of Course Work for Graduate Degrees

Course work, whether transfer or resident, may not be used for degree purposes if it is more than five years old at the time the degree is to be conferred, unless prior approval is given by the Associate Dean.

Course Credit and Residency Requirements

A maximum of six hours of approved 4000-level courses may be used toward a 36-hour degree. The final 24 hours of course work must be taken in residence at UHCL. A minimum of 30 hours must be taken from 5000 and 6000-level courses. Correspondence or extension credits may not be applied toward a graduate degree. EDUC 6032 is the prerequisite to EDUC 6033 and EDUC 6033 is to be completed before students register for Master's Options 1 or 2. Students must have an approved Master's Thesis/Project form on file with the SoE Office of the Associate Dean prior to enrolling in either a master's project or master's thesis.

Transfer of Credit

Only graduate courses in which grades of "B-" or better were earned may be considered for transfer credit toward a master's degree. Grades of "C+" or below or grades of Satisfactory ("S"), Passing ("P") or Credit ("CR") will not be accepted toward meeting requirements for the master's degree. In most instances, the transfer of credit is limited to six hours of course work but may not include more than 12 hours.

Master's Degree Options

One of the following options must be selected for each plan leading to a master's degree (not all options apply to all master's degree plans):

Option 1: Master's Thesis requires continuous registration in the thesis research course, EDUC 6939, during each fall and spring semester until completion. Students must register for a minimum of six hours of thesis credit and no more than six hours of thesis may apply as credit toward a degree. If continuous registration in the master's thesis

course is not maintained during fall and spring semesters, previously accumulated master's thesis credits will not count toward the master's degree.

Option 2: Master's Project requires continuous registration in the project course, EDUC 6839, during each fall and spring semester until completion. Students must register for a minimum of six hours of project credit and no more than six hours of project may apply as credit toward a degree. If continuous registration in the master's project course is not maintained during fall and spring semesters, previously accumulated master's project credits will not count toward the master's degree.

Option 3: Master's Internship/Practicum requires application for admission by June 8 for the fall semester, October 1 for the spring semester and March 1 for the summer session.

Option 4: The Extended Course option requires an additional six hours of course work and successful completion of a Comprehensive Examination. The application to take the Comprehensive Examination must be submitted by August 10 for fall, February 10 for spring and May 10 for summer.

Detailed requirements and procedures for satisfying the Master's Degree Options are contained in the Master's Options Guidelines booklet, which may be obtained through the SoE Office of the Associate Dean.

Age of Standard Certification Course Work for Students Who Hold a Master's Degree

All course work, whether resident or transfer, may not exceed five years in age at the time of recommendation for a certificate requiring a master's degree.

Grade Point Requirements for Standard Certificates Requiring a Master's Degree

Students seeking a certificate requiring a master's degree must maintain at least a "B" (3.000) average in certification course work to be recommended for any certification. Only grades of "C-" or better are accepted for credit toward any professional certificate.

Transfer Credit Toward a Certificate Requiring a Master's Degree

Only course work in which a grade of "B-" or above was earned from an accredited institution may be considered for transfer credit. A maximum of twelve credit hours may be transferred toward the certificate plan. Any required practicum or internship experiences must be completed at UHCL in order to be recommended for that certificate by the SoE.

Deadlines

Applications for graduate practica and internships may be obtained from and returned to B1231. These applications must be received by June 8 for the fall semester, October 1 for the spring semester and March 1 for the summer session. Students are authorized for enrollment in either the practicum or the internship as soon as possible after all requirements have been verified.

Students are referred to the Master's Option Guidelines booklet for specific information regarding theses, projects, internships/practica and comprehensive examinations. This booklet is available in the Office of the Associate Dean. Completed theses and projects are due in that office by the posted deadlines.

MASTER'S DEGREE PLANS

MASTER OF SCIENCE IN COUNSELING

The graduate plan in Counseling leads to the master of science degree. Students seeking this degree in Counseling may, depending on their career goals, select degree plans that meet the academic qualifications for the School Counselor Standard Certificate (EC-12) or Licensed Professional Counselor (LPC).

The combined master's degree and School Counselor Standard Certificate plan require a minimum of 51 hours. To be eligible at the time of certification recommendation, students must have a master's degree, a valid Texas teaching certificate, a passing score on the state assessment and two years of successful full-time approved classroom teaching experience.

Students who already possess the master's degree may elect to pursue school counselor certification only. School counselor certification requires a minimum of 42 hours, including all required COUN courses, plus some electives.

Students who wish to pursue LPC certification must complete the master's degree plan with a minimum of 54 hours. To be eligible to receive the LPC, graduates must also document three years, or 3000 clock hours, of post-master's supervised counseling experience and pass the state licensure examination.

The opportunity to complete the academic requirements for the LPC or the School Counselor Standard Certificate through the counseling plan is restricted to students admitted to the counseling plan. Students who are not admitted to the counseling plan may enroll in counseling courses only with prior approval of the plan coordinator. In each case, students must meet the stated course prerequisites and space must be available in the course.

Admission Requirements

Students who meet the graduate admissions requirements to the SoE (see Graduate Admissions Requirements) must meet additional requirements prior to applying for candidacy to the counseling plan. Counseling applications are available on the SoE Web site at http://prtl.uhcl.edu/portal/page/portal/SOE/Forms/form_files/Counseling_1.pdf. Each application for candidacy must include:

- Completed application form.
- Brief essay (500-800 words) stating the student's career goals and reasons for applying to this plan.
- Documentation of completion of the Graduate Record Examination (GRE).
- Official transcripts from all universities attended. The last 60 hours, including the full semester in which the 60th hour appears, will be used to calculate the GPA.
- Three professional recommendations discussing potential ability in the counseling field.
- Student's self-rating sheet.

Applicants who submit properly completed applications may be invited to participate in a structured interview. The admissions process is conducted during the fall and spring

semesters of each year. Application forms and instructions may be obtained in the SoE Office of Academic Advising. Questions about the content of the application packet and process should be directed to the Office of Academic Advising. Applicants are solely responsible for ensuring that their packets of completed application forms, essays, supporting transcripts, documented GRE scores, letters of recommendation and self-rating sheet are received by the Office of Academic Advising on or before the deadline: October 1 for spring entry and June 1 for fall entry. If the application deadline falls on a weekend or a university holiday, applications will be accepted before the close of business on the following working day. Faxes and late applications will not be accepted.

Applicants will be contacted to schedule an interview with the admissions committee. Notification of conditional admissions decisions will be sent to applicants in December for spring entry and August for fall entry. If conditionally admitted to the counseling program, students must attend a mandatory orientation.

Students who receive written notice that their packets are incomplete must write a letter requesting reactivation of their counseling application and submit the requested documentation to B1231 by the deadlines given above in order to be reconsidered for the plan.

Restricted Courses

All counseling plan (COUN) courses are restricted to students who have been formally admitted to the counseling plan, unless otherwise approved.

LICENSED PROFESSIONAL COUNSELOR PREPARATION (FOR CANDIDATES ALREADY HOLDING A MASTER’S DEGREE IN A COUNSELING RELATED FIELD)*

To receive LPC certification, one must also complete all post graduate criteria as outlined by the LPC board, including temporary certification, 3000-hours supervised post-master’s internship, and passing the National Counselor Examination.

Check prerequisites before enrolling in any courses.

Counseling Core (30 hours):

COUN 5131	COUN 5231	COUN 5432
COUN 6232	COUN 6334	COUN 6435 ¹
COUN 6531 ¹	COUN 6532	COUN 6533
COUN 6731		

Capstone experience (6 hours):

COUN 5739 ¹	COUN 6739 ¹
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MASTER OF SCIENCE IN COUNSELING WITH LICENSED PROFESSIONAL COUNSELOR PREPARATION

To receive LPC certification, one must also complete all post graduate criteria as outlined by the LPC board, including temporary certification, 3000-hours supervised post-master’s internship and passing the National Counselor Examination.

Check prerequisites before enrolling in any courses.

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Professional Education Core (12 hours):

COUN 6030	COUN 6031	COUN 6032 ¹
COUN 6033		

Counseling Core (30 hours):

COUN 5131	COUN 5231	COUN 5432
COUN 6232	COUN 6334	COUN 6435 ¹
COUN 6531 ¹	COUN 6532 ¹	COUN 6533
COUN 6731		

Advised electives (3 hours):

COUN 5034	COUN 5035	COUN 5931
COUN 5939	COUN 6341	COUN 6343
COUN 6534		

Capstone experience (6 hours):

COUN 5739 ¹	COUN 6739 ¹	
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SCHOOL COUNSELOR CERTIFICATION FOR STUDENTS HOLDING A MASTER'S DEGREE

Check prerequisites before enrolling in any courses.

Counseling Core (33-34 hours):

COUN 5010 ¹	COUN 5131	COUN 5231
COUN 5432	COUN 6232 ²	COUN 6334
COUN 6435 ¹	COUN 6531	COUN 6532 ²
COUN 6533	COUN 6534	COUN 6731

Advised elective (3 hours):

COUN 5034	COUN 5035	COUN 5931
COUN 5939	COUN 6033	COUN 6331
COUN 6341	COUN 6343	

Capstone experience (6 hours):

COUN 5739 ²	COUN 6739 ²	
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¹Students not passing the state assessments by the final semester of this plan must also enroll in and successfully complete this course.

²Grades must be "B-" or better.

MASTER OF SCIENCE IN COUNSELING WITH SCHOOL COUNSELOR CERTIFICATION

Check prerequisites before enrolling in any courses.

Professional Education Core (12 hours):

COUN 6030	COUN 6031	COUN 6032 ¹
COUN 6033		

Counseling Core (33-34 hours):

COUN 5010 ²	COUN 5131	COUN 5231
COUN 5432	COUN 6232 ¹	COUN 6334
COUN 6435 ¹	COUN 6531	COUN 6532 ¹
COUN 6533	COUN 6534	COUN 6731

Capstone experience (6 hours):

COUN 5739 ¹	COUN 6739 ¹
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¹Grades must be "B-" or better.

²Students not passing the state assessments by the final semester of this plan must also enroll in and successfully complete this course.

UHCL BILINGUAL COUNSELOR CERTIFICATE

Although SBEC does not have a separate specialized certification to train bilingual students to work with English Language Learners (ELLs), UHCL has developed a program tailored to train teachers who are bilingual to work with this population. For more information about this program, please see the Other Certificates section of the catalog.

MASTER OF SCIENCE IN CURRICULUM AND INSTRUCTION

The graduate plan in Curriculum and Instruction leads to the master of science degree. This degree consists of a minimum of 36 semester hours and is designed for practicing teachers whose career plans remain focused on classroom instruction.

Check prerequisites before enrolling in any courses.

Professional Education Core (12 hours):

EDUC 6032	EDUC 6033	SILC 6030
TCED 6031/INST 6031		

Curriculum and Instruction Core (9 hours):

TCED 5030	TCED 5031	TCED 5036
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9 hours from an area of specialization chosen in consultation with your assigned Faculty Advisor.

Master's Degree Options (6 hours):

- Option 1: EDUC 6939,
- or Option 2: EDUC 6839,
- or Option 3: TCED 6739, plus 3 hours of electives.

MASTER OF SCIENCE IN EARLY CHILDHOOD EDUCATION

The graduate plan in Early Childhood Education leads to the master of science degree. Students will be subject to an interview with members of the Early Childhood Education program prior to admission. Students seeking this degree must complete at least 36 hours of credit. Within the degree, there are three tracks of Early Childhood Education: master's degree, master's degree focusing on young children with disabilities and master's degree with EC-6 certification.

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Check prerequisites before enrolling in any courses.

Required Professional Education Core (12 hours):

EDUC 6032	EDUC 6033	INST 6031 ¹
SILC 6030		

¹Students in Track C must take TCED 6031 instead of INST 6031.

Required Early Childhood Core (9 hours):

ECED 5031	ECED 5032	ECED 5131
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Track A - Master's Degree Only

Advised Electives (9 hours)

ECED 5033	ECED 5132	ECED 5133
ECED 5331	ECED 5332 ¹	ECED 5333
ECED 5231	ECED 5335	ECED 5737

Master's Degree Options (6 hours):

Option 1: EDUC 6939 or

Option 2: EDUC 6839 or

Option 3: ECED 6739 plus 3 hours of an approved elective (Internship requires prior completion of a minimum of 9 hours of the Professional Education Core and a minimum of 15 ECED hours completed from the 21 ECED hours on the plan).

Track B - Master's Degree with Focus on Young Children with Disabilities

Required (12 hours)

ECED 5332 ¹	ECED 5333 ¹	ECED 5737
SPED 5131 ¹		

Master's Degree Options (6 hours):

ECED 6739 plus 3 hours of an approved elective (Internship requires prior completion of a minimum of 9 hours of the Professional Education Core and a minimum of 15 ECED hours completed from the 21 ECED hours on the plan).

Track C - Master's Degree with EC-6 Certification (39 hours)

Includes initial teaching certification (see academic advising for graduate teacher certification plan).

Required (12 hours)

ECED 5033	ECED 5132	ECED 5331
ECED 5335		

Master's Degree Options (6 hours):

ECED 6739 plus 3 hours of an approved elective (Internship requires prior completion of a minimum of 9 hours of the Professional Education Core and a minimum of 15 ECED hours completed from the 21 ECED hours on the plan).

Additional Certification Courses (36 hours):

EDUC 5130/EDUC 4130	EDUC 5132/EDUC 4132	LLLS 5131/LLLS 4434
LLLS 5533/LLLS 4435	SPED 5030/SPED 4030	TCED 5010 ¹ /TCED 4010 ¹

TCED 5231/TCED 4231

TCED 5232/TCED 4232

TCED 5233/TCED 4233

TCED 4738 and TCED 4798 or TCED 4768/TCED 4769

¹Students not passing the state assessments by the final semester of this plan must also enroll in and successfully complete this course.

**MASTER OF SCIENCE IN EDUCATIONAL MANAGEMENT WITH
PRINCIPAL CERTIFICATION**

The graduate plan in Educational Management leads to the master of science degree with principal certification, if principal certification requirements are met. The master’s degree in Educational Management consists of 39 hours of graduate course work. Requirements for the master’s degree are completion of the Professional Education Core (12 hours), the Administration Core (24 hours) and the Capstone Experience/Graduate Internship (3 hours). Students will be eligible to register for graduate internship after they have successfully completed at least 27 hours of the master’s degree. Graduate Internship is only offered in the fall and spring semesters. An internship application form must be completed and submitted by June 8 for fall semester and October 1 for spring semester in order to enroll in ADSU 6739.

In order to fulfill principal certification requirements, students must successfully complete the 39 hours of master of science degree course work in educational management. Students must also have a valid Texas Teaching Certificate, two years of successful full-time classroom teaching in an approved accredited school and a passing score on the Principal state assessment.

Students who meet the graduate admissions requirements to the SoE (see Graduate Admissions Requirements) must meet additional requirements prior to being admitted to the educational management program. Each applicant must provide:

- Documentation of the completion of the Graduate Record Examination (GRE).
- Proof of having a valid Texas Teaching Certificate.
- A letter of support from a school building administrator.

Check prerequisites before enrolling in any courses.

Professional Education Core (12 hours):

EDUC 6032

EDUC 6033

INST 6031

SILC 6030

Administration Core (24 hours):

ADSU 6030

ADSU 6132

ADSU 6233

ADSU 6235

ADSU 6436

ADSU 6437

ADSU 6533

ADSU 6638

Capstone Experience (3 hours):

ADSU 6739¹

¹Internship application form must be completed and submitted by June 8 for fall semester and October 1 for spring semester in order to enroll in ADSU 6739. Students will be eligible to register for ADSU 6739 after they have successfully completed at least 27 hours of the master’s degree.

PRINCIPAL STANDARD EC-12 CERTIFICATE FOR STUDENTS HOLDING A MASTER'S DEGREE

The principal certificate plan consists of 27 hours of graduate course work. Requirements for the plan are completion of the Administration Core (24 hours) and the Capstone Experience/ Graduate Internship (3 hours). Students will be eligible to register for Graduate Internship after they have successfully completed at least 18 hours of the plan. Students are reminded that the graduate internship is only offered in the fall and spring semesters. An internship application form must be completed and submitted by June 8 for fall semester and October 1 for spring semester in order to enroll in ADSU 6739.

In order to fulfill principal certification requirements, students must successfully complete the 27 hours of course work, have a valid Texas teaching certificate, two years of successful full-time classroom teaching in an approved accredited school, and pass the Principal state assessment.

Check prerequisites before enrolling in any courses.

Administration Core (24 hours):

ADSU 6030	ADSU 6132	ADSU 6233
ADSU 6235	ADSU 6436	ADSU 6437
ADSU 6533	ADSU 6638	

Capstone Experience (3 hours):

ADSU 6739¹

¹Internship application form must be completed and submitted by June 8 for fall semester and October 1 for spring semester in order to enroll in ADSU 6739. Students will be eligible to register for ADSU 6739 after they have completed at least 18 hours of the certificate.

PROBATIONARY PRINCIPAL CERTIFICATION

A one-year probationary principal certificate is available to candidates who hold principal or assistant principal positions and meet the requirements of the UHCL School of Education. The probationary principal certificate may be renewed annually for a maximum of two years. For information concerning the requirements to obtain and/or renew the probationary certificate, visit with the UHCL School of Education Office of Educator Certification.

SUPERINTENDENT CERTIFICATION

The superintendent certification plan requires the completion of 15 hours of specified course work (see below) after finishing the principal certification plan. A passing score on the Superintendent state assessment is required prior to recommendation for this certificate.

Admissions Requirements

Students will be asked to provide the following documentation to their faculty adviser upon admission to the program and to the Office of Educator Certification at the time of certification recommendation:

- Evidence of a valid Texas Principal or Mid-Management Administrator's Certificate.
- Proof of current service as a school administrator or written approval from the Program Chair of Educational Leadership.

Check prerequisites before enrolling in any courses.

The following courses are on the superintendent certification plan:

EDLS 7636	EDLS 7637	EDLS 7638
EDLS 7833	EDLS 7837	

UHCL BILINGUAL ADMINISTRATOR CERTIFICATE

Although SBEC does not have a separate specialized certification to train bilingual students to work with English Language Learners (ELLs), UHCL has developed a program tailored to prepare future school administrators who are bilingual to work with this population. For more information about this program, please see the Other Certificates section of the catalog.

MASTER OF SCIENCE IN INSTRUCTIONAL TECHNOLOGY

The graduate plan in Instructional Technology leads to the master of science degree that prepares graduates to systematically design training and instruction. One of the requirements for the successful completion of the MS in INST will be an electronic portfolio. INST students should enroll in INST 5131, Trends and Issues, as soon as possible since it will be the course in which students create the template and discover what to include in the efolio. Students should contact their faculty adviser for additional information and deadlines.

Check prerequisites before enrolling in any courses.

Professional Education Core (12 hours):

EDUC 6032	EDUC 6033	INST 6031
SILC 6030		

Instructional Technology Core (12 hours):

INST 5130	INST 5131	INST 5333
INST 5433		

Electives:

Choose 2 elective courses as advised.

Master's Degree Options (6 hours):

Option 1: EDUC 6939- Master's Thesis Research (3 hrs) Minimum of two semesters required for a maximum of six hours, with continuous registration until completion; or

Option 2: EDUC 6839- Master's Project (3 hrs) Minimum of two semesters required for a maximum of six hours, with continuous registration until completion; or

Option 3: INST 6739 and another INST elective course (Internship requires prior completion of all Professional Education Core courses, Instructional Technology Core courses and at least one INST elective from the plan); or

Option 4: Master's Comprehensive Examination and two additional INST Electives courses (6 hrs)

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Master's Degree Options (6 hours):

LLS 6732 and LLS 6639 (requires prior completion of LLS 6732, 12 hours of LLS courses and all of the Professional Education Core) or

or

EDUC 6839 or EDUC 6939

MASTER OF SCIENCE IN READING WITH READING SPECIALIST STANDARD EC-12 CERTIFICATE

This graduate plan in Reading leads to the master of science degree with a Reading Specialist Standard Certificate (EC-12). Students seeking this certification must hold a valid Texas teaching certificate and must be able to verify a minimum of two years full-time approved successful teaching experience. A passing score on the Reading Specialist TExES is required. The plan consists of a minimum of 36 semester hours.

Check prerequisites before enrolling in any courses.

Professional Education Core (12 hours):

EDUC 6032

EDUC 6033

TCED/INST 6031

SILC 6030

Required Reading Courses (12 hours):

LLS 5532 or LLS 5533

LLS 5534

LLS 5738

LLS 6331 or SILC 6032

Electives (6 hours):

LLS 5131 and LLS 5532/LLS 5533

or

LLS 5635 and LLS 5636

Other course (1 hour):

TCED 5010¹

Master's Degree Options (6 hours):

LLS 5736 and LLS 5737

or

LLS 6732 and LLS 6639 (requires prior completion of LLS 6732 and 12 hours of LLS courses)

¹Students not passing the Reading Specialist state assessment by the final semester of this plan must also enroll in and successfully complete this course.

READING SPECIALIST STANDARD EC-12 CERTIFICATE FOR STUDENTS HOLDING A MASTER'S DEGREE

This graduate certification plan leads to the Reading Specialist Standard (EC-12) Certificate. Students seeking this certification must hold a master's degree, a valid Texas teaching certificate and verify a minimum of two years approved successful full-time teaching experience. A passing score on the Reading Specialist TExES is required. The plan consists of a minimum of 24 semester hours.

Check prerequisites before enrolling in any courses.

Required Reading courses (12 hours):

LLS 5532 or LLS 5533 LLS 5534 LLS 5738

LLS 6331 or SILC 6032

Electives (6 hours):

LLS 5635 and LLS 5636

or

LLS 5131 and LLS 5532/LLS 5533

Other course (1 hour):

TCED 5010¹

Capstone Experience (6 hours):

LLS 5736 and LLS 5737 or LLS 6732

and

LLS 6639 (requires prior completion of LLS 6732 and 12 hours of LLS courses)

¹Students not passing the Reading Specialist state assessment by the final semester of this plan must also enroll in and successfully complete this course.

**MASTER OF SCIENCE IN SCHOOL LIBRARY AND INFORMATION
SCIENCE WITH SCHOOL LIBRARIAN STANDARD CERTIFICATE (EC-12)**

The graduate plan in School Library and Information Science leads to the master of science degree. Students completing this degree plan may also be eligible for certification as school librarians. Students seeking this certification must hold a valid Texas teaching certificate and must be able to verify a minimum of two years successful full-time classroom teaching experience in an approved accredited school. A passing score on the School Librarian state assessment is required prior to recommendation for this certificate. The plan consists of 39 semester hours.

Check prerequisites before enrolling in any courses.

Professional Education Core (12 hours):

EDUC 6032 EDUC 6033 INST 6031

SILC 6030

School Library Core (24 hours):

LLS 5532 LLS 5533 LLS 6131

LLS 6132 LLS 6133 LLS 6231

LLS 6334 LLS 6336

Capstone Experience (3 hours):

LLS 6739

Other course (1 hour):

TCED 5010¹

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¹Students not passing the School Librarian state assessment by the final semester of this plan must also enroll in and successfully complete this course.

SCHOOL LIBRARIAN STANDARD CERTIFICATE (EC-12) FOR STUDENTS HOLDING A MASTER'S DEGREE

This 27 hour certificate is intended for students holding a master's degree and planning careers in elementary or secondary school libraries. Students planning careers in other library settings should seek special advisement.

Check prerequisites before enrolling in any courses.

School Librarian Core (24 hours):

LLS 5532	LLS 5533	LLS 6131
LLS 6132	LLS 6133	LLS 6231
LLS 6334	LLS 6336	

Capstone Experience (3 hours):

LLS 6739

Other courses (1 hour):

TCED 5010¹

¹Students not passing the School Librarian state assessment by the final semester of this plan must also enroll in and successfully complete this course.

To be recommended for the School Librarian certificate, students must complete the above program, hold a valid Texas teaching certificate, verify two years of successful full-time teaching experience in a public or approved accredited private school, hold a master's degree and pass the School Librarian state assessment.

DUAL MASTER OF SCIENCE DEGREES

Master of Science in Reading with Reading Specialist Standard Certificate (EC-12)

Master of Science in School Library and Information Science with School Librarian Standard Certificate (EC-12)

The dual degree plan in Reading and School Library and Information Science leads to two master of science degrees. Students completing this dual degree plan will also be eligible for certification as School Librarians and Reading Specialists. Students seeking these certifications must hold a valid Texas Teaching Certificate and must be able to verify a minimum of two years full-time approved successful teaching experience. Passing scores on the Reading Specialist state assessment and on the School Librarian state assessment are required. The dual degree plan consists of 60 semester hours.

Check prerequisites before enrolling in any courses.

Professional Education Core (12 hours):

EDUC 6032	EDUC 6033	INST 6031
SILC 6030		

Required Reading Courses (12 hours):

LLS 5533	LLS 5534	LLS 5738
LLS 6331		

School Library Core (21 hours):

LLS 5532	LLS 6131	LLS 6132
LLS 6133	LLS 6231	LLS 6334
LLS 6336		

Required Reading Electives (6 hours):

LLS 5131 and LLS 5137

or

LLS 5635 and LLS 5636

Reading Capstone Experience (6 hours):

LLS 6732	LLS 6639 (requires prior completion of LLS 6732, 12 hours LLS and all of the Professional Education core)
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Library Capstone Experience (3 hours):

LLS 6739

Other course (1 hour):

TCED 5010¹

¹Students not passing the School Librarian state assessment and the Reading Specialist state assessment by the final semester of this plan must also enroll in and successfully complete this course.

DOCTORAL DEGREE PLAN

DOCTOR OF EDUCATION IN EDUCATIONAL LEADERSHIP

The focus of the EdD is the preparation of individuals for service as educational leaders in educational organizations, in particular, Pre-K to university educational settings. The intent is to provide such individuals with the advanced knowledge and skills necessary to generate and apply research for solving the problems faced by educational leaders.

Prior to admission to the EdD program, students must have:

- Completed a master's degree and the equivalent of UHCL's EDUC 6032, EDUC 6033, INST 6031 and SILC 6030
- Completed UHCL Admissions Application
- Official transcripts from each accredited institution attended sent to the Office of Admissions
- Provided a recent (less than 5 years old) score from the Graduate Record Examination (GRE)
- Provided evidence of at least three years of work experience in an educational setting
- Provided three reference forms from persons who can address students' performance in graduate studies and potential for educational leadership

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- Provided a letter from an employer confirming support of the applicant's pursuit of the EdD and support for at least one field placement in the employing organization

Other information may be required; contact the Office of Academic Advising for details.

If an applicant does not meet one or more of the admission requirements, but can provide letters testifying to the applicant's strong leadership qualities, provisional admission may be granted.

The structure of the EdD program is as follows:

Check prerequisites before enrolling in any courses.

Leadership Core:

EDLS 8030	EDLS 8130	EDLS 8131
EDLS 8132	EDLS 8230	EDLS 8330
EDLS 8430		

Research Core:

EDLS 7031	EDLS 7032	EDLS 7033
EDLS 7130	EDLS 7130	

Communication Core:

EDLS 7030	EDLS 7034	EDLS 7035
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Specialization:

12 hours from one area of specialization as follows:

Superintendent

EDLS 7636	EDLS 7637	EDLS 7833
EDLS 7837		

Special Populations

EDLS 7036	EDLS 7037	EDLS 7038
EDLS 7039		

Curriculum & Instruction

EDLS 7136	EDLS 7137	EDLS 7138
EDLS 7139		

Dissertation^{1, 2}:

EDLS 8939	EDLS 8969	EDLS 8999
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Those interested in applying should contact the Office of Academic Advising in Bayou 1231 (by phone at 281-283-3600 or by e-mail at education@uhcl.edu). The deadline for application is March 15; however, early admission is available. Contact the Office of Academic Advising for details.

¹Students must register for dissertation each long semester until completion. Only 12 hours of dissertation may count in the program.

²Before being permitted to register for dissertation courses, a doctoral student must have advanced to candidacy.

SCHOOL OF EDUCATION COURSE ROSTER

ADMINISTRATION AND SUPERVISION

- ADSU **5010: PROFESSIONAL PREPARATION SEMINAR**
Prerequisite: An approved, signed degree or certification plan on file in the SoE. This course is designed to assist students in either the principal or superintendent certification programs to understand the State certification standards for successful entry into their chosen educational field.
- ADSU **5931: RESEARCH TOPICS IN EDUCATIONAL LEADERSHIP**
Identified by specific title each time course is offered.
- ADSU **5939: INDEPENDENT STUDY IN EDUCATIONAL LEADERSHIP**
Prerequisites: Approval of instructor and Associate Dean.
- ADSU **6030: INTRODUCTION TO EDUCATIONAL LEADERSHIP**
Principles of educational leadership, structure and governance of public education, interpersonal relations and communication skills.
- ADSU **6130: ADMINISTRATIVE SYSTEMS**
Prerequisite: ADSU 6030. Technological applications for school administrative systems focusing on communication, presentation and management systems.
- ADSU **6132: CURRICULUM**
Prerequisite: ADSU 6030. Research, theory and practice, pertaining to the design, implementation, analysis and evaluation of the school curriculum.
- ADSU **6233: PRINCIPALSHIP**
Prerequisite: ADSU 6030. Technical, human and conceptual skills required of building-level school administrators.
- ADSU **6235: ADMINISTRATION OF SPECIAL PROGRAMS**
Prerequisite: ADSU 6030. Program planning, implementation, evaluation and improvement through study and development of special programs that meet local, state and national needs and requirements.
- ADSU **6333: INSTRUCTIONAL LEADERSHIP**
Prerequisite: ADSU 6030. The course content has been approved by the Texas Education Agency and meets the guidelines for Instructional Leadership Training required for Administrators and Supervisors. The components of the course are: leadership, instructional effectiveness, observing and conferencing with teachers and lesson design.
- ADSU **6432: MANAGEMENT THEORY**
Prerequisite: ADSU 6030. Adaptations of the fundamentals of management to program development, personnel and fiscal resources.
- ADSU **6434: ADMINISTRATION OF SCHOOL PERSONNEL**
Prerequisite: ADSU 6030. Focuses on the various aspects of personnel administration in the educational setting to include creating a meaningful work environment, to increase motivation and job satisfaction and developing effective and interactive employee communications.
- ADSU **6436: SCHOOL RESOURCE MANAGEMENT**
Prerequisite: ADSU 6030. Fundamentals of planning, cost accounting, quantitative evaluation of needs and resources and application of prudent business practices to school finance.
- ADSU **6437: SCHOOL LAW**
Prerequisite: ADSU 6030. State and federal laws and court decisions affecting the authority, responsibilities, liabilities and appeals related to the operations of public school systems.
- ADSU **6533: APPRAISAL OF TEACHING**
Prerequisite: ADSU 6030. The course follows the official guidelines for training appraisers as required for the Texas Teacher Appraisal System. Students are also required to do in-depth research on professional growth and/or development as it relates to evaluation.

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- ADSU 6537: INTERPERSONAL COMMUNICATION**
Prerequisite: ADSU 6030. This course, designed for students of school administration, focuses on understanding different communication styles, developing skills for speaking and listening effectively, improving written communications and mastering the steps of effective group presentations.
- ADSU 6538: PROGRAM, POLICY AND POLITICS**
Prerequisite: ADSU 6030. Study of local, state and national policy and politics as instruments of program change, development, control and reform. Emphasis given to the role of the principal in school policy matters.
- ADSU 6638: THE PRINCIPAL AND SCHOOL COMMUNITY RELATIONS**
Prerequisite: ADSU 6030. Application of interpersonal skills in campus leadership; study of leadership approaches for use with various school constituencies. Required for principal certification.
- ADSU 6735: LEADERSHIP RESEARCH SEMINAR**
Prerequisite: Must be taken during the final six hours of the ADSU Master's Plan. Demonstration of acquired competency through research on current educational leadership topics. This capstone experience provides a rich opportunity to demonstrate the inter-relatedness of theory and practice.
- ADSU 6739: GRADUATE INTERNSHIP**
Prerequisites: Administrative Core courses and approval of Associate Dean. Supervised internship in an approved educational environment. Written and oral reports required.

COUNSELING

- COUN 5010: PROFESSIONAL PREPARATION SEMINAR**
Prerequisites: COUN 5231, 5432, 6532, 6731 and an approved, signed degree or certification plan on file in the SoE. This course is designed to assist students in the School Counselor Certification Plan to understand the State certification standards for successful entry into their chosen educational field.
- COUN 5034: COMMUNITY COLLABORATION IN COUNSELING**
Prerequisite: Admission to the Counseling Plan. This course focuses on the establishment of partnerships and recognition of community resources to meet the needs of diverse populations. Field experiences required.
- COUN 5035: ADVANCED INTERPERSONAL SKILLS IN DIVERSE SETTINGS**
Prerequisites: COUN 6030 and COUN 6435. This course will examine the implications of cross cultural differences and similarities as well as the enhancement of interpersonal counseling skills required for professionals working within a diverse setting. Field experiences required.
- COUN 5131: COUNSELING FOR LIFESPAN DEVELOPMENT**
Prerequisite: Admission to the Counseling Plan. Addresses child development, including bio-social, cognitive and psychosocial changes and issues that arise during the school years that may require counseling support.
- COUN 5231: PRINCIPLES OF COUNSELING**
Prerequisite: Admission to Counseling Plan. History, principles, services and theoretical development of guidance. Development of basic counseling skills.
- COUN 5432: THEORIES OF COUNSELING**
Prerequisite: COUN 5231. Current theories of counseling and their applications to practice.
- COUN 5739: PRACTICUM IN COUNSELING**
Prerequisites: Completion of all core courses, admission to Counseling Program and approval of instructor and Associate Dean. Restricted to students with degree or certification plans in counseling. Counseling of bona fide clients in a supervised setting.
- COUN 5931: TOPICS IN COUNSELING**
Prerequisite: COUN 5231. Identified by specific title each time course is offered.
- COUN 5939: INDEPENDENT STUDY IN COUNSELING**
Prerequisites: Approval of instructor and Associate Dean.
- COUN 6030: MULTICULTURAL FOUNDATIONS FOR COUNSELORS**
Prerequisite: Admission to the Counseling Plan. This course will review the social, cultural and legal issues related to counseling diverse populations in the United States.

- COUN 6031: TECHNOLOGY APPLICATIONS FOR COUNSELORS**
Prerequisite: Admission to the Counseling Plan. This course instructs the counselor on using computers and related programs/software to facilitate research, communication, reports and presentations for counselors.
- COUN 6032: STATISTICS AND MEASUREMENT FOR COUNSELORS**
Prerequisite: Admission to the Counseling Plan. This course will examine both formal and informal procedures for collecting and analyzing data, principles of measurement and descriptive statistics.
- COUN 6033: RESEARCH DESIGN AND ANALYSIS FOR COUNSELORS**
Prerequisites: COUN 6032. This course will enable the counselor to design, analyze and apply counseling research techniques, both qualitative and quantitative.
- COUN 6232: ASSESSMENT ISSUES FOR COUNSELORS**
Prerequisites: COUN 6032 or EDUC 6032 and admission to the Counseling program. Review of the most common psychological tests. Basic principles of psychological report writing and interpretation.
- COUN 6334: CAREER DEVELOPMENT AND COUNSELING**
Prerequisites: COUN 6032 or EDUC 6032; COUN 6232 or PSYC 6232 and admission to Counseling Plan. Review of theories, sources of information, methods for appraisal, appraisal instruments and counseling techniques related to the career development process throughout the lifespan.
- COUN 6435: PRE-PRACTICUM IN COUNSELING**
Prerequisites: COUN 5231 and COUN 5432. Pre-practicum development of advanced counseling skills and case management documents in a supervised setting.
- COUN 6531: COUNSELING SPECIAL POPULATIONS**
Prerequisites: COUN 5131 and COUN 5231. Course will prepare counselors to provide services to clients with special needs; to review main approaches to defining psychological abnormalities; to become familiar with the DSM-IV-TR; to learn processes for making psychological diagnoses; to understand major causal theories of psychopathological disorders; to understand role of counselor in ARD/504 processes.
- COUN 6532: GROUP COUNSELING**
Prerequisites: COUN 5231 and COUN 5432. Basic principles of group dynamics, processes, theoretical applications, techniques and leadership skills in an experiential setting.
- COUN 6533: CRISIS INTERVENTION**
Pre-requisites: COUN 6532 or COUN 6435, or permission of instructor. Knowledge of theory and methodology of crisis prevention and intervention, incident debriefing, violence prevention; development of crisis intervention teams.
- COUN 6534: DEVELOPMENTAL SCHOOL COUNSELING PROGRAMS**
Prerequisite: COUN 5231. Addresses the design, implementation and evaluation of developmental school counseling programs, with emphasis on the counselor's role in counseling, consultation and coordination of student services in the domains of developmental guidance, individual planning, responsive services and system support.
- COUN 6731: PROFESSIONAL SEMINAR IN COUNSELING**
Prerequisite: COUN 5231. Advanced topics including the latest research in counseling; emphasis on ethical, legal and professional issues.
- COUN 6739: INTERNSHIP IN COUNSELING**
Prerequisites: COUN 5739 and approval of Associate Dean. Restricted to students with degree or certification plans in counseling. Supervised internship in an approved counseling environment; written and oral reports required.

EARLY CHILDHOOD EDUCATION

- ECED 5031: TEACHING YOUNG CHILDREN**
Exploration of practices that nurture the intellectual growth and general development of young children. Field experiences required.

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- ECED 5032: COMMUNITY PROGRAMS FOR YOUNG CHILDREN**
Focus is on studies of various school and community programs (and their underlying theoretical perspectives) that serve young children and families. Trends and issues in early childhood education will be explored. Field experiences required.
- ECED 5033: GUIDANCE AND CLASSROOM MANAGEMENT FOR EC-6**
This course explores theories and strategies for guiding young children's behavior in classroom and non-classroom settings. Focus will be on establishing effective discipline and management strategies which promote autonomy in young children.
- ECED 5131: CREATIVE ACTIVITIES FOR THE YOUNG CHILD**
Prerequisite: ECED 5031. Strategies for developing, implementing and evaluating creative and intellectually stimulating learning environments and curricula for young children. Field experiences required.
- ECED 5132: LITERACY DEVELOPMENT IN EARLY CHILDHOOD**
Focus on language and emergent literacy development of young children including research and implications for practice. Field experiences required.
- ECED 5133: MATHEMATICS AND PROBLEM SOLVING FOR YOUNG CHILDREN**
This course explores theories and models of problem solving and mathematics for children ages 3-9. Focus is on understanding, developing and implementing curriculum based on children's metacognitive procedures in mathematics and problem solving.
- ECED 5231: PLAY AND THE DEVELOPING CHILD**
Focus on research, philosophy and application of developmental play theory. Influence of play on physical growth, social relationships, emotional well-being, cognitive development and creative expression is reviewed.
- ECED 5331: EVALUATION OF DEVELOPMENT OF YOUNG CHILDREN**
Prerequisite: ECED 5031. Overview of formal and informal evaluation, including authentic assessment of young children's development. Assessment models that focus on physical, social, emotional, cognitive and language capabilities are reviewed. Field experiences required.
- ECED 5332: INFANTS AND YOUNG CHILDREN WITH EXCEPTIONALITIES**
Prerequisite: SPED 4030 or SPED 5030. A study of various educational models and methods for the assessment and service provision to infants and young children with special needs. Field experiences required.
- ECED 5333: ADVANCED STUDIES OF INFANTS AND YOUNG CHILDREN WITH SPECIAL NEEDS**
Prerequisites: ECED 5332 or SPED 5332. Advanced studies of the education of infants and young children with disabilities to include service coordination, assistive/adaptive technologies and health care issues. Field experiences required.
- ECED 5335: CHILDREN, FAMILY AND SOCIETY**
Social contexts in which a child develops, the relationships of individuals in these social contexts and the interaction within and between cross-cultural contexts. Field experiences required.
- ECED 5737: PRACTICUM: INFANTS AND YOUNG CHILDREN WITH DISABILITIES**
Prerequisites: ECED/SPED 5332 and ECED/SPED 5333. Fieldwork with infants and/or young children with disabilities not limited to school, agency or privately funded programs.
- ECED 5931: RESEARCH TOPICS IN EARLY CHILDHOOD EDUCATION**
Identified by specific title each time course is offered.
- ECED 5939: INDEPENDENT STUDY IN EARLY CHILDHOOD EDUCATION**
Prerequisites: Approval of instructor and Associate Dean.
- ECED 6739: INTERNSHIP IN EARLY CHILDHOOD EDUCATION**
Prerequisites: Completion of a minimum of 9 hours of the Professional Education Core and 15 ECED hours from the MS plan and approval of the Associate Dean. Supervised internship in an early childhood setting.

EDUCATION

- EDUC 5130: COGNITION AND INSTRUCTION**
To familiarize students with the theoretical foundation of cognitive psychology, the research protocols of cognitive science and the implication of each for classroom technology and instruction.
- EDUC 5132: ISSUES IN PROFESSIONAL EDUCATION**
Prerequisite: Admission to Teacher Education Program. Ethical, social, legal and political constraints and considerations in teaching. Emphasis on moral self-assessment and the development of teachers as professional role models for the educational community.
- EDUC 5931: RESEARCH TOPICS IN PROFESSIONAL EDUCATION**
Identified by specific title each time course is offered.
- EDUC 5939: INDEPENDENT STUDY IN EDUCATION**
Prerequisites: Approval of instructor and Associate Dean.
- EDUC 6032: APPLIED STATISTICS**
Application of descriptive and inferential statistics in education. Focuses on the calculation and use of measures of central tendency and variability, and presents statistical tools typically used in educational research including selected parametric and non-parametric techniques.
- EDUC 6033: RESEARCH DESIGN AND ANALYSIS**
Prerequisite: EDUC 6032 or equivalent. Design, analysis and application of educational research techniques, both qualitative and quantitative.
- EDUC 6839: MASTER'S PROJECT**
Prerequisites: EDUC 6033 or equivalent, 21 additional hours of approved degree course work and approval of instructor and Associate Dean. Applied field research. May be repeated for credit.
- EDUC 6939: MASTER'S THESIS RESEARCH**
Prerequisites: EDUC 6033 or equivalent, 21 additional hours of approved degree course work and approval of instructor and Associate Dean. May be repeated for credit.

EDUCATIONAL LEADERSHIP

- EDLS 7030: DISPUTE RESOLUTION**
Designed to analyze various approaches in resolving disputes and to develop skills in helping to resolve disputes that may occur in managing responsibilities. The elements of arbitration, mediation and negotiations are included. Materials from educational, governmental and service organizations will be used.
- EDLS 7031: QUANTITATIVE RESEARCH I**
This is the first of a two-course sequence (with EDLS 7032) and focuses on quantitative techniques of inquiry that pertain to educational research and policy analysis. Using an integrated approach, students will study statistics; exploratory data analysis; sampling, survey and experimental design; naturalistic observation and inquiry; and interview and questionnaire design in the context of using research information in planning, change management, policy analysis and program management. Topics include inferential, descriptive, comparative, relational and non-parametric statistics.
- EDLS 7032: QUANTITATIVE RESEARCH II**
Prerequisite: EDLS 7031. This is the second of a two-course sequence (with EDLS 7031) and focuses on quantitative techniques of inquiry that pertain to educational research and policy analysis. Using an integrated approach, students will study statistics; exploratory data analysis; sampling, survey and experimental design; naturalistic observation and inquiry; and interview and questionnaire design in the context of using research information in planning, change management, policy analysis and program management. Topics include inferential, descriptive, comparative, relational and non-parametric statistics.
- EDLS 7033: QUALITATIVE RESEARCH**
Prerequisite: EDLS 7031. Focuses on qualitative techniques of inquiry that pertain to educational research and policy analysis. Using an integrated approach, the students will study many of the same topics discussed in EDLS 7031, but from a qualitative perspective.

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- EDLS 7034: PROFESSIONAL WRITING & COMMUNICATIONS**
Addresses public writing and presentation skills. Course includes the study of creating case studies as well as reading, interpreting and discussing case studies; dissertation writing and other textual forms including press releases, speeches, newsletters and grants; developing skills for speaking and listening effectively with different audiences, as well as the effective use of technology in presentations; managing interactions with the media including interviews for print, radio and television.
- EDLS 7035: INTERCULTURAL COMMUNICATION**
Focuses on the understanding of cultural issues that influence communication effectiveness with diverse populations.
- EDLS 7036: POLICY & PROGRAMS- SPECIAL POPULATIONS**
Overview of various programs serving special populations (ECE, ELL and Special Education). Includes trends and issues, policy implications, legal and ethical aspects and advocacy. Field experiences required.
- EDLS 7037: ASSESSMENT ISSUES- SPECIAL POPULATIONS**
Prerequisites: EDLS 7130 and EDLS 7033. Overview of assessment issues and practices for special populations. Program evaluation will also be addressed. Field experiences required.
- EDLS 7038: CURRICULUM PLANNING AND PROGRAM DEVELOPMENT- SPECIAL POPULATIONS**
Overview of curriculum program planning and program issues. This course will include research and best practice in pedagogy as it applies to curriculum planning and program development for special populations. Field experiences required.
- EDLS 7039: FAMILY & COMMUNITY RESOURCES- SPECIAL POPULATIONS**
Prerequisite: EDLS 7034. Overview of family and community resources that support children and families in programs serving special populations. Communication skills and grant writing are featured. Field experiences required.
- EDLS 7130: PROGRAM EVALUATION**
Prerequisite: EDLS 7033. Addresses the evaluation of the effectiveness of programs and policies. Topics include purposes for evaluating; evaluator's role; evaluation structure, various design applications, including experimental, quasi-experimental and descriptive; indicators for effectiveness and program process; along with a series of components, including collection of quantitative and qualitative data, analysis and use of evaluation results in the decision-making process.
- EDLS 7131: SOCIETY, LANGUAGE AND READING**
Prerequisite: EDLS 7035. Examines the impact of linguistic, cultural, and social variables on learning to read.
- EDLS 7132: INTEGRATING READING INTO THE CURRICULUM**
Examines current research and practice on integrating reading throughout the content area curriculum.
- EDLS 7133: WRITING WORKSHOP IN THE CLASSROOM I**
Prerequisite: Concurrent enrollment in EDLS 7134. Examines research based instructional strategies for improving writing in grades K-12.
- EDLS 7134: CURRICULUM WRITING WORKSHOP IN THE CLASSROOM II**
Prerequisite: Concurrent enrollment in EDLS 7133. Examines research based instructional strategies for improving writing in grades K-12.
- EDLS 7135: LITERACY ASSESSMENT FOR THE PRACTITIONER**
Prerequisites: Six hours from EDLS 7034 or EDLS 7131-7135. Assessment and diagnosis of literacy disorders including dyslexia.
- EDLS 7136: CURRENT PEDAGOGICAL ISSUES**
This course, in a seminar format, presents an analysis of current curricular and instructional issues in educational research. Course activities involve extensive review of student-selected research journal articles related to their individual research agenda.
- EDLS 7137: ADVANCED MODELS OF TEACHING**
In this course, students examine a variety of teaching models to extend their existing knowledge base of instructional strategies. Focus of examination will be on the following Models of Teaching: Concept Attainment, Inquiry Training, Synectics, Advance Organizers, Non-Directive Teaching, Group Investigation, Role Playing and Simulation.

- EDLS 7138: CURRICULUM DESIGN: DEVELOPMENT, IMPLEMENTATION, EVALUATION**
Students will examine the impact of 21st Century National Standards on the development, implementation and evaluation of state and local curricula.
- EDLS 7139: PROFESSIONAL DEVELOPMENT PRINCIPLES AND PRACTICES**
This course examines current research-based strategies and techniques, e.g., workplace improvement goals development, assessment models, motivational methods and skills transferability, for the effective planning and implementation of professional development programs.
- EDLS 7636: POLITICS AND SCHOOL FINANCE**
Includes federal, state and local sources of funding; issues related to the distribution of moneys and local taxation policies; understanding the concepts and issues of bond elections, investments, debt service and risk management, analysis of the community power structure within the district, how national and state political forces affect local education policies.
- EDLS 7637: PERSONNEL MANAGEMENT**
Covers the various aspects of administering personnel in the educational setting: rights and responsibilities of employees, contracts, collective bargaining, termination, advertising, recruiting, interviewing, hiring practices, staff development and creation of policies governing personnel.
- EDLS 7638: THE SUPERINTENDENT AND SCHOOL COMMUNITY RELATIONS**
Approval of the Associate Dean/Admission to the Superintendent Certification Plan. Application of interpersonal skills in educational leadership; study of leadership approaches for use with various school constituencies.
- EDLS 7833: SUPERINTENDENT SEMINAR**
Contemporary theory and issues in School Leadership.
- EDLS 7837: SUPERINTENDENT INTERNSHIP**
Supervised internship in an approved educational environment. Written and oral reports required.
- EDLS 7931: DOCTORAL RESEARCH TOPICS IN EDUCATIONAL LEADERSHIP**
Identified by specific topic each time course is offered.
- EDLS 7939: DOCTORAL INDEPENDENT STUDY IN EDUCATIONAL LEADERSHIP**
Prerequisites: Approval of instructor and student's doctoral committee.
- EDLS 8030: ORGANIZATIONAL LEADERSHIP**
Prerequisite: EDLS 7034. Explores major philosophies and theories of leadership and their applications to successfully leading and managing educational organizations in community settings, especially ones with a diverse population. Topics include theories of organization and their implications for diagnosis and actions; managerial styles and their implications in addressing individual and group dynamics; values and ethics; cultural sensitivity; legal responsibilities; and effective decision making strategies for successful outcomes. Field experiences is required.
- EDLS 8130: STRATEGIC PLANNING & SYSTEMS ALIGNMENT**
Addresses components of systems theory, comprehensive strategic planning and modeling and organizational alignment. Topics include developing systems analysis, strategic and unit-level planning, contingency planning, integration of planning horizontally and vertically and alignment of planning with resources and assessment. Field experiences required.
- EDLS 8131: POLICY, KNOWLEDGE MANAGEMENT & FORECASTING**
Prerequisite: EDLS 8130. Investigates the use of data systems for organizational management and policy development. Uses techniques of knowledge management systems, data mining and forecasting tools to effectively integrate diverse data sets, such as demographics, facilities needs, planning documents, assessment data, human resource data and financial data. Topics include the development and use of demographic models, GIS models, database design, forecasting tools and simulation tools. Field experiences required.
- EDLS 8132: TRANSITION AND CHANGE MANAGEMENT**
Prerequisite: EDLS 8131. Explores the theory and research of change management as applied to enterprise-wide change, organizational transitions and processes. Topics include analysis of the various aspects of systemic change, such as change leadership, team building, process planning, accountability systems, succession management, data analysis, communication and survey tools, resource allocation, community relations and marketing of services. Field experiences required.

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EDLS 8230: ETHICS, VALUES AND SOCIAL RESPONSIBILITY

Identifies highest standards in professional collaboration, duty to stakeholders, the extent of professional responsibility extending beyond matters of designated and measurable accountability and commitment to the community served. The course merges the best of the technical literature by professional ethicists with an emphasis on practice and continuous improvement.

EDLS 8330: HUMAN RESOURCES ADMINISTRATION

Addresses various aspects of human resources leadership and management. Topics include federal/state laws, meaningful work environment; motivation and job satisfaction; effective and interactive employee communications; and relevant, ongoing professional development opportunities for self and for staff, highlighting lifelong learning. Discussions include the research and theory of adult learning (transformational learning); reflective practices; and mentoring. Field experiences required.

EDLS 8430: FINANCIAL RESOURCES MANAGEMENT

Addresses financial management practices and problems of nonprofit organizations in the area of education, government and human services. Specific topics include financial accounting, preparation and interpretation of financial statements, financial analysis and cost accounting, budgeting, cost containment and retrenchment and financial planning. Field experiences required.

EDLS 8530: RESEARCH SEMINAR

Prerequisite: EDLS 7033: Focuses on challenging topics of leadership in educational settings. The main focus is on creating and maintaining effective schools. Educational leaders are invited to address current real-world problems that doctoral students would analyze in order to develop workable alternative solutions. The process works toward doctoral students developing viable research projects that could serve as relevant dissertation topics. Field experiences required.

EDLS 8939: DISSERTATION

Prerequisites: Admission to candidacy for doctoral degree and consent of Doctoral Program Committee. Twelve (12) hours of dissertation count toward the program. Focuses on the activities necessary for the completion of the dissertation.

EDLS 8969: DISSERTATION

Prerequisites: Admission to candidacy for doctoral degree and consent of Doctoral Program Committee. Twelve (12) hours of dissertation count toward the program. Focuses on the activities necessary for the completion of the dissertation.

EDLS 8999: DISSERTATION

Prerequisites: Admission to candidacy for doctoral degree and consent of Doctoral Program Committee. Twelve (12) hours of dissertation count toward the program. Focuses on the activities necessary for the completion of the dissertation.

INSTRUCTIONAL TECHNOLOGY

*For definition of "Basic computer literacy," go to <http://soe.uhcl.edu/ComputerLiteracy>.

**Pending Coordinating Board approval

INST 5011: ASSISTIVE-ADAPTIVE COMPUTER APPLICATIONS

Teaches the discipline and laws related to special education. Classroom models and resources will be created to support the design of instruction for students with disabilities.

INST 5035: CREATING DIGITAL RESOURCES

Prerequisite: Basic computer literacy*. In this introductory course, participants will learn about innovative trends in the field of instructional and communication technologies. Participants will create instructional products.

INST 5130: LEARNING THEORY AND INSTRUCTION

Students will be able to identify and describe the salient characteristics that differentiate learning environments designed with each of several prominent contemporary theories of learning and cognitive science. Students will apply each theory to one or several learning environments.

INST 5131: TRENDS & ISSUES

Prerequisites: Basic computer literacy*. Participants will learn about trends and issues affecting instructional design and technology in education, business and industry. Participants will create an eFolio template for voice, video, text and graphics.

- INST 5135: MULTIMEDIA DESIGN APPLICATIONS**
This course introduces the instructional analysis, design, development, implementation and evaluation and theoretical underpinnings of multimedia components as an instructional tool. The participants will design multimedia projects appropriate for online learning environments.
- INST 5233: PERFORMANCE TECHNOLOGY**
This course enables learners to apply human performance improvement tools and techniques to identify performance problems and select potential solutions. Topics covered include: performance technology, non-instructional performance interventions, needs assessment and change management.
- INST 5333: SYSTEMATIC DESIGN OF TECHNOLOGY-BASED INSTRUCTION**
Application of systematic procedures for designing training and instruction based on a combination of practical experience and instructional systems design theory and research. A secondary emphasis will be on methods for instructional delivery including instructor-lead, print, computer and electronic network-based systems.
- INST 5433: INSTRUCTIONAL DESIGN, PROJECT MANAGEMENT AND GRANT WRITING**
This course enables learners to plan and manage instructional design and development projects and write successful educational grant proposals. Students will also learn project management techniques, project management software, applications and resources for identifying educational grant opportunities.
- INST 5535: INTERNET FOR INSTRUCTION**
Prerequisite: Basic computer literacy*. Students will plan and design online instructional materials and/or modules that effectively incorporate the Internet and address the social, ethical, legal and human factors affecting the Internet as a communication, professional development and lifelong learning tool.
- INST 5635: INSTRUCTIONAL WEB DESIGN AND DEVELOPMENT**
Students will learn to design and develop an instructional Web site by applying principles of educational psychology, communications theory and fundamental principles of message design to create tables, frames and interactive multimedia elements, and forms in web pages.
- INST 5735: ADVANCED WEB DEVELOPMENT**
Prerequisite: INST 5635. This course is for experienced HTML programmers seeking to expand Web skills. Topics include programming in ASP, DHTML, connecting forms to databases, server setup, maintenance and management and other current tools and applications. The course requires hands-on activities, group work and the design, development and implementation of Web-based instructional modules.
- INST 5835: DIGITAL VIDEO PRODUCTION FOR EDUCATORS AND TRAINERS**
This course covers basic "Digital Video" pre-production, production and post-production. Student will develop and use a final edited video in either a multimedia presentation, on a web site or in an instructional video tape. The course also provides opportunities to explore newer video formats such as DVD and streaming video.
- INST 5919; 5939: INDEPENDENT STUDY IN INSTRUCTIONAL TECHNOLOGY**
Prerequisites: Approval of instructor and Associate Dean.
- INST 5931: RESEARCH TOPICS IN INSTRUCTIONAL TECHNOLOGY**
Identified by title each time course is offered.
- INST 6031: APPLICATIONS OF TECHNOLOGY**
Prerequisite: Basic computer literacy*. Students will learn how to use and integrate computers and various software applications (e.g., word processors, databases, spreadsheets, graphics) with instruction to facilitate learning and performance. They will also be introduced to educational software, multimedia development and assorted telecommunication technologies such as e-mail and the Internet.
- INST 6037: ADVANCED TECHNOLOGY APPLICATIONS**
Prerequisite: Basic computer literacy*. Creates a variety of multimedia related concepts including desktop publishing, video production, Web design, multimedia development and graphic design and animation.

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- INST 6137: TECHNOLOGY AND eLEARNING**
Prerequisite: INST 6437. Links current understanding of human cognition with advances in computer technologies. Addresses how technology-rich learning environments must benefit from a firm grounding in educational psychology and cognitive science.
- INST 6237: ADVANCED INSTRUCTIONAL DESIGN**
Prerequisite: INST 5333. Covers a variety of analysis techniques, design theories and design models.
- INST 6337: MOTIVATIONAL DESIGN OF INSTRUCTION**
Focuses on systematic strategies that will enable teachers, trainers and instructional designers to develop instruction that motivates students to learn. Students will examine theories of human motivation and learn how to apply the ARCS model of motivational design.
- INST 6437: INTERACTIVE DISTANCE LEARNING**
Focuses on the systematic design and delivery of interactive distance learning programs based on the use of the Internet and related telecommunication technologies. Students design, develop and formatively evaluate their own distance instruction, analyze research and examine current trends and issues.
- INST 6537: MANAGEMENT OF COMPUTER RESOURCES**
This course covers: configuring, maintaining and trouble-shooting hardware, software, computer networks and peripheral devices; the availability of emerging technologies, telecommunications; multimedia; and curriculum integration. Methods for maximizing the use of the technology in classrooms, in school libraries and in computer labs will also be discussed.
- INST 6637: ANALYZING EMERGING USES OF TECHNOLOGY**
Advanced discussion on the instructional applications of emerging technologies. The purpose is to link research on emerging uses of technology to establish a direction of research selected by students. Students will analyze research and prepare annotated bibliographies and a review of literature.
- INST 6737: TRAINING PRACTICUM**
Practical, hands-on experience in conducting needs assessment, designing and delivering technology training, supporting post-training performance and evaluating real-life training situations for continuing adult education and development.
- INST 6739: INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY**
Prerequisites: Approval of Associate Dean, completion of all Professional Education Core courses, Instructional Technology Core courses and at least one INST elective from the plan. Supervised practice in educational computing under the guidance of a selected professor.

LITERACY, LANGUAGE AND LIBRARY SCIENCE

**Pending Coordinating Board approval

- LLS 5131: INTEGRATING THE LANGUAGE ARTS**
Approaches to developing oral and written expression, listening skills and the integration of all the language arts for EC-8.
- LLS 5133: FOUNDATIONS OF READING**
Historical, philosophical, physiological and psychological foundations of reading.
- LLS 5134: DEVELOPMENTAL READING PROGRAMS FOR EC-8**
Structuring developmental reading programs, emphasizing alternative approaches.
- LLS 5135: DEVELOPMENTAL READING PROGRAMS FOR SECONDARY SCHOOLS**
Analysis of model reading programs in grades 4-12, emphasizing alternative approaches to teaching, materials and instructional strategies.
- LLS 5137: MODERN TRENDS IN LITERATURE FOR CHILDREN AND YOUNG ADULTS**
Examines current trends and issues in the literature published for children and young adults.
- LLS 5531: CRITICAL READING AND THINKING**
Applying higher order thinking skills to reading in literature and the content areas.
- LLS 5532: SELECTING LITERATURE AND MATERIALS FOR YOUNG ADULTS**
Selection, use and organization of literature for students in grades 8-12; reading materials, resources and bibliography sources.

- LLLS 5533: SELECTING LITERATURE AND MATERIALS FOR CHILDREN**
Selection of literature and other resources, including motivational techniques for encouraging an interest in reading appropriate for EC-8 students.
- LLLS 5534: FOUNDATIONS IN SECONDARY LITERACY**
Theories and practices of secondary reading and writing, reader response theory, physiological, and psychological foundations of secondary reading in grades 4-12.
- LLLS 5634: TEACHING METHODS FOR ENGLISH/READING LANGUAGE ARTS: GRADES 8-12**
Prerequisite: Admission to Teacher Education Program. Implementation of English/reading language arts teaching methodologies for grades 8-12 based upon application of theory and practice. Field experiences required.
- LLLS 5635: THE TEACHING OF WRITING I**
Prerequisite: Concurrent enrollment in LLLS 5636. Teaching writing skills and improving student writing in grades K-12 using a process approach; instructional strategies based upon theory and current research.
- LLLS 5636: THE TEACHING OF WRITING II**
Prerequisite: Concurrent enrollment in LLLS 5635. Teaching writing skills and improving student writing in grades K-12 using a process approach; instructional strategies based upon theory and current research.
- LLLS 5736: PRACTICUM: ASSESSMENT AND INITIAL INSTRUCTIONAL TECHNIQUES FOR EARLY INTERVENTION OF LITERACY**
Introduces Reading Recovery teacher-in-training techniques which focus upon assessment and observation methods of early literacy, theoretical framework for early intervention and introduction of instructional strategies. Field experiences required.
- LLLS 5737: PRACTICUM: ADVANCED INSTRUCTIONAL TECHNIQUES AND SUMMATIVE ASSESSMENT PROCEDURES FOR EARLY INTERVENTION OF LITERACY**
Introduces Reading Recovery teacher-in-training techniques which focus upon advanced instructional techniques and summative assessment procedures for early intervention of literacy. In addition, a theoretical framework for early literacy will be applied during on-site training with first grade children. Field experiences required.
- LLLS 5738: FOUNDATIONS OF EARLY LITERACY**
Theories and practices of early literacy development including phonics, phonemic awareness, early writing development and speaking and listening. This course includes training for leadership in early literacy practices
- LLLS 5931: RESEARCH TOPICS IN LITERACY, LANGUAGE AND LIBRARY SCIENCE**
Identified by title each time course is offered.
- LLLS 5939: INDEPENDENT STUDY IN LITERACY, LANGUAGE AND LIBRARY SCIENCE**
Prerequisites: Approval of instructor and Associate Dean.
- LLLS 6131: SELECTION AND USE OF SCHOOL LIBRARY MATERIALS**
Fundamental criteria, tools and resources applicable to the selection of print and non-print materials in school libraries.
- LLLS 6132: CATALOGING AND CLASSIFICATION**
Fundamentals of cataloging print and non-print materials in school libraries.
- LLLS 6133: REFERENCE AND BIBLIOGRAPHY**
Study, evaluation and application of print and non-print reference sources used in school libraries.
- LLLS 6231: LIBRARY INFORMATION AND RETRIEVAL SYSTEMS**
An introduction and evaluation of current library information and retrieval systems and their application to school libraries.
- LLLS 6331: SOCIOLINGUISTIC APPLICATIONS TO READING**
Examination of sociolinguistic models and concepts, the study of language in educational settings and language differences applied to reading instruction.

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- LLLS 6334: ADMINISTRATION OF SCHOOL LIBRARY SERVICES**
Principles and illustrative practices in the organization, budgeting, policy making, facilities planning and staffing of school libraries.
- LLLS 6336: MEDIA AND TECHNOLOGY SELECTION AND APPLICATION**
Selection, evaluation and application of audio visual and computer software and hardware, including the design and production of media in school libraries.
- LLLS 6639: LEADERSHIP IN CLINICAL PRACTICES IN ASSESSMENT OF LITERACY TASKS**
Prerequisites: 12 hours Reading course work including LLLS 6732. Advanced techniques in assessment and strategies for intervention in problem reading situations; includes practice in reading supervision. Field experiences required.
- LLLS 6732: ASSESSMENT AND REMEDIATION OF READING AND LANGUAGE ARTS LITERACY**
Prerequisites: Six hours Reading course work. Practice in assessment and remediation of literacy. Simulated and laboratory practice in administration, interpretation, evaluation of literacy assessment instruments and practice with a multiplicity of reading/language arts strategies for literacy development including dyslexia and related disorders.
- LLLS 6739: INTERNSHIP IN SCHOOL LIBRARY PRACTICE**
Prerequisites: Completion of 18 hours in the School Library Core and approval of Associate Dean. Supervised field experiences in EC-12, incorporating information skills instruction, daily logs and seminars.

STUDIES IN LANGUAGE AND CULTURE

- SILC 5031: CURRICULUM ISSUES IN EDUCATING THE BILINGUAL STUDENT**
Prerequisite: Fluency in Spanish. Study and design of the curriculum for bilingual education programs with emphasis on teaching academic content areas (mathematics, social sciences and sciences) and vocabulary development. Course taught in Spanish.
- SILC 5032: APPLIED LINGUISTICS FOR BILINGUAL EDUCATION/ESL**
Analysis of language development, language acquisition and language use.
- SILC 5033: CROSS-CURRICULAR LITERACY FOR SECOND LANGUAGE LEARNERS**
Research, theory and practice in the development of reading and writing skills for second language learners in all content areas.
- SILC 5034: COMMUNITY COLLABORATION**
Prerequisite: SILC 6030. Establishing partnerships to meet the needs of diverse communities. Field experiences required.
- SILC 5035: INTERPERSONAL INTERACTIONS IN DIVERSE SETTINGS**
Prerequisite: SILC 6030. Emphasis on developing an understanding of the implications of cross-cultural differences and similarities and the skills required for professionals working within a diverse setting.
- SILC 5036: MULTICULTURAL CURRICULUM DEVELOPMENT**
Prerequisite: SILC 6030. The study of materials, strategies and issues related to the development of multicultural curricula. Addresses the needs of general education, special education, early childhood education and reading/library resource personnel.
- SILC 5130: THEORY AND RESEARCH IN BILINGUAL AND ESL EDUCATION**
Survey of theoretical, historical, legal and sociocultural basis of bilingual education and ESL programs.
- SILC 5134: SECOND LANGUAGE TEACHING**
Trends, issues and practices related to the teaching of English as a second language.
- SILC 5531: LITERACY FOR SPANISH-SPEAKING STUDENTS**
Prerequisite: Fluency in Spanish. Study of traditional and contemporary views of literacy in Spanish. Focus on teaching Spanish language arts and reading to students whose first language is Spanish. Course taught in Spanish.
- SILC 5931: RESEARCH TOPICS IN THE STUDIES OF LANGUAGE AND CULTURE**
Identified by title each time course offered.

- SILC 5939: INDEPENDENT STUDY IN LANGUAGE AND CULTURE**
Prerequisites: Approval of instructor and Associate Dean.
- SILC 6030: FOUNDATIONS OF MULTICULTURAL EDUCATION**
Social, cultural and legal issues regarding diversity in the United States.
- SILC 6032: MODELS OF LANGUAGE**
A study of the components of language and the use of phonology, morphology, syntax and semantics to describe them. Focuses on describing languages and dialectical variations.
- SILC 7030: INTERCULTURAL COMMUNICATION**
Focuses on the understanding of cultural issues that influence communication effectiveness with diverse populations.

SPECIAL EDUCATION

- SPED 5030: SURVEY OF INDIVIDUAL DIFFERENCES**
Study of various theories of cognition and learning in relation to individuals with disabilities. Provides an in-depth study of various categories of disabilities to include characteristics, causation and the course of disability throughout the lifespan.
- SPED 5131: EDUCATIONAL ASSESSMENT OF EXCEPTIONALITIES**
Prerequisite: SPED 5030 or equivalent. A review of procedures used for diagnosing disabilities and an in-depth study of procedures used in special education settings with an emphasis on informal techniques, authentic assessment and functional analysis of behavior.
- SPED 5132: CURRICULAR APPROACHES TO LEARNING DIFFICULTIES**
Prerequisite: SPED 5030 or equivalent. Causal factors and remedial alternatives for children with low performance records in regular school environments.
- SPED 5133: PROGRAMMING FOR EDUCATIONAL DISABILITIES**
Prerequisites: SPED 5131, 5132, 5233, 5331. Applied behavior analysis approach to prescriptive models for intervention in cases of educational difficulties. Field experiences required.
- SPED 5233: PROVIDING POSITIVE BEHAVIORAL SUPPORT**
Prerequisite: SPED 5030 or equivalent. A study of the theoretical, legal, social and philosophical issues related to the principles and practices for supporting students with challenging behaviors in school settings to include development of intervention plans.
- SPED 5331: COLLABORATION AND CONTINUITY IN PROGRAMMING FOR INDIVIDUALS WITH DISABILITIES**
Prerequisite: SPED 5030 or equivalent. A study of issues and skills related to programming across the lifespan with a focus on collaborative processes involving professionals, students and their families.
- SPED 5332: EXCEPTIONALITIES IN INFANTS AND YOUNG CHILDREN**
Prerequisite: SPED 5030 or equivalent. A study of various educational models and methods for the assessment and service provision to infants and young children with special needs. Field experiences required.
- SPED 5333: ADVANCED STUDIES OF EXCEPTIONALITIES IN INFANTS AND YOUNG CHILDREN**
Prerequisite: ECED 5332 or SPED 5332. Advanced studies of the education of infants and young children with disabilities to include service coordination, assistive/adaptive technologies and health care issues. Field experiences required.
- SPED 5737: PRACTICUM: INFANTS AND YOUNG CHILDREN WITH EXCEPTIONALITIES**
Prerequisites: ECED/SPED 5332 and ECED/SPED 5333. Completion of all prior course work for the Early Childhood Handicapped Endorsement. Fieldwork with infants and/or young children with disabilities; not limited to school, agency or privately funded programs.
- SPED 5931: RESEARCH TOPICS IN SPECIAL EDUCATION**
Identified by title each time course is offered.
- SPED 5939: INDEPENDENT STUDY OF EXCEPTIONALITIES**
Prerequisites: Approval of instructor and Associate Dean.

TEACHER EDUCATION

*See INST footnote

- TCED 5010: PROFESSIONAL PREPARATION SEMINAR**
 Prerequisite: An approved, signed degree or certification plan on file in the SoE; assists students with degrees to connect all facets of teacher certification in order to make a successful entry into their chosen educational field.
- TCED 5014: MENTORING AND COGNITIVE COACHING**
 Enables participants to apply peer mentoring and cognitive coaching theories and will include observation and feedback techniques.
- TCED 5030: MODELS OF TEACHING**
 Analysis of the knowledge base for instruction and development of proficiency in a variety of teaching models.
- TCED 5031: CURRICULUM PLANNING**
 Prerequisite: TCED 5030. Design and evaluation of curriculum for early childhood through twelfth grade; study of curriculum theory, design principles, issues and trends.
- TCED 5032: PREPARATION FOR K-12 EDUCATORS FOR NATIONAL BOARD FOR PROFESSIONAL TEACHING STANDARDS I**
 Prerequisite: 3 years of teaching experience. Initial preparation for educators grades K-12 for National Board for Professional Teaching Standards. Course includes preparation for description, analysis and reflection upon professional development and teaching to match the requirements for the national standards.
- TCED 5033: PREPARATION FOR K-12 EDUCATORS FOR NATIONAL BOARD FOR PROFESSIONAL TEACHING STANDARDS II**
 Prerequisite: TCED 5032. Includes preparation for the professional teaching portfolio, the description, analysis and reflection of the components of the portfolio and preparation for the written examination.
- TCED 5036: ISSUES OF PEDAGOGY**
 Prerequisites: EDUC 6033 and TCED 5030. An in-depth examination of current curricular and instructional issues in research, specifically tied to students' teaching practice. One focus area will be assessment – data analysis, impact and implications.
- TCED 5231: TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL**
 Prerequisite: Admission to Teacher Education Program. Utilization of new programs, processes and equipment designed to individualize instruction in social studies. Field experiences required.
- TCED 5232: TEACHING SCIENCE IN THE EC-6 CLASSROOM**
 Prerequisite: Admission to Teacher Education Program. Development of science concepts in EC-6 instruction. Emphasis on curriculum materials and the process approach as a science teaching method. An examination of National Science Foundation curriculum projects as related to EC-6. Field experiences required.
- TCED 5233: TEACHING MATHEMATICS IN THE EC-6 CLASSROOM**
 Prerequisites: MATH 3032 and Admission to Teacher Education Program. Development of mathematical concepts and teaching strategies for EC-6. Emphasis on problem solving with manipulative and curriculum materials appropriate for use with EC-6 students. Field experiences required.
- TCED 5234: SOCIAL STUDIES METHODS FOR THE SECONDARY GRADES**
 Prerequisite: Admission to Teacher Education Program. Curriculum designs, instructional models and authentic assessment techniques for developing social studies knowledge, citizenship and critical thinking skills; emphasis on best practice and research based strategies for teaching secondary students. Field experiences required.
- TCED 5235: SCIENCE METHODS FOR THE SECONDARY GRADES**
 Prerequisite: Admission to Teacher Education Program. Strategies for teaching secondary science including field studies, research and incorporation of local environmental issues; emphasis on recent research as it relates to science education; addressing issues and trends in secondary science education and enhancing science achievement in the classroom. Field experiences required.

- TCED 5236: MATHEMATICS METHODS FOR THE SECONDARY GRADES**
Prerequisite: Admission to Teacher Education Program. Curriculum designs, instructional models and authentic assessment techniques for developing mathematical knowledge and problem-solving skills; emphasis on best practice and research based strategies for teaching mathematics to secondary students. Field experiences required.
- TCED 5332: TEACHING SCIENCE IN THE 4-8 CLASSROOM**
Prerequisite: Admission to Teacher Education Program. Development of science concepts and teaching strategies for grades 4-8. An emphasis on the inquiry approach to teaching science consistent with concepts of cognitive development. Integrated Physics and Chemistry as well as the use of technology in the science classroom will be addressed. An examination of National Science Foundation curriculum projects as related to grades 4-8. Field experiences required.
- TCED 5333: TEACHING MATHEMATICS IN THE 4-8 CLASSROOM**
Prerequisites: MATH 3037 and Admission to Teacher Education Program. Development of mathematical concepts and teaching strategies for grades 4-8. Emphasis on problem solving with manipulative and curriculum materials appropriate for use with 4-8 students. Algebraic and graphing technology will be addressed. Field experiences required.
- TCED 5431: NATURE OF THE MIDDLE LEVEL LEARNER**
A developmental approach to the study of early adolescents with emphasis on their physical, emotional, intellectual and moral development, learning styles, culturally related differences and discipline management techniques.
- TCED 5530: ADOLESCENT DEVELOPMENT AND CURRICULUM**
A developmental approach to the study of adolescents, related to discipline, classroom management and scope and sequence of curriculum.
- TCED 5630: EDUCATING THE GIFTED AND TALENTED LEARNER**
A historical survey of the field, definitions, basic terminology, theories, models and characteristics of the gifted and talented; brief summary of identification and assessment procedures; models for interaction with gifted students and a review of effective programs.
- TCED 5631: GAMES, LOGIC AND GIFTEDNESS**
Game-like techniques for teaching gifted students formal and informal logic and critical thinking in mathematics, science and language; includes laboratory experiences teaching new thinking skills.
- TCED 5632: GROWTH AND DEVELOPMENT OF THE GIFTED LEARNER**
Examines the differentiated affective characteristics and needs of the gifted including a review of general counseling theories, effective communication skills, assessment of affective needs, strategies for assisting the gifted in developing interpersonal skills and issues surrounding the potential of the gifted to make the significant contributions to society.
- TCED 5634: CURRICULUM DEVELOPMENT FOR GIFTED AND TALENTED LEARNERS**
Provides the foundation for the development of differentiated curricula for gifted students. Significant curriculum models are presented. Other topics include effective teaching strategies, adapting curriculum for individual differences, the organization of curriculum for the gifted and the teaching of higher-level cognitive skills.
- TCED 5636: CREATIVE THEORIES, MODELS AND APPLICATIONS FOR THE GIFTED LEARNER**
Survey of the concept of creativity including topics such as instruments and techniques for identifying creativity, theories and models of creativity, techniques for creative enrichment and challenges unique to creative persons.
- TCED 5637: PRACTICUM IN GIFTED AND TALENTED EDUCATION**
Fieldwork with gifted and talented students.
- TCED 5911: RESEARCH TOPICS IN TEACHER EDUCATION**
Identified by specific title each time course is offered.
- TCED 5921: RESEARCH TOPICS IN TEACHER EDUCATION**
Identified by specific title each time course is offered.
- TCED 5931: RESEARCH TOPICS IN TEACHER EDUCATION**
Identified by specific title each time course is offered.
- TCED 5939: INDEPENDENT STUDY IN TEACHER EDUCATION**
Prerequisites: Approval of instructor and Associate Dean.

TCED 6031: APPLICATION OF TECHNOLOGY IN THE CLASSROOM

Prerequisite: Basic computer literacy*. Students will learn how to use and integrate computers and various software applications (e.g., word processors, databases, spreadsheets, graphics) with instruction to facilitate learning and performance. They will also be instructed in the use of educational software, multimedia development and telecommunication technologies such as e-mail and the Internet that can be used to enhance student learning.

TCED 6734: ADVANCED SEMINAR IN SCIENCE EDUCATION

Advanced topics on research in science education; emphasis on instructional techniques and concept formation.

TCED 6735: SEMINAR IN ENVIRONMENTAL EDUCATION

Curricular implications of energy and environmental issues; emphasis on instructional techniques in science, social studies and other subject matter areas.

TCED 6739: INTERNSHIP IN CURRICULUM AND INSTRUCTION

Prerequisite: Approval of the Associate Dean. Supervised internship in curriculum and instruction.



David Benz, Director of Student Relations, and Caroline M. Crawford, Associate Professor of Instructional Technology, recruit students to UHCL programs at the Texas Computer Education Association's Annual Convention and Exposition in Austin, Texas.



UHCL geography students and Assistant Professor of Geography Jeff Lash, far left in the back row, take a moment to commemorate their 14-day trek to explore the geography of Texas before leaving UHCL May 13. The trip received funding from National Geographic Society Education Foundation.

SCHOOL OF HUMAN SCIENCES AND HUMANITIES

- Behavior Analysis
- Behavioral Sciences – General
- Clinical Psychology
- Criminology
- Cross-Cultural Studies
- Digital Media Studies
- Family Therapy
- Fitness and Human Performance
- History
- Humanities
- Literature
- Psychology
- School Psychology
- Sociology

The School of Human Sciences and Humanities (HSH) is dedicated to the study of people. The school fosters the liberal arts and encourages practical preparation for occupations.

Instead of many separate departments, there are two interrelated clusters: Humanities and Fine Arts (HFA) and Human Sciences (HS). Within these plans, students may develop either a broadly interdisciplinary plan of study or one that is more narrowly focused, resembling traditional departmental majors. With the help of faculty advisers, students develop the plans most appropriate to their interests and goals.

ADMISSION INTO A DEGREE PLAN

Records for degree-seeking graduate students are processed by the Office of Admissions and forwarded to the dean's office for faculty assignment and completion of the degree plan.

Requirements for each HSH degree plan are detailed in the following pages.

Information on HSH degree plans and advising schedules can be obtained from the HSH Advising Office.

There are two ways applicants can be accepted into a graduate degree plan in the School of Human Sciences and Humanities:

- Those applicants who have a minimum of a 3.000 cumulative grade point average (GPA) in their last 60 hours of course work meet the School's graduate admissions criterion. Those applicants who are certain that they meet the minimum cumulative GPA requirement are not required to take the GRE.
- For students whose cumulative GPA falls below 3.000, there is a second procedure by which they can be considered for admission into a graduate degree plan. They must submit scores from the Verbal and Quantitative portions of the Graduate Record Examination (GRE). To be admitted into degree candidacy in HSH under the second option, students must have a minimum score of 2050 using the following formula: $(\text{GPA in the last 60 hours} \times 500) + \text{GRE Verbal} + \text{GRE Quantitative} = 2050$ or higher.

In order to have adequate time to review applicants' material, the Application for Admission, transcripts for all prior college course work and GRE scores (if necessary) must be received by the Office of Admissions according to the following deadlines:

- Fall Enrollment.....August 1
- Spring Enrollment.....December 1
- Summer Enrollment.....May 1

Students wishing to apply to one of the Professional Psychology Plans (Clinical Psychology, Family Therapy, School Psychology) should refer to that section of the Catalog for information about the Professional Psychology admission process, requirements and deadlines.

	Office	Phone
Office of Academic Advising	Bayou 1539	281-283-3333
Office of the Dean	Bayou 1529	281-283-3300
Dir., Texas Dept. of Criminal Justice Program	Bayou 1617	281-283-3420
Web Site http://www.uhcl.edu/hsh		

Certificate in Women's Studies

Women's Studies is an interdisciplinary curriculum administered by the School of Human Sciences and Humanities. Women's Studies courses offer challenging new perspectives by exploring the special contributions of women and the impact of gender in a variety of academic disciplines.

Inquiries should be addressed to the convener of Women's Studies.

Certificate Requirements

Nine hours of Women's Studies courses in any combination.

Highly recommended:

WMST 5732 Seminar in Women's Studies

MA in Humanities-Women's Studies Sub-Plan requirements:

Within Sub-Plan I, Texts, students select nine hours of graduate Women's Studies courses.

Highly recommended:

HUMN 5732 Seminar in Women's Studies

Other Women's Studies courses are identified in the course roster.

PLANS IN HUMAN SCIENCES

Plans in Human Sciences are designed to help students explore a number of significant issues: to understand one's self in relation to others; to distinguish what is genuinely personal from what is societal; to help in the difficult processes of value formation and critical thinking; to come to a more subtle appreciation of collective ideals and notions of the good life, the nature of happiness and how to secure it; and to cope intelligently with the complexities and problems of modern society.

Plans in Human Sciences have strong theoretical and applied orientations. As these plans seek better understanding of self and society, they are equally intended to prepare students for a variety of professional careers, such as work in human service agencies, scientific research and college teaching. For specific information regarding careers in any of the human sciences, students should consult the HSH Advising Coordinator.

MASTER OF ARTS DEGREES IN BEHAVIORAL SCIENCES

The graduate plans in Behavioral Sciences lead to the master of arts (MA) degree. The plans are a vehicle for advanced study of human behavior. Although course work is taken primarily in psychology, sociology and anthropology, students are encouraged to take additional course work in other appropriate areas. Applicants should have strong undergraduate preparation in the behavioral sciences; those with fewer than 12 upper-level hours are required to take additional undergraduate course work at UHCL. Inquiries should be addressed to the HSH Advising Coordinator.

Areas of Non-Clinical Study

The following areas of study are available to graduate students in Behavioral Sciences:

- Behavioral Sciences-General
- Psychology
- Behavior Analysis
- Sociology

These plans are not designed to prepare students to deliver clinical services, but, depending on the plan, to deliver human services, teach in community colleges or for preparation for further graduate study.

Degree Requirements

The Candidate Plan of Study (CPS) must include the following requirements:

1. A minimum of twelve upper-level hours in the behavioral sciences (anthropology, psychology, sociology). If this requirement has not been met prior to admission, then such courses must be taken before beginning work toward the master of arts.
2. Minimum of 36 hours, at least 30 of which must be earned in courses at the 5000 or 6000 level.
3. Six hours in Research Design and Statistical Measurement at the 5000 or 6000 level.
4. A minimum of six hours in one of the following master's options.
 - a. Master's Thesis
 - b. Master's Project
 - c. Graduate Internship
5. Registering for a master's thesis, project or internship should not be seen as an automatic right. Students wishing to do a master's option must submit a master's option proposal. For the thesis or project the proposal should be three to six pages in length. It should include a literature review, with references and a statement of the proposed methodology for carrying out the thesis or project. Before registering for thesis or project students must have the approval of a faculty

member who agrees to supervise the work. Before registering for an internship students must apply through the internship coordinator and meet the required criteria, including a grade point average of 3.00 or better. The university reserves the right to deny admittance to or remove a specific student from a specific internship.

6. Grades of “B-” or better must be earned for at least 30 hours of course work. Grades of “C+” or below are not acceptable for these 30 hours.
7. Maximum of 12 graduate credits earned at another institution may be applied toward the master of arts degree if the following requirements are met:
 - a. The course or courses are pertinent to the degree objective and the CPS.
 - b. The course or courses were taken not more than five years before admission to graduate study at UHCL.
 - c. Grades of “B-“ or better were earned. Grades of “C+” or below are not acceptable.
 - d. The course or courses were not applied to a graduate degree already earned.
 - e. The course or courses were not taken by correspondence or extension.
 - f. At least 24 credits of the degree plan must be earned at UHCL.

MASTER OF ARTS IN BEHAVIORAL SCIENCES-GENERAL

Prerequisites: Twelve upper-level hours in the behavioral sciences with a grade of “C” or above. Grades of “C-“ or below are not acceptable.

General Requirements:

PSYC 6036/6037	Research Design and Statistics I and II or	6 hours
SOCI 6730	Graduate Statistics and	
SOCI 6731	Graduate Research Methods	
CRCL 5031	Cultural Diversity or	3 hours
CRCL 5035	Human Rights and Social Justice	
PSYC 5031	Human Growth and Development	3 hours
SOCI 5333	Minorities and Majorities or	3 hours
SOCI 5236	Religion and Global Change or	
SOCI 5334	Social Stratification	
PSYC 6739/ SOCI 6739 ^{1,2}	Graduate Internship or	6 hours
PSYC 6839/ SOCI 6839	Master’s Project or	
PSYC 6939/ SOCI 6939	Master’s Thesis	

¹Completion of PSYC 5134 Interviewing and Assessment is a prerequisite for an internship in a human services setting, unless an equivalent course has been taken previously.

²PSYC 5135 Professional Issues and Ethics is a prerequisite for all internships.

Area of Specialization

Students select 15 hours from the behavioral sciences or other relevant disciplines with the approval of the academic adviser and the HSH Advising Coordinator. In addition, students must develop with their advisers a written focus statement that will guide their elective course work. This focus statement will be attached to the degree plan.

WOMEN’S STUDIES SUB-PLAN

As part of the 15 remaining hours at least 9 hours selected from:

CRCL 5131	Gender, Culture and Power	PSYC 5533	Psychology of Gender, Race & Sexuality
PSYC 5337	Violence Against Women		
PSYC 5732	Sem in Women’s Studies (strongly recommended)	PSYC 5831	Gender Persp in Therapy

An additional three hours of Women’s Studies courses selected from graduate level HIST/LITR/ HUMN/PHIL/ARTS. An additional 3 hours of electives.

INDUSTRIAL/ORGANIZATIONAL (I/O) SUB-PLAN

The I/O Sub-Plan is designed for students who seek training in such areas as training and development and human resources. Internships are available only in the fall and spring semesters in this sub-plan and may not be available outside of regular work hours. Please note that an Internship requires PSYC 5134 Interview/Assessment and PSYC 5135 Professional Issues as prerequisites.

Core Course requirements (18 hours):

PSYC 5331	Personnel Psychology	PSYC 6036	Res Design and Stat I
PSYC 5332	Organizational Psychology	PSYC 6037	Res Design and Stat II
PSYC 5334	Change and Organizational Development	PSYC 6734	Assessment in Industry

Approved electives 15 hours

Master’s Options

Students select one of the options listed below:

PSYC 6739	Graduate Internship or	6 hours
PSYC 6839	Master’s Project or	6 hours
PSYC 6939	Master’s Thesis or	6 hours

Course Work Option:

Students selecting a course work option will take all 18 hours of course work listed under the core course requirements for the I/O Sub-Plan plus PSYC 6735 Seminar in I/O Psychology plus 21 hours of approved electives.

MASTER OF ARTS IN PSYCHOLOGY

This degree requires 36 hours with a thesis or project as the master’s option or 42 hours with the internship as the master’s option. Any undergraduate prerequisite hours not completed before enrollment are additional.

Prerequisites:

1. Introductory psychology or equivalent (three hours)
2. Four courses from the following nine areas in psychology with a grade of “B-“ or better in each course. Grades of “C+” or below are not acceptable. At least two of the four courses must have been taken at the upper-level.

- a. Systems and theories of psychology
 - b. Theories of personality
 - c. Child psychology (developmental psychology)
 - d. Social psychology
 - e. Abnormal psychology
 - f. Learning
 - g. Brain and behavior (biopsychology; physiological psychology)
 - h. Cognitive psychology
 - i. Psychological Thinking
3. Course in statistics. Students whose undergraduate work does not include three hours in statistics must take PSYC 4730 Behavioral Statistics or PSYC 4631 and 4632 Research Design and Statistical Methods I and II.
 4. Students are expected to demonstrate graduate level writing ability. Those students whose writing is deemed unacceptable will be advised to take remedial courses.

Foundation Requirements: 18 hours

PSYC 6036/6037 Research Design and Statistics I and II	6 hours
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Students must take at least four of the following five core Psychology classes:

PSYC 5031	Human Growth and Development	3 hours
PSYC 5235	Learning Principles	3 hours
PSYC 5532	Advanced Social Psychology	3 hours
PSYC 6832	Advanced Cognitive Psychology	3 hours
	Prerequisite: PSYC 4832: Cognitive Psychology	
PSYC 6134	Biological Basis of Behavior	3 hours

(If an equivalent undergraduate course was taken, substitute PSYC 5432 Psychoactive Drugs)

Master's Options

Students select one of the options listed below:

PSYC 6739	Graduate Internship ^{1,2,3}	6 hours
PSYC 6839	Master's Project ¹	6 hours
PSYC 6939	Master's Thesis ¹	6 hours

¹These three options require considerable advance planning. Students may have to meet additional criteria before being permitted to begin one of these options. Students wanting one of these options must make arrangements with a faculty adviser at least one semester in advance. The university reserves the right to deny admittance to or remove a specific student from a specific internship. Master's projects, theses and internships require continuous registration during each fall and spring semester until completion, for a minimum of six hours. If students do not maintain continuous registration in the master's project, thesis or internship, previously accumulated master's option credits will not count toward the master's degree.

²Completion of PSYC 5135 Professional Issues in Human Services is a prerequisite for all PSYC internships.

³Completion of PSYC 5134 Interviewing and Assessment is a prerequisite for an internship in a human services setting, unless an equivalent course has been taken previously. If PSYC 5134 is not needed, the student must take an extra elective to complete the 42 required hours.

Area of Specialization

Twelve additional hours (18 additional hours for students doing the internship option) are selected from psychology and/or other relevant disciplines with the approval of the academic adviser and the HSH Advising Coordinator. These hours are designed to provide a specific disciplinary focus within psychology. These courses may focus on biopsychology, life-span development, human performance or some other area of choice.

Grades

Only grades of “B-” or better will count toward the Master of Arts in Psychology. Grades of “C+” or below are not acceptable.

Limitations

No more than six hours of video courses can be counted toward this degree. No more than nine hours of a combination of Independent Study, Behavioral Neuroscience Research or Behavioral Pharmacology Research courses can be counted toward this degree.

APPLIED COGNITIVE PSYCHOLOGY SUB-PLAN

Applied Psychology is the application of principles and techniques of Psychology to a real world problem. In Applied Cognitive Psychology, (ACP), principles and methods associated with Cognitive Psychology are applied to the human-machine interface to improve the usability and effectiveness of the interface. The Applied Cognitive Psychology Sub-Plan is designed to focus on Human Factors and thus provides students with a well-rounded foundation in psychology, the user centered design process and the methods used to evaluate human-machine interfaces. Students will obtain basic competency in perception, cognition and information processing systems as well as how to apply this knowledge to the design of the human-machine interface.

Practicum and research experiences will be provided in laboratory and industrial settings. All students will complete a major research project prior to graduation. The sub-plan includes a course sequence that prepares the student to take the exam to become a Certified Professional Ergonomist (CPE) or Certified Human Factors Professional (CHFP).

Psyc 6036/6037	Research Design and Statistics I and II	6 hours
Core Psychology Courses (Select 3 of 5)		9 hours
PSYC 5031	Human Growth and Development	
PSYC 5235	Learning Principles	
PSYC 5332	Organizational Psychology	
PSYC 5532	Advanced Social Psychology	
PSYC 6134	Biological Basis of Behavior	
Required Applied Cognitive Psychology Courses		21 hours
PSYC 6832	Advanced Cognitive Psychology	
*PSYC 6431	User Centered Design	
*PSYC 6434	Human Factors Engineering	
PSYC 6x3x	Human Factors Methods and Analysis	
PSYC 6x1x	Human Factors and Ergonomics Seminar ¹	
PSYC 6x3x	Practicum in Human Factors ²	
Applied Cognitive Psychology Elective (Select 1)		3 hours

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CSCI 3131	Programming with Visual Basic	
DMST 5039	Web Design	
DMST 5232	Technical Foundations of Digital Media	
INDH 4231	Ergonomics, Human Factors and Workplace Design	
INDH 5335	Ergonomic Methods and Analysis Techniques	
PSYC 5339	Training and Development	
Master's Option		6 hours
PSYC 6739	Graduate Internship ³ or	
PSYC 6939	Master's Thesis ³	

¹Must be taken every Fall and Spring semester while enrolled in the Sub-Plan for a minimum of 3 semesters.

²Must be taken for two semesters

³ Pre-requisite: PSYC 6x3x Practicum in Human Computer Interaction

*Pending Coordinating Board approval

Certificate in Human Factors/Ergonomics

Students enrolled in the Human Factors/Ergonomics Certificate Program complete the following courses:

PSYC 6036/6037	Research Design and Statistics I and II	6 hours
*PSYC 6434/INDH 5334	Human Factors Engineering	3 hours
*PSYC 6431	User Centered Design	3 hours
PSYC 6x3x	Research Topic: Human Factors Methods and Analysis	3 hours
INDH 5335	Ergonomics Methods and Analysis Techniques	3 hours
*Pending Coordinating Board approval		

MASTER OF ARTS IN BEHAVIOR ANALYSIS

The goal of this degree plan is to provide students with a foundation in behavior analysis and psychology through an integrated sequence of course work, practicum and research activities. Students obtain competency in the basic principles of learning and the application of these principles with particular emphasis on interventions for children with developmental disabilities. Practicum and research experiences are provided in home, school and clinic settings. All students complete a major research project prior to graduation. The program includes a course sequence and practicum that have been approved by the Behavior Analyst Certification Board, Inc®. Students completing the course work and practicum requirements of the program will be eligible to sit for the Board Certified Behavior Analyst (BCBA) exam. Students wishing to enroll in this degree plan must formally apply. Additional information can be obtained by contacting the faculty coordinator.

Prerequisites: Twelve hours of undergraduate psychology with a grade of "B-" or better in each course and a course in statistics. At least two of the four psychology courses must have been taken at the upper-level.

Required Plan Core Courses (33 hours)

PSYC 5235	Learning Principles	3 hours
PSYC 6238	Applied Behavior Analysis	3 hours
PSYC 6031	Behavioral Assessment	3 hours
PSYC 6239	Behavioral Interventions I1	3 hours
*PSYC 6331	Behavioral Interventions II1	3 hours

PSYC 6036/ 6037	Research Design and Statistics I and II	6 hours
PSYC 6134	Biological Bases of Behavior	3 hours
PSYC 5135	Professional Issues	3 hours
PSYC 6330	Research & Practicum in Applied Behavior Analysis ²	6 hours

Students select one of the following behavior analysis electives (3 hours)

PSYC 5736	Behavioral Medicine	3 hours
PSYC 6235	Behavioral/Cognitive Therapies	3 hours
PSYC 5931	Research Topics in Psychology (Behavior Analysis)	3 hours

Students select two of the following psychology electives (6 hours)

PSYC 5031	Human Growth and Development	3 hours
PSYC 5131	Psychopathology of Childhood	3 hours
PSYC 5532	Advanced Social Psychology	3 hours
PSYC 6832	Advanced Cognitive Psychology	3 hours

¹This seminar course includes class meetings and up to 10 hours per week of field activities in home, school and clinic settings.

²This course requires completion of a research project and 20 hours per week of field experience in home, school or clinic settings for two semesters (3 credits per semester).

*Pending Coordinating Board approval

Applied Behavior Analysis Certificate

The Applied Behavior Analysis Certificate is designed for individuals who have already earned a master's degree in Psychology or a related discipline and who would like to complete the course work and practicum required to sit for the Board Certified Behavior Analyst (BCBA) exam. Students wishing to enroll in this option must formally apply. Additional information can be obtained by contacting the faculty coordinator. The certificate will be granted by the School of Human Sciences and Humanities upon completion of the following courses:

PSYC 5235	Learning Principles	3 hours
PSYC 6238	Applied Behavior Analysis	3 hours
PSYC 6031	Behavioral Assessment	3 hours
PSYC 6239	Behavioral Interventions I ¹	3 hours
*PSYC 6331	Behavioral Interventions II ¹	3 hours
PSYC 6330	Research & Practicum in Applied Behavior Analysis ²	6 hours

¹This seminar course includes class meetings and up to 10 hours per week of field activities in home, school and clinic settings.

This course requires completion of a research project and 20 hours per week of field experience in home, school or clinic settings for two semesters (3 credits per semester).

*Pending Coordinating Board approval

MASTER OF ARTS IN SOCIOLOGY

General Requirements

1. Thesis Option (total hours = 30)

SOCI 5131	Contemporary Sociological Theory	3 hours
SOCI 6730	Graduate Statistics	3 hours
SOCI 6731	Graduate Research Methods	3 hours

Core Classes: Students must take at least nine hours of core Sociology classes (listed below)

Electives	6 hours
SOCI 6939 Master's Thesis Research ¹	6 hours

¹The thesis is a 35-40 page paper that could potentially be publishable in a Sociology scholarly journal (it must be in American Sociological Association format, use real data, contain a literature review and test at least one hypothesis derived from a Sociological theory). This option requires a thesis committee, a proposal, a completed thesis approved by the student's thesis committee and the successful defense with a thesis committee consisting of at least two sociologists.

2. Project Option (total hours = 36)

SOCI 5131	Contemporary Sociological Theory	3 hours
SOCI 6730	Graduate Statistics	3 hours
SOCI 6731	Graduate Research Methods	3 hours

Core Classes: Students must take at least nine hours of core Sociology classes (listed below)

Electives	12 hours
SOCI 6839 Master's Project Research	6 hours

3. Internship Option (total hours = 36)

SOCI 5131	Contemporary Sociological Theory	3 hours
SOCI 6730	Graduate Statistics	3 hours
SOCI 6731	Graduate Research Methods	3 hours

Core Classes: Students must take at least 9 hours of core sociology classes (listed below)

Electives	12 hours
SOCI 6739 Graduate Internship	6 hours

Core Sociology Classes

Students must take a minimum of nine hours selected from the following:

SOCI 5136	Women and the Law	SOCI 5236	Religion and Global Change
SOCI 5137	Race and the Law	SOCI 5333	Minorities and Majorities
SOCI 5331	Advanced Criminology	SOCI 5336	Law and Society
SOCI 5337	Complex Organizations	SOCI 5433	Social Conflict and Mediation
SOCI 5334	Social Stratification	SOCI 5532	Advanced Social Psychology
SOCI 5537	Urban Problems		

Graduate Sociology students are also encouraged to structure their plans of study to reflect concentrations within the discipline. The following concentrations have been developed by the Sociology faculty to help student better plan for their career and/or doctoral educational goals.

1. Graduate Concentration in Diversity

(must successfully complete all 3):

SOCI 5333	Minorities and Majorities
SOCI 5236	Religion and Global Change
SOCI 5334	Social Stratification

2. Graduate Concentration in Work and Occupations

(must successfully complete all 3):

SOCI 5337	Complex Organizations
SOCI 5433	Social Conflict and Mediation
SOCI 5532	Advanced Social Psychology

3. Graduate Concentration in Urban Studies

(must successfully complete all 3):

SOCI 5333	Minorities and Majorities
SOCI 5334	Social Stratification
SOCI 5537	Urban Problems

PROFESSIONAL PSYCHOLOGY PLANS

The graduate programs in Professional Psychology lead to the master of arts (MA) degree. These plans provide a background in psychology as an academic discipline along with specific course work and specialized training in one of three areas: (1) Clinical Psychology, (2) Family Therapy or (3) School Psychology. While completing a Professional Psychology Plan does not automatically qualify graduates for any specific license or clinical credential, many of our graduates have been successfully licensed in Texas as a Licensed Psychological Associate (LPA), Licensed Specialist in School Psychology (LSSP), Licensed Professional Counselor (LPC) and/or Licensed Marriage and Family Therapist (LMFT) or by a number of other professional boards or associations. For further information about certification and licensure, contact the Coordinator of Graduate Programs in Professional Psychology or the HSH Advising Coordinator.

Admission into a Professional Psychology Plan will be offered only to the most qualified applicants. The ordinary minimum standard for admission is an overall 3.250 grade point average, the prerequisite psychology preparation for each program as listed in the plan description below and evidence of clinical aptitude. The percentage of applicants accepted into the professional plans generally ranges between 25% and 75% depending on the program.

Application For Admission

The application process is restricted to only one plan. There is an application fee for the plan application payable to the University of Houston-Clear Lake as described below, which is in addition to the application fee for university admission. All application materials must be submitted in a single envelope, including recommendations and transcripts, submitted as described below. Applicants submit GRE scores to the university following the standard reporting procedure as well as entering them onto the plan application form. Applicants are advised that they must complete a university Application for Admission and submit it and all required fees and documents to the university Admissions Office before beginning the plan, in addition to the plan application described here.

Application for admission to a Professional Psychology Plan:

1. All application materials must be submitted to the appropriate admissions committee in a single envelope, including recommendations and transcripts which are submitted as described below.
2. Professional Psychology application components:
 - a. The Professional Psychology Programs Application (form found in the Professional Psychology Brochure or on the university's Web site)
 - b. A brief curriculum vitae (a résumé including relevant course work and paid or volunteer work experiences, any honors, presentations, papers and other life experiences that should be considered)
 - c. A brief (up to 1000 word) essay stating reasons for wanting this training and how it fits into career goals
 - d. Three Recommendations for Applicant Admission (form found in the Professional Psychology Brochure or on the university's Web site)
 - e. Transcripts from all colleges and universities previously attended (These are in addition to the transcripts sent directly to the UHCL Office of Admissions); applicants should collect all transcripts and include them in the application envelope
 - f. A \$35 check or money order made payable to: UHCL Professional Psychology Plans
 - g. Scores on the Graduate Record Examination (GRE) General Test
 - h. Documents listed in a-f must be sent together in a single envelope to:

_____ Admissions Committee
School of Human Sciences and Humanities
University of Houston-Clear Lake
2700 Bay Area Blvd.
Houston, Texas 77058-1098

*Name of Plan: Clinical Psychology, Family Therapy or School Psychology

3. Deadline for Application and Notification of Admissions Decision. Applications are accepted once a year between December 10th and January 25th for review in the Spring. Applicants have the responsibility to insure that their applications for UHCL admission, GRE scores and supporting transcripts are received by the university Office of Admissions and the Professional Psychology application envelope containing all required documents is received by the appropriate committee within the dates given above. The three admissions committees notify applicants of admissions decisions usually by April 1st.
4. Additional information regarding applications. Any evidence of tampering with recommendations or transcripts could result in disqualifying applicants from admission. Applicants should note that admission to graduate status at the university is not equivalent to admission to one of the Professional Psychology Plans. In some cases, applicants may be contacted by the advising office; any such communication refers only to acceptance into graduate status in the university based on the application for university admission described above. This should not be confused with acceptance into one

of the Professional Psychology Plans. Applicants are not admitted into a Professional Psychology Plan until they receive formal notice from the Professional Psychology Plan director that they have been accepted into the plan. Applicants should direct any questions regarding the status of their application to the Coordinator, Graduate Plans in Professional Psychology. If students are not accepted into a Professional Psychology Plan, they may apply for admission to a non-clinical master's plan. Information regarding these plans is available in the advising office, School of Human Sciences and Humanities. However, applicants to a non-clinical master's plan should be aware of the information in the section below entitled "Restricted Courses."

- Scholarships. Limited scholarships for tuition and fees for Professional Psychology students are available on a competitive basis. Scholarships may also carry a waiver of out-of-state tuition for qualified recipients. For information and application forms, applicants should contact the HSH Advising Coordinator.

Restricted Courses

Applicants should note the following courses that are restricted to students formally admitted to one of the Professional Psychology plans. Restricted courses may not be taken by graduate students in the General Psychology plan or transitional students not yet admitted into a Professional Psychology Plan.

*PSYC 5136	Multicultural Counseling	PSYC 6132	Seminar in Professional School Psychology
*PSYC 5137	Mindfulness and Acceptance Therapies	PSYC 6133	Pers Assess of Child
PSYC 5231	Psychotherapy: Theory & Research	PSYC 6136	Marital/Family Interaction
PSYC 5234	Family Life Cycle	PSYC 6137	Family Research
PSYC 5236	Family Assessment	PSYC 6139	Intervention I: Academic & Cognitive Skills
PSYC 5239	Group Therapy	PSYC 6230	Intervention II: Social & Behavioral Skills
PSYC 5731	Basic Psychotherapy Skills	PSYC 6231	Intervention III: Affective and Adaptive Skills
PSYC 5734	Prof Practice and Ethics	PSYC 6233	Adv Family Therapy
PSYC 5738	Family Ther Practicum	PSYC 6234	Systems and Symptoms
PSYC 5832	Clinical Hypnosis	PSYC 6236	Child Adol Fam Ther
PSYC 6032	Intellectual Assessment	PSYC 6332	Intervention IV: Program Design
PSYC 6033	Personality Assessment	PSYC 6531	Psychopathology
PSYC 6034	Consultation in School Psych	PSYC 6534	Couple and Sex Therapy
PSYC 6038	Clinical Practicum	PSYC 6636/	Clinical Internship
PSYC 6039	School Psych Practicum	PSYC 6666	
PSYC 6111	Student Diversity in Learning		
PSYC 6121	Ethics and Law in School Psych		

*Pending Coordinating Board approval

Review of Progress

Continuation in a professional program requires satisfactory academic performance and the acquisition of appropriate clinical and professional skills and personal attributes. Students admitted to the plans will be evaluated annually for academic progress and appropriate professional behavior and development. An unsatisfactory evaluation may lead to probation or, in extreme cases, termination from the plan. The policies and procedures for each plan contain further information regarding these matters and may be obtained from the convener for each plan.

Grade Requirements

Only courses in which a grade of “B-” or better is earned may be applied toward any Professional Psychology Plan requirement. Grades of “C+” or below are not acceptable.

MASTER OF ARTS IN CLINICAL PSYCHOLOGY

The Clinical Psychology Plan prepares students to work in the mental health field and includes theoretical training and practical experience in psychological assessment and psychotherapy. The plan is a member of the Council of Applied Master’s Programs in Psychology (CAMPP) and adheres to the academic and training standards of CAMPP. Graduates of the plan regularly meet the requirements for licensure as a Professional Counselor and/or Psychological Associate.

Prerequisites (15 hours)

Fifteen hours of undergraduate psychology course work in Introductory Psychology, Theories of Personality, Abnormal Psychology, Social Psychology and three additional hours of upper-level psychology.

A number of courses below have prerequisite requirements and are restricted to students admitted into a Professional Psychology Plan. See the Course Roster at the end of the catalog for information about prerequisite requirements and the section above on restricted courses.

Required Plan Core Courses (21 hours)

PSYC 5031	Human Growth and Dev
PSYC 6531	Psychopathology
PSYC 5235	Learning Principles
PSYC 5734	Prof Practice & Ethics
PSYC 6036/ PSYC 6037	Res Design & Stat I & II
PSYC 6134	Bio Basis of Behavior

Sociocultural Elective (select one course, 3 hours)

*PSYC 5136	Multicultural Counseling
PSYC 5437	Aging
PSYC 5533	Psychology of Women
PSYC 5534	Minorities and Majorities
PSYC 5535	Cross-Cult Persp on Family
PSYC 5831	Gender and Cultural Perspect in Thrpy

Assessment Requirements (select two courses, 6 hours)

PSYC 6031	Behavioral Assessment
PSYC 6032	Intellectual Assessment
PSYC 6033	Personality Assessment

Therapy Requirements (four courses, 12 hours)

PSYC 5231	Psychotherapy Theory/Res
PSYC 5731	Basic Psychotherapy Skills
PSYC 5239	Group Psychotherapy
PSYC 6235	Beh/Cognitive Therapies

Therapy Electives (select two courses, 6 hours)

*PSYC 5137	Mindfulness and Acceptance Therapies
PSYC 5233	Intro to Family Therapy
PSYC 5434	Intro to Art Therapy
PSYC 5735	Anxiety and Stress Management
PSYC 5736	Behavioral Medicine
PSYC 5831	Gender and Cultural Persp in Therapy
PSYC 5832	Clinical Hypnosis
PSYC 5833	Transpersonal Therapy
PSYC 6534	Couple and Sex Therapy

Other courses may be substituted with consent of adviser.

Free Elective (3 hours)

Supervised Clinical Experience (12 hours)

TOTAL HOURS = 63

*Pending Coordinating Board approval

MASTER OF ARTS IN FAMILY THERAPY

The Family Therapy Plan provides theoretical and applied training in family systems theory and family therapy and is accredited by the Commission of Accreditation for Marriage and Family Therapy Education. The Family Therapy curriculum is outlined below.

Admissions

Applicants must submit all materials as listed in the Professional Psychology Plan section. All applications are initially reviewed by the Family Therapy faculty. Selected applicants are invited for group interviews during which they are evaluated on their performance in response to questions by the Family Therapy faculty. Approximately 20 successful applicants are selected into the plan each year.

Plan Requirements

Prerequisites (18 hours)

Eighteen hours of undergraduate Behavioral Sciences course work, including Introductory Psychology, Theories of Personality, Child Psychology, Abnormal Psychology, Research Design and Statistics. No undergraduate courses may be counted toward degree requirements in Family Therapy.

A number of courses below have prerequisite requirements and/or are restricted to students admitted into a Professional Psychology Plan. See the Course Roster at the end of the catalog for information about prerequisite requirements and the section above on restricted courses.

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Required Courses (49 hours)

PSYC 5233	Intro to Family Therapy	PSYC 5234	Family Life Cycle
PSYC 5236	Family Assessment	PSYC 5239	Group Psychotherapy
PSYC 5433	Substance Abuse: Causes and Treatments	PSYC 5731	Basic Psychotherapy Skills
PSYC 5737	Family Therapy Professional Ethics	PSYC 5738	Family Therapy Practicum (for two sems/six credits)
PSYC 6137	Family Research	PSYC 6233	Advanced Family Therapy
PSYC 6234	Systems and Symptoms	PSYC 6236	Child and Adol Family Therapy
PSYC 6531	Psychopathology	PSYC 6534	Couple and Sex Therapy
PSYC 6611 ¹	Seminar in Family Therapy		

¹This course is taken for four semesters (one credit hour per semester).

Elective (select one course)

PSYC 5031	Human Growth and Dev	PSYC 5032	Family Psychology
PSYC 5434	Art Therapy	PSYC 5235	Learning Principles
PSYC 5533	Psychology of Gender, Race & Sexuality and Cultural	PSYC 5437	Aging
PSYC 5831	Gender Persp in Therapy	PSYC 5535	Cross Cult Persp/Family
PSYC 5931	Res Topics in Psychology	PSYC 5833	Transpersonal Therapy
PSYC 6136	Marital and Family Interaction	PSYC 6134	Biological Basis of Behavior

Other courses with consent of adviser

Internship (9 hours)

PSYC 6636	Clinical Internship
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Three semesters with a minimum of 1000 hours, including 500 hours of direct client contact and supervision by an American Association of Marriage and Family Therapy approved supervisor.

Total Hours 61

NOTE: Students are also expected to join the American Association for Marriage and Family Therapy (AAMFT) and to attend two national or state professional meetings (AAMFT or the Texas Association for Marriage and Family Therapy) while they are in the program.

MASTER OF ARTS IN SCHOOL PSYCHOLOGY

The School Psychology Plan is based on a collaborative data-based, problem-solving model of training. The focus of the specialty is on the psycho-educational needs of children. The emphasis of the plan is on training students who will work as specialists in School Psychology within public schools. The plan is broadly designed and may also be appropriate for students who may be working with children in other settings (e.g., public agencies). The plan strives to produce school psychological specialists who have high standards of ethical, professional conduct; engage in empirically based and collaborative decision making as part of a multidisciplinary team; have a high level of competency in assessment, intervention and consultation; and have sensitivity to and respect for the uniqueness, dignity, culture and worth of each individual.

The School Psychology Plan at UHCL is approved by the National Association of School Psychologists (NASP) at the specialist level of training. The plan requires a minimum of 69 hours of course work, 57 of which are exclusive of internship.

Re-Specialization Policy¹

TSBEP: Students seeking credentialing by the Texas State Board of Examiners of Psychologists (TSBEP) can develop a modified plan in consultation with their adviser and the Director of the School Psychology Plan. These students must formally apply to the plan and be accepted as outlined for all students. The plan will be designed according to requirements set forth by TSBEP and the UHCL NASP-Approved Plan. At a minimum, such students will take the School Psychology Professional Seminar, Practicum, Consultation and Internship courses.

NCSP: Students seeking credentialing as a Nationally Certified School Psychologist (NCSP) can develop a modified plan in consultation with the Director of the School Psychology Plan. These students must formally apply to the plan and be accepted as outlined for all students. The plan will be designed according to requirements set forth by the NCSP board. Such individuals will have to complete the substantial equivalent of the UHCL plan and NCSP requirements.

¹It must be emphasized that TSBEP and NCSP credentials are granted by boards and not by any academic plan. Upon completion of the re-specialization plan of study, students must apply to the appropriate Board.

Admission

The School Psychology Selection Committee accepts only a limited number of students into the plan based on review and evaluation of the criteria required for application. These criteria include: complete application (application form, vita, essay and three letters of reference); official transcripts of all previous course work; GPA of 3.250 or above; GRE of 900 or above preferred; 12 hours of undergraduate Behavioral Sciences course work which must include Introductory Psychology, Child Psychology, Theories of Personality and Abnormal Psychology. These prerequisites may be waived for students who possess graduate degrees and, in some cases, a similar course may substitute for a prerequisite.

Acceptance to Candidacy

Admission to the plan as described above is not synonymous with acceptance to candidacy. Students will be evaluated for Candidacy by the primary School Psychology faculty upon completion of Practicum. Candidacy evaluation includes a feedback interview if appropriate.

Internship

The School Psychology Plan recognizes the internship as the culminating experience in specialty training. The internship consists of a minimum of 1200 hours, 600 of which must be done in a school setting. The internship occurs during the final year of training and is designed to be accomplished on a full-time basis over a period of one academic year. Interns receive a stipend during this final year of training.

End of Plan Evaluation

Students are required to take a graduate comprehensive examination upon successful completion of plan requirements (minimum GPA of 3.000; grades of "B-" or better in all course work; grades of "C+" or below are not acceptable toward the degree). The comprehensive examination has been designated to be the National Certification Examination in School Psychology (Praxis II). This is a nationally standardized examination designed to

assess the entry-level knowledge and skills that might be expected of a master's specialist level school psychologist. This exam must be taken after students are accepted to candidacy. It is recommended to be taken during the first semester of internship placement. For graduation, students must obtain a score not less than ½ standard deviation below the NCSP criterion (pass) score. In addition to the national examination, each student must also submit a portfolio documenting competencies in each of the NASP domains of practice. The portfolio is submitted a few months prior to graduation. Additional information regarding this requirement is provided in the Student Handbook.

Required Courses

The course work is designed to provide preparation in each of the NASP Domains of Practice. Any course substitutions or use of transfer credits must be approved by the School Psychology Plan faculty.

Recommended Course Sequence:

YEAR 1**Summer**

PSYC 5031 Human Growth and Development

Semester 1 (Fall)

PSYC 5131 Psychopathology of Childhood
PSYC 5235 Learning Principles
PSYC 6036 Research Design and Statistics I

Semester 2 (Spring)

PSYC 6032 Intellectual Assessment
PSYC 6037 Research Design and Statistics II
PSYC 6238 Applied Behavior Analysis

YEAR 2**Summer**

PSYC 5233 Introduction to Family Therapy
PSYC 6134 Biological Basis of Behavior

Semester 3 (Fall)

PSYC 6039 Practicum in School Psychology
PSYC 6111 Student Diversity in Learning
PSYC 6121 Ethics/Law in School Psyc.
PSYC 6133 Personality Assessment of the Child
PSYC 6139 Intervention I: Academic and Cognitive Skills

Semester 4 (Spring)

PSYC 6034 Consultation in School Psyc
PSYC 6039 Practicum in School Psychology
PSYC 6230 Intervention II: Social and Behavioral Skills
PSYC 6231 Intervention III: Affective and Adaptive Skills

YEAR 3

Summer

PSYC 6132	Seminar in Professional School Psychology
PSYC 6332	Intervention IV: Program Design/Evaluation for Special Populations

Semester 5 (Fall)

PSYC 6666	Clinical Internship
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Semester 6 (Spring)

PSYC 6666	Clinical Internship
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MASTER OF ARTS IN CRIMINOLOGY

The graduate plan in Criminology leads to the master of arts (MA) degree. This degree requires 36 hours with a thesis, project or internship; or 39 hours with the course work option.

The academic goal of the plan is to provide students with a comprehensive, in-depth understanding of crime: why it occurs, how it is measured and how it might be controlled. An additional goal is to help students develop the knowledge and skills needed to attain successful careers within the criminal justice system or advance in their current careers.

General Requirements

CRIM 5036	Research Design and Statistics I	3 hours
CRIM 5037	Research Design and Statistics II	3 hours
CRIM 5136	Race and Crime	3 hours
CRIM 5331	Advanced Criminology	3 hours
CRIM 5336	Law and Society	3 hours

Six hours selected from the following core courses:

CRIM 5133	Advanced Juvenile Delinquency	3 hours
CRIM 5139	Correctional Institutions	3 hours
CRIM 5338	Criminal Law	3 hours
CRIM 5432	Sociology of Law Enforcement	3 hours

Master's Options

Students select one of the following options:

CRIM 6739	Graduate Internship	6 hours
CRIM 6839	Master's Project	6 hours
CRIM 6939	Master's Thesis	6 hours

Students choosing one of these three options must select nine hours of electives from Criminology and/or other relevant disciplines with the approval of their academic adviser for a total of 36 hours.

or

Course Work Master's Option

Students selecting the course work option must take CRIM 6735 Seminar in Criminology plus 15 hours of electives from Criminology and/or other relevant disciplines for a total of 39 hours. Students may not enroll in CRIM 6735 until they have successfully completed at least 24 hours of their degree plan.

Available Criminology Electives:

CRIM 5135	The Death Penalty	3 hours
CRIM 5137	Prevention and Control of Crime	3 hours
CRIM 5138	Homeland Security	3 hours
CRIM 5332	White-Collar Crime	3 hours
CRIM 5333	Computer Crime	3 hours
CRIM 5335	Criminal Justice and the Mass Media	3 hours
CRIM 5339	Comparative Criminology	3 hours
CRIM 5431	Domestic Violence	3 hours
CRIM 5433	Serial Murder	3 hours
CRIM 6734	Future of Crime and Justice	3 hours

Courses from the core course list not utilized to fulfill the core requirement may be used as electives.

Graduate students may not apply more than six semester hours of online graduate course work toward the M.A. in Criminology.

MASTER OF ARTS IN FITNESS AND HUMAN PERFORMANCE

The graduate plan in Fitness and Human Performance leads to the master of arts (MA) degree. The plan is designed for students preparing for careers as coaches, strength and conditioning professionals and exercise fitness specialists, where their prime duty is initiating, directing and evaluating exercise and testing programs. Applicants should have basic course work in health and fitness, including course work in the physiology of exercise and biomechanics. If these requirements have not been met, such courses must be taken before the degree can be awarded. These hours will not count toward the 36 hours required for the master’s degree.

Degree Requirements

Core Requirements (21 hours)

HLTH 5131	Applied Neuromuscular Physiology	HLTH 5132	Applied Cardiovascular Physiology
HLTH 5133	Sports Nutrition	HLTH 6032	Adv Sem in Sports Medicine
HLTH 5335	Exercise Principles for Special Populations	HLTH 6035	Stat in Exercise Science
		HLTH 6033	Lab Techniques and Res Design

Select 9 hours from the following:

HLTH 5231	Tech/Hum Performance
HLTH 5931	Res Topics in Health
HLTH 5939	Independent Study in Human Performance
HLTH 6037	Advanced Seminar in Peak Performance

General Requirements (6 hours)

Students select one of the options listed below:

HLTH 6739	Graduate Internship
HLTH 6839	Master’s Project
HLTH 6939	Master’s Thesis

Master’s projects, theses and internships require continuous registration during each fall and spring semester until completion, for a minimum of six hours. If students do not maintain continuous registration in the master’s project, thesis or internship, previously accumulated master’s option credits will not count toward the master’s degree.

CERTIFICATE IN FITNESS AND HUMAN PERFORMANCE (GRADUATE)

The Fitness and Human Performance certificate is designed for individuals with a bachelor's degree who are not seeking a master's degree in Fitness and Human Performance, but who do want to receive specific instruction in fitness, exercise, nutrition and human performance. The certificate will be granted by the School of Human Sciences and Humanities upon completion of the 12-hour curriculum. Credit hours completed as part of the certificate program may be applied to the Fitness and Human Performance master's plan upon completion of admission requirements to the degree-seeking plan. Non-degree-seeking students are subject to the university's academic standards and do not differ from degree-seeking students in regard to any other university policies.

Certificate Requirements

HLTH 5131	Applied Exercise Physiology: (Neuromuscular)
HLTH 5132	Applied Exercise Physiology: (Cardiopulmonary)
HLTH 5133	Sports Nutrition
HLTH 6032	Advanced Seminar in Sports Medicine or
HLTH 6037	Advanced Seminar in Peak Performance

CROSS-CULTURAL STUDIES (GRADUATE)

The master of arts (MA) plan in Cross-Cultural Studies examines the relationships among culture, diversity and power in the U.S. and in a global context. The plan emphasizes the study of differences and inequalities structured by race, gender, ethnicity, class, sexuality and nationality. It develops understanding of social and political conflict and strategies of conflict resolution. Cross-Cultural Studies is an interdisciplinary plan including disciplines as diverse as Anthropology, History, Literature and Sociology. By exploring similar questions in diverse disciplines and using a range of methodological approaches, students gain an understanding of the complexities of culture and diversity. The plan emphasizes religion, gender, human rights and immigration. Focusing on contemporary and historical issues, courses provide theoretical and practical training that can be applied in a variety of fields, including non-profit, legal, service, religious and educational institutions, among others.

Degree Requirements

Core: 9 hours required

CRCL 5031	Theories of Cultural Diversity
CRCL 5037	Theories and Practices of Mediation
CRCL 5631	Cross-Cultural Methods

Foundation: 6 hours required

CRCL 5032	Political Economy
CRCL 5033	Religion and Community
CRCL 5035	Human Rights and Social Justice
CRCL 5131	Gender, Culture and Power

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Race and Culture: 6 hours required

CRCL 5531	Cross-Cultural Perspectives on the Family
CRCL 5731	Seminar in American Multicultural Literature
HIST 5232	American Social Movements
HIST 5432	Studies in European History
HIST 5434	Studies in Latin American History
LITR 5437	Literature and Culture
PSYC 5533	Psychology of Gender, Race & Sexuality
SOCI 5333	Minorities and Majorities
WMST 4132	Women of Color

Perspectives on Globalization: 6 hours required

ANTH 5333	Peoples of Mexico and Central America
ANTH 5535	Cultures of Asia
CRCL 5039	Environment and Society
CRCL 5537	Cultures of Africa
CRCL 5538	Cultures of the Middle East
HUMN 5035	Texts and Images III
SOCI 5537	Urban Problems

Electives: 3 hours required

Select Any of the Above Courses -or-

PSYC 5338	Cross-Cultural Communications
PSYC 6237	Culture and Consciousness

Master's Option: 6 hours required

Thesis, Project or Internship (students are encouraged to select the internship option). Students must contact the internship coordinator or thesis/project adviser the semester before beginning an internship, project or thesis.

Course Work Option: Students selecting a course work option will complete 36 hours of courses plus CRCL 6735 Research Seminar in Cross-Cultural Studies for a total of 39 hours.

PLANS IN HUMANITIES AND FINE ARTS

The plans in Humanities and Fine Arts bring together complementary studies in literature, history, art, philosophy, language and communication. These disciplines comprise the liberal arts curricula of the university and students in all areas of study are strongly encouraged to complement their educations by enrolling in liberal arts courses.

Humanities and Fine Arts courses are designed to be intellectually stimulating and challenging; to develop clarity of thought, speech and writing; to encourage the formation of enlightened attitudes and values; and to develop both the critical and creative capabilities of each student.

ADMISSION INTO A GRADUATE DEGREE PLAN

There are two ways applicants can be accepted into a graduate degree plan in the School of Human Sciences and Humanities:

- Those applicants who have a minimum of a 3.000 cumulative grade point

average (GPA) in their last 60 hours of course work meet the School’s graduate admissions criterion. Those applicants who are certain that they meet the minimum cumulative GPA requirement are not required to take the GRE.

- For students whose cumulative GPA falls below 3.000, there is a second procedure by which they can be considered for admission into a graduate degree plan. They must submit scores from the Verbal and Quantitative portions of the Graduate Record Examination (GRE). To be admitted into degree candidacy in HSH under this second option, students must have a minimum score of 2050 using the following formula: $(\text{GPA in the last 60 hours} \times 500) + \text{GRE Verbal} + \text{GRE Quantitative} = 2050$ or higher.

In order to have adequate time to review an applicant’s material, the Application for Admission, transcripts for all prior college course work and GRE scores (if necessary) must be received by the Office of Admissions according to the following deadlines:

Fall Enrollment.....	August 1
Spring Enrollment.....	December 1
Summer Enrollment.....	May 1

MASTER OF ARTS IN DIGITAL MEDIA STUDIES

The graduate plan in Digital Media Studies is the first of its kind in Texas. It provides students with cutting-edge interdisciplinary instruction in digital media theory and skills.

The plan responds to a cultural shift toward media convergence by giving students the flexibility to create an academic plan that best meets their intellectual needs and career goals. After completing a core curriculum, students may select digital media courses in communication, art, business, computer programming, gaming and instructional technology.

Courses in the Digital Media Studies plan are organized into three foundational areas: Concept, Design and Production. Exposure to each of these areas is essential to understand how digital media are produced, delivered and used. Students are required to take nine hours of core courses and six hours in each of the foundational areas. Students then select three additional hours in the foundational area that most interests them. Their course work is followed by a 6-hour capstone experience in the form of a graduate internship, master’s project or master’s thesis. The degree requires 36 hours of study.

Students without adequate undergraduate experience in computer software or graphics may be required to take preparatory courses at the undergraduate level before entering the program. A Computer Imaging course or its equivalent is considered the minimal level of preparation required.

Core Requirements (9 hours)

DMST 5031	Graphic Design ¹
DMST 5230	Critical Approaches to Digital Media
DMST 5232	Technical Foundations of Digital Media

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¹Students who have taken Graphic Design in another program may take Advertising Design or Illustration as an alternative.

Concept (6 hours)

DMST 5034	Global Issues in Film
DMST 5233	Digital Media Law and Ethics Seminar
DMST 5234	Public Relations Writing
MKTG 5031	Marketing Essentials for the 21st Century: Creating Customer Value
MKTG 5931	E-Marketing Management
MGMT 5638	Managing Technical and Professional People

Design (6 hours)

DMST 5033	Advertising Design or COMM 5035 Illustration
DMST 5038	Digital Photography
DMST 5039	Web Design (or INST 5635)
DMST 5139	Advanced Web Design (or INST 5735)
DMST 5231	Advanced Digital Media Design
*PSYC 6431	User Centered Design

Production (6 hours)

DMST 5931	Theory and Principles of Computer Game Programming (Prereq: DMST 5132)
DMST 5036	Digital Video (or INST 5835)
DMST 5132	3D Modeling
DMST 5235	Animation
DMST 5236	Digital Storytelling
DMST 5332	Compositing
DMST 5538	Desktop Publishing
ISAM 5030	Fundamentals of Business Programming
ISAM 5638	Advanced Applications Programming with JAVA (Prereq: ISAM 5030)

Elective (3 hours)

Select one additional course from the Concept, Design or Production area.

New courses are introduced under the DMST 5931: Research Topics rubric. If a scheduled course is not listed in the curriculum, consult with your advisor to determine whether it falls under the concept, design or production area.

Capstone Experience (6 hours)

DMST 6739 or *6769: Graduate Internship or
DMST 6839: Master's Project or *DMST 6939: Master's Thesis

*Pending Coordinating Board approval

MASTER OF ARTS IN HISTORY

The graduate plan in History leads to the master of arts (MA) degree. Since the plan is designed to facilitate an advanced level of historical inquiry, applicants for graduate degree candidacy should have had a sound undergraduate training in history. Students lacking

sufficient background may be required to take supplementary course work before being admitted to candidacy.

Degree Requirements

All students seeking the master of arts degree in History must complete HIST 5031: Research and Methods Seminar in the first 12 hours of course work. In addition, at least nine hours must be taken in historical areas outside the student's sub-plan. If the student's sub-plan is the United States, at least one of the three courses must be in the history of Latin America and one in the history of Europe. If the student's sub-plan is Europe, at least one of the three courses must be in the history of Latin America and one in the history of the United States.

Master's degree candidates prepare a Candidate Plan of Study (CPS) with the assistance and approval of a faculty adviser. All master's degree options must contain a minimum of 30 graduate semester credit hours. Only courses in which a grade of "B-" or better is earned may be applied toward any of the plans for a Master of Arts Degree in History. Grades of "C+" or below are not acceptable.

The master's degree Option 1 requires a minimum of 30 graduate semester hours including six hours of Master's Thesis Research and, at the discretion of the thesis adviser, an oral defense of the thesis. Option 2 requires a minimum of 36 semester hours including six hours of Master's Project Research and an oral examination upon completion of the project. Option 4 requires a minimum of 36 semester hours of course work plus written and oral comprehensive examinations in the last semester. The written component will be based on two broad historical fields, with reading lists to be developed by the examination committee. The oral exam will follow, permitting detailed discussion of the written material. Students seeking a graduate degree in Humanities and whose Candidate Plans of Study have a history emphasis, will follow the guidelines noted above.

For the successful completion of master's degree Option 1, the Master's Thesis, students are expected to do original work in some field of historical inquiry. Emphasis should be placed on the creative use of materials and methods, including those which can be appropriately borrowed from complementary disciplines such as literature, art, sociology and psychology.

To complete master's degree Option 2, the Master's Project, students are expected to make contributions to the collection and organization of useful and important historical materials: for example, the collection and transcription of interviews or the recording, identification and dating of historical buildings and building sites in the area. A project need not be limited to the traditional style, but may include forms such as the extended review essay or studies in film, video or theater.

Master's projects and theses require continuous registration during each fall and spring semester until completion, for a minimum of six hours. If students do not maintain continuous registration in the master's project or thesis, previously accumulated master's option credits will not count toward the master's degree.

MASTERS OF ARTS IN HUMANITIES

The graduate plan in Humanities leads to the Master of Arts (MA) degree. The plan combines interdisciplinary study in the humanities with a sub-plan in the study of Texts (Sub-Plan I) or Images (Sub-Plan II). The Humanities disciplines include arts, communi-

cations, history, humanities, literature and philosophy. The degree emphasizes the broad sweep of culture and students are exposed to concepts and achievements that are global in origin and scope. Students may enroll with degrees from the humanities or from other fields, although some course preparation in the humanities is desirable. The plan emphasizes faculty advisement and mentoring. The capstone experience - thesis, project or internship - provides an opportunity to work closely with a faculty member or professional mentor. For additional information about the degree, contact the HSH Advising Coordinator.

Degree Requirements

All master's degree options must contain a minimum of 30 graduate semester hours. The degree consists of a required core (9 hours), a sub-plan (minimum of 15 hours) and a master's option (thesis, project, internship or additional course work). With the approval of their faculty advisers, students pursuing a master's degree in humanities may take up to six hours of credit outside the following rubrics: ARTS, COMM, HIST, HUMN, LITR and PHIL. Further exceptions are at the discretion of the Humanities and Fine Arts Division Chair in consultation with the faculty adviser.

Required Core (9 hours). The core introduces students to significant texts and images in western and non-western civilizations:

HUMN 5031	Texts and Images I
HUMN 5033	Texts and Images II
HUMN 5035	Texts and Images III

Sub-Plans (minimum 15 hours)

Students select one of two sub-plans: Texts or Images. Sub-Plan I, Texts, focuses on literary, historical, philosophical, psychological and critical written works. Students select from courses in ARTS (Art History), COMM¹, HIST, HUMN, LITR and PHIL. Sub-Plan II, Images, includes course work in studio art, lens media (photography and video), visual communication (graphic design) and art history. A minimum of 18 undergraduate hours in ARTS courses is required. Included in the 18 required hours must be courses in drawing, painting, sculpture, art history and two additional foundation courses to be determined with an ARTS faculty adviser.

¹Students should note that many graduate COMM courses have prerequisites.

Master's Options

Students select one of the following options for completing the MA in Humanities degree:

- Thesis Option: 24 hours of course work plus 6 hours of thesis research (30 hours total)
- Project Option: 30 hours of course work plus 6 hours of project research (36 hours total)
- Internship Option: 30 hours of course work plus 6 hours of internship (36 hours total)

- Course Work Option: 36 hours of course work plus a comprehensive written examination (36 hours total)

The thesis, project or internship should be interdisciplinary in its orientation, concept and content. Master's projects, theses and internships require continuous registration during each fall and spring semester until completion, for a minimum of six hours. If students do not maintain continuous registration in the master's project, thesis or internship, previously accumulated master's option credits will not count toward the master's degree. Studio arts and applied graphic design students select project or internship options only.

American Studies

Students concentrating in American Studies select Sub-Plan I, Texts, and complete a minimum of 15 hours of course work in the American Studies courses listed below. Students who intend to write a thesis or complete a project or internship may elect no more than two courses from any one rubric. Students in the course work option must select a balanced plan of study with the approval of their adviser. All American Studies students must complete at least one course in a Human Sciences rubric.

Five with American (Western Hemisphere) Content:

ANTH 5333	HIST 5132	HIST 5133	HIST 5138	HIST 5232	HIST 5233
HIST 5234	HIST 5235	HIST 5237	LITR 5431 ¹	LITR 5731 ¹	SOCI 5333
SOCI 5334	SOCI 5336				

¹Courses may be repeated for credit when content varies.

Other courses with more than 50% American content will also fulfill this requirement. Theses, projects or internships will deal with an Americanist subject.

Professional Writing/Applied Graphic Design

Students who wish to complete a concentration in Professional Writing/Applied Graphic Design will select Sub-Plan I, Texts. A minimum of 15 hours is required for the concentration; 12 hours must come from Professional Writing or Applied Graphic Design courses. Theses, projects or internships will deal with Professional Writing or Applied Graphic Design subjects. Students who elect to study Applied Graphic Design should be proficient in photography or digital photography and basic computer problem-solving skills.

Professional Writing Certificate

Students who successfully complete at least 12 hours of approved professional writing courses can apply for a Certificate of Professional Writing. Eligible students should contact the Humanities Professional Writing Certificate Coordinator early in the semester in which they expect to graduate.

Women's Studies

Students concentrating in Women's Studies select Sub-Plan I, Texts. A minimum of 15 hours is required for the concentration; 12 hours must be in Women's Studies courses. Theses, projects or internships will deal with a related subject.

MASTER OF ARTS IN LITERATURE

Graduate studies in Literature at UHCL lead to the Master of Arts (M.A.) degree. Students may study literature from the distant past to the present. Sub-plans are available in American Studies, Composition and Rhetoric, Creative Writing or Professional Writing.

Applicants for admission should have sound undergraduate training in literature. Students lacking a sufficient background may be required to take additional undergraduate courses before admission to candidacy or before continuing in graduate courses. Applications and inquiries should be addressed to the university Office of Admissions or HSH Advising Coordinator.

Degree Requirements

Every M.A. candidate is assigned an adviser from the full-time Literature faculty. Early in registration, the candidate meets with the faculty adviser to create an individual Candidate Plan of Study (CPS).

The Literature M.A. offers 3 plans of study featuring 3 "capstones":

- Course Work-Comprehensive Option (default plan): 36 hours of course work + comprehensive written exam.
- Project Option: 30 hours of course work + project (6 hours minimum).
- Thesis Option: 24 hours of graduate course work + minimum of 6 hours thesis + defense conference. (This option requires fewer minimal hours than other options but in practice often takes more semesters to complete.)

All students initially register for the Course Work-Comprehensive Option. This option offers the broadest exposure to literature. It is usually the fastest and lowest-cost path to complete the Master's degree in Literature. Unlike the Thesis and Project options, it rarely requires additional semesters.

Students who wish to pursue the Project or Thesis options must petition for reclassification as they approach the 24-hour course work minimum. Procedures for all three options are detailed in the "Capstone Options Guide" for Literature M.A. Students, available on UHCL's Literature program webpage (<http://hsh.uhcl.edu/LITR>).

During their first year of graduate work, all candidates for the M.A. in Literature must take LITR 5132: Literary Theory.

Students must also take at least 12 hours of "reading-centered" courses involving analysis of literary texts: e.g., American Literature, Literature and Gender, British Literature-Pre-Restoration.

Minimal numbers of LITR and graduate hours.

Most of an M.A. student's course work must be in graduate Literature courses—courses listed under the LITR rubric with numbers in the 5000 series. Two courses may be filled by "Texts and Images" courses from Humanities: HUMN 5031, 5033, 5035. In special cases,

faculty advisers may authorize non-LITR or undergraduate courses. All such courses must support the primary graduate LITR courses in an intellectually coherent plan of study.

Each Capstone Option requires a minimal number of graduate LITR courses.

- Course Work-Comprehensive Option: at least 27 of 36 course work hours must be graduate LITR (including options for two HUMN Texts and Images courses).
- Project Option: at least 21 of 30 course work hours must be graduate LITR (including options for two HUMN Texts and Images courses).
- Thesis Option: at least 18 of the 24 course work hours must be graduate LITR (including options for two HUMN Texts and Images courses).

All Master's degree options require a minimum of 30 graduate semester hours.

- Thesis Option: a minimum of 30 graduate semester hours including at least six hours of LITR 6939 Thesis Research.
- Project Option: a minimum of 36 semester hours including at least six hours of LITR 6839 Project Research.
- Course Work-Comprehensive Option: a minimum of 36 semester hours of course work, of which six hours may be undergraduate without special permission.

Master's projects and theses require continuous registration during each fall and spring semester until completion, for a minimum of six hours. If students do not maintain continuous registration in the Master's project or thesis, previously accumulated Master's option credits will not count toward the Master's degree.

Candidates for the Thesis Capstone Option are expected to write an original essay in criticism and/or scholarship, or an original creative work of substantial complexity and quality that demonstrates clear mastery of its form. Students wishing to write creative theses must take at least one of the graduate Seminars in Creative Writing (LITR 5430).

Candidates for the Project Capstone Option undertake some other original work. Scholarship may be combined with lesson plans for teaching at various levels. Creative writing projects may include a piece of creative writing such as a lengthy short story, a one-act play, a collection of poems or a novel. Unusual topics, experimental genres and interdisciplinary approaches may be explored.

Candidates for the Course Work-Comprehensive Option are required to pass a comprehensive examination based on readings from their individual course work. See the on-line Capstone Options Guide for details. Examinations are designed to reflect and support the course of study students have chosen.

COMPOSITION AND RHETORIC AND PROFESSIONAL WRITING SUB-PLANS

Students may obtain an M.A. in Literature with an emphasis in Composition and Rhetoric or Professional Writing. The Composition and Rhetoric Sub-Plan prepares students to teach composition at the community college and university levels. The Professional Writing Sub-Plan prepares students for positions as business, science and technical writers.

Composition and Rhetoric Sub-Plan

Required Courses (9 hours total)

LITR 5130 Composition: Theory and Practice-Required

Six additional units from any of the following:

LITR 5037	Writing for the Technical Professions
LITR 5038	Writing for the Business Professions
LITR 5039	Editing
LITR 5131	Studies in Composition & Rhetoric (variable topics)
LITR 5739	Writing Center Practicum and one semester tutoring in Writing Center
LITR 6739	Graduate Internship

Professional Writing Sub-Plan

Required Courses

Select 9 hours from the following courses:

LITR 5036	Public Relations Writing
LITR 5037	Writing for the Technical Professions
LITR 5038	Writing for the Business Professions
LITR 5039	Editing
LITR 5131	Studies in Composition and Rhetoric (recommended for students who plan to teach Professional Writing)

AMERICAN STUDIES SUB-PLAN, M.A. IN LITERATURE

The sub-plan in American Studies provides a broad understanding of the relationship between American literature, history and culture. It prepares students to study for the Ph.D. in American Studies or Literature or to pursue careers in government or foreign service.

Students complete the requirements of the Literature degree and include the following in their plans:

LITR 5132 Literary Theory

Two courses from ANTH 5032, HIST 5035, LITR 5431, LITR 5731 (may be repeated for credit when content varies).

One course with American (Western Hemisphere) content from ANTH, ARTS, SOCI, HIST, HUMN, PHIL, WMST.

Note: One of the above courses must be in ANTH or SOCI.

SCHOOL OF HUMAN SCIENCES AND HUMANITIES COURSE ROSTER

ANTHROPOLOGY

- ANTH 5032: POLITICAL ECONOMY**
Surveys current anthropological approaches to political and economic issues. (Crosslisted with CRCL 5032).
- ANTH 5333: CULTURES OF MEXICO AND CENTRAL AMERICA**
Surveys anthropological approaches to regions of Mexico, Central America and US-Mexico border. Particular attention paid to gender and women's issues, as well as race and class.
- ANTH 5531: CROSS-CULTURAL PERSPECTIVES ON THE FAMILY**
Cross-cultural data are used to examine family relations, including marriage, sex roles and child rearing. (Crosslisted with CRCL 5531, PSYC 5535 and SOCI 5535).
- ANTH 5535: CULTURES OF ASIA**
Surveys anthropological approaches to Asian societies.
- ANTH 5537: CULTURES OF AFRICA**
Surveys anthropological approaches to African societies. (Crosslisted with CRCL 5537).
- ANTH 5538: CULTURES OF THE MIDDLE EAST**
Investigates the social and cultural diversity of peoples of Middle East. Focuses on religion, economy and social structure.
- ANTH 5931: RESEARCH TOPICS IN ANTHROPOLOGY**
Identified by specific title each time course is offered.
- ANTH 5939: INDEPENDENT STUDY IN ANTHROPOLOGY**
Independent study in anthropology. Permission of instructor required.

ARTS

- ARTS 5037: STUDIES IN ART HISTORY**
Understanding and interpreting art history. Topics vary; may be repeated for credit with permission of instructor.
- ARTS 5038: CRAFTS DESIGN AND HISTORY**
Supervised projects in crafts history, design and techniques. May be repeated for credit.
- ARTS 5231: SCULPTURE AND CERAMIC STUDIO**
Prerequisite: Permission of instructor. Supervised projects. May be repeated for credit.
- ARTS 5331: PAINTING-DRAWING-PRINTMAKING**
Prerequisite: Permission of instructor. Supervised projects. May be repeated for credit.
- ARTS 5631: WEAVING STUDIO**
Supervised projects in weaving with an emphasis on technique and design. May be repeated for credit.
- ARTS 5919: INDEPENDENT STUDY IN ART**
Independent study in Art. Permission of instructor required.
- ARTS 5931: RESEARCH TOPICS IN ART**
Prerequisite: Permission of instructor. Identified by specific title each time course is offered.
- ARTS 5939: INDEPENDENT STUDY IN ART**
Independent study in Art. Permission of instructor required.

COMMUNICATION

Please note: Film courses are listed under ARTS and COMMUNICATION.

- COMM 5031: GRAPHIC DESIGN**
Professional approaches to graphic design. Presentations on design theory and practice. Professional design projects using Adobe Illustrator. Previous art, design and/or computer skills desirable.

COMM 5033: ADVERTISING DESIGN

Prerequisites: COMM 5031 and COMM 5037 or permission of instructor. Professional approaches to advertising design, theory and practice. Advertising design projects requiring photographic and computer skills. Previous art, design, computer and writing skills desirable.

COMM 5035: ILLUSTRATION

Prerequisites: COMM 5031 and COMM 5037, or permission of instructor. Advanced computer projects utilizing various techniques in visual messaging including professional practices in traditional design, computer skills and typography. Previous art, design, computer and writing skills desirable.

COMM 5037: COMPUTER IMAGING

Projects in processing photographic imagery in a computerized environment using Adobe Photoshop. Previous art, design and/or computer skills desirable. Access to a digital camera helpful.

COMM 5931: RESEARCH TOPICS IN COMMUNICATION

Identified by specific title each time course is offered.

COMM 5939: INDEPENDENT STUDY IN COMMUNICATION

Prerequisite: Permission of instructor. Independent study in communications. May be repeated for credit.

CROSS-CULTURAL STUDIES

CRCL 5031: THEORIES OF CULTURAL DIVERSITY

Theoretical approaches to cultural interpretation and methods of cultural comparison. Emphasis on cultural diversity as expressed in formations of nationalism, ethnicity, race, class, family and gender; and roots of racism and tolerance.

CRCL 5032: POLITICAL ECONOMY

Surveys current anthropological approaches to political and economic issues. (Crosslisted with ANTH 5032).

CRCL 5033: RELIGION AND COMMUNITY

Examination of the nature of religious experience from a comparative perspective. Basic belief, ritual and institutional structures of major world faiths with attention to the operation of religious communities in multicultural settings.

CRCL 5035: HUMAN RIGHTS AND SOCIAL JUSTICE

Exploration of conceptions of human rights and of recent attempts to reconcile such conceptions in the context of globalizations and from the perspective of social justice.

CRCL 5037: THEORIES AND PRACTICES OF MEDIATION

Application of mediation techniques to the needs of community groups, churches, businesses and non-governmental agencies.

CRCL 5039: ENVIRONMENT AND SOCIETY

Examination of diverse conceptions of and values attached to, the natural world History of human-induced changes to the environment. Analysis of global movements. Exploration of the changing role of civil society in solving environmental problems.

CRCL 5131: GENDER, CULTURE AND POWER

Exploration of the many ways gender is constructed cross-culturally. Examination of how different societies conceptualize each gender and assign them social, economic and political significance. Analysis of relationship between gender and class, race, ethnicity and nationality.

CRCL 5231: STUDIES IN EUROPEAN HISTORY

Critical examination of major themes in the European past including historiographical analysis. Topics vary; may be repeated for credit with permission of instructor.

CRCL 5232: PEOPLES OF MEXICO AND CENTRAL AMERICA

Anthropological approaches to Mexico, Central America and the U.S.-Mexico border.

CRCL 5238: NEGOTIATING ACROSS CULTURES

Examines challenges facing international organizations and multinational corporations in negotiating across cultures. Explores decision-making and its relation to beliefs and values of people of diverse cultures and political systems.

- CRCL 5239: EGYPT IN TRANSITION**
Course exposes students to culture, history, religion and politics of Egypt and the Middle East. It explores sociological, historical and cross-cultural forces shaping modern Egypt.
- CRCL 5330: CULTURAL STUDY ABROAD**
Prerequisite: Permission of instructor. Course exposes students to culture, history, religion and politics of another country. Involves foreign travel, and includes prerequisite of semester long course focusing on study abroad country.
- CRCL 5332: DIVERSITY IN URBAN AMERICA**
Examines classical theories of urban life and urban development; explores urban issues such as ethnic diversity, transportation and policy.
- CRCL 5333: MINORITIES AND MAJORITIES**
The pattern of interaction between race, ethnic and gender groups; personality and structural effects of prejudice and discrimination. Includes both U.S. and cross-cultural perspectives.
- CRCL 5334: WORLD FUTURES**
Survey of recent world models and forecasts, with implications for policy and administration.
- CRCL 5338: CROSS-CULTURAL COMMUNICATIONS**
Examines role of cross-cultural communication in economic, political and social transactions. Examines impact of cultural beliefs, values and behavior patterns on communication with members of different cultures and identifies factors that facilitate cross-cultural communications.
- CRCL 5434: STUDIES IN LATIN AMERICAN HISTORY**
Critical examination of major issues and themes in Latin American history. Topics vary; may be repeated for credit.
- CRCL 5531: CROSS-CULTURAL PERSPECTIVES ON THE FAMILY**
Examines family dynamics from cross-cultural perspective using case study material. (Crosslisted with ANTH 5531, PSYC 5535 and SOCI 5535).
- CRCL 5535: CULTURES OF ASIA**
Anthropological approaches to Asian societies.
- CRCL 5537: CULTURES OF AFRICA**
Investigates ethnicity, social organization, politics and religion of Africa. (Crosslisted with ANTH 5537).
- CRCL 5538: CULTURES OF THE MIDDLE EAST**
Investigates the social and cultural diversity of peoples of the Middle East. Focuses on religion, economy and social structure.
- CRCL 5631: CROSS-CULTURAL METHODS**
Examines methods used in a variety of disciplines to study difference based on culture, race, ethnicity, gender, class and nationality.
- CRCL 5731: SEMINAR IN AMERICAN MULTICULTURAL LITERATURE**
Survey of minority or immigrant literature; intensive study of a particular ethnic group's texts and authors; a trans-ethnic theme or topic; a major author or authors. Topics vary. May be repeated for credit with permission of instructor. (Crosslisted with LITR 5731).
- CRCL 5732: U.S. SOCIAL MOVEMENTS**
Analysis and comparison of ideology, composition and social role of such reform movements as abolitionism, civil rights, feminism, labor unions, populism, progressivism and socialism. Topics vary; may be repeated for credit with permission of instructor.
- CRCL 5734: CROSS-CULTURAL TEXTS IN DIALOGUE**
Texts representing First-World colonialism and imperialism (e.g., Heart of Darkness, Passage to India, Robinson Crusoe) are read in dialogue with corresponding texts from perspective of the colonized (e.g., Things Fall Apart, Midnight's Children, Lucy); includes postcolonial poetry and theory.
- CRCL 5735: LITERATURE OF THE PACIFIC RIM**
Selected Pacific Rim readings from literature of Japan, China, Russia, Hawaii, and South Pacific. Focus on representative and contemporary works of Patrick White, Yukio Mishima, Alexander Solzhenisyn, Eileen Chang, Li Ang, Mark Twain, and James Michener.
- CRCL 5931: RESEARCH TOPICS IN CROSS-CULTURAL STUDIES**
Identified by specific title each time course is offered.

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- CRCL 5939: INDEPENDENT STUDY IN CROSS-CULTURAL STUDIES**
Prerequisite: Approval of independent study director required. Independent Study in Cross-Cultural Studies.
- CRCL 6735: RESEARCH SEMINAR IN CROSS-CULTURAL STUDIES**
Prerequisite: 24 hours of graduate course work. An advanced research seminar in Cross-Cultural Studies. Explores research methods and techniques of cross-cultural studies. Students will write major research paper. Topic will vary by semester.
- CRCL 6739: GRADUATE INTERNSHIP**
Prerequisite: 24 hours of graduate-level course work and approval of internship coordinator. Minimum of two days a week in an approved internship setting. Written report required. Arrangements for internships should be completed by the beginning of the prior semester.
- CRCL 6839: MASTERS PROJECT RESEARCH**
Approval of advisor and project director required.
- CRCL 6939: MASTERS THESIS RESEARCH**
Approval of advisor and thesis director required.

CRIMINOLOGY

- CRIM 5036: CRIMINOLOGICAL RESEARCH AND STATISTICS I**
Design, analysis and application of criminological research techniques and methods of measurement.
- CRIM 5037: CRIMINOLOGICAL RESEARCH AND STATISTICS II**
Prerequisite: CRIM 5036. Further examination of procedures involved in designing and analyzing criminological research.
- CRIM 5133: ADVANCED JUVENILE DELINQUENCY**
In depth analysis of delinquency theories, issues and policies in the U.S. and abroad. Topics include measurement and research, serious violent offending, gangs and treatment by justice agencies. (Crosslisted with SOCI 5133).
- CRIM 5135: THE DEATH PENALTY**
History and development of capital punishment as a social institution. Focus on issues such as deterrence, discrimination and execution of innocent prisoners. (Crosslisted with SOCI 5135).
- CRIM 5136: RACE AND CRIME**
Historical and social understanding of racial and ethnic groups in the United States as related to causation of crime and involvement in the criminal justice system.
- CRIM 5137: PREVENTION AND CONTROL OF CRIME**
Theories and application of crime control and prevention in society.
- CRIM 5138: HOMELAND SECURITY**
Examination of events before, during and after September 11, 2001 in order to prepare for future manmade and natural catastrophic threats to homeland security.
- CRIM 5139: CORRECTIONAL INSTITUTIONS**
An advanced, theoretical examination of both prisons and jails as "total institutions." Includes history of prisons, various philosophies of incarceration, organization structure, institutional subcultures and problems encountered in the classification and supervision of incarcerated offenders.
- CRIM 5331: ADVANCED CRIMINOLOGY**
Examination of major theories of crime causation. Emphasis on sociological theories of social structure, social process and social conflict along with classical and neoclassical perspectives. (Crosslisted with SOCI 5331).
- CRIM 5332: WHITE-COLLAR CRIME**
Study of financial, physical and social costs of white-collar crime. Examines both perpetrators and victims. Special attention paid to computer crime. (Crosslisted with SOCI 5332).
- CRIM 5333: COMPUTER CRIME**
Consideration of common forms of computer crime, including financial theft/embezzlement, malicious hacking, international industrial espionage and dissemination of pernicious viruses and worms.

- CRIM 5335: CRIMINAL JUSTICE AND THE MASS MEDIA**
Examines collision between two powerful sets of social institutions—the criminal justice system and the mass media. (Crosslisted with SOCI 5335).
- CRIM 5336: LAW AND SOCIETY**
This course surveys a number of problematic issues in contemporary American society from the perspectives of sociological, philosophical and legal theories. The course examines the controversial ways U.S. political system seeks to reconcile individual liberties with the collective obligations of the social contract. (Crosslisted with SOCI 5336).
- CRIM 5337: ORGANIZED CRIME**
Advanced, theoretical examination of organized criminal groups, such as the “mafia” and other criminal groups worldwide. Applies historical, economic, political and legal perspectives. Emphasizes victimless crime, labor rackets and extortion. Covers special governmental commissions and legislative reforms.
- CRIM 5338: CRIMINAL LAW**
Study of structure and rationale for criminal law; focus on criminal liability, criminal defenses and types of offenses. (Crosslisted with CRIM 4334).
- CRIM: 5339: COMPARATIVE CRIMINOLOGY**
Comparative study of criminology and institutions of social control in selected western and nonwestern countries.
- CRIM 5431: DOMESTIC VIOLENCE**
Examines historical and contextual foundations, theories of causation and victimization, legal and enforcement responsibility, potential solutions to abuse and violence in domestic relationships.
- CRIM 5432: SOCIOLOGY OF LAW ENFORCEMENT**
Critical analysis of issues related to roles and functions of American policing, including previous research on policing, previous experiments in police strategies and tactics and new trends in policing in 21st century.
- CRIM 5433: SERIAL MURDER**
Examination of phenomenon of serial murder on national and international bases. Discussions include current and historical serial killers, why they kill, case studies and their investigation.
- CRIM 5931: RESEARCH TOPICS IN CRIMINOLOGY**
Identified by a specific title each time course is offered.
- CRIM 5939: INDEPENDENT STUDY IN CRIMINOLOGY**
Prerequisite: Approval of advisor and independent study director.
- CRIM 6734: FUTURE OF CRIME AND JUSTICE**
Behavioral perspective on possible and probable futures and their impact on American society and the Criminal Justice System. Emphasis on socioeconomic and technological factors and trends currently shaping crime in America.
- CRIM 6735: SEMINAR IN CRIMINOLOGY**
Prerequisites: CRIM 5036; CRIM 5037; 24 hours of graduate course work. Fulfills course work option requirement in graduate criminology. Students apply the substantive knowledge and research skills they have acquired to topic selected by instructor.
- CRIM 6739: GRADUATE INTERNSHIP**
Prerequisite: 24 hours of graduate course work and approval of internship coordinator. Minimum of two days a week in approved internship setting. Written report required. Arrangements for internship should be completed by beginning of prior semester.
- CRIM 6839: MASTER’S PROJECT RESEARCH**
Approval of advisor and project director required.
- CRIM 6939: MASTER’S THESIS RESEARCH**
Approval of advisor and thesis director required.

DIGITAL MEDIA STUDIES

*Pending Coordinating Board approval

- DMST 5031: GRAPHIC DESIGN**
Professional approaches to graphic design. Presentations on design theory and practice. Professional design projects using Adobe Illustrator. Previous art, design and/or computer skills desirable.
- DMST 5033: ADVERTISING DESIGN**
Prerequisites: DMST 5031 and DMST 5037 or permission of instructor. Professional approaches to advertising design, theory and practice. Advertising design projects requiring photographic and computer skills. Previous art, design, computer and writing skills desirable.
- DMST 5034: GLOBAL ISSUES IN FILM**
Global issues in a digital society are addressed using critical/cultural studies approaches. Focus on world-wide cultural differences to foster knowledge and understanding of diversity issues.
- DMST 5036: DIGITAL VIDEO**
Basic methods and processes of video production, using non-linear editing equipment. Emphasis on technique, concept and artistic expression. (INST 5635 may be taken as an alternative).
- DMST 5037: COMPUTER IMAGING**
Projects in processing photographic imagery in computerized environment using Adobe Photoshop. Previous art, design and/or computer skills desirable. Access to digital camera helpful.
- DMST 5038: DIGITAL PHOTOGRAPHY**
Prerequisite: DMST 5037: Computer Imaging. Exploration of photography and photographic processes in the digital realm. Addresses concepts of documentation, communication and fine art.
- DMST 5039: WEB DESIGN**
Creating and publishing Web pages using HTML. Study of formal design elements, theories, audience analysis and usability. (INST 5635 may be taken as an alternative).
- DMST 5132: 3D MODELING**
3D modeling techniques for animation, images and 3D computer sculptures. Includes how to build 3D models and exposure to variety of modeling techniques used in 3D software applications, as well as texture mapping and lighting in 3D environment.
- DMST 5139: ADVANCED WEB DESIGN**
Advanced techniques in Web page construction, including Web animation, dynamic HTML and site management. Also covers audience and usability testing. (INST 5735 may be taken as an alternative).
- DMST 5230: CRITICAL APPROACHES TO DIGITAL MEDIA**
Exploration of personal, cultural, social, economic, political and ethical impacts of information technology, using critical/cultural studies approaches.
- DMST 5231: ADVANCED DIGITAL MEDIA DESIGN**
Concept-based design course taken the semester before the final project in which students use digital tools from their major areas of study.
- DMST 5232: TECHNICAL FOUNDATIONS OF DIGITAL MEDIA**
Delivery of content through digital media. Explores concepts of digital systems, computer components, networking and delivery techniques.
- DMST 5233: DIGITAL MEDIA LAW AND ETHICS SEMINAR**
Overview of legal and ethical issues pertinent to the professional communicator, regarding issues such as information access, intellectual property, privacy and defamation. Emphasis on regulation of new technology.
- DMST 5234: PUBLIC RELATIONS WRITING**
Writing for corporate, nonprofit and government organizations, including press releases, public service announcements, speeches, newsletters, grants, etc. Also covers interviewing, public relations research techniques, layout and production.
- DMST 5235: ANIMATION**
Prerequisite: *DMST 5132 3D Modeling. Fundamental principles of animation, both computer and traditional. Emphasis on 3D computer animation techniques including key framing, path animation, non-linear animation and hierarchical animation. Storyboarding and animation project planning also covered.

- DMST 5236: DIGITAL STORYTELLING**
Developing skills in preparation, narrative development techniques and writing for digital short film scripts. Introduction to basic knowledge and skills in interactive media writing
- DMST 5332: COMPOSITING**
Trends and techniques in digital compositing for film and video with emphasis on combining 2D and video imagery with 3D animation. Coverage of matte creation and use, keying, transitions, timing, titling and special effects as well as procedures for rendering 3D elements in layers for compositing.
- DMST 5538: DESKTOP PUBLISHING**
Prerequisite: DMST 5037. Coverage of all aspects of desktop publishing—from concept and content development to design, layout, project management and printing. Includes examination of InDesign, Photoshop and Illustrator.
- DMST 5931: RESEARCH TOPICS IN DIGITAL MEDIA STUDIES**
Identified by specific title each time course is offered.
- DMST 5939: INDEPENDENT STUDY IN DIGITAL MEDIA STUDIES**
Prerequisite: Approval of independent study director. Independent study in Digital Media Studies.
- DMST 6739: GRADUATE INTERNSHIP**
Development of digital media under supervision of selected professor and on-site organizational supervisor. Five hundred hours on-site required.
- *DMST 6769: GRADUATE INTERNSHIP**
Development of digital media under supervision of selected professor and on-site organizational supervisor. Five hundred hours on-site required. Intends for students wishing to complete entire internship in one semester. Permission of instructor required.
- DMST 6839: MASTER'S PROJECT RESEARCH**
Completion of a project sufficient to represent a capstone activity that integrates knowledge and skills developed in the program.
- *DMST 6939: MASTER'S THESIS RESEARCH**
Approval of advisor and thesis director required. Requires minimum of two semesters.

GEOGRAPHY

- GEOG 5231: APPROACHES TO GEOGRAPHIC EDUCATION**
Geographic content knowledge is linked to teaching strategies and curriculum development. Content focus will address approaches designed to foster geographic knowledge, study skills and critical thinking.
- GEOG 5931: RESEARCH TOPICS IN GEOGRAPHY**
Identified by specific title each time course is offered.
- GEOG 5939: INDEPENDENT STUDIES IN GEOGRAPHY**
Prerequisites: Approval of instructor and Associate Dean.

HISTORY

- HIST 5031: RESEARCH AND METHODS SEMINAR**
Research methods and techniques including historiography, bibliography and introduction to primary and secondary sources in political, social, economic, quantitative and public history.
- HIST 5035: PHILOSOPHY OF HISTORY**
An examination of significant schools of thought regarding the nature of history and historical change.
- HIST 5037: THE SOUTH BEFORE THE CIVIL WAR**
Examination of specific problems and themes in pre-Civil War Southern history, such as gender, slavery, regional identity and political and economic development. Topics vary; may be repeated for credit with permission of instructor.
- HIST 5131: STUDIES IN EARLY AMERICAN HISTORY, 1607-1815**
Critical examination of major issues and themes in the history of the British North American colonies that became the United States. Topics vary; may be repeated for credit with the permission of instructor.

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- HIST 5132: THE CIVIL WAR AND RECONSTRUCTION**
American society and politics between the 1850s and the 1870s, emphasizing the end of slavery and the emergence of industrial America.
- HIST 5133: ANTEBELLUM AMERICA, 1815-1865**
Examines specific problems and themes in nineteenth century American culture such as changes in family structure, race relations, the status of women and psychology of popular culture. Topics vary; may be repeated for credit with permission of instructor.
- HIST 5134: THE SOUTH SINCE RECONSTRUCTION**
Examination of specific problems and themes in Southern history following Reconstruction, such as race, class, gender and political and economic development. Topics vary; may be repeated for credit with permission of instructor.
- HIST 5135: AMERICAN FRONTIERS**
Critical examination of idea of West as historical place, frontier process and site of national myth from early contact between European and Native American peoples on. Evaluation of parallels to modern frontier of space exploration.
- HIST 5138: LOCAL HISTORY SEMINAR**
History of local and nearby areas including Harris, Galveston, Fort Bend and Brazoria counties; heavy emphasis on student research into local and regional people, events and institutions. Topics vary; may be repeated for credit with permission of instructor.
- HIST 5232: U.S. SOCIAL MOVEMENTS**
Analysis and comparison of ideology, composition and social role of such reform movements as abolitionism, civil rights, feminism, labor unions, populism, progressivism and socialism. Topics vary; may be repeated for credit with permission of instructor.
- HIST 5233: U.S., 1877-1919**
Topics in transformation of U.S. wrought by immigration and industrialization between end of Reconstruction and demobilization after World War I. Topics vary; may be repeated for credit with permission of instructor.
- HIST 5234: U.S., 1919-1945**
Topics in modernization of life in U.S. and crises of the Great Depression and World War II. Topics vary; may be repeated for credit with permission of instructor.
- HIST 5235: U.S. SINCE 1945**
Topics in contemporary U.S. history and exploration of problems involved in analyzing the very recent past. Topics vary; may be repeated for credit with permission of instructor.
- HIST 5236: STUDIES IN HISTORY AND FILM**
Such topics as the history of film genres or filmmakers; the use of film as historical evidence; the correlation of films to history. Topics vary; may be repeated for credit with permission of instructor.
- HIST 5237: NAZI CINEMA AND THE THIRD REICH**
Exploration of Third Reich through film and cultural artifact. Film was a medium which preserved old notions of identity, while offering new instruments of consensus building. Studies themes such as fascism, gender, violence, national identity, anti-Semitism and mass culture.
- HIST 5238: WEIMAR CINEMA AND THE GREAT WAR**
Study of selected German films for 1918 to 1931 as contributions to debates about rationality, gender, violence, national identity and the human condition shaped by experiences of First World War. Across disciplinary seminar that draws equally on film theory and history, psychoanalysis, philosophy and cultural criticism.
- HIST 5239: THE VIETNAM WAR IN FILM**
Examines the Vietnam War in US film and cultural artifact. Traces intersection of fact and fiction, evident in decades following Vietnam War. Explores notions of mourning and memory and how they relate to post-war experience.
- HIST 5430: STUDIES IN WOMEN'S HISTORY**
Critical examination of major themes and issues in the history of women. Topics may vary; may be repeated for credit with the permission of instructor. "Women's Studies Course."
- HIST 5431: BIOGRAPHY IN EUROPEAN HISTORY**
Examination of issues involved in researching and writing biographies of individuals from the European past. Students will read important biographies and write a partial biography.

- HIST 5432: STUDIES IN EUROPEAN HISTORY**
Critical examination of major themes in the European past including historiographical analysis. Topics vary; may be repeated for credit with permission of instructor.
- HIST 5433: REFORMATION EUROPE**
A seminar which examines the Reformation movement in sixteenth century Europe.
- HIST 5434: STUDIES IN LATIN AMERICAN HISTORY**
Critical examination of major issues and themes in Latin American history. Topics vary; may be repeated for credit with permission of instructor.
- HIST 5931: RESEARCH TOPICS IN HISTORY**
Identified by specific title each time course is offered.
- HIST 5939: INDEPENDENT STUDY IN HISTORY**
Prerequisite: Approval of independent study director. Independent study in history.
- HIST 6839: MASTER'S PROJECT RESEARCH**
Approval of advisor and project director.
- HIST 6939: MASTER'S THESIS RESEARCH**
Approval of advisor and thesis director.

HEALTH

- HLTH 5335: EXERCISE PRINCIPLES FOR SPECIAL POPULATIONS**
Exploration of relationships among special populations, their respective pathologies and how physical activity may influence their physical function.
- HLTH 5931: RESEARCH TOPICS IN HEALTH EDUCATION**
Identified by specific title each time course is offered.
- HLTH 5939: INDEPENDENT STUDY IN HEALTH**
Prerequisite: Approval of independent study director. Independent study in health.
- HLTH 6032: ADVANCED SEMINAR IN SPORTS MEDICINE**
Discussion of current research issues in cardiopulmonary, metabolic, environmental and biomechanical factors related to sports medicine. (Crosslisted with HLTH 4035).
- HLTH 6033: LABORATORY TECHNIQUES AND RESEARCH DESIGN**
Concepts and methodology related to performing exercise science research. Examination of the various statistical methods and testing procedures utilized in exercise science research.
- HLTH 6034: SEMINAR IN EXERCISE, NUTRITION AND WEIGHT CONTROL**
Study of the problem of obesity and malnourishment. Current research on influence of genetics, eating behavior and activity patterns upon nutrition and weight control.
- HLTH 6035: STATISTICS IN EXERCISE SCIENCE**
Application of statistical processes commonly used in exercise science research.
- HLTH 6037: ADVANCED SEMINAR IN PEAK PERFORMANCE**
How to improve performance by enhancing strength, flexibility, speed, power, agility and coordination. Varying content. May be repeated for credit with permission of instructor.
- HLTH 6739: GRADUATE INTERNSHIP**
Prerequisite: 24 hours of graduate-level course work and approval of internship coordinator. Minimum of two days a week in an approved setting. Written report required. Arrangements for internship should be completed by preregistration.
- HLTH 6839: MASTER'S PROJECT RESEARCH**
Approval of advisor and project director.
- HLTH 6939: MASTER'S THESIS RESEARCH**
Approval of advisor and thesis director.

HUMANITIES

- HUMN 5031: TEXTS AND IMAGES I**
Touchstones of literature and art from ancient times through the Middle Ages. Artists and works such as: Epic of Gilgamesh, Homer, Plato, Virgil, the Bible; Mesopotamian art, classical Greek sculpture, the Parthenon; Dante, Petrarch.

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HUMN 5033: TEXTS AND IMAGES II

Touchstones of literature and art from European Renaissance to contemporary times. Artists and works such as: Rousseau, Goethe, Wordsworth, Austen, Dostoevski, Borges, Proust, Joyce; Gainsborough, Hogarth, Goya, Manet, Cezanne, Picasso, Matisse, Rothko, Warhol.

HUMN 5035: TEXTS AND IMAGES III

Origins and interplay of non-western traditions; study of founding philosophical and religious traditions such as those of Asia, Africa, the Middle East and Native America.

HUMN 5037: WRITING FOR THE TECHNICAL PROFESSIONS

Theory and practice of creating technical documents such as instructions, procedures, process analyses, and operating manuals. Attention to the importance of form, structure, and design for successful presentation.

HUMN 5131: WRITING FOR THE BUSINESS PROFESSIONS

Advanced seminar in rhetorical analysis of professional communication. Emphasizes production of effective, efficient documents. Includes overview of changing workplace demands and strategies to manage communication projects.

HUMN 5133: PUBLIC RELATIONS WRITING

Writing for corporate, government and non-profit organizations. Press releases, public service announcements, speeches, newsletters, grants, etc. Interviewing, public relations research techniques, layout and production.

HUMN 5134: EDITING

Students will learn the interpersonal and linguistic skills required for editing. They will learn to make documents highly readable by revising for content, mechanics, style, visual design, organization, illustrations, tables and documentation.

HUMN 5231: HISTORY OF EXPLORATION

Historical survey of humanity's exploration of the physical cosmos from prehistory to present day.

HUMN 5232: OUR FUTURE IN SPACE

Review of the forces and factors shaping exploration of space including space technologies, economics, politics as well as values, visions and aspirations.

HUMN 5236: STUDIES IN FILM

In-depth analysis of film texts from a topical, generic, historical or theoretical perspective. Topics vary. May be repeated for credit with permission of instructor.

HUMN 5336: PHILOSOPHY OF RELIGION

An investigation of the responses of philosophers and theologians to questions about the nature of God and the problem of evil.

HUMN 5732: SEMINAR IN WOMEN'S STUDIES

Prerequisite: Any previous Women's Studies course. An advanced course in Women's Studies, designed to acquaint the student with contemporary issues in feminist scholarship across the disciplines. (Crosslisted with HUMN 4732, PSYC 4732, PSYC 5732).

HUMN 5915: COOPERATIVE EDUCATION

Educational paid work assignment by a student in the field of his or her career interest and course of study. Academic supervision and a report required.

HUMN 5931: RESEARCH TOPICS IN HUMANITIES

Identified by a specific title each time the course is offered.

HUMN 5939: INDEPENDENT STUDY IN HUMANITIES

Prerequisite: Approval of independent study director required. Independent study in Humanities.

HUMN 6739: INTERNSHIP

Supervised internship in approved internship setting. Comprehensive written report required.

HUMN 6839: MASTER'S PROJECT RESEARCH

Approval of advisor and project director required.

HUMN 6939: MASTER'S THESIS RESEARCH

Approval of advisor and thesis director required.

LITERATURE

Please note: Additional writing courses are listed under COMMUNICATION.

- LITR 5034: WORKSHOP IN POETICS**
A comprehensive consideration of elements, mechanics and compositional strategies in English language poetry; bases for evaluation of both traditional and free verse forms; some attention to the development of the poetic tradition in English since the Middle Ages.
- LITR 5036: PUBLIC RELATIONS WRITING**
Writing for corporate, government and non-profit organizations. Press releases, public service announcements, speeches, newsletters, grants, etc. Interviewing, public relations research techniques, layout and productions.
- LITR 5037: WRITING FOR THE TECHNICAL PROFESSIONS**
Theory and practice of creating technical documents such as instructions, procedures, process analyses, and operating manuals. Attention to the importance of form, structure, and design for successful presentation.
- LITR 5038: WRITING FOR THE BUSINESS PROFESSIONS**
Advanced seminar in rhetorical analysis of professional communication. Emphasizes production of effective, efficient documents. Includes overview of changing workplace demands and strategies to manage communication projects.
- LITR 5039: EDITING**
Students will learn the interpersonal skills required for editing. They will learn to make documents highly readable by revising for content, mechanics, style, visual design, organization, illustrations, and documentations.
- LITR 5130: COMPOSITION: THEORY AND PRACTICE**
Workshop in approaches to the teaching process; emphasis on composition theory, techniques for teaching description, narration, exposition, syntax and grammar.
- LITR 5131: STUDIES IN COMPOSITION AND RHETORIC**
Identified by specific title each time course is offered. May be repeated for credit with permission of instructor.
- LITR 5132: LITERARY THEORY**
History of main theories of literature; selected concepts, technical constructs, schools of criticism and theory. Literature MA candidates must take during first year of graduate work.
- LITR 5430: CREATIVE WRITING**
Seminar in writing fiction, poetry, drama or creative nonfiction. May be repeated for credit when genre varies.
- LITR 5431: AMERICAN LITERATURE**
Seminar focused on a particular style, period or genre such as romanticism, realism, novel, poetry or drama. May be repeated for credit when content varies.
- LITR 5432: MODERN AND CONTEMPORARY LITERATURE**
Seminar on works from the 20th and 21st centuries. May be repeated for credit when content varies.
- LITR 5433: EUROPEAN LITERATURE**
Seminar on selected masterpieces of European literature or intensive study of a particular period, national or area literature. May be repeated for credit when content varies.
- LITR 5434: BRITISH LITERATURE--PRE-RESTORATION**
Seminar focused on a particular author, period or genre, for instance Chaucer, Shakespeare or Spenser and Milton; women's writing. Course may be repeated for credit when content varies.
- LITR 5435: BRITISH LITERATURE-- RESTORATION TO THE PRESENT**
Seminar focused on a particular period or genre, for instance Restoration, 18th Century, Romantic or Victorian; the novel. May be repeated for credit when content varies.
- LITR 5436: MAJOR AUTHORS**
Intensive study of one or more authors influential in American, English or World literature. For instance: Euripides, Dante, Dickinson, George Eliot, Mishima or Walcott. May be repeated for credit when content varies.

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- LITR 5437: LITERATURE AND CULTURE**
Seminar on interdisciplinary approaches to the study of texts within cultures. Course may be repeated for credit when content varies.
- LITR 5438: LITERATURE AND GENDER**
Seminar on texts exploring gender issues. When emphasis is on women, a “Women’s Studies Course.” May be repeated for credit when content varies.
- LITR 5439: GENRE, MOVEMENT, OR STYLE**
Intensive study of a particular literary genre, movement or style such as Romanticism, Surrealism, the Gothic, the short story, the epic, confessional poetry, mysteries & detective stories or magic realism. May be repeated for credit when content varies.
- LITR 5731: MULTICULTURAL LITERATURE**
Intensive study of a particular ethnic group’s texts and authors, a trans-ethnic theme or topic; a survey of minority or immigrant literature, or colonialism. Course may be repeated for credit when content varies.
- LITR 5739: WRITING CENTER PRACTICUM**
Permission of instructor required. Prepares students to work in a one-on-one tutoring environment. Instruction in working with students as peer tutors; emphasis placed on learning about the composing process, strategies for invention, organization, development, revision and editing.
- LITR 5831: WORLD LITERATURE**
Seminar on selected world masterpieces, or intensive study of a particular nation’s or region’s literature and culture. Course maybe repeated for credit when content varies.
- LITR 5931: RESEARCH TOPICS IN LITERATURE**
Identified by specific title each time course is offered.
- LITR 5939: INDEPENDENT STUDY IN LITERATURE**
Prerequisite: Approval of independent study director. Independent study in Literature.
- LITR 6739: GRADUATE INTERNSHIP**
Prerequisites: LITR 5130, LITR 5739 and one semester tutoring in the Writing Center. Supervised composition internship in approved setting. Comprehensive written report required.
- LITR 6839: MASTER’S PROJECT RESEARCH**
Approval of advisor and project director required.
- LITR 6939: MASTER’S THESIS RESEARCH**
Approval of advisor and thesis director required.

PHILOSOPHY

- PHIL 5431: METAPHYSICS**
Inquiry into the thought of major thinkers on the nature of reality. The particular philosophers to be studied will vary from semester to semester.
- PHIL 5433: CONTINENTAL PHILOSOPHY**
The study of major European philosophers of the modern period: Kant, Hegel, Nietzsche, Heidegger, Levinias and others.
- PHIL 5931: RESEARCH TOPICS IN PHILOSOPHY**
Identified by specific title each time course is offered.
- PHIL 5939: INDEPENDENT STUDY IN PHILOSOPHY**
Prerequisite: Approval of independent study director required. Independent study in Philosophy.

PSYCHOLOGY

*Pending Coordinating Board approval

- PSYC 5031: HUMAN GROWTH AND DEVELOPMENT**
An overview of the developmental process throughout the life span. Focus on physical, cognitive, social and emotional components of development.
- PSYC 5032: FAMILY PSYCHOLOGY**
Family process from a systemic perspective, with attention to family history, family life cycle, family health and dysfunction and family therapy.

- PSYC 5035: BODY AWARENESS**
An experiential course which deals with the use of movement in therapy, the creative process using movement, non-verbal communications, body language, kinesthetic awareness and relaxation techniques. (Crosslisted with PSYC 4035).
- PSYC 5065: RESEARCH DESIGN AND STATISTICAL MEASUREMENT**
Design, analysis and application of social science research techniques and methods of measurement. (Crosslisted with SOCI 5065).
- PSYC 5131: PSYCHOPATHOLOGY OF CHILDHOOD**
Prerequisite: PSYC 5031 or equivalent. Survey of psychological disorders of childhood: diagnostic categories, assessment approaches, etiology, treatment and prognosis.
- PSYC 5134: INTERVIEWING AND ASSESSMENT**
Interviewing skills, goal setting, evaluating client progress, cultural sensitivity and ethics.
- PSYC 5135: PROFESSIONAL ISSUES IN HUMAN SERVICES**
Ethics, dual relationships, legal issues, confidentiality and other professional issues in the delivery of human services.
- PSYC 5136: MULTICULTURAL COUNSELING**
This course will familiarize students with culturally sensitive clinical practice with ethnic and other minority clients.
- PSYC 5137: MINDFULNESS AND ACCEPTANCE THERAPIES**
This course will familiarize students with the theory and research supporting recent trends in behavior therapy, particularly the group of therapies interested in the constructs of mindfulness and acceptance.
- PSYC 5231: PSYCHOTHERAPY: THEORY AND RESEARCH**
Prerequisite: PSYC 3331; 4531; or equivalent; admission to clinical psychology, family therapy or school psychology program. Forms of modern psychotherapy: psychoanalysis, humanistic, existential and behavioral.
- PSYC 5233: INTRODUCTION TO FAMILY THERAPY**
Introduction to theories and techniques of family and marital therapy; family process and lifestyle of the family.
- PSYC 5234: FAMILY LIFE CYCLE**
Prerequisite: PSYC 5233 and admission to family therapy program. Overview of family process and modifications of family structures over the course of the family cycle (e.g., birth of the first child, adolescence and mid-life, children leaving home, etc).
- PSYC 5235: LEARNING PRINCIPLES**
Basic principles of learning and their applications to human problems. Preparation for more advanced applications courses. An undergraduate learning or behavioral modification course is recommended as a preparation.
- PSYC 5236: FAMILY ASSESSMENT**
Prerequisite: PSYC 4631, 4632 and PSYC 5233; admission to the Family Therapy Program. An overview of assessment methods and instruments related to marital and family dysfunctions. Diagnosis of dysfunctional relationship patterns and of nervous and mental disorders.
- PSYC 5237: CREATIVITY**
Historical and developmental approach to the importance of creative activity throughout the lifespan; a new approach to "creative necessity."
- PSYC 5238: NEGOTIATING ACROSS CULTURES**
The challenges facing international organizations and multinational corporations in negotiating across cultures and generating decisions that take into account the beliefs and values of people of diverse cultures and political systems. (Crosslisted with SOCI 5238).
- PSYC 5239: GROUP PSYCHOTHERAPY**
Prerequisites: Acceptance into clinical psychology, family therapy or school psychology program, PSYC 5731 and one therapy course. An introduction to the theory and practice of group psychotherapy including the study of group dynamics and group process. Students participate as group members and practice, under supervision, as group facilitators.

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- PSYC 5330: INTRODUCTION TO INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY**
Overview of issues, problems and practices in industrial/organizational psychology. Topics include work group dynamics, attitudes, job analysis, employee selection, performance appraisal, training and organizational development. (Crosslisted with PSYC 4332).
- PSYC 5331: PERSONNEL PSYCHOLOGY**
Prerequisites: PSYC 6036 and 6037. Overview of the issues and problems encountered by industrial/organizational psychologists. Topics include job analysis, employee selection, performance appraisal, reliability and validity and employment law.
- PSYC 5332: ORGANIZATIONAL PSYCHOLOGY**
Overview of the issues and problems which organizational psychologists examine and the methods they employ. Topics include work motivation, job attitudes and organizational change.
- PSYC 5333: LEADERSHIP IN ORGANIZATIONS**
Interdisciplinary examination of the determinants and consequences of effective and ineffective leadership in various types of organizations. (Crosslisted with SOCI 5339).
- PSYC 5334: CHANGE AND ORGANIZATIONAL DEVELOPMENT**
Prerequisites: PSYC 5332. Introduces students to notion of change, both at individual and organizational level. Surveys organizational change techniques and strategies. Students learn to work in groups and apply OD models to diagnose organizational problems and recommend interventions. (Crosslisted with SOCI 5430).
- PSYC 5335: CAREER COUNSELING**
Prerequisites: Admission to clinical psychology, family therapy or school psychology program. Review of theories of career choice, accessing vocational information, theories and methods of career assessment and counseling techniques to facilitate career development across the lifespan.
- PSYC 5336: BEHAVIOR IN COMPLEX ORGANIZATIONS**
Study of how complex organizations are used as "social tools" to attain specific ends; exploration of issues of organizational structure, goals, technology, boundaries, resources and power. Focus on behavioral consequences of bureaucratic hierarchy.
- PSYC 5337: VIOLENCE AGAINST WOMEN**
Global perspectives of violence against women by men. Topics include rape, sexual abuse, incest, female genital mutilation, battering, sexual slavery, sexual harassment.
- PSYC 5338: CROSS-CULTURAL COMMUNICATIONS**
Examines the role of cross-cultural communication in economic, political and social transactions. Examines the impact of cultural beliefs, values and behavior patterns on communication with members of different cultures and identifies the factors that facilitate cross-cultural communications.
- PSYC 5339: TRAINING AND DEVELOPMENT**
Overview of training and development in organizations with particular emphasis on needs assessment, the learning environment and methods of program evaluation.
- PSYC 5430: HUMAN SERVICES MANAGEMENT**
Management principles, leadership, conflict resolution, budgeting and fund-raising in human services agencies and government and other community organizations. (Crosslisted with SOCI 5432).
- PSYC 5431: GROUP AND ORGANIZATIONAL BEHAVIOR**
Examination of theories of group and organizational behavior and their application to such settings as the criminal justice system and corporate organizations. Inter-group conflict and conflict resolution also considered.
- PSYC 5432: PSYCHOACTIVE DRUGS**
Legal and illegal drugs and their effect on mental state and behavior; how they work on the nervous system; why people use them; attempts to control them.
- PSYC 5433: SUBSTANCE ABUSE: CAUSES AND TREATMENTS**
Study of the factors that contribute to substance abuse and the various treatment modalities.
- PSYC 5434: INTRODUCTION TO ART THERAPY THEORY AND PRACTICE**
History, theory and practice of art therapy; introduction to psychodynamic, humanist and behaviorist contributions.

- PSYC 5436: ADULT DEVELOPMENT**
Examination of common development patterns during the adult years. Emphasis on the interrelationships among work, family and leisure. (Crosslisted with SOCI 5436).
- PSYC 5437: AGING**
Study of current and future issues relating to the elderly from both a psychological and a societal perspective. (Crosslisted with SOCI 5437).
- PSYC 5530: GROUP DYNAMICS AND TEAMWORK**
Prerequisites: PSYC 5330 and PSYC 5332. Emphasis on individual and group processes that contribute to group effectiveness. Students will work in groups to facilitate learning group dynamics concepts.
- PSYC 5532: ADVANCED SOCIAL PSYCHOLOGY**
Theory, methodology and research findings pertinent to the individual in social context. (Crosslisted with SOCI 5532).
- PSYC 5533: PSYCHOLOGY OF GENDER, RACE & SEXUALITY**
Sex roles, stereotyping, socialization of women and men, feminism, female sexuality, feminist therapy androgyny, situation of minority women. "Women Studies Course."
- PSYC 5534: MINORITIES AND MAJORITIES**
The pattern of interaction among race, ethnic and gender groups; personality and structural effects of prejudice and discrimination. Course includes both U.S. and cross-cultural perspectives. (Crosslisted with SOCI 5333).
- PSYC 5535: CROSSCULTURAL PERSPECTIVES ON THE FAMILY**
Cross-cultural data are used to examine family systems including marriage, sex roles and child rearing. (Crosslisted with ANTH 4531, ANTH 5531 and SOCI 5535).
- PSYC 5536: OCCUPATIONAL HEALTH PSYCHOLOGY**
Effects of work environment on employees' health and well-being. Emphasis on promotion of wellness and prevention of negative health-related consequences within organizational settings.
- PSYC 5731: BASIC PSYCHOTHERAPY SKILLS**
Prerequisite: Courses in abnormal psychology and personality, or permission of instructor and admission to clinical psychology, school psychology, or family therapy program. Counseling skills development and micro-skills laboratory experience.
- PSYC 5732: SEMINAR IN FEMINIST THEORY**
Prerequisite: Any previous Women's Studies course. An advanced course in Women's Studies, designed to acquaint the student with contemporary issues in feminist scholarship across the disciplines. (Crosslisted with PSYC 4732, HUMN 4732, HUMN 5732).
- PSYC 5734: PROFESSIONAL PRACTICE, LAW AND ETHICS**
Prerequisite: Admission to clinical psychology, school psychology or family therapy program. Issues in professional practice: career planning, licensing, Texas law, ethics, professional standards and responsibilities.
- PSYC 5735: ANXIETY AND STRESS MANAGEMENT**
Examination of development and maintenance of stress and anxiety. Focus on anxiety disorders and stress conditions and methods of treatment including cognitive-behavioral therapy, progressive muscle relaxation, exercise, meditation, stress inoculation and pharmacological approaches.
- PSYC 5736: BEHAVIORAL MEDICINE**
Prerequisite/corequisite: A course in behavior analysis or in learning principles. Clinical applications of behavioral principles in the prevention and treatment of physical disease.
- PSYC 5737: FAMILY THERAPY PROFESSIONAL ETHICS**
Prerequisite: Admission to the Family Therapy Program. Issues in the professional practice of family therapy: legal and professional standards and responsibilities, ethics, licensing, Texas law.
- PSYC 5738: FAMILY THERAPY PRACTICUM**
Prerequisite: PSYC 5233, 5731 and admission to the Family Therapy Program. Supervised clinical experience working with families including study of advanced family systems interventions and a focus on students' own families.
- PSYC 5831: GENDER AND CULTURAL PERSPECTIVES IN THERAPY**
Examination of women's "pathology" from social perspectives; feminist critique of traditional psychotherapy. Analysis of values and power issues in rape, incest, battering, obesity and assertiveness. "Women Studies Course."

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- PSYC 5832: CLINICAL HYPNOSIS**
Prerequisite: Admission to clinical psychology, school psychology or family therapy program. Induction techniques, tests for depth of trance and hypnotically induced phenomena including sensory changes, cognitive changes and suggestibility. Emphasis on clinical applications of phenomena.
- PSYC 5833: TRANSPERSONAL THERAPY**
Introduction to the theory and practice of transpersonal therapy, including an overview of Eastern and Western approaches to psychotherapy.
- *PSYC 5911: SELECTED TOPICS IN PSYCHOLOGY**
Identified by specific title each time course is offered.
- PSYC 5915: COOPERATIVE EDUCATION**
Educational paid work assignment by a student in the field of his or her career interest and course of study. Academic supervision and a report required.
- PSYC 5931: RESEARCH TOPICS IN PSYCHOLOGY**
Identified by specific title each time course is offered.
- PSYC 5919, 5929, 5939: INDEPENDENT STUDY IN PSYCHOLOGY**
Prerequisite: Approval of advisor and independent study director. Independent study of Psychology. May be taken for 1, 2, or 3 credit hours.
- PSYC 6011: SEMINAR IN ADVANCED STATISTICS**
Prerequisite: Concurrent enrollment in or previous graduate level statistics course. Overview of advanced topics in statistics, e.g., multiple regression, meta-analysis, signal-detection analysis, etc.
- PSYC 6031: BEHAVIORAL ASSESSMENT**
Prerequisite: PSYC 5235 and PSYC 6238 or equivalent and admission to the Applied Behavior Analysis Sub-plan. Use of various behavioral assessment instruments, single subject research designs and ethics as applied to behavioral analysis.
- PSYC 6032: INTELLECTUAL ASSESSMENT**
Prerequisites: PSYC 6036, 6037 (concurrent enrollment accepted) and admission to clinical psychology or school psychology program. Review of theory underlying individual intelligence tests with emphasis on the CHC approach. Supervised practice in the administration, scoring and interpretation of the WAIS-III, WISC-IV and WJ-III.
- PSYC 6033: PERSONALITY ASSESSMENT**
Prerequisites: PSYC 6531 or 5131 and admission to clinical psychology or school psychology program. An overview of the major psychological assessment techniques. Emphasis on structured interviews, personality inventories and projective techniques.
- PSYC 6034: CONSULTATION IN SCHOOL PSYCHOLOGY**
Prerequisite: 36 hours of School Psychology Course work. Models of consultation: consultation as a collaborative problem-solving process in the schools. Focus on primary and secondary intervention/prevention strategies. Supervised project involving consultation and requiring field experience.
- PSYC 6036: RESEARCH DESIGN AND STATISTICS I**
Prerequisite: Undergraduate course in statistics. Application and design of research methodologies for the behavioral sciences with special emphasis on experimental and quasi-experimental research designs. (Crosslisted with SOCI 6036).
- PSYC 6037: RESEARCH DESIGN AND STATISTICS II**
Prerequisite: PSYC 6036. Application of statistical analysis to research results in the behavioral sciences with special emphasis on analyzing experimental and quasi-experimental research designs. (Crosslisted with SOCI 6037).
- PSYC 6038: CLINICAL PRACTICUM**
Prerequisites: PSYC 5731 and PSYC 6531; admission to clinical psychology program; permission of the instructor; and twelve hours of graduate level course work including Basic Psychotherapy Skills, psychopathology and two therapy or testing courses. Application of therapy skills with clients under supervision. Written report required.
- PSYC 6039: SCHOOL PSYCHOLOGY PRACTICUM**
Prerequisites: 24 hours of School Psychology coursework which must include PSYC 5731, 6032 and 6133 can be concurrent enrollment; admission to the school psychology program area and permission of instructor. Application of assessment skills with clients under supervision. Written reports required.

- PSYC 6111: STUDENT DIVERSITY IN LEARNING**
Course will familiarize students with potential effects of racial, cultural, ethnic, experiential, socioeconomic, gender-related and linguistic variables that impact development and learning. Development of cultural competency and necessary skills for providing services to diverse populations of children and families in educational setting.
- PSYC 6121: ETHICS AND LAW IN SCHOOL PSYCHOLOGY**
Exploration of ethical and legal guidelines pertinent to delivery of psychological services in school setting. Planning and establishing a professional identity for career development; understanding legalities, ethics and standards of practice for school psychology; and working effectively with special populations and problems in school settings.
- PSYC 6132: SEMINAR IN PROFESSIONAL SCHOOL PSYCHOLOGY**
Prerequisite: 42 hours of School Psychology coursework. History and foundation of school psychology, roles and functions of the school psychologist, special education laws and professional issues related to the practice of school psychology.
- PSYC 6133: PERSONALITY ASSESSMENT OF THE CHILD**
Prerequisites: PSYC 5131 and 6032 or 6036, 6037 and admission to clinical psychology or school psychology program. Supervised practice in the use of major personality tests for children and adolescents, including projective and objective/empirical measures.
- PSYC 6134: BIOLOGICAL BASIS OF BEHAVIOR**
The role of the nervous system in perception, movement, drives, emotions, higher mental processes and mental illness.
- PSYC 6136: MARITAL AND FAMILY INTERACTION**
Prerequisite: PSYC 5233 and admission to clinical psychology, school psychology, or family therapy program. Analysis of marital and family interaction process through evaluation of communication patterns in a variety of families.
- PSYC 6137: FAMILY RESEARCH**
Prerequisites: PSYC 5236 and admission to Family Therapy Program. Overview of research methods with a focus on research in family process and family therapy.
- PSYC 6139: INTERVENTION I: ACADEMIC AND COGNITIVE SKILLS**
Prerequisite: Admissions to School Psychology Program or permission of instructor. Overview and clinical practice of research-based interventions to promote academic and cognitive skills in school-aged children. Topics include bilingual education, preschool education, curriculum-based assessment and design of reading interventions.
- PSYC 6230: INTERVENTION II: SOCIAL AND BEHAVIORAL SKILLS**
Prerequisite: Intervention I or admission to School Psychology Program or permission of instructor. Overview and clinical practice in school, community and family interventions that promote safe schools and social competence among children and youth.
- PSYC 6231: INTERVENTION III: AFFECTIVE AND ADAPTIVE SKILLS**
Prerequisites: Admission to School Psychology Program; successful completion of PSYC 5131, 6133, 6230. Theories and evidence-based counseling interventions for youth; field-based experience; crisis intervention; prevention issues.
- PSYC 6232: MENTAL MEASUREMENT**
Prerequisite: An elementary statistics course. Introduction to the general area of mental measurement. Theory and content of measuring devices in fields of intelligence, interests, personality and special aptitudes.
- PSYC 6233: ADVANCED FAMILY THERAPY**
Prerequisite: PSYC 5233 and admission to family therapy program or permission of instructor. Must be taken in conjunction with PSYC 5731 or after taking PSYC 5731. In depth review of family systems and family therapy paradigms.
- PSYC 6234: SYSTEMS AND SYMPTOMS**
Prerequisite: PSYC 6233; admission to clinical psychology, school psychology or family therapy program. In depth study of systems theory with emphasis on clinical implications.
- PSYC 6235: BEHAVIORAL/COGNITIVE THERAPIES**
Prerequisite: PSYC 5235 or previous course in learning and admission to general clinical psychology, school psychology or family therapy program. Application of principles of behavior and cognition to individual therapy.

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- PSYC 6236: CHILD AND ADOLESCENT FAMILY THERAPY**
Prerequisites: PSYC 5233, 5234 and admission to the Family Therapy Program. Family therapy approaches to problems of children and adolescents; focus on multiple contexts such as family, school and community.
- PSYC 6237: CULTURE AND CONSCIOUSNESS**
Explores the nature of interaction between culture and human consciousness. Specifically, it will examine the impact of culture on the perception of space and time, the definition of reality and the formation of belief and value structures. (Crosslisted with SOCI 4237).
- PSYC 6238: APPLIED BEHAVIOR ANALYSIS**
Prerequisite: PSYC 5235 or equivalent. The use of learning principles in applied areas such as education, business, health and human services.
- PSYC 6239: BEHAVIORAL INTERVENTIONS I**
Prerequisites: PSYC 5235 and PSYC 6238 or equivalent and admission to the Behavior Analysis Program. Specialized application of behavior analytic principles and methods; requires up to 10 hours per week of field activities.
- PSYC 6330: RESEARCH AND PRACTICUM IN APPLIED BEHAVIOR ANALYSIS**
Prerequisites: PSYC 5135, 5235, 6031, 6238 and permission of instructor. Supervised application of behavior analytic principles and methods in community settings. Completion of a research project is required. Students may enroll in this course twice, for up to six hours of credit.
- PSYC 6331: BEHAVIORAL INTERVENTIONS II**
Prerequisites: PSYC 5235, PSYC 6238, PSYC 6031 and admission to behavior analysis program. Specialized application of behavior analytic principles and methods; requires up to 10 hours per week of field activities.
- PSYC 6332: INTERVENTION IV: PROGRAM DESIGN**
Prerequisites: Intervention I, II and III or admission to School Psychology Program and permission of instructor. Methods to evaluate effectiveness of service delivery systems for special populations of children and youth.
- PSYC 6335: BEHAVIORAL PHARMACOLOGY RESEARCH**
Prerequisite: Permission of instructor. Laboratory investigation of drug/brain/ behavior relationships in the rat. Readings from primary research literature, laboratory experiments and research reports.
- PSYC 6336: BEHAVIORAL NEUROSCIENCE RESEARCH**
Prerequisite: Permission of instructor. Laboratory investigation of brain/behavior relationships in the rat. Readings from primary research literature, laboratory experiments and research reports.
- PSYC 6431: USER CENTERED DESIGN**
Covers how users should be included in design process including needs analysis, requirements writing, Iterative testing of low/medium/high fidelity prototypes, implementation of requirements and evaluations.
- PSYC 6434: HUMAN FACTORS ENGINEERING**
Analysis of principles of human factors, along with introduction and overview of the HF/E disciplines.
- PSYC 6531: PSYCHOPATHOLOGY**
Prerequisite: One course in abnormal psychology. Current issues and research in behavior pathology.
- PSYC 6534: COUPLE AND SEX THERAPY**
Prerequisites: PSYC 5233, 5731 and admission to a professional psychology programs. Practice of couples therapy including theory and practice as well as the etiology of sexual dysfunctions and introduction to principles and practices of sex therapy.
- PSYC 6539: PRACTICUM IN INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY**
Prerequisites: PSYC 5331, 5332, 6036, 6037 and permission of instructor. Supervised application of psychological principles in an organizational setting. Review of ethical, legal and professional issues. Written report required.
- PSYC 6711 SEMINAR IN FAMILY THERAPY**
Prerequisite: Admission to the Family Therapy Program. Current professional issues in the field of family therapy. May be repeated with permission of instructor.

- PSYC 6636: CLINICAL INTERNSHIP**
Prerequisites: PSYC 5734, PSYC 5738 (2 semesters), PSYC 6038 or PSYC 6039; program approval for placement in an appropriate internship. Arrangements must be completed by preregistration.
- PSYC 6666: CLINICAL INTERNSHIP**
Prerequisite: Admission to clinical psychology, school psychology, or family therapy program. Minimum of two days a week in an approved internship setting; written report required. Arrangements for internship must be completed by preregistration.
- PSYC 6734: ASSESSMENT IN INDUSTRY**
Prerequisites: PSYC 6036 and 6037. Psychological testing and measurement theory as it applies to assessment of people in organizations. Covers different assessment tools and their use in industry.
- PSYC 6735: SEMINAR IN INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY**
Prerequisites: Students must have a minimum cumulative graduate GPA of 3.00 and completion of all core I/O courses. Issues related to the practice of I/O psychology. Topics include professional issues, consulting skills and career development. This is a hands-on course.
- PSYC 6736: ADVANCED PERSONALITY THEORY**
Advanced seminar on the dynamics of personality.
- PSYC 6739: GRADUATE INTERNSHIP**
Prerequisite: 24 hours of graduatelevel course work and approval of internship coordinator. Students seeking an internship must have completed PSYC 5135 and if in Human Services internship, must have completed PSYC 5134. Written report required. Arrangements for internships should be completed by the beginning of the prior semester.
- PSYC 6832: ADVANCED COGNITIVE PSYCHOLOGY**
Prerequisite: PSYC 4832: Cognitive Psychology. Latest theories and research findings related to human cognition. Topics include perception, attention, memory, language and unconscious processing.
- PSYC 6836: POST-GRADUATE INTERNSHIP IN SCHOOL PSYCHOLOGY**
Prerequisites: Graduate degree in School Psychology or equivalent and permission of instructor. This site-based internship students focused experience in the role(s) of School Psychology and directed study for the National School Psychology.
- PSYC 6839: MASTER'S PROJECT RESEARCH**
Approval of advisor and project director required.
- PSYC 6939: MASTER'S THESIS RESEARCH**
Approval of advisor and thesis director required. PSYC 6036/6037 suggested.

SOCIOLOGY

*Pending Coordinating Board approval

- SOCI 5032: SOCIOLOGY OF MENTAL ILLNESS**
The history of defining and treating mental illness; consequences of the social structures in which treatment occurs.
- SOCI 5035: HUMAN RIGHTS AND SOCIAL JUSTICE**
Exploration of conceptions of human rights and of recent attempts to reconcile such conceptions in the context of globalization and from perspective of social justice.
- SOCI 5131: CONTEMPORARY SOCIOLOGICAL THEORY**
Exploration of major developments in sociological theory since 1930, including Critical theory, Feminist theory, Post-Modern theory and Rational Choice theory.
- SOCI 5133: ADVANCED JUVENILE DELINQUENCY**
In depth analysis of delinquency theories, issues and policies in the U.S. and abroad. Topics include measurements and research, serious violent offending, gangs and treatment by justice agencies. (Crosslisted with CRIM 5133).
- SOCI 5135: THE DEATH PENALTY**
Introduction to history and development of capital punishment as a social institution. Special focus on issues such as deterrence, discrimination and execution of innocent prisoners. (Crosslisted with CRIM 5135).

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- SOCI 5136: WOMEN AND THE LAW**
Evolution of women's legal rights in the United States. Examination of contemporary issues in context of human rights law. Legal status of women in economic, political and judicial sectors.
- SOCI 5137: RACE AND THE LAW**
Evolution of legal rights of race/ethnic groups in U.S. from sociological perspective. Examination of civil rights movement, hate crimes and Affirmative Action policy.
- SOCI 5236: RELIGION AND GLOBAL CHANGE**
Examination of religion in the modern world, religious identities and the process of secularization, all from a global, cross-cultural perspective.
- SOCI 5238: NEGOTIATING ACROSS CULTURES**
The challenges facing international organizations and multinational corporations in negotiating across cultures and generating decisions that take into account the beliefs and values of people of diverse cultures and political systems. (Crosslisted with PSYC 5238).
- SOCI 5239: EGYPT IN TRANSITION**
Course exposes students to culture, history, religion and politics of Egypt and the Middle East. It explores sociological, historical and cross-cultural forces shaping modern Egypt.
- SOCI 5330: CULTURAL STUDY ABROAD**
Prerequisite: Permission of instructor. Course exposes students to culture, history, religion and politics of another country. Involves foreign travel, and includes prerequisite of semester long course focusing on study abroad country.
- SOCI 5331: ADVANCED CRIMINOLOGY**
Study of criminal behavior from perspectives of biology, psychology and sociology. Within each discipline, major theories will be examined and critiqued. (Crosslisted with CRIM 5331).
- SOCI 5332: WHITE-COLLAR CRIME**
Study of financial, physical and social costs of white-collar crime. Examination of perpetrators and victims of consumer fraud, environmental crimes, unsafe products and political corruption. (Crosslisted with CRIM 5332).
- SOCI 5333: MINORITIES AND MAJORITIES**
The pattern of interaction among race, ethnic and gender groups; personality and structural effects of prejudice and discrimination. Course includes both U.S. and cross-cultural perspectives. (Crosslisted with PSYC 5534).
- SOCI 5334: SOCIAL STRATIFICATION**
Patterns of social and economic inequality in the United States. Distribution of income and wealth, social mobility, life chances, education and power. Class, race and gender differences will be discussed as well as patterns of social change.
- SOCI 5335: CRIMINAL JUSTICE AND THE MASS MEDIA**
This course examines the collision between two powerful sets of social institutions-the criminal justice system and the mass media. (Crosslisted with CRIM 5335).
- SOCI 5336: LAW AND SOCIETY**
This course surveys a number of problematic issues in contemporary American society from the perspectives of sociological, philosophical and legal theories. The course examines the controversial ways our political system seeks to reconcile civil liberties with the collective obligations of the social contract. (Crosslisted with CRIM 5336).
- SOCI 5337: COMPLEX ORGANIZATIONS**
Study of how complex organizations are used as "social tools" to attain specific ends; exploration of issues of organizational structure, goals, technology, boundaries, resources, power and organizational environments and exercises in designing prototype organizations.
- SOCI 5338: CRIMINAL LAW**
Study of structure and rationale for criminal law; focus on criminal liability, criminal defenses, types of offenses and contemporary issues, with attention to the Model Penal Code.
- SOCI 5339: LEADERSHIP IN ORGANIZATIONS**
Overview of the topic of leadership in organizations from multiple perspectives including psychology, sociology and management. (Crosslisted with PSYC 5333).
- SOCI 5430: ORGANIZATIONAL DEVELOPMENT**
Overview of the current theories and methods of organizational development and the role of the behavioral sciences in the process. (Crosslisted with PSYC 5334).

- SOCI 5431: GROUP AND ORGANIZATIONAL BEHAVIOR**
Examination of theories of group and organizational behavior and their application to settings such as the criminal justice system and corporate organizations. Inter-group conflict and conflict resolution also considered.
- SOCI 5432: HUMAN SERVICES MANAGEMENT**
Management principles, leadership, conflict resolution, budgeting and fundraising in human services agencies and government and other community organizations. (Crosslisted with PSYC 5430).
- SOCI 5433: SOCIAL CONFLICT AND MEDIATION**
Examines theories of social conflict and application of dispute resolution/mediation techniques to needs of community groups, courts, churches, businesses and non-governmental agencies.
- SOCI 5436: ADULT DEVELOPMENT**
Examination of common development patterns during the adult years. Emphasis on the interrelationships among work, family and leisure. (Crosslisted with PSYC 5436).
- SOCI 5437: AGING**
Study of current and future issues relating to the elderly from both a psychological and societal perspective. (Crosslisted with PSYC 5437).
- SOCI 5532: ADVANCED SOCIAL PSYCHOLOGY**
Prerequisite: PSYC 4131, 6036, 6037 or equivalent. Theory, methodology and research findings pertinent to the individual in social context. (Crosslisted with PSYC 5532).
- SOCI 5533: SOCIOLOGY OF HUMAN INTIMACY**
Inquiring into the forms and dynamics of human intimacy. Topics include attraction, sexuality, marriage and divorce, domestic violence, friendship and loneliness. (Crosslisted with PSYC 5531).
- SOCI 5535: CROSSCULTURAL PERSPECTIVES IN THE FAMILY**
Crosscultural data are used to examine family systems in terms of marriage, sexroles and child rearing. "May include Women's Studies content." (Crosslisted with ANTH 4531, ANTH 5531 and PSYC 5535).
- SOCI 5536: CULTURE AND ECONOMIC CHANGE**
The course will examine the effects of cultural values and social organization on business endeavors, entrepreneurship and economic change. The role of transitional corporations in breaking down traditional practices and possibly creating new cultures will also be explored.
- SOCI 5537: URBAN PROBLEMS**
Examine classical theories of urban life and urban development; explores urban problems such as crime, transportation, suburban conflict and corresponding urban policy.
- SOCI 5931: RESEARCH TOPICS IN SOCIOLOGY**
Identified by specific topic each time course is offered.
- SOCI 5939: INDEPENDENT STUDY IN SOCIOLOGY**
Prerequisites: Approval of advisor and independent study director. Independent study in Sociology.
- SOCI 6338: STRATEGIC PLANNING**
An introduction to planning and decisionmaking approaches that reflect anticipated changes in organizational, environmental and competitive conditions.
- SOCI 6730: GRADUATE STATISTICS**
Prerequisite: Must be Sociology major; must pass undergraduate statistics test during first day of class with score of 80% or higher. Multivariate statistical analysis including logit regression and path analysis.
- SOCI 6731: GRADUATE RESEARCH METHODS**
Prerequisite: Must be Sociology major; must pass undergraduate methods test during first day of class with score of 80% or higher. Advanced study of logic, principles and procedures involving techniques of data collection, organization and statistical analyses.
- SOCI 6735: SEMINAR IN SOCIOLOGY**
Prerequisites: SOCI 5334 and 5537. Overview of the discipline of sociology, covering recent theoretical trends in the last 20 years. Focus will be on institutions of family, educational system, economy, community and the state.

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SOCI 6739: GRADUATE INTERNSHIP

Prerequisite: Twenty-four hours of graduatelevel course work and approval of Internship Committee. Minimum of two days a week in an approved internship setting. Written report required. Arrangements for internships should be completed by the beginning of the prior semester.

SOCI 6839: MASTER'S PROJECT RESEARCH

Approval of advisor and project director required.

SOCI 6939: MASTER'S THESIS RESEARCH

Approval of advisor and thesis director required.

SPANISH

SPAN 5031: INTENSIVE SPANISH I

This course is designed to provide Spanish language proficiency and communication skills; listening, reading, speaking and writing.

SPAN 5033: INTENSIVE SPANISH II

Prerequisite: 1 semester of college Spanish or 2 years of high school Spanish. Development of Spanish communication skills: listening, reading, speaking and writing.

SPAN 5035: INTENSIVE SPANISH III

Prerequisite: 2 semesters of college Spanish or 4 years of high school Spanish. Development of Spanish communication skills and cultural background.

SPAN 5931: RESEARCH TOPICS IN SPANISH

Identified by specific topic each time course is offered.

WOMEN'S STUDIES

WMST 5337: VIOLENCE AGAINST WOMEN

Global perspectives of violence against women by men. Topics include rape, sexual abuse, incest, female genital mutilation, battering, sexual slavery, sexual harassment.

WMST 5533: PSYCHOLOGY OF GENDER, RACE & SEXUALITY

Topics include sex roles, stereotyping, socialization of women and men, feminism, female sexuality, feminist therapy, androgyny, situation of minority women.

WMST 5732: SEMINAR IN WOMEN'S STUDIES

Prerequisite: Any other Women's Studies course. An advanced course in Women's Studies, designed to acquaint the student with contemporary issues in feminist scholarship across the disciplines. (Crosslisted with HUMN 5732, PSYC 5732).

WMST 5931: RESEARCH TOPICS IN WOMEN'S STUDIES

Identified by specific title each time course is offered.

WMST 5939: INDEPENDENT STUDY IN WOMEN'S STUDIES

Prerequisite: Approval of independent study director. Independent study in Women's Studies.



Assistant Professor of Criminology Everett Penn is one of several Fulbright scholars on the faculty in the School of Human Sciences and Humanities. Nationally recognized professors share innovative ideas in a wide range of programs from psychology to studio arts.



Graduate Research Assistant Micaela Morgado (c) works closely with Assistant Professor of Biology Bazlur Rashid (l) and Associate Professor of Biology Larry Rohde (r) in UHCL's Laboratory for Biotechnology.

SCHOOL OF SCIENCE AND COMPUTER ENGINEERING

- Biological Services
- Biotechnology
- Chemistry
- Computer Engineering
- Computer Information Systems
- Computer Science
- Engineering Management
- Environmental Science
- Mathematical Science
- Physics
- Software Engineering
- Statistics
- Systems Engineering

The School of Science and Computer Engineering (SCE) offers high quality academic degrees consistent with the role of a regional public university. Plans within the school prepare graduates to enter fields in natural sciences, mathematics, computing and computer and software engineering. Individuals in the school's plans are expected to develop skills in problem solving, independent study and critical thinking, and to be able to adapt knowledge to new situations and to the benefit of society. Students in these plans attain a sense of professional values and ethics as well as knowledge and skills relevant to their specific subject area. This sense of professional responsibility is essential if society is to benefit from the interfaces with advanced technology and science.

The school supports research and development directed toward producing new knowledge and identifying additional applications of existing knowledge. Dissemination of scientific knowledge through publications and presentations is encouraged, as well as professional service to local, regional, national and international communities.

The School of Science and Computer Engineering has three divisions; the Division of Computing and Mathematics, the Division of Engineering and the Division of Natural Sciences. The faculty of each division aspires to a professional model that includes balance among the components of the SCE mission: teaching, research and service.

The Division Chair of Computing and Mathematics coordinates the plans in Computer Information Systems, Computer Science, Mathematical Science and Statistics. The Division Chair of Engineering coordinates the plans in Computer Engineering, Software Engineering, Systems Engineering and Engineering Management. Support areas include telecommunications, robotics, control systems, industrial modeling, mathematical modeling and petrochemical processes.

The Division Chair of Natural Sciences coordinates the plans in Biological Sciences, Biotechnology, Chemistry, Environmental Science and Physics. Sub-plans or specialization areas include physiology/pre-health, cell/molecular, ecology/microbiology, biotechnology, environmental chemistry, environmental geology, environmental biology, industrial hygiene, safety and technical management. The Chemistry Program has complete accreditation from the American Chemical Society (ACS).

STANDARDS AND REQUIREMENTS FOR DEGREES IN THE SCHOOL OF SCIENCE AND COMPUTER ENGINEERING

ADMISSION INTO A DEGREE PLAN

Following admission to the university, students' transcript evaluations are forwarded to the Office of Student Advising. All graduate plans require that faculty admissions committees review the students' files and determine whether students will be accepted into degree plans. Students are notified of their admission status by the associate dean. Once accepted to a degree plan, students meet with academic advisors at New Student Orientation to obtain detailed instructions about completing a Candidate Plan of Study (CPS). The CPS delineates specific requirements of a study area and must be completed during the semester of acceptance into a degree plan.

In general, no more than 9 hours for a graduate degree taken at University of Houston-Clear Lake prior to completion of a CPS may be applied toward any degree in the school. These hours, along with the hours accumulated during the semester the CPS is being finalized, will be evaluated for acceptance by the faculty advisor and approved by the associate dean.

STANDARDS FOR GRADUATE DEGREES

The Graduate Record Exam (GRE) is required of all students applying for admission to a graduate plan in the school. Computer Information Systems is the only plan that accepts Graduate Management Admission Test (GMAT) in lieu of the GRE. It is recommended that students who apply for admission to a graduate plan have a grade point average (GPA) of at least 3.000 (four point grade scale) on the last 60 hours of course work. GRE scores will be evaluated by the degree plan's admissions committee and will be used as one of the indicators of the applicant's potential for completion of the plan to which he/she has applied. Individual degree plans may specify additional qualifications (see individual plan descriptions).

All graduate degrees in the School of Science and Computer Engineering require 30-36 hours depending on specific plan requirements; a minimum of 30 hours must be graduate courses. No more than six hours of upper-level (4000 level) credit will be allowed in any master's degree. A maximum of six hours of Independent Study may be applied to any master's degree. A maximum of six hours of grades within the range of "C+," or "C" may be counted toward any graduate degree.

GRADUATE DEGREE OPTIONS

Thesis Option

Students selecting the thesis option must select a committee and submit a formal thesis proposal to the Office of the Dean prior to enrolling for thesis courses. The thesis committee will consist of at least three members, two of whom must be full-time UHCL faculty members. A fulltime faculty member of the School of Science and Computer Engineering will serve as the chair of the committee. The Office of the Dean will notify students, chairs and committee members of approval of the committee composition. The chair will report the final grades.

Students must register for the appropriate thesis research course no later than the first long semester after the dean has accepted the proposal. See the Master's Degree Option: Master's Thesis section of this catalog for more information.

University and SCE guidelines and procedures relating to the graduate thesis committee, thesis proposal, the thesis document and defense are described in the Graduate Thesis Guidelines and Procedures Manual available in the Office of the Dean.

Extended Course Work Option

All graduate plans in the school offering this option require a capstone course. See the particular plan area for the specific extended course work option requirements.

Internship Option

Some plans offer an internship option. See the particular plan of interest.

Research Project Course Option

Some plans offer a research project course option. See the particular plan of interest.

DIVISION OF COMPUTING AND MATHEMATICS

Students desiring to study in the computing and mathematics may choose any one of five undergraduate or four graduate plans. Applicants should consult the chair of the division for additional information.

Requirements and Standards for Plans in Computing, Mathematical Science and Statistics

Graduate Degree Candidacy

Students seeking graduate degree candidacy should have a bachelor's degree in a related field. To be accepted for degree candidacy, students should be within 15 hours of completing upper-level foundation courses. These courses are listed in the particular degree area in the catalog. All foundation courses must be completed within one calendar year of first graduate registration at UHCL. Students needing more than 15 hours of upper-level foundation courses are encouraged to complete a second bachelor's degree.

GRADUATE COMPUTING DEGREES

Computer Information Systems

Graduate studies in Computer Information Systems lead to a master of science (MS) degree. This plan is designed to prepare students for key technical, administration and management positions in the analysis, design, implementation, maintenance, operation and management of industrial and commercial computer information systems.

Basic Preparation

Students aspiring to graduate degree candidacy must have a bachelor's degree in a related area and a background in Computer Information Systems. Preparatory require-

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ments are proficiency in at least two high level languages, including an object-oriented programming language such as Java, C++ or C#, and the following undergraduate course: Calculus I or Business Calculus

Upper-level foundation course requirements:

CSCI 4333	Design of Database Systems	CSCI 3331	Comp Org & Assembly Lang
MATH 3331	Discrete Mathematics	CSCI 3333	Data Structures
SWEN 4432	Software Engineering	CINF 3331	Business Data Communications (or CENG 3331 + CENG 3311)
CSCI 4230	Web App Development		

None of the above courses may apply to the graduate degree.

Students may select from the thesis option or the extended course work option. The thesis option requires 33 credit hours of graduate work and the extended course work option requires 36 credit hours.

Core Requirements (9 Hours)

The following courses, or approved substitutions are required for both the thesis option and extended course work options:

CSCI 5132	Internet Protocols
CSCI 5333	Database Management Systems
CSCI 6530	Research Methods in Computer Science

Thesis Option (24 Hours)

CENG/CINF/CSCI/SWEN or other approved related courses	6 hours
CINF/CSCI 4000-6000 level	3 hours
*CINF/CSCI courses, 5100-6000 level	9 hours
CSCI 6939 Master's Thesis Research	6 hours

* Students interested in pursuing the thesis option are encouraged to take CINF 5939 (Independent Study in CIS) during their first year, in order to write up their thesis proposals (with the sponsoring of a faculty advisor).

Extended Course Work Option (27 Hours)

Students desiring to follow the extended course work option must successfully complete the capstone project course (CINF 6838).

CENG/CINF/CSCI/SWEN or other approved related courses	6 hours	
CINF/CSCI 4000-6000	6 hours	
CINF/CSCI 5100-6000	12 hours	
CINF 6838	Research Project and Seminar (taken after completion of the required core and during last 12 hours)	3 hours

Sub-plan In Database and Web-based Systems

Students interested in developing a sub-plan in Database Systems and Web-based Systems should take the following electives:

CSCI 5433	Object-Oriented Database Systems
CSCI 5533	Distributed Information Systems
CSCI 5633	Web Database Development
CSCI 5733	XML Application Development
CSCI 5833	Data Mining: Tools and Techniques

Sub-plan In Networking and Security

Students interested in developing a sub-plan in Networking and Security should take the following electives:

CENG 5333	Network Performance Analysis
CSCI 5233	Computer Security and Integrity
CSCI 5234	Web Security
CSCI 5235	Network Security
CSCI 5431	Client-Server Based Network Programming
CSCI 5531	Advanced Operating Systems

Suggested Plan of Study (for students in the Thesis Option)

The following study plan for the four regular semesters is recommended as a typical example for incoming full-time CIS students who plan to pursue the Thesis option. Individual study plans may vary as long as the prerequisite structures are satisfied. Students should seek the advice of their assigned faculty advisor and set up their Candidate Plan of Study (CPS) as early as possible.

Semester 1 (9 credits):

CSCI 5132	Internet Protocols
CSCI 5333	Database Management Systems
CINF/CSCI	4000-6000 level

Semester 2 (9 credits)

CINF/ CSCI	5000-6000 level
CSCI 6530	Research Methods in Computer Science
CINF/CSCI 5939	Independent Study

Semester 3 (9 credits)

CENG/CINF/SWEN	or other approved related courses
CINF/CSCI	5100-6000 level
CINF/CSCI 6939	Master's Thesis Research

Semester 4 (6 credits)

CINF/CSCI	5100-6000 level
CINF/CSCI 6939	Master's Thesis Research

Computer Science

The plan in Computer Science leads to the master of science (MS) degree. This plan is designed to prepare students to hold key technical positions in the development of computer-based solutions to complex systems problems.

Basic Preparation

Students seeking admission into the degree plan in Computer Science must have a bachelor's degree in computer science or a closely related area and extensive background in computer science. It is expected that the minimum GRE score required for acceptance into the plan be reasonably balanced among the different components of the GRE exam. Students with bachelor's and master's degrees in related fields of study will be required to complete appropriate background courses. The admissions committee, during evaluation of the student's application, will designate courses to be completed before beginning graduate studies. Preparatory requirements include proficiency in at least two modular computer programming languages, including C or C++, plus the completion of the following undergraduate courses, their equivalents or successful completion of equivalence exams upon approval from the admissions committee.

Calculus II (Not offered at UHCL)

CENG 3511	Lab for Computer Architecture	CSCI 4333	Design of Database Systems
CENG 3531	Computer Architecture	CSCI 4534	Operating Systems
CSCI 3331	Comp Org & Assembly Language	MATH 3131	Introduction to Linear Algebra
CSCI 3333	Data Structures	SWEN 4432	Software Engineering
CSCI 3532	Adv Data Structures & Algorithms		

Additionally, at least two of the following must be completed:

CSCI 3231	Numerical Methods
PHYS 3032	University Physics II
MATH 3331	Discrete Mathematics
MATH 3334	Probability and Statistics for Scientists & Engineers
MATH 4131	Ordinary Differential Equations and Applications

None of the above courses may apply towards the graduate degree.

Students should consult with their faculty advisor to determine if they have sufficient background to satisfy a specific course prerequisite. Foundation and prerequisite courses should be completed before enrolling in any graduate course.

Students expecting credit for foundation courses completed at international institutions must submit course descriptions. This will allow proper evaluation and appropriate credit.

Students may select from the thesis option or the extended course work option. The thesis option requires 33 credit hours of graduate work. The extended course work option requires 36 credit hours.

Core Requirements (12 Hours)

The following courses or their approved substitutions are required for both the thesis and the extended course work options:

CSCI 5333	Database Management Systems
CSCI 5531	Advanced Operating Systems
CSCI 6530	Research Methods in Computer Science

One of the following:

CSCI 5232	Concepts of Programming Languages
CSCI 5432	Design and Analysis of Algorithms

Thesis Option (21 Hours)

Required courses for thesis option.

CSCI/CINF/SWEN/CENG/SENG 4000-6000	3 hours
CSCI electives	3 hours
CSCI/CINF electives	3 hours
CINF/SWEN/CENG/SENG electives	6 hours
CSCI 6939 Master's Thesis Research	6 hours

Extended Course Work Option (24 Hours)

Complete the following courses:

CSCI/CINF/SWEN/CENG/SENG	4000-6000	6 hours
CSCI electives	5100-6000	6 hours
CSCI/CINF electives	5100-6000	6 hours
CINF/SWEN/CENG/SENG electives		3 hours
CSCI 6838	Research Project and Seminar	3 hours

NOTE: CSCI 6838 must be taken during the last 12 hours, after completion of CSCI 5531 and CSCI 5333

Sub-plans

Students interested in developing a sub-plan should take the corresponding courses listed below:

Sub-plan in database systems:

CSCI 5433	Object-Oriented Database Systems
CSCI 5533	Distributed Information Systems
CSCI 5633	Web Database Development
CSCI 5733	XML Application Development
CSCI 5833	Data Mining: Tools and Techniques

Sub-plan in Network Performance and Security:

CENG 5333	Network Performance Analysis
CSCI 5132	Internet Protocols
CSCI 5233	Computer Security and Integrity
CSCI 5234	Web Security
CSCI 5235	Network Security
CSCI 5631	N-Tiered Client-Server Architectures

Sub-plan in Data Mining and Computational Bioinformatics:

BIOT 5733	Bioinformatics
CENG 5634	Artificial Neural Networks
CSCI 5530	Pattern Classification
CSCI 5532	Pattern Recognition and Image Processing
CSCI 5833	Data Mining: Tools and Techniques
CSCI 5933	Computational Bioinformatics

Participation with PhD Degree at Texas A&M University

The Computer Science Department of Texas A&M University is accepting applications for the PhD plan from interested UHCL graduates. The degree requirements include minimal residence at the Texas A&M campus. Texas A&M University maintains the same entrance standards for all applicants. This case by case plan supports research within the Clear Lake area technical community. Individuals may contact the Chair of the UHCL Computer Science plan for details.

MATHEMATICAL SCIENCE AND STATISTICS DEGREES

Mathematical Science

The graduate plan in Mathematical Science leads to the master of science (MS) degree. Applicants for candidacy should have a bachelor's degree in mathematics. Students with other degrees may apply if their preparation includes a substantial number of advanced credits in mathematics. In some cases, additional preparatory courses may be required.

Undergraduate Foundation Courses for Masters in Mathematics

- Ordinary Differential Equations
- Abstract Algebra
- Advanced Calculus
- Real Analysis

Introduction to Probability (may be waived with advisor's consent if undergraduate real analysis is successfully completed before enrollment in STAT 5431 Theory and Application of Probability).

With advisor's approval, two of the following may count towards the Master's Degree if taken as a graduate student at UHCL: MATH 4431 (Introduction to Analysis) and MATH 4232 (Introduction to Abstract Algebra) or MATH 4133 (Introduction to Topology). [Provided that equivalent courses have not been completed previously]

Course selections will be arranged in consultation with a faculty advisor while preparing the CPS. Students selecting the extended course work option must complete MATH 6837 (Research Project 1). This is to be taken after successfully completing nine hours of core and during the last 9 hours of course work. MATH 6838 (Research Project II) can be completed following MATH 6837 with faculty adviser approval prior to registration.

Core Requirements (18 Hours)

MATH 5131	Abstract Algebra	MATH 5136	Ordinary Differential Equations
MATH 5132	Real Analysis		& Dynamical Systems

Students will select three courses from the following seven:

MATH 5134	Logic	MATH 5333	Numerical Analysis
MATH 5231	Linear Algebra	MATH 5137	Topology & Geometry
MATH 5330	Mathematical Software & Modeling Simulation	STAT 5431	Theory & Application of Probability
MATH 5431	Mathematical Modeling in the Applied Sciences		

Thesis Option (18 Hours)

MATH, STAT courses, 5000-6000 level	6 hours
Electives, 5000-6000 level courses	6 hours
MATH 6939 Master's Thesis Research	6 hours

Extended Course Work Option (18 Hours)

MATH, STAT courses, 5000-6000 level	6 hours
Electives, 5000-6000 level courses	6 hours
MATH Electives, 4000-6000 level	3 hours
MATH 6837 Research Project I	3 hours

Statistics

The plan in Statistics leads to a master of science (MS) degree. This plan emphasizes a curriculum that is designed to educate students in the theory and application of statistics. The plan is suitable for students with an undergraduate background in mathematics, engineering or the sciences.

Students with degrees in engineering, science or other fields will be considered if their preparation includes an adequate number of upper-level credits in mathematics and statistics. In some cases, additional preparatory courses may be required.

Core Requirements (18 Hours)

The following courses or their approved substitutes are required:

MATH 5231	Linear Algebra	STAT 5532	Linear Models & Regression Analysis
STAT 5431	Theory & Application of Probability	STAT 5533	Statistical Computing with SAS & S-Plus
STAT 5432	Theory & Applications of Statistics	STAT 5531	Multivariate Statistical Analysis

Thesis Option (18 Hours)

STAT courses, 5000-6000 level	3 hours
Electives, 5000-6000 level	3 hours
MATH or STAT electives, 4000-6000 level	6 hours
STAT 6939 Master's Thesis Research	6 hours

Extended Course Work Option (18 Hours)

Students desiring to follow the extended course work option must complete STAT 6837 and STAT 6838 during the last 18 hours of course work.

STAT courses, 5000-6000 level	3 hours
Electives, 5000-6000 level	3 hours
MATH or STAT electives, 4000-6000 level	6 hours
STAT 6837 and STAT 6838	6 hours

Dual Master Degrees of Mathematics and Statistics

The graduate plan in Mathematics and Statistics leads to a Master of Science (MS) degree in Mathematics and a Master of Science (MS) degree in Statistics. This plan emphasizes a curriculum that is designed to educate students in both Mathematics and Statistics. The plan is suitable for students with degrees in engineering, science or other fields with an undergraduate background in mathematics.

Core Requirements (33 Hours)

The following courses or their approved substitutes are required:

MATH 5131	Abstract Algebra	STAT 5431	Theory & Application of Probability
MATH 5132	Real Analysis	STAT 5432	Theory & Applications of Statistics
MATH 5136	Ordinary Differential Equations & Dynamical Systems	STAT 5531	Multivariate Statistical Analysis
MATH 5231	Linear Algebra	STAT 5532	Linear Models & Regression Analysis
STAT 5533	Statistical Computing with SAS and S-Plus		

Students will select two courses from the following six courses:

MATH 5133	Complex Analysis	MATH 5232	Number Theory
MATH 5134	Logic	MATH 5333	Numerical Analysis
MATH 5137	Topology & Geometry	MATH 5431	Math Modeling in the Applied Sciences

Thesis Option (27 Hours)

MATH /STAT courses	5000-6000 level	9 hours
Electives	5000-6000 level	6 hours
MATH /STAT electives	4000-6000 level	6 hours
MATH or STAT 6939	Master’s Thesis Research	6 hours

Extended Course Work Option (27 Hours)

Students desiring to follow the extended course work option must complete Research Project I and II (MATH 6837/6838 or STAT 6837/6838) during the last 18 hours of course work.

MATH /STAT courses	5000-6000 level**	9 hours
Electives	5000-6000 level	6 hours
MATH /STAT electives	4000-6000 level	6 hours
MATH 6837/6838 or STAT 6837/6838		6 hours

Note: At least 6 of these 9 credit hours have to be in the field in which the thesis or research project is done.

DIVISION OF ENGINEERING

Students desiring to study in engineering may choose from four graduate plans. The four graduate plans are Computer Engineering (CENG), Software Engineering (SWEN), Systems Engineering (SENG) and Engineering Management (EMGT). Applicants should consult the chair of the division for additional information.

Requirements and Standards for Plans in Engineering

Graduate Degree Candidacy

Students seeking graduate degree candidacy should have a bachelor’s degree in a related field. To be accepted for degree candidacy, students should be within 15 hours of completing upper-level foundation courses. These courses are listed in the particular degree area in the catalog. All foundation courses must be completed within one calendar year of first graduate registration at UHCL. Students needing more than 15 hours of upper-level foundation courses are encouraged to complete a second bachelor’s degree.

Computer Engineering

The plan in Computer Engineering leads to the master of science (MS) degree. Graduate study in this plan prepares students to occupy leading roles in the development and use of computers and computer systems. The plan in Computer Engineering addresses the evaluation, design and implementation of computer systems for various applications.

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The curriculum and faculty research emphasize the integration of systems design, software applications and hardware design. Current specializations within the computer engineering degree plan include computer control systems, industrial automation and robotics, fault-tolerant computing, parallel processing, telecommunications and networking. The plan consists of formal courses, laboratory work and research in one of the specialty areas conducted under the guidance of a faculty advisor.

Basic Preparation

Candidates should have a bachelor's degree in Computer Engineering or equivalent. Students should consult an academic advisor to determine if they have sufficient background to satisfy course prerequisites. At a minimum, the following undergraduate courses, or their equivalents, are required and should be completed prior to enrolling in certain graduate courses:

CENG 3112	Lab for Digital Circuits	CENG 4534	Digital System Design
CENG 3132	Digital Circuits	CSCI 3133	Programming with C
CENG 3511	Lab for Computer Architecture	CSCI 3231	Numerical Methods
CENG 3531	Computer Architecture	CSCI 3331	Comp Org and Assembly Language
CENG 4133	Microprocessor Interfacing	MATH 4131	Ord Diff Equations & Appl
CENG 4331	Analysis and Design of Linear Systems		

(Note: Students may enroll in CENG 5031 Computer Engineering Fundamentals and CENG 5011 Lab for Computer Engineering Fundamentals to meet the requirements of CENG 3132, CENG 3112, CENG 3531 and CENG 3511.)

Core Requirements (12 Hours)

The following courses or their approved substitutions are required for both the thesis and the extended course work options.

CENG 5131	Engineering Applications	3 hours
CENG 5334	Fault Tolerant Computing	3 hours
CENG 5434	Microcomputer Systems Design	3 hours
CENG 6332	High Performance Computer Architecture	3 hours

Elective Requirements (18 Hours)

The following courses or their approved substitutions are required for both the thesis and the extended course work options.

CENG courses	5100-6000 level	6 hours
CENG/CSCI/SWEN courses	5100-6000 level	6 hours
Technical elective	4000-6000 level	6 hours

Thesis Option (6 Hours)

CENG 6939	Master's Thesis Research	6 hours
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Note: an additional 3 hours of thesis may be used as a plan elective.

Extended Course Work Option (6 Hours)

CENG 6838	Research Project*	3 hours
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CENG elective	5000-6000 level	
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(Student may take 3 hours extra of project course)		3 hours
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*To be taken after completion of core courses and during last 12 hours

Sub-plan in Digital Signal Processing (DSP)

Students interested in developing a sub-plan in Digital Signal Processing should take the following as electives:

CENG 5431	Digital Signal Processing	CENG 5433	Principles of Digital Communication Systems
CENG 6431	DSP Implementations		

Sub-plan in Telecommunications

Students interested in developing a sub-plan in telecommunications should take the following as electives:

CENG 5333	Network Performance Analysis	CENG 5433	Principles of Digital Comm. Systems
CENG 5431	Digital Signal Processing		

Engineering Management

The graduate plan in Engineering Management (EMGT) leads to the master of science (MS) degree. The Engineering Management Plan offers the candidate the opportunity to earn an advanced degree in two years while maintaining full-time employment. The EMGT curriculum provides the candidate with an enhanced perspective on issues that affect the management of technology in today's world. The material is targeted to equip the candidate with the tools to better manage a project, processes, personnel, products and services in real-world situations. From organization behavior, management of organizations and optimal decision-making, to engineering, economics, the plan courses focus on essential topics. Individuals with engineering and scientific backgrounds will find that this master of science degree may better suit their needs than the traditional MBA.

The Engineering Management (EMGT) curriculum is composed of 30 hours of graduate course work of which 24 will be core courses. The 6 hours of electives could be either a 3 hour course elective with the Capstone Project or 6 hours of Thesis. The following plan course of study illustrates the cross-disciplinary nature of the program.

Entrance Requirements

To enter the EMGT plan, a candidate must hold a bachelor's degree in engineering or science. The candidate must be approved by the graduate admission committee to ensure that the appropriate industrial or existing managerial background knowledge base is

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present. The GRE is required of all candidates applying for admission. The preferred GRE score is at least 1000 (verbal + quantitative), with a verbal score of 400 or higher. GRE scores will be evaluated by the degree plan's admissions committee and will be used as one of the indicators of the applicant's potential for completion of the plan. It is recommended that candidates who apply for admission to a graduate plan have a GPA of 3.0 or greater (four point grade scale) on the last 60 hours of course work.

The graduate degree in EMGT requires 30 hours of graduate courses. No 4000 level credits will be allowed for the EMGT master's degree. A maximum of six hours of grades of "C" may be counted toward the graduate degree; grades of "C-" will not apply.

Foundation Courses Required for Entrance

In addition, the EMGT graduate admission committee may require that a set of foundation courses and their prerequisites be completed before enrolling in graduate EMGT program. The foundation courses are:

MATH 4131	Ordinary Differential Equations and Apps	MATH 3334	Probability and Statistics for Scientists & Engineers
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Industrial related experience and letters of recommendations from current employers may also be required during admission review. The EMGT faculty graduate admissions committee based upon plan needs, the guidelines stated herein and UHCL admission requirements will decide acceptance into the program. Once admitted, the candidate must file a CPS in the first semester of enrollment.

Core Requirements (18 Hours)

*Pending Coordinating Board Approval

The following 18 hours of core requirements are required for both the thesis and capstone option.

EMGT 5130	New Business Development	3 hours
EMGT 5230	Negotiation Strategies	3 hours
EMGT 5231	Engineering Management Planning	3 hours
*EMGT 5330	Service and Operations Management	3 hours
MGMT 5032	Human Behavior in Organizations	3 hours
MGMT 5636	Management of Technology	3 hours

Elective Requirements

*Pending Coordinating Board Approval

The master degree candidates with capstone option and thesis option must complete 9 hours of elective requirements and 6 hours of elective requirements, respectively. However, MGMT 5931 and SWEN 5230 cannot be included together.

EMGT 5131	Legal Issues in Engineering Management	3 hours
*EMGT 5331	Six-Sigma Quality	3 hours
MGMT 5931	Research Topic in Management: Project Management	3 hours
SENG 5230	Systems Engineering Economics	3 hours
SWEN 5230	Software Project Management	3 hours

Capstone Option

The Capstone enrollment is limited to candidates who have completed 18 hours of the EMGT core requirements and elective requirements and their prerequisites. Under the capstone option, the master degree candidates must complete 18 hours of core requirements and 9 hours of elective requirements.

EMGT 6837	Engineering Management Capstone Project	3 hours
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Thesis Option

The following gives the rubric, course names, and credits for EMGT Thesis Option that consists of six (6) hours of thesis research in engineering management. The master degree candidacy must have the approval of the candidate's faculty advisor and the Dean of SCE. Under the thesis option, master degree candidates must complete 18 hours of core requirements and 6 hours of elective requirements.

EMGT 6939	Master's Thesis Research	6 hours
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Software Engineering

The graduate plan in Software Engineering leads to the master of science (MS) degree. Students are best prepared for this program by having an undergraduate in Computer Science or Computer Engineering. Studies in this degree address the foundations, methodologies and tools used in the management, planning, design and engineering of software systems. By providing a careful balance between theory and practice, the Plan prepares students for key software positions in industry, government, and other institutions where software engineering has become a key activity of the larger company. The Plan requires seven core areas of software engineering to be mastered. Each of these key areas is covered by a dedicated core course. The plan also allows for further expansion into one of three areas (subplans) of software engineering: Software Project Management, Software Safety, and System Design. The Software Engineering program allows three to four electives that can be utilized to target the degree to an area of interest within software engineering. The software engineering degree is designed to prepare students for jobs such as system analyst, requirements engineering, software architecture, software project manager, or software designer.

Credit earned before acceptance.

No more than 9 hours of graduate level Software Engineering classes may be applied to the SWEN degree if taken without admission into the program. No more than 6 hours graduate credit may be transferred to the Software Engineering degree.

Candidate Plan of Study (CPS): Students accepted in the Software Engineering program must file a candidate plan of study with their assigned faculty advisor by the end of the first semester of study. The candidate plan of study details all courses the student must take to fulfill the degree requirements.

Entrance Requirements

To enter the Software Engineering plan as either a local student or distance student, a candidate must hold a bachelor’s degree in computer science, computer engineering, software engineering or closely related field, must submit GRE scores of at least 1000 (verbal + quantitative), with a verbal score of 400 or higher and a GPA of 3.00 or higher. The faculty graduate admissions committee will decide acceptance into the program based upon program need, the guidelines stated herein and university admission requirements. Once admitted, the student must file a candidate plan of study (CPS) in the first semester of enrollment. Foundation courses, and other courses, that are found to be needed are added to the CPS and must be completed in or before the first year of enrollment.

Courses that may be required for Admission to Software Engineering:

Technical Writing and Intermediate Writing may be added as a requirement of admission to software engineering based on the verbal GRE score. If this requirement is added then the student will have to take these two writing courses in addition to the other courses required for the degree. If the GRE verbal is 400 or above, these additional courses will not be required.

WRIT 3035	Intermediate Writing *	3 hours
WRIT 3135	Technical Writing *	3 hours

*Required if verbal GRE < 400,

Foundation Courses Required for Entrance

Foundation courses and their prerequisites are required for entry and must be completed before enrolling in graduate SWEN courses.

CSCI 3333	Data Structures	3 hours
MATH 3331	Discrete Mathematics**	3 hours
MATH 3334	Probability and Statistics for Scientists and Engineers**	3 hours

** Math 3331 and 3334 required if quantitative GRE < 500

Core Requirements (21 Hours)

SWEN 5130	Requirements Engineering	3 hours
SWEN 5232	Software Construction	3 hours
SWEN 5233	Software Architecture	3 hours
SWEN 5234	Software Engineering Processes	3 hours
SWEN 5432	Software Engineering Life Cycle	3 hours
SWEN 5532	Software Safety	3 hours
SWEN 5534	Reuse and Reengineering	3 hours

Capstone Option (3 hours of capstone + 12 hours of electives)

SWEN 6837	Software Engineering Capstone Project**	3 hours
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**Capstone enrollment is limited to students who have completed all 21 hours of the SWEN CORE and their prerequisites.

EMGT/SENG/CENG/CSCI/SWEN *technical elective	5100-6000 level	3 hours
EMGT/SENG/CENG/CSCI/SWEN *technical elective	4000-6000 level	3 hours
SWEN *technical elective	4000-6000 level	3 hours
SWEN *technical elective	5100-6000 level	3 hours

*Courses taken as electives in SWEN require permission of the faculty advisor.

Thesis Option (6 hours of thesis + 9 hours of electives)

SWEN 6939	Master's Thesis Research	6 hours
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Students must form a thesis committee and prepare a thesis proposal in the semester prior to enrollment into thesis. Contact the SCE advising office for instructions.

EMGT/SENG/CENG/CSCI/SWEN *technical elective	4000-6000 level	6 hours
SWEN *technical elective	5100-6000 level	3 hours

*Courses taken as electives require permission of the faculty adviser.

Students interested in concentrating their study in a specific sub-area of software engineering such as System Design, Software Safety or Software Project Management may choose as electives those courses listed under the respective sub-plans listed below.

System Design Sub-plan

*SWEN 5132	Software Design Patterns	3 hours
*SWEN 5133	Aspect- Oriented Development	3 hours
*SWEN 5134	Service Oriented Architecture	3 hours

Software Safety Sub-plan

SENG 5330	Risk Management	3 hours
SENG 5334	Human Factors Engineering	3 hours
SWEN 5431	Testing, Validation and Verification	3 hours

Software Project Management Sub-plan

SENG 5330	Risk Management	3 hours
SWEN 5230	Software Project Management	3 hours
SWEN 4435 or SWEN 5435	Personal Software Process	3 hours

Web Based Electives (Distance Option)

CSCI 5333	Database Management Systems
SENG 5330	Risk Management
*SWEN 5132	Software Design Patterns
*SWEN 5133	Aspect-Oriented Development
*SWEN 5134	Service Oriented Development
SWEN 5230	Software Project Management
SWEN 5430	Software Metrics
SWEN 5431	Testing, Validation and Verification
SWEN 5435 or SWEN 4435	Personal Software Process

Some courses have a dependency structure and students should consult the Software Engineering Course Roster in this catalog for prerequisites, co-requisites of courses.

Software Engineering via Distance Education (Online)

The Software Engineering program may be taken entirely via the internet. All SWEN core courses are offered online and there are nine elective courses that are offered online. All SWEN courses and electives necessary for the degree are available via the web whereas the foundation courses are not. Foundation courses and writing courses are only offered as traditional on campus live lecture classes. These courses must be taken either at UHCL or at another university before entry into the SWEN distance option. Electives available for the SWEN degree are listed with the distance option above. For more information about the software engineering degree and the distance option see <http://sce.uhcl.edu/swen/>.

Software Engineering Certificate

The admission requirements for the certificate program are as follows: an undergraduate degree in Computer Science, Computer Engineering or Software Engineering, and an undergraduate GPA of 3.0. (The GRE is not required for the certificate since the certificate program is considered a non-degree seeking program). A student pursuing the certificate could possibly transfer the certificate courses to the SWEN Degree after completion of the certificate. To do this the student must take the GRE, apply and be accepted to the SWEN program. The certificate cannot be pursued at the same time as the SWEN degree since students pursuing a certificate are considered non-degree seeking and therefore cannot be enrolled in a degree seeking program at the same time.

The Software Engineering certificate is designed to prepare students to address important aspects of software development including: developing the student's ability to communicate ideas; develop and manage software products; and to understand the complexities of building quality into a software product. To earn the certificate the 4-course set below must be completed within a 4 year time limit.

Certificate - Software Engineering (4 courses)

SWEN 5130	Requirements Engineering
SWEN 5232	Software Construction
SWEN 5234	Software Engineering Processes
SWEN 5432	Software Engineering Life Cycle

Systems Engineering

The graduate plan in Systems Engineering leads to a master of science (MS) degree. The plan is designed to prepare engineers who are knowledgeable in interdisciplinary systems engineering approaches and engineering management and who therefore have the full range of concurrent engineering concepts and skills needed to specify, implement and support complete systems. Such knowledge is particularly important in the evolution of systems that are critical to achieving the mission of an organization and to sustaining the safety of life, health, property and the environment. Such systems are vital to many organizations that are served by UHCL such as: aerospace, biomedical, chemical, energy, manufacturing and others. The plan consists of formal courses, laboratory work and research conducted under the guidance of a faculty advisor. Candidates can tailor their plan of study to emphasize systems engineering analysis or systems engineering management. The Web site for the Systems Engineering program is <http://sce.uhcl.edu/seng>

Basic Preparation

The candidates should have a bachelor's degree and be approved by the graduate admissions committee to ensure that the appropriate background knowledge base is present. This background must include, at a minimum:

CSCI 3133	Programming with C	3 hours
MATH 3334	Prob. and Statistics for Scientists and Engineers	3 hours
MATH 4131	Ordinary Differential Equations and Apps	3 hours

Candidates who do not have the required or equivalent preparation are required to take the appropriate courses before enrolling in certain graduate career courses in SENG, SWEN, CSCI and CENG. The committee recommends that candidates take CENG 5131 Engineering Applications as a preparation elective.

Core Requirements (21 Hours)

SENG 5130	Systems Engineering Processes	3 hours
SENG 5230	Systems Engineering Economics	3 hours
SENG 5231	Concurrent Engineering	3 hours
SENG 5232	Engineering Specialty Integration	3 hours
SENG 5233	Systems Engineering Analysis & Modeling	3 hours
SENG 5330	Risk Management	3 hours
SWEN 5230	Software Project Management	3 hours

Elective Options

SENG 5332	Decision Analysis for Systems Engineering	3 hours
SENG 5334	Human Factors Engineering	3 hours
SENG 5532	Adv. Decision Analysis for Systems Eng.	3 hours
MGMT 5636	Management of Technology	3 hours
MGMT 5638	Managing Technical and Professional People	3 hours
INDH 5335	Ergonomic Methods and Analysis Techniques	3 hours
INDH 6332	Safety Engineering	3 hours

These candidates may also choose elective options from the CENG, SWEN or EMGT engineering programs.

Elective Hours:

Thesis Option (6 hours of thesis + 9 hours of electives)

SENG 6939 Master's Thesis Research	6 hours
Electives in engineering, science and mathematics approved by the student's advisor	9 hours

Capstone Option (3 hours of capstone + 12 hours of electives)

SENG 6837 Systems Engineering Capstone Project	3 hours
Electives in engineering, science and mathematics approved by the student's advisor	12 hours

Systems Engineering Certificate

Students may already have a Masters degree in a related field and would benefit from a four course set in Systems Engineering basics that would help them advance in their professional career. The candidate could, after receiving a SENG certificate, apply these four courses toward the completion of the master of science degree. The candidate choosing to earn a certificate in Systems Engineering will be required to complete four courses with a 3.0 grade point average or better, based on a 4.0 system. The candidate will be given the option to pick from the following core courses they find most useful to their application:

The Systems Engineering Basics four, three hour courses are:

SENG 51530	Systems Engineering Processes	3 hours
SENG 5203	Systems Engineering Economics	3 hours
SENG 5330	Risk Management	3 hours
SENG 5332	Decision Analysis for Systems Engineering	3 hours
SENG 5231	Concurrent Engineering	3 hours
SENG 5233	Systems Engineering Analysis & Modeling	3 hours
SENG 5334	Human Factors Engineering	3 hours
INDH 5335	Ergonomic Methods and Analysis Techniques	3 hours
INDH 6332	Safety Engineering	3 hours

DIVISION OF NATURAL SCIENCES

BIOLOGICAL SCIENCES

Biological Sciences

The graduate plan in Biological Sciences leads to the master of science (MS) degree. Applicants for candidacy should have a bachelor's degree in Biology, although applicants with other degrees may apply if their degrees or preparation include a significant number of plan core courses in the Biological Sciences, as well as appropriate chemistry, physics and mathematics courses.

Students should have completed the basic requirements of the bachelor of science degree in Biological Sciences at UHCL or the following courses (including prerequisites or equivalents) before applying for admission:

BIOL 3431	Genetics
BIOL 4431	Biochemistry I
BIOL 4434	Comparative Animal Physiology

or

BIOL 4435	Human Physiology
MATH 3038	Computation Statistics

Two of the following four courses:

BIOL 3231	Microbiology
BIOL 4131	Ecology
BIOL 4437	Cellular Physiology
BIOL 4531	Molecular Biology

A maximum of six credit hours of the 4000 level courses listed above may be applied toward the MS degree.

As a condition of admittance to the graduate program, students who fail to meet School GRE and/or GPA standards will be required to meet additional performance criteria, such as past performance in critical courses, withdrawal and drop history, letters of recommendation, personal knowledge of past performance, improvement on repeated courses, work and/or life experiences and individual faculty support as a mentor in the research laboratory.

All graduate students in the Biology program must complete a Candidate Plan of Study (CPS) with their assigned faculty advisor before they complete 9 hours of graduate credit. Courses completed past the initial 9 hours that are not on the approved CPS may not be counted toward the degree.

Graduate students who are pursuing the master's thesis option are advised to take BIOL 5530, Research Methods in Biology, in consultation with their faculty advisor early in their studies as preparation for beginning the thesis. The remaining graduate hours may be taken in related areas and will be arranged with the faculty adviser during the preparation of the CPS. At minimum, 24 of the 36 hours must be in the Biological Sciences. Students who select the non-thesis option are required to complete BIOL 6838, the capstone project and seminar course, during their last 12 hours.

Masters Degree in Biology with a Pre-Health Specialization (36 hours total)

The masters degree in Biology with a pre-health focus consists of coursework that is intended to prepare the student for medical/dental/physician assistant/allied health school curricula. The pre-health specialization coursework includes 27 hours of core courses, 3 hours of capstone course (BIOL 6838), and 6 hours of graduate electives. A thesis option is also available.

Core Coursework (27 hours):

BIOL 4432	Biochemistry II
BIOL 5131	Membrane Biology
BIOL 5132	Cell Signaling
BIOL 5332	Toxicology
BIOL 5435	Advanced Immunology
BIOL 5635	Neuroscience
BIOL 5734	Oncogenes
BIOL 5736	Bioethics
BIOL 5436	Physiological Basis of Disease
or	
BIOL 5136	Physiology of Human Aging

Non-thesis option (9 hours):

Two (2) additional electives (4000 level or above), plus BIOL 6838 Research Project and Seminar

Thesis option (9 hours):

BIOL 5530 Research Methods in Biology plus six hours in BIOL 6939 Master's Thesis Research

For students selecting the non-thesis option, recommended electives include:

BIOL 4332	Histology
BIOL 4437	Cellular Physiology
BIOL 4438	Developmental Biology
BIOL 4531	Molecular Biology
BIOL 4731	Cancer Biology
BIOL 5433	Enzymology Molecular Biology
BIOL 5939	Independent Study in Biological Science

UHCL Pre-Health Advisory Committee Web page: <http://www.uhcl.edu/sce/HPAC>
Information on the certificate option in Biotechnology can be found in the Undergraduate Catalog.

BIOTECHNOLOGY

The graduate plan in Biotechnology leads to the master of science (M.S.) degree. In addition to satisfying admission requirements of the University and SCE (e.g., transcripts and GRE scores), applicants for the M.S. in Biotechnology program should have completed a bachelor's degree in biology or a related discipline. All applicants must submit two letters of recommendation directed to the chairperson of the admissions committee for the M.S. in Biotechnology. Upon acceptance to the M.S. in Biotechnology, a student must identify the concentration to be pursued.

Applicants should have completed the appropriate foundation course work. Applicants missing certain required courses in their undergraduate preparation, but who meet the minimum university standards for admission, may be admitted on condition that they will complete specific undergraduate foundation courses for full admission to the program. If additional coursework is required to meet prerequisites for courses in a concentration area, students may enroll in these after admittance to the program.

Courses listed as foundation courses on the CPS for either the core or concentration area will not apply to the credit hours required for the M.S. degree. Students requiring significant prerequisite or foundation coursework should anticipate an extended time commitment for earning the graduate degree.

Basic Prerequisite Requirements

Applicants must have completed the equivalent of the basic requirements for the Bachelor of Science degree in Biological Sciences, or the following courses or equivalents before applying for admission:

BIOL 3431	Genetics	BIOL 4437	Cellular Physiology
BIOL 4431	Biochemistry I	BIOL 4531	Molecular Biology
BIOL 4434, 4435 or 3134	Animal, Human or Plant Physiology	MATH 3038	Computational Statistics

In all cases above, evidence of completion of the course with a grade of "C" or better is required.

Concentration Prerequisite Requirements

The following additional prerequisite courses are required for the specific concentration chosen by the student:

Molecular Biotechnology Concentration (UHCL course or equivalent)

BIOL 4522	Molecular Biology Laboratory
BIOL 4535	Tissue Culture

Bioinformatics / Computational Biology Concentration (UHCL course or equivalent)

CSCI 3133	Programming with C	CSCI 3333	Data Structures
CSCI 3134	Software Development with Java	CSCI 3532	Advanced Data Structures and Algorithms
CSCI 3233	Object-Oriented Design and Programming	CSCI 4333	Design of Database Systems

Biotechnology Management and Marketing Concentration (UHCL course or equivalent)

**MGMT 3031	Management Theory and Practice
**MGMT 4534	Organizational Behavior
**MKTG 3031	Marketing: Creating Value for Customers

**If students have not taken MGMT 3031, MGMT 4534, and MKTG 3031 they may take MGMT 5032 and MKTG 5031 to fulfill the foundation requirements of this concentration.

A maximum of 6 credit hours of the 4000-level courses listed above may be applied toward the M.S. degree.

In all cases above, evidence of completion of the course with a grade of “C” or better is required.

Core Requirements for the M.S. Degree

The M.S. degree requires the completion of 36 hours. All core requirements and Biotechnology electives must be completed with a grade of “C” or better but GPA must be ≥ 3.0. Although the M.S. in Biotechnology does not require an internship, field experience or thesis, these options are available and students are encouraged to participate in them.

Biotechnology Core Curriculum (27 hours)

Required courses (18 hours):

BIOT 5031	Applied Biotechnology	3 hours
BIOT 5131	Advanced Methods in Biotechnology I	3 hours
BIOT 5132	Advanced Methods in Biotechnology II	3 hours
BIOT 5733	Bioinformatics	3 hours
BIOT 5736	Bioethics	3 hours
STAT 5135	Applied Statistical Methods	3 hours

Extended Coursework Option (9 hours):

Under the Extended Coursework Option, a minimum of 27 hours of Biotechnology core curriculum (including 6 hours of approved electives from any of the three concentrations and 3 hours of BIOT 6838 Research Project and Seminar), plus 9 hours of electives within their specific concentration area must be completed.

Thesis Option (9 hours):

Under the Thesis Option, a minimum of 27 hours of Biotechnology core curriculum (including 3 hours of BIOT 5530 Research Methods in Biotechnology and 6 hours of BIOT 6939 Master’s Thesis Research), plus 9 hours of electives within their specific concentration area must be completed (Note: an additional 3 credit hours of BIOT 6939 may be used as a plan elective). Graduate students who select the master’s thesis option are advised to take BIOT 5530, Research Methods in Biotechnology, early in their studies as preparation for beginning the thesis.

Concentration Areas and Electives in the Biotechnology Program

Molecular Biotechnology Concentration (9-15 Hours)

BIOL 5131	Membrane Biology	BIOL 5732	Advances in Molecular Biology
BIOL 5132	Cell Signaling	BIOL 5734	Oncogenes
BIOL 5332	Toxicology	BIOL 5737	Molecular Vectors
BIOL 5333	Industrial Microbiology	BIOL 5738	Gene Therapy
BIOL 5433	Enzymology	BIOL 5833	Proteomics
BIOL 5435	Advanced Immunology	BIOT 5915	Cooperative Education Work Term
BIOL 5634	Apoptosis		
BIOL 5635	Neuroscience	BIOT 5931	Research Topics in Biotechnology

Bioinformatics / Computational Biology Concentration (9-15 Hours)

BIOL 5737	Molecular Vectors	CSCI 5633	Web Database Development
BIOL 5833	Proteomics	CSCI 5733	XML Application Development
CSCI 5333	Database Management Systems	CSCI 5833	Data Mining: Tools and Techniques
CSCI 5433	Object-Oriented Database Systems	BIOT 5915	Cooperative Education Work Term
CSCI 5530	Pattern Classification	BIOT 5931	Research Topics in Biotechnology
CSCI 5532	Pattern Recognition and Image Processing		

Biotechnology Management and Marketing Concentration (9-15 Hours)

BAPA 5131	The Global Environment of Business	MGMT 6332	International Management
MGMT 5133	Teamwork & Leadership Skills: Theory in Practice	MKTG 5332	Executive Decisions In Marketing
MGMT 5636	Management of Technology	MKTG 5532	International Marketing Strategy
INDH 6135	Radiation Protection	MGMT 5638	Managing Technical and Professional People
BIOT 5931	Research Topics in Biotechnology		

CHEMISTRY

The plan in Chemistry leads to the master of science (MS) degree. Graduate students enrolled in the Chemistry plan may choose from high quality content courses in all of the traditional areas of Organic, Analytical, Physical and Inorganic Chemistry, as well as in the closely related fields of Biochemistry and Environmental Chemistry. Moreover, students are encouraged to further enhance their studies by undertaking research with one of the Chemistry plan's faculty in any of these areas. In regard to such research, it should be

noted that during the past nine years the Chemistry plan has received endowments from the Welch Foundation in the form of a Chemistry Departmental Research Grant. Those funds have been expended in support of the research efforts carried out by the plan's faculty during the training of students. This grant has just been renewed through the year 2011. The Chemistry plan also has an endowment from the Zeon Chemicals Company.

All chemistry courses taken at UHCL more than one year prior to being admitted to the Chemistry plan are subject to faculty review before being accepted for degree credit. Further information on the Chemistry plan is available from the Chair of Chemistry.

Chemistry

An advanced studies plan in Chemistry leads to the master of science (MS) degree. The thesis option affords students opportunities to develop research skills appropriate for terminal degrees as professional chemists or for continuation into PhD plans. The extended course work option emphasizes classroom instruction in advanced chemical sciences and is particularly appropriate for educational advancement by industry professionals and secondary school teachers.

Basic Requirements

Students seeking the MS degree in Chemistry must have completed, at minimum, the following courses with grades of "C-" or better:

General (Freshman) Chemistry I & II with laboratory	8 hours
Organic Chemistry I & II with laboratory	8 hours
Analytical Chemistry I & II with laboratory	8 hours
Physical Chemistry I & II with laboratory	8 hours
Inorganic Chemistry with laboratory	5 hours

Most of these course requirements may be met at UHCL prior to entering the graduate Chemistry plan by completing the following courses with grades of "C-" or better: CHEM 3233, CHEM 3234, CHEM 3224; CHEM 4635, CHEM 4636, CHEM 4622; CHEM 4231, CHEM 4232, CHEM 4222; CHEM 4335.

None of these courses is normally accepted for degree credit toward the hours in the graduate plan.

Core Requirements

Students must successfully complete a minimum of 18 hours of graduate career chemistry courses, 12 hours of which must be taken at UHCL. All core requirements and chemistry electives must be completed with a grade of "B-" or better. A minimum of three hours must come from each of the following:

Organic Chemistry (CHEM 5134, CHEM 5336, CHEM 5337, CHEM 5638)
Analytical Chemistry (CHEM 5133, CHEM 5636)
Physical Chemistry (CHEM 5235, CHEM 5637, CHEM 5639)
Inorganic Chemistry (CHEM 5335, CHEM 5336)
Graduate Seminar (CHEM 6731)

Extended Course Work Option

Under the extended course work option, a minimum of 30 hours of formal course work (including three hours CHEM 6731 Graduate Seminar) must be completed. In addition, students must choose an adviser and complete a total of six hours credit in the two Research Project and Seminar courses (CHEM 6837 and CHEM 6838).

Thesis Option

Under the thesis option, a minimum of 24 hours of formal course work (including three hours of CHEM 6731 Graduate Seminar) must be completed. In addition, students must complete a minimum of six hours of CHEM 6939, Master's Thesis Research. A maximum of nine hours of CHEM 6939 can be applied toward graduation requirements. Remaining course work for a total of 36 hours may come from CHEM 6838 Research Project and Seminar or additional formal courses.

ENVIRONMENTAL SCIENCE

The graduate plan in Environmental Science leads to the master of science (MS) degree. The plan seeks, through an interdisciplinary approach, to prepare students for opportunities in government and the private sector. Graduates of the plan may also be prepared to pursue further academic training in environmental sciences and occupational health. Students must specialize in one of the following areas: Environmental Biology, Environmental Chemistry, Environmental Geology, Industrial Hygiene or Safety.

Basic Requirements

Students seeking a master's degree must have course work preparation appropriate to their area of specialization. At least 34 hours of natural science and 6 hours of mathematics are required prior to admission. Candidates should have a "B" average (GPA: 3.0) on the last 60 hours of credit. GREs are required by all students applying for the graduate program. Scores will be evaluated by the school's admissions committee.

Students should submit a written statement to the Office of the Dean of Science and Computer Engineering specifying their educational goals and objectives as well as their intended areas of specialization, i.e., Environmental Biology, Environmental Chemistry, Environmental Geology, Industrial Hygiene or Safety. Applicants are also encouraged to submit letter(s) of recommendation as supporting documents. Basic requirement courses do not count toward the degree. These courses do, however, count toward the total hours required above. The following must be completed prior to admission into the graduate plan:

General Chemistry	2 semesters
General Physics	2 semesters
Calculus I	1 semester

The following must be completed prior to or within the first year of study:

Organic Chemistry I	1 semester
Statistics	1 semester

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The master's degree requires completion of a minimum of 36 hours. The core consists of STAT 5135, ENSC 5530, and ENSC 6731 or ENSC 6838 or ENSC 6939, which must be taken in the order listed. Thesis and research project course options are available and are described below.

Thesis Option (36 Hours)

ENSC 5530	Research Methods: Environmental Science	3 hours
ENSC 6939	Master's Thesis: Environmental Science	6 hours
STAT 5135	Applied Statistical Methods	3 hours

Designated electives (maximum of 6 hours of 4000 level credit): 24 hours

Research Project Course Option (36 Hours)

ENSC 5530	Research Methods: Environmental Science	3 hours
ENSC 6838	Research Project	3 hours
	Or ENSC 6731 Graduate Seminar	
STAT 5135	Applied Statistical Methods	3 hours
Designated electives (maximum of 6 hours of 4000 level credit)		27 hours

Electives are selected in consultation with the faculty advisor and must include at least one course from three of the following areas: biology, chemistry, geology or industrial hygiene and safety. A maximum of six hours of environmental management courses may be included.

All graduate students are required to produce a major paper and present a public seminar. Prior to enrolling in ENSC 6731 or ENSC 6838, students must have a faculty advisor and an approved research topic.

Students pursuing the research project option may be advised to complete hours in independent study or internship in addition to ENSC 6838. Before enrolling in thesis, students must have a faculty thesis advisor and an approved research proposal.

Required Courses or their equivalents for the Industrial Hygiene sub-plan:

INDH 5131	Control of Occupational Hazards	3 hours
INDH 5333	Air Pollution	3 hours
INDH 5335	Ergonomic Methods & Analysis Techniques	3 hours
INDH 6135	Radiation Protection	3 hours
INDH 6232	Analytical Methods for Hazard Evaluation	3 hours
INDH 6332	Safety Engineering	3 hours
BIOL 5332	Toxicology	3 hours
CHEM/GEOL At the 4000, 5000, or 6000 (if applicable):		
to be arranged with advisor		3 hours

If Research Project instead of Thesis is chosen, then the student will need to have one more course to be approved by the faculty advisor.

Required Courses or their equivalents for the Safety sub-plan

ENSC 5530	Research Methods in Environmental Science	3 hours
INDH 5xxx	System Safety & Accident Investigation	3 hours
INDH 5xxx	Const. & General Industry Safety	3 hours
INDH 5131	Control of Occupational Hazards	3 hours
INDH 5335	Ergonomic Methods & Analysis Techniques	3 hours
INDH 6232	Analytical Methods for Hazard Evaluation	3 hours
INDH 6332	Safety Engineering	3 hours
STAT 5135	Applied Statistical Methods	3 hours
BIOL/CHEM/or GEOL at the 4000, 5000, 6000 levels (if applicable):		
to be arranged with advisor		3 hours

If Research Project rather than Thesis is chosen, then the student will need to have one more course in INDH to be approved by the faculty advisor.

PHYSICS

The graduate plan in Physics leads to the master of science (MS) degree at UHCL. The goal of this program is to prepare students for Ph.D. level work and advanced research in Physics and Astronomy. This program also serves to expand the knowledge base of practicing engineers. Students in this program gain better problem-solving abilities as well as increased knowledge of several aspects of Physics and Astronomy. The physics program provides students with a deeper understanding of the essential science used in many of the engineering disciplines and in the space industry.

Basic Preparation

Applicants for candidacy should have a bachelor of science (BS) degree in one of the physical sciences, mathematics or engineering disciplines. Applicants with other degrees may also apply if they meet the requirements listed below. Equivalent courses or appropriate substitutions will be determined in consultation with a faculty advisor. If background deficiencies exist, students may be required to take courses that will not apply toward the graduate degree.

Students should take the following courses (or equivalents) in preparation for the program (Note PHYS 4131 and PHYS 4132 satisfy many of these requirements):

University Physics I & II with Laboratory	8 hours
Modern Physics	3 hours
Calculus I, II	8 hours
Calculus III	3 hours
Differential Equations	3 hours
Complex Variables	3 hours
Linear Algebra	3 hours
Probability and Statistics	3 hours
Principles of Electromagnetism	3 hours

Principles of Quantum Mechanics	3 hours
Thermodynamics & Fluid Mechanics	3 hours

Core Requirements

The following 15 hours of graduate physics courses are required for both the thesis and extended course work options.

PHYS 5331 or equivalent	Electrodynamics I	3 hours
PHYS 5431 or equivalent	Classical Mechanics	3 hours
PHYS 5531 or equivalent	Mathematical Methods in Physics I	3 hours
PHYS 5631 or equivalent	Quantum Mechanics I	3 hours
PHYS 5731 or equivalent	Statistical Mechanics and Thermodynamics	3 hours

Advanced Electives

Advanced SCE courses that meet the needs of students' professional goals may be selected in consultation with a faculty advisor.

Thesis Option

Under the thesis option, a minimum of 24 hours of formal course work must be completed. In addition, students must complete a minimum of 6 hours of PHYS 6939; Master's Thesis Research. A maximum of 12 hours of PHYS 6939 can be applied toward graduation requirements. Remaining course work for a total of 36 hours may come from additional formal courses.

Non-Thesis Option

Under the non-thesis option, a minimum of 30 hours of formal course work must be completed. In addition, students must choose an advisor and complete 3 credit hours of Independent Study Research (PHYS 5739 or PHYS 5939) and 3 hours in the Research Project and Seminar Course (PHYS 6838). Students completing the sub-plan in Technical Management should complete either PHYS 5739 or PHYS 6838 as a capstone.

Sub-plan in Technical Management

A good technical manager needs both an advanced broad-based technical background and insight into how to lead a team of people from different technical disciplines. Because physics is the scientific basis of all engineering, it can satisfy much of the broad-based technical requirement for a degree training technical managers. The physics core is complemented by a combination of systems engineering and management courses in order to create a plan that provides both the technical background and the leadership training. This results in a unique new approach to training technical managers. Please note that this sub-plan can only be completed with the non-thesis option.

Systems Engineering (at least two courses): 6 hours

SENG 5230	Systems Engineering Economics	3 hours
SENG 5231	Concurrent Engineering	3 hours
SENG 5330	Risk Management	3 hours
SENG 5332	Decision Analysis for Systems Engineering	3 hours

Management (at least two courses): 6 hours

MGMT 5032	Human Behavior in Organizations	3 hours
MGMT 5133	Teamwork & Leadership Skills: Theory in Practice	3 hours
MGMT 5638	Managing Technical & Professional People	3 hours

Approved Electives: 6 hours

Approved courses in SCE (All ASTR, PHYS and SENG courses qualify) and any approved course in the School of Business.

Collaborative UHCL/UH Physics Ph.D. Program

The first program of its kind, the Collaborative UHCL\UH Physics Ph.D. Program establishes a partnership between the master's degree program at UHCL and the Ph.D. program at UH. Select faculty at UH and UHCL hold joint appointments which allow them to ensure the smooth transition of their students from the M.S. to the Ph.D. program. In addition, a Joint Admission Committee helps advise students on their transition.

Six UHCL Physics courses PHYS 5331/5311: Electrodynamics I, PHYS 5431/5411: Classical Mechanics, PHYS 5531/5511: Mathematical Methods in Physics I, PHYS 5631/5611 and 5632/5612: Quantum Mechanics I and II, and PHYS 5731/5711: Statistical Mechanics and Thermodynamics will count towards Ph.D. candidacy at UH. A candidate must earn a grade of B or better in the class and on the final exam. Students exploring this option must apply for Ph.D. candidacy through the UH/UHCL Physics Joint Admissions Committee. Students accepted into the collaborative Ph.D. program will be subject to the same requirements as other Ph.D. candidates in the UH Physics program. They will complete their Ph.D. Thesis under the advisement of a UH and UHCL faculty committee. More information on the program can be found at <http://www.uhcl.edu/sce/collaborative>.

Physics Candidacy Certificate

Students completing the candidacy requirements for the Collaborative UHCL/UH Physics Ph.D. Program are eligible to receive a physics candidacy certificate. This certificate can be awarded to students independently of the Physics Master's Degree. A student pursuing a certificate has the option of switching to the Physics MS degree program at anytime during their enrollment in the certificate program and can apply all physics coursework taken towards the certificate to the MS degree. Qualified students pursuing the Physics MS degree have the option of applying for the certificate once the candidacy requirements are satisfied.

SCHOOL OF SCIENCE AND COMPUTER ENGINEERING COURSE ROSTER

ASTRONOMY AND SPACE SCIENCE (See also PHYSICS)

Please note: All ASTR graduate courses (5000 or 6000 level) assume the student has a solid background in physics and mathematics, at least, through differential equations.

- ASTR 5131: GRADUATE ASTRONOMY**
Quantitative introduction to physics of the stars, interstellar medium, cosmochemistry, the Galaxy, and Universe as determined from a variety of astronomical observations and models.
- ASTR 5231: STELLAR STRUCTURE AND EVOLUTION**
Prerequisites: Core Physics courses or instructor approval. Principal concepts, equations, methods and results of the theories of stellar atmosphere and interiors and their relation to observations.
- ASTR 5331: REMOTE SENSING INSTRUMENTATION AND TECHNIQUES**
Prerequisite: Core physics courses or instructor approval. Fundamentals of remote sensing; radiative quantities; radiative transfer theory and applications; interaction mechanisms, applications to the development of uses for remote sensing systems from spacecraft and aircraft.
- ASTR 5431: FUNDAMENTALS OF ASTRODYNAMICS**
Prerequisite: Core physics courses or instructor approval. Development of the two-body problem and universal formulation of all types of orbits, initial value problems, two-point boundary value problems, coordinate transformations and trajectory perturbations.
- ASTR 5432: PERTUBATION METHODS IN ASTRODYNAMICS**
Prerequisite: ASTR 5431 or instructor approval. A study of the methods of the solution to the perturbed two-body problem with applications to the motion of satellites.
- ASTR 5531: PLANETARY SCIENCE**
Prerequisite: Physical geology or equivalent. Planetary dynamics, planetary interiors, atmospheres and surfaces; magnetism; models of solar system origin.
- ASTR 5631: UNIVERSAL ORIGINS AND LIFE**
Origin of the universe, including an overview of the fundamental particles and forces as well as relativity, the Big Bang, the inflationary universe, the accelerating universe, and origin and evolution of life.
- ASTR 5632: ASTROBIOPHYSICS AND SETI**
The search for life in the universe, including origin of the universe, evolution of Earth as a habitable planet, possibilities for finding life on Mars and other solar system bodies, discovery of extra-solar planets, and the Search for Extra-Terrestrial Intelligence (SETI).
- ASTR 5931: RESEARCH TOPICS IN SPACE SCIENCE**
Identified by specific title each time course is offered.
- ASTR 5939: INDEPENDENT STUDY IN SPACE SCIENCE**
Prerequisites: Approval of instructor, chair and associate dean required.

BIOLOGY

*Pending Coordinating Board approval

- BIOL 5131: MEMBRANE BIOLOGY**
Prerequisite: Biochemistry. Study of synthesis and function of cellular membranes.
- BIOL 5132: CELL SIGNALING**
Prerequisites: BIOL 4431 and 4437 or equivalent. Detailed study of signal transduction in living cells. Concentration on current knowledge regarding the manner in which cells communicate with one another, integrate incoming signals and respond in appropriate manner.
- BIOL 5136: PHYSIOLOGY OF HUMAN AGING**
Prerequisite: Human physiology. Biological changes in human organ systems with advancing age; theoretical and empirical aspects of aging processes.
- BIOL 5215: LABORATORY FOR ICHTHYOLOGY**
Corequisite: BIOL 5235. Advanced laboratory course on identification, anatomy and ecology of

fish. Fisheries methods also emphasized. Weekend or weekday field trips and collections required.

- BIOL 5233: ECOTOXICOLOGY**
Prerequisite: BIOL 4235 or BIOL 5332 or equivalent. Study of environmental pollutants and effects on ecosystems.
- BIOL 5234: POPULATION AND COMMUNITY DYNAMICS**
Prerequisites: Ecology and Genetics. Application of basic population modeling and analysis methods used in the management of animal populations. Emphasis placed on harvested populations and fisheries.
- BIOL 5235: ICHTHYOLOGY**
Corequisite: BIOL 5215 Advanced study of biology, ecology and evolution of marine and freshwater fishes.
- BIOL 5332: TOXICOLOGY**
Prerequisite: BIOL 4235 or BIOL 4431 or BIOL 4434 or BIOL 4435 or equivalent. Evaluation of the effects of poisons and other toxic substances.
- BIOL 5333: INDUSTRIAL MICROBIOLOGY**
Prerequisites: Microbiology and biochemistry. Microbial processes having economic interest to man; fermentation, deterioration, waste disposal: food spoilage and drug preparation.
- BIOL 5336: NEUROPSYCHOLOGY PRACTICUM**
Prerequisite: Permission of instructor. Laboratory investigation of drug/brain/behavior relationships in the rat. Readings from primary research literature, laboratory experiments and research report.
- BIOL 5432: PRINCIPLES OF PHARMACOLOGY**
Prerequisite: BIOL 4431, BIOL 4434, or BIOL 4435. Emphasis on principles for evaluating the effects of drugs.
- BIOL 5433: ENZYMOLOGY**
Prerequisite: BIOL 4431 or equivalent. Study of enzyme isolation, purification, assay and characterization. Emphasis on kinetics of enzyme catalyzed reactions and on the use of enzymes in medicine and industry.
- BIOL 5434: HUMAN STRESS**
Prerequisites: BIOL 4435, BIOL 4436 or equivalent. Stressors and the characteristic physiological manifestations of stress in nervous and hormonal mechanisms.
- BIOL 5435: ADVANCED IMMUNOLOGY**
Prerequisite: BIOL 4631 or equivalent. Course will allow students to explore published research that supports currently accepted mechanisms of the immune function. Students will be expected to correlate basic principles of the immune system to the advances in medicine and pathology.
- *BIOL 5436: PHYSIOLOGICAL BASIS OF DISEASE**
Prerequisite: An introductory Human Physiology course or equivalent. The effects of diseases on normal physiologic functions and the physiologic basis of medical treatments for these diseases will be discussed.
- BIOL 5530: RESEARCH METHODS IN BIOLOGY**
Prerequisite: Graduate standing. Students will develop a research proposal, which allows integrating knowledge and standard procedures in a chosen area of Biology. A written proposal and an oral presentation are required to complete the course.
- BIOL 5531: AQUATIC TOXICITY TESTING**
Prerequisite: BIOL 4235 or equivalent. Theory of toxicity testing, statistical analysis procedures and laboratory practice in standard aquatic toxicity tests.
- BIOL 5532: ESTUARINE ECOLOGY**
Prerequisite: BIOL 4131. Study of physical, chemical and biological nature of estuarine ecosystems, Includes one or more weekend or weekday field trips and lab experiments.
- BIOL 5533: ECOLOGICAL METHODS**
Field methods for analysis of ecological systems. Field work and laboratory are required.
- BIOL 5534: CONSERVATION BIOLOGY**
Prerequisite: Genetics or Evolution. Analysis of evolutionary forces that generate and shape

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biodiversity and the biological, sociopolitical and economic issues faced in the conservation of biodiversity.

- BIOL 5535: TROPICAL RAINFOREST ECOLOGY**
Study of neotropical rain forests, including their physical, chemical and geological characteristics and plant /animal ecology. Students completing course qualify for discounted optional ecology study trip to the Amazon flooded forest areas of Brazil.
- BIOL 5632: BIOENERGETICS**
Prerequisite: BIOL 4431 or equivalent. Mechanisms of ATP Synthesis and other aspects of biological energy transduction.
- BIOL 5634: APOPTOSIS**
Prerequisite: BIOL 4437. Students in this course will study the stimuli and pathways involved in programmed cellular death.
- BIOL 5635: NEUROSCIENCE**
Prerequisites: Anatomy, Physiology. This course introduces basic and advanced concepts in neuroscience. The course covers a wide range of topics in this exciting field of science from the molecular level through the anatomical organization of sensory and motor systems.
- BIOL 5731: ADVANCED CANCER BIOLOGY**
Prerequisite: BIOL 3431 or BIOL 4531 or equivalent. Cancer, genetics and heredity; prevention, detection and treatment of cancer. Literature research and presentation on molecular basis of various cancers required.
- BIOL 5732: ADVANCED MOLECULAR BIOLOGY**
Prerequisite: Genetics. Study of eukaryotic DNA replication, post transcriptional processing, eukaryotic gene regulation, overexpression and repression, protein structure.
- BIOL 5734: ONCOGENES**
Prerequisite: Molecular biology. Study of cancer at the level of the gene.
- BIOL 5736: BIOETHICS**
Prerequisite: General Biology. Study of complex situations in biology and medicine that require moral reflection, judgment or decisions.
- BIOL 5737: MOLECULAR VECTORS**
Prerequisite or corequisite: Molecular biology. Properties, construction and use of vectors for molecular cloning and manipulation.
- BIOL 5738: GENE THERAPY**
Prerequisite or corequisite: Molecular biology. Gene technologies with applications to disease, cancer, neurological and genetic disorders, cardiovascular and infectious diseases.
- BIOL 5833: PROTEOMICS**
Prerequisite: Molecular Biology. Analysis of gene function of mRNA expression profiling with cDNA arrays, protein interactions by genome-side two hybrid screening and more direct analysis of protein expression, sequence and structure.
- BIOL 5915: COOPERATIVE EDUCATION WORK TERM**
Prerequisites: Approved Candidate Plan of Study, completed cooperative education file and approval of associate dean and Director of Cooperative Education. Educational paid work assignment by a student in the field of his/her career interest and course of study. Technical report will be required at the end of the semester.
- BIOL 5919, 5939: INDEPENDENT STUDY IN BIOLOGICAL SCIENCE**
Prerequisites: Approval of instructor, chair and associate dean.
- BIOL 5931: RESEARCH TOPICS IN BIOLOGY**
Identified by specific title each time course is offered.
- BIOL 6838: RESEARCH PROJECT AND SEMINAR**
Prerequisite: 24 hours completed in approved graduate program. Students will complete a study of the current literature, including methodology and techniques, used in a selected area of Biology. A written review paper and an oral presentation will be required.
- BIOL 6939: MASTER'S THESIS RESEARCH**
Prerequisites: Approval of advisor, master's committee and dean.

BIOTECHNOLOGY

*Pending Coordinating Board approval

BIOT 5031: APPLIED BIOTECHNOLOGY

Prerequisite: Molecular Biology. How recombinant DNA technology can be used to create various useful products using experimental results and actual methodological strategies to illustrate basic concepts. Course is designed for students with backgrounds in biochemistry, molecular genetics or microbiology.

BIOT 5131: ADVANCED METHODS IN BIOTECHNOLOGY I

Prerequisite: BIOL 4531. Designed to provide advanced practical training in current techniques of molecular and cellular biology, including recombinant DNA technology, Southern and Northern analysis of nucleic acids, PCR, DNA sequencing and analysis using current computer programs, Western blotting, etc. Intended for students who have prior background in molecular biology.

BIOT 5132: ADVANCED METHODS IN BIOTECHNOLOGY II

Prerequisite: BIOL 4531. Will focus on describing latest techniques of molecular biology and proteomics, including chromatographic separations of proteins, His-tagged protein and Ni-column purification, design and analysis of dual expression plasmids, RTPCR, 2-D gel electrophoresis and mass spec analysis of proteins, yeast two-hybrid assay.

BIOT 5530: RESEARCH METHODS IN BIOTECHNOLOGY

Students will develop a research proposal, which allows integrating knowledge and standard procedures in a chosen area of Biotechnology. A written research proposal and oral presentation will be required.

BIOT 5733: BIOINFORMATICS

Prerequisite: BIOL 4531 or equivalent. Examination of the tools and sequence databases for all known genomes.

BIOT 5736: BIOETHICS

Prerequisite: General Biology. Study of complex situations in Biology, Biotechnology and Medicine that require moral reflection, judgment or decisions.

BIOT 5915: COOPERATIVE EDUCATION WORK TERM

Prerequisites: Approved Candidate Plan of Study, completed cooperative education file and approval of associate dean and Director of Cooperative Education. Educational paid work assignment by a student in the field of his/her career interest and course of study. Technical report will be required at the end of the semester.

***BIOT 5919, 5929, 5939: INDEPENDENT STUDY IN BIOTECHNOLOGY**

Prerequisites: Approval of instructor, chair and associate dean.

BIOT 5931: RESEARCH TOPICS IN BIOTECHNOLOGY

Identified by specific title each time course is offered

BIOT 6838: RESEARCH PROJECT AND SEMINAR

Prerequisite: 24 hours completed in approved graduate program. Students will complete a study of the current literature, including methodology and techniques used in a chosen area of Biotechnology. A written review paper and oral presentation will be required

BIOT 6939: MASTER'S THESIS RESEARCH

Prerequisites: Approval of advisor, master's committee and dean

COMPUTER ENGINEERING

CENG 5011: LAB FOR COMPUTER ENGINEERING FUNDAMENTALS

Corequisite: CENG 5031. Laboratory experiments in digital circuits and computer architecture.

CENG 5031: COMPUTER ENGINEERING FUNDAMENTALS

Corequisite: CENG 5011. Fundamentals of logic systems and computer architecture.

CENG 5131: ENGINEERING APPLICATIONS

Prerequisite: Linear Systems Analysis or equivalent. Study of modern engineering techniques emphasizing mathematical methods currently used in industry. The MATLAB software package will be used for problem solving.

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- CENG 5132: ADVANCED ENGINEERING APPLICATIONS**
Prerequisite: CENG 5131. Presentation of modern mathematical and analysis techniques used for problem solving in engineering and other disciplines. Topics include state-space solutions, Fourier and Laplace analysis and probability and statistics. Each topic area will be completed with a solution of a practical example that is of current interest in various areas of technology. The MATLAB software package will be used for solving certain problems.
- CENG 5231: NETWORK SYSTEM SPECIFICATION**
The procedures and approaches used to evaluate and specify systems will be covered. Case studies will include systems that combine data acquisition, engineering workstation capability and small-business aspects in a networked group of computers. Laboratory instruction.
- CENG 5232: SYSTEMS ENGINEERING ANALYSIS & MODELING**
Prerequisites: SENG 5231 and SENG 5232 or permission of instructor and advisor. Use of computing tools to analyze, model and simulate solutions to complex systems engineering problems.
- CENG 5331: THEORY OF INFORMATION & CODING**
Prerequisites: Background in digital logic, statistics and linear systems analysis. Shannon's theory of information and coding applied to discrete communications channels; theory of finite fields applied to error detection and correction codes.
- CENG 5333: NETWORK PERFORMANCE ANALYSIS**
Prerequisites: Background in data communications and probability theory. Queuing theory, data link control, routing and flow control, polling and line control, LANs, circuit switching and call processing. Laboratory instruction.
- CENG 5334: FAULT TOLERANT COMPUTING**
Prerequisites: Background in probability, computer hardware and computer software. Lectures and research projects involving: design techniques for fault tolerant computers; fault modes; failure mechanisms; failure, fault and error relationship; architectural and software options for fault tolerance; modeling and evaluation techniques.
- CENG 5431: DIGITAL SIGNAL PROCESSING**
Prerequisite: CENG 5131 or equivalent. Sampling, Fourier analysis, FFT's and digital filtering. Laboratory instruction.
- CENG 5432: DIGITAL CONTROL SYSTEMS**
Prerequisite: CENG 5131 or equivalent. Analysis and synthesis of digital control systems and a comparison of continuous and discrete control systems. Laboratory instructions.
- CENG 5433: PRINCIPLES OF DIGITAL COMMUNICATIONS SYSTEMS**
Prerequisites: Linear systems theory and calculus -based probability. Analysis and synthesis of digital communications systems.
- CENG 5434: MICROCOMPUTER SYSTEMS DESIGN**
Prerequisites: Computer architecture and assembly language. Software design and use of 32-bit microcomputers and microcontrollers as used in modern computer systems and products. Laboratory instruction.
- *CENG 5531: MACHINE LEARNING AND APPLICATIONS**
Prerequisite: MATH 3334. Fundamentals of machine learning and pattern recognition. Topics covered include neural networks, Bayesian inference and non-parametric techniques.
- *CENG 5534: ADVANCED DIGITAL SYSTEM DESIGN**
Prerequisite: CENG 4534 or equivalent. Behavioral and structural design methods and examples using hardware description languages, including control, arithmetic, bus systems, memory systems and logic synthesis from hardware descriptions.
- CENG 5634: ARTIFICIAL NEURAL NETWORKS**
Prerequisite: Senior or graduate standing in computing, mathematics, business or other majors. Knowledge of computer algorithms, programming and a basic understanding of calculus, linear algebra, probability and statistical theory. A course covering artificial neural network (ANN) models and computation. The emphasis is on the rationale, theory, modeling, analysis, methodology, evaluation and representative applications of ANN. The computational capabilities and limitations of several popular ANN models are analyzed.

- CENG 5915: COOPERATIVE EDUCATION WORK TERM**
Prerequisites: Approved Candidate Plan of Study, completed cooperative education file and approval of associate dean and Director of Cooperative Education. Educational paid work assignment by a student in the field of career interest and course of study. A technical report will be required at the end of the semester. (Specific requirements are noted in the Cooperative Education Catalog description.)
- CENG 5931: RESEARCH TOPICS IN COMPUTER ENGINEERING**
Identified by specific title each time course is offered.
- CENG 5939: INDEPENDENT STUDY IN COMPUTER ENGINEERING**
Prerequisites: Approval of instructor, chair and associate dean.
- CENG 6332: HIGH PERFORMANCE COMPUTER ARCHITECTURE**
Prerequisite: Background in computer architecture. Introduction to systems architecture design and tuning techniques for High Performance Computing; RISC's, cache, pipelines, hypercubes, data-flow and supercomputers. Laboratory instruction.
- CENG 6431: DSP IMPLEMENTATIONS**
Prerequisites: CENG 5431 and C Programming. Implementation techniques of digital signal processing applications emphasizing Code Composer Studio and the TI DSP 320 family of digital signal processors. Laboratory instruction.
- CENG 6434: ADVANCED MICROCOMPUTER SYSTEM DESIGN**
Prerequisite: CENG 5434 or equivalent. System and product design with modern microcomputers and micro controllers. Laboratory instruction.
- CENG 6532: PARALLEL PROCESSING**
Prerequisites: Background in computer architecture and programming. Integrated discussion of the software and hardware design issues involved in parallel processing. Laboratory instruction.
- CENG 6533: ROBOTICS**
Topics of current interest in robotics applied to the study of mechanical systems for robots, robotics control and sensors for robotics. Laboratory instruction.
- CENG 6838: RESEARCH PROJECT**
Prerequisite: 24 hours completed in graduate program. Students will be assigned a research project which requires integrating knowledge and standard procedures in the discipline. A written paper and a presentation will be required.
- CENG 6939: MASTER'S THESIS RESEARCH**
Prerequisites: Approval of advisor, master's committee and dean.

CHEMISTRY

*Pending Coordinating Board approval

- *CHEM 5130: MATHEMATICAL METHODS AND PHYSICAL CONCEPTS IN CHEMISTRY**
Prerequisites: CHEM 4231, CHEM 4232. Prepares chemistry graduate students for math and physics concepts they will encounter in graduate physical chemistry courses.
- *CHEM 5131: INDUSTRIAL NUCLEIC ACID CHEMISTRY AND BIOTECHNOLOGY**
Prerequisites: CHEM 3233, Biology and/or Biochemistry. Designed for those students who are interested in industrial applications in chemical and biotechnology areas.
- CHEM 5133: SPECTROSCOPIC IDENTIFICATION OF ORGANIC COMPOUNDS**
Prerequisite: CHEM 4635 or equivalent. Theory and practice of structure determination using IR, UV-VIS, PMR and MS techniques. Lecture and laboratory instruction.
- CHEM 5134: SYNTHETIC ORGANIC CHEMISTRY**
Prerequisites: CHEM 3233, CHEM 3234. Modern synthetic methods used in organic chemical synthesis. A mechanistic approach is used.
- CHEM 5235: KINETICS OF CHEMICAL REACTIONS**
Prerequisites: CHEM 4231, CHEM 4232 or equivalent and CHEM 5130. The study of chemical bonding and structure as applied to practical chemical problems.
- CHEM 5335: ADVANCED INORGANIC CHEMISTRY**
Prerequisite: CHEM 4335 or equivalent. The comprehensive study of the theory and properties of compounds containing the main groups of elements in the periodic table.

CHEM 5336: ORGANOMETALLIC CHEMISTRY

Prerequisites: CHEM 3233, CHEM 3234; CHEM 4231, CHEM 4232. Systematic study of the compounds containing a carbon-metal bond. Synthesis, structural types and typical reactions of both main group and transition metal compounds are discussed.

CHEM 5337: PHYSICAL ORGANIC CHEMISTRY

Prerequisites: CHEM 3233, CHEM 3234; CHEM 4231, CHEM 4232. Advanced study of the relationships between structure and reactivity of mechanisms operating during organic chemical transformations.

CHEM 5431: CONTAMINANT FATE AND TRANSPORT

Prerequisite: CHEM 3333 or equivalent. Principles of contaminant behavior in the environment. Case studies on important toxic chemicals including heavy metals, petroleum hydrocarbons, soap and detergents, pesticides, and polycyclic aromatic hydrocarbons. Suitable for non-majors.

CHEM 5535: SAMPLING & ANALYSIS OF ENVIRONMENTAL CONTAMINANTS

Prerequisite: MATH 3038. Field sampling techniques, US EPA/OSHA/USGS/ASTM standard methodology, field and lab quality assurance/quality control (QA/QC), wet chemical methods and instrumentations for the analysis of environmental contaminants.

CHEM 5631: ENVIRONMENTAL CHEMODYNAMICS

Prerequisite: CHEM 3333. Focus on the kinetic and thermodynamic mechanisms for chemical movement across air/soil, soil/water, water/sediment and water/air interfaces and how natural processes affect movement of chemicals in air, water, sediment and soil; information vital to performing human and ecological risk assessments.

CHEM 5632: QUANTUM MECHANICS I

Prerequisites: Calculus I, II and either University Physics (calculus-based) I, II or CHEM 4231, CHEM 4232 and either CHEM 5130 or PHYS 5531. Foundations and techniques of Quantum Mechanics and their application to atomic and molecular properties.

CHEM 5633: ORIGINS OF LIFE

Prerequisites: General Chemistry and University or College Physics. Origin of the universe, the chemical elements, the Earth and life, including pre-biotic chemistry. The nature of the first replicators, origin of the genetic code and the origin of biomolecular chirality.

CHEM 5634: ASTROBIOCHEMISTRY AND SETI

Prerequisites: General Chemistry and University or College Physics. The search for life in the universe including origin and evolution of the chemical elements and life, chemistry of habitable planets, chemical signatures of life on other planets and the Search for Extra-Terrestrial Intelligence. (SETI)

CHEM 5635: INTRODUCTION TO POLYMER CHEMISTRY

Prerequisite: CHEM 3233. Introduction to the chemistry, structure and properties of polymers.

CHEM 5636: GAS CHROMATOGRAPHY – MASS SPECTROMETRY

The study of combined analytical methods such as GC/MS, LC/MS and MS/MS.

CHEM 5637: MODERN SPECTROSCOPY

Prerequisites: General Chemistry I, II, CHEM 4231, CHEM 3233, CHEM 3234 and CHEM 5130. Theory and application of spectroscopy including modern laser techniques.

CHEM 5638: TOTAL SYNTHESIS OF NATURAL PRODUCTS

Prerequisite: Approval of instructor. A mechanistic-based approach to the total synthesis of organic natural products.

CHEM 5639: SYMMETRY IN CHEMISTRY

Prerequisites: CHEM 3233, CHEM 3234; CHEM 4231, CHEM 4232, CHEM 4335 and CHEM 5130. Applications of group theory in physical, inorganic and organic chemistry.

CHEM 5915: COOPERATIVE EDUCATION WORK TERM

Prerequisites: Approved Candidate Plan of Study, completed cooperative education file and approval of associate dean and Director of Cooperative Education. Educational paid work assignment by a student in the field of career interest and course of study. A technical report is required at the end of the semester. (Specific requirements are noted in the Cooperative Education catalog description.)

CHEM 5919, 5939: INDEPENDENT STUDY IN CHEMISTRY

Prerequisites: Approval of instructor, chair and associate dean required.

- CHEM 5931: RESEARCH TOPICS IN CHEMISTRY**
Identified by specific title each time course is offered.
- CHEM 6731: GRADUATE SEMINAR**
Advanced seminar where an in-depth perusal of a chemical topic shall be undertaken and a research proposal and formal presentation shall be completed.
- CHEM 6837: RESEARCH PROJECT AND SEMINAR I**
Prerequisite: Admission to graduate program in chemistry. Students will develop a research proposal which allows integrating knowledge and standard procedures in the discipline. A written paper and a presentation will be required.
- CHEM 6838: RESEARCH PROJECT AND SEMINAR II**
Prerequisites: CHEM 6837 and 24 hours completed in approved graduate program. Students will develop a research proposal which allows integrating knowledge and standard procedures in the discipline. A written paper and a presentation will be required.
- CHEM 6939: MASTER'S THESIS RESEARCH**
Prerequisites: Approval of faculty advisor, master's committee and dean.

COMPUTER INFORMATION SYSTEMS

- CINF 5915: COOPERATIVE EDUCATION WORK TERM**
Prerequisites: Approved Candidate Plan of Study, completed cooperative education file and approval of associate dean and Director of Cooperative Education. Educational paid work assignment by a student in the field of career interest and course of study. A technical report will be required at the end of the semester. (Specific requirements are noted in the Cooperative Education Catalog description.)
- CINF 5919, 5939: INDEPENDENT STUDY IN COMPUTER INFORMATION SYSTEMS**
Prerequisites : Approval of instructor, chair and associate dean.
- CINF 5931: RESEARCH TOPICS IN COMPUTER INFORMATION SYSTEMS**
Identified by specific title each time course is offered.
- CINF 6838: RESEARCH PROJECT AND SEMINAR**
Prerequisite: 24 hours completed in graduate program. Attendance at the orientation meeting on the first class day required. Students will be assigned a research project which requires integrating knowledge and standard procedures in the discipline. A written paper and a presentation will be required.
- CINF 6939: MASTER'S THESIS RESEARCH**
Prerequisites: Approval of faculty advisor, master's committee and Dean.

COMPUTER SCIENCE

- CSCI 5032: DATA STRUCTURES**
Prerequisite: Programming in C or Java. Data structures including linked lists, queues, stacks, tables, trees, B-trees, B+ trees, balanced trees, graphs, finite state machines and file structures. Algorithms including recursion, searching and sorting. An introduction to complexity analysis. Leveling course for approved CS/CIS graduate students. Laboratory instruction.
- CSCI 5037: TOPICS IN COMPUTER SCIENCE FOR NON-MAJORS**
Identified by topics each time the course is offered. Not to be taken by majors in computing programs. Laboratory instruction.
- CSCI 5061: PROGRAMMING LANGUAGES AND PROBLEM SOLVING**
Credit may not be applied toward a degree in Computer Science. Problem-solving techniques including in-depth coverage of Assembly Language and C. Principles and survey of programming languages, such as Pascal, Ada, C++, Java, Prolog, Lisp and Smalltalk. Laboratory instruction.
- CSCI 5131: SIMULATION TECHNIQUES**
Prerequisites: Computer language proficiency, numerical methods and probability; linear systems analysis recommended. Modern software techniques in continuous and discrete model construction for industrial and scientific applications. Laboratory instruction.

CSCI 5132: INTERNET PROTOCOLS

Prerequisites: CSCI 3331, CSCI 3333 and CSCI 3532 or equivalents. Interconnection of heterogeneous networks and the layering principles of TCP/IP which make it possible. A brief look at underlying hardware technologies. Internet addressing and routing, reliable and unreliable transport protocols. Application level services available in the Internet.

CSCI 5232: CONCEPTS OF PROGRAMMING LANGUAGES

Prerequisite: CSCI 3333. The course assumes knowledge of at least one imperative language such as C, C++, or Java. Study of various programming languages from conceptual standpoint; topics will include formal language definition, data storage techniques, design techniques and implementation issues for compilers. Both numeric and string processing languages will be covered.

CSCI 5233: COMPUTER SECURITY & INTEGRITY

Prerequisites: CSCI 4333, CSCI 4534 or equivalents. Introduction to encryption and decryption; security mechanisms in computer architectures, operating systems, databases, networks and introduction to security.

CSCI 5234: WEB SECURITY

Prerequisites: CSCI 5233 and CSCI 4230 or instructor's approval. Fundamental coverage of issues and techniques in developing secure web-based applications and related topics such as network security, web server security, application-level security and web database security, etc.

CSCI 5235: NETWORK SECURITY

Prerequisites: CSCI 5233 or CSCI 4233 and CSCI 5132 or CSCI 4132. Advanced cryptography, access control, distributed authentication, TCP/IP security, firewalls, IPSec, Virtual Private Networks, intrusion detection systems and advanced topics such as wireless security, identity management, etc.

CSCI 5331: COMPUTER GRAPHICS

Prerequisites: CSCI 3532, CSCI 4530 or equivalent, linear algebra and analytic geometry. Interactive graphics techniques, three dimensional graphics including 3-D projections, hidden line elimination and shading. Stereo graphics, Virtual Reality and Animation. Laboratory instruction.

CSCI 5332: ADVANCED GRAPHICS WINDOWING SYSTEMS

Prerequisites: CSCI 3532, CSCI 4530 and C programming. Analysis and design of graphics techniques for windowing systems. Development of graphical user interfaces (GUIs) using the X Window System. Laboratory instruction.

CSCI 5333: DATABASE MANAGEMENT SYSTEMS (DBMS)

Prerequisite: CSCI 4333. Database management systems (DBMS), relational DBMS, object-oriented DBMS, knowledge base management systems, database language, query optimization, security and integrity, concurrency control and recovery, design theory of databases. Laboratory instruction.

CSCI 5431: CLIENT-SERVER BASED NETWORK PROGRAMMING

Prerequisites: CSCI 3133; CSCI 4531 or CSCI 4534. Principles and issues related to the development of client-server based applications. Detailed study of networking API to the TCP/IP protocol suite in a suitable multitasking platform (Unix or Windows NT). Concurrency issues in the design of client and server programs. Trade-offs of different architectures and usage of Remote Procedure Calls. Broadcasting and Multicasting. Interoperability of IPv4 and IPv6 clients and servers. Laboratory instruction.

CSCI 5432: DESIGN AND ANALYSIS OF ALGORITHMS

Prerequisite: CSCI 3532. Review of advanced data structures and algorithm design. Focus on analysis techniques for complex algorithms and data structures, including amortized analysis, randomized algorithms and NP approximations. Includes survey of parallel analysis and complexity theory.

CSCI 5433: OBJECT-ORIENTED DATABASE SYSTEMS

Prerequisite: CSCI 4333; CSCI 4230 recommended. Integration of object-oriented technology with database and Internet technologies, topics include modeling and design for object-oriented database systems, their development processes, implementation of online web database applications using object-oriented languages, scripting languages and object-oriented DBMS to store and retrieve objects in an object-oriented database. Laboratory instruction.

- CSCI 5530: PATTERN CLASSIFICATION**
Prerequisites: Calculus, linear algebra, probability, statistics and a compiler language. Introduction to the basic concepts of pattern classification including Bayes decision theory, parametric and non-parametric techniques, linear discriminant functions and clustering. Laboratory instruction.
- CSCI 5531: ADVANCED OPERATING SYSTEMS**
Prerequisites: CSCI 4534, familiarity with C and UNIX system calls. Study of current methodologies used in the design of distributed operating systems including issues related to the design of distributed file systems, interprocess communication and synchronization facilities, process, processor and memory management within the context of distributed operating systems. Case studies and review of current literature. Basic introduction to network programming and its application to the design of a simplified component of a distributed operating system. Laboratory instruction.
- CSCI 5532: PATTERN RECOGNITION AND IMAGE PROCESSING**
Prerequisites: Calculus, linear algebra, probability, statistics and a compiler language. An introduction to basic concepts and techniques for digital image processing, including software and hardware techniques for statistical pattern recognition and extracting useful information from pictures by automatic means. Laboratory instruction.
- CSCI 5533: DISTRIBUTED INFORMATION SYSTEMS**
Prerequisite: CSCI 5333. Distributed transparency, distributed database design, distributed query processing, distributed concurrency control and recovery, distributed DBMS. Laboratory instruction.
- CSCI 5631: N-TIER CLIENT SERVER ARCHITECTURES**
Prerequisite: CSCI 5431 or CSCI 5531. Principles and issues related to the development of interface based software components as the foundation for developing scalable multitier architectures. Topics include: interface definition and design, language integration (VB, C++ and Java), concurrency and threading issues, type libraries, distributed components, connectable components and persistence.
- CSCI 5633: WEB DATABASE DEVELOPMENT**
Prerequisites: CSCI 4230 and CSCI 4333. Principles of design and implementation of web database systems for storing, updating and retrieving data on the web: web database development techniques, database modeling, SQL development, web database connectivity, web database application programming. Scripting languages, exchanging data with XML, user authentication, user tracking, session management, e-commerce and web database administration will be covered. Laboratory instruction.
- CSCI 5635: PARALLEL PROCESSING**
Prerequisite: Background in computer architecture and programming. Integrated discussion of the software and hardware design issues involved in parallel processing. Laboratory instruction.
- CSCI 5733: XML APPLICATION DEVELOPMENT**
Prerequisites: CSCI 3134, CSCI 4230. XML standards including XML, DTD, DOM, XSL, XSLT, Xpath, Xpointer and XML Schema. XML related technologies including XML parsers, JAXP, XSL parsers, XML servers, XML databases, SOAP and Web services. Laboratory instruction.
- CSCI 5833: DATA MINING: TOOLS AND TECHNIQUES**
Prerequisites: CSCI 3333 and CSCI 4333. CSCI 5333 recommended. Overview of the data mining process (e.g., CRISP-DM) including issues of data cleansing and data modeling. Characterization of data (structured, unstructured, time series). Examination of machine learners (neural networks, decision trees, genetic programs). Critique of various data mining tools regarding functionality and application. Assessment of data mining domains using financial, bioinformatics and web-based repositories.
- CSCI 5915: COOPERATIVE EDUCATION WORK TERM**
Prerequisites: Approved Candidate Plan of Study, completed cooperative education file and approval of associate dean and Director of Cooperative Education. Educational paid work assignment by a student in the field of career interest and course of study. A technical report will be required at the end of the semester. (Specific requirements are noted in the Cooperative Education Catalog description.)
- CSCI 5919, 5939: INDEPENDENT STUDY IN COMPUTER SCIENCE**
Prerequisites: Approval of instructor, chair and associate dean.

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CSCI 5931: RESEARCH TOPICS IN COMPUTER SCIENCE

Identified by specific title each time course is offered.

CSCI 5933: COMPUTATIONAL BIOINFORMATICS

Prerequisite: CSCI 5833. Course assumes students have very little or no prior Biological background. The course examines computational approaches to understanding and predicting the structure, function, interactions and evolution of DNA, RNA, proteins and related molecules and processes. The methods taught focus on developing the structure of the models, on model fitting algorithms (machine learning) and on the application of the resulting models (data mining). Most applications will revolve around DNA, RNA, protein sequence and gene expression-array data, but other types of data may also be considered.

CSCI 6132: ENTERPRISE NETWORKING

Prerequisite: CSCI 5132. Seminar in enterprise networking; groupware, workflow and workgroup computing. Laboratory instruction.

CSCI 6530: RESEARCH METHODS IN COMPUTER SCIENCE

A study of current methods and techniques in computer science research, including writing research proposals, conducting research, technical writing and presentations.

CSCI 6532: REAL-TIME SYSTEMS

Prerequisite: Background in operating systems. Major issues in the design and implementation of predictable real-time systems including cyclic executives, fixed priority executives, dynamic priority executives, priority inversion, object-oriented design, real-time transaction systems, real-time programming languages and real-time operating systems. Laboratory instruction.

CSCI 6838: RESEARCH PROJECT AND SEMINAR

Prerequisite: 24 hours completed in graduate program. Attendance at the orientation meeting on the first class day required. Students will be assigned a research project which requires integrating knowledge and standard procedures in the discipline. A written paper and a presentation will be required.

CSCI 6939, 6969: MASTER'S THESIS RESEARCH

Prerequisites: Approval of faculty advisor, master's committee and Dean.

ENGINEERING MANAGEMENT

*Pending Coordinating Board approval

EMGT 5130: NEW BUSINESS DEVELOPMENT

Prerequisites: Foundation courses. The course concentrates on proposal writing; how to write an executive summary; proposal management; proposal process & procedures; proposal training; oral proposal presentations; government contracting and request for proposals.

EMGT 5131: LEGAL ISSUES IN ENGINEERING MANAGEMENT

Prerequisites: Foundation courses. This course will provide an overview of warranty law, deceptive trade practices law, product liability and class action concepts. Class discussions will focus on legal considerations for engineering managers, risk assessment and the expense and adverse impact of litigation.

EMGT 5230: NEGOTIATION STRATEGIES

Prerequisites: Foundation courses. This course will educate the student to better understand the behavior of individuals, groups and organizations in the context of competitive situations. Students develop negotiation skills experientially and understand negotiation in useful analytical frameworks.

EMGT 5231: ENGINEERING MANAGEMENT PLANNING

Prerequisites: Foundation courses. This course offers engineering management planning; design and implements systems concepts that are involved with government contracting. The course focuses on the production of a system engineering management plan.

*EMGT 5330: SERVICE AND OPERATIONS MANAGEMENT

Prerequisites: Foundation courses. This course provides an overview, concepts and methods that are useful in understanding the management of a firm's operations. This course will concentrate on operations strategy, process improvement, forecasting, lean and just-in-time and supply chain management.

***EMGT 5331: SIX-SIGMA QUALITY**

Prerequisites: Foundation courses. This course will cover the knowledge areas of six sigma green belt. Topics include six sigma goal, lean principles, theory of constraints, design for six sigma, quality function deployment, process management, data and process analysis and design of experiments.

EMGT 5931: RESEARCH TOPICS IN ENGINEERING MANAGEMENT

Identified by specific title each time course is offered.

EMGT 6837: ENGINEERING MANAGEMENT CAPSTONE PROJECT

Prerequisites: At least 18 hours of graduate work in EMGT. Students will be grouped into teams to undertake a software project utilizing the tools, techniques and skills acquired during their previous course work. Each team will be assigned to a client and will interact with that client to establish requirements, agree upon a design and achieve a successful acceptance test of the resulting software system. Teams will meet on a weekly basis with their faculty mentor to discuss progress.

***EMGT 6939: MASTER'S THESIS RESEARCH**

Prerequisites: Approval of faculty advisor, thesis committee and dean.

ENVIRONMENTAL SCIENCE

ENSC 5031: TEACHING ENVIRONMENTAL SCIENCE

The course is designed for K-12 teachers to enhance their own knowledge, awareness and understanding of environmental issues (air, water and waste) of national and regional importance. It is also designed to equip teachers of all grades with the appropriate educational resources so that they may effectively teach their own students about issues of environmental sciences through classroom instruction, laboratory assignment, site visit, observations and field demonstration.

ENSC 5530: RESEARCH METHODS: ENVIRONMENTAL SCIENCE

Prerequisites: STAT 5135, advisor approval and approved research topic. Development of proposal for master's project or thesis research.

ENSC 5915: COOPERATIVE EDUCATION WORK TERM

Prerequisites: Approved Candidate Plan of Study, completed cooperative education file and approval of associate dean and Director of Cooperative Education. Educational paid work assignment by a student in the field of career interest and course of study. A technical report will be required at the end of the semester. (Specific requirements are noted in the Cooperative Education Catalog description.)

ENSC 5931: RESEARCH TOPICS IN ENVIRONMENTAL SCIENCE

Identified by specific title each time course is offered.

ENSC 5939: INDEPENDENT STUDY IN ENVIRONMENTAL SCIENCE

Prerequisites: Approval of instructor, chair and associate dean.

ENSC 6731: GRADUATE SEMINAR

Prerequisites: ENSC 5530, STAT 5135 and 24 hours completed in an approved graduate program. Advanced seminar where an in-depth perusal of an environmental science topic shall be undertaken and a formal paper and presentation shall be completed.

ENSC 6838: RESEARCH PROJECT

Prerequisites: ENSC 5530, 24 hours completed within a CPS and approval of graduate advisor. Students complete their research project; write the research paper and present research findings in a public forum.

ENSC 6939: MASTER'S THESIS RESEARCH

Prerequisites: Master's degree candidacy as well as approval by advisor, master's committee and dean.

GEOLOGY

Please note: All GEOL graduate courses (5000 and 6000 level) assume the student has completed (or is currently enrolled in) courses equivalent to physical geology, mineralogy and petrology, plus stratigraphy or sedimentology.

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- GEOL 5233: ENVIRONMENTAL GEOCHEMISTRY**
Prerequisites: GEOL 3034, 3137 or equivalent; Inorganic and organic chemistry. Basic solution geochemistry and equilibria concepts to formation and alteration of sedimentary materials of low temperature origin. Geochemistry of fluids in natural aqueous environments with emphasis on diagenesis and weathering.
- GEOL 5331: ENVIRONMENTAL GEOLOGY**
Relationships and interactions between pollutants and earth materials, land instability hazards, resource exploitation problems; and other topics of current interest.
- GEOL 5333: WETLANDS**
Prerequisite: GEOL 4233. Survey of wetlands types including coverage of environmental importance of wetlands, interaction of soils, geomorphology and biological community in wetlands formation, wetlands protection and wetlands creation.
- GEOL 5531: HYDROLOGY OF GROUNDWATER**
Prerequisite: GEOL 3034, 4531. Course emphasizes principles of occurrence and movement of ground water. Factors applying to pollution, estimates of supply and engineering aspects will be emphasized. Local case studies will be included. Laboratory exercises included.
- GEOL 5532: HYDROLOGY OF SURFACE WATER**
Prerequisite: GEOL 3034 or equivalent. Course will emphasize principles of occurrence and movement of surface water. Factors applying to pollution, estimates of supply and engineering aspects will be studied. Local case studies of water resources, flooding and effects included. Laboratory exercises included.
- GEOL 5631: REMOTE SENSING: APPLICATIONS IN GEOLOGY**
Prerequisites: GEOL 3034, 4222, 4234 or equivalent. Course emphasizes principal sensors and products of spacecraft remote sensing. Emphasizes applications of remote sensing to geology, hydrology, oceanography and biology. Land use and other environmental applications are also included. Laboratory exercises included.
- GEOL 5632: HAZARDOUS MATERIALS IN THE GEOLOGIC ENVIRONMENT**
Prerequisite: GEOL 5531. Study of the environmental problems arising from use of the geologic environment as a waste repository. Course includes such topics as landfills, clay lined waste pits, underground storage tanks, deep well injection, role of salt deposits in waste disposal and ordinance contamination of Department of Defense sites.
- GEOL 5730: PLANETARY GEOLOGY**
Prerequisites: GEOL 3034 or equivalent, GEOL 3137, GEOL 4234. Comparison of the planets and the solid surface satellites with emphasis on the terrestrial planets. Latest space probe data included.
- GEOL 5931: RESEARCH TOPICS IN GEOLOGY**
Identified by specific title each time course is offered.
- GEOL 5939: INDEPENDENT STUDY IN GEOLOGICAL SCIENCES**
Prerequisites: Approval of instructor, chair and associate dean.
- GEOL 6838: RESEARCH PROJECT AND SEMINAR**
Prerequisite: 24 hours completed in approved graduate program. Students will develop a research proposal which allows integrating knowledge and standard procedures in the discipline. A written paper and a presentation will be required.
- GEOL 6939: MASTER'S THESIS RESEARCH**
Prerequisites: Approval of advisor, master's committee and dean.

INDUSTRIAL HYGIENE AND SAFETY

- INDH 5131: CONTROL OF OCCUPATIONAL AND ENVIRONMENTAL HAZARDS**
Prerequisites: INDH 4131, 4133, 4135 or equivalents. Engineering and control technology used to eliminate and reduce hazards. Includes ventilation design, shielding, heat and cold stress, noise control, emissions control and waste management.
- INDH 5233: RECOGNITION OF OCCUPATIONAL DISEASES**
Prerequisite: BIOL 4235. Incidence and patterns of occupational diseases in the U.S. Approaches to recognition and prevention. Workplace exposures and effects. Occupational disorders by organ systems.

- INDH 5333: AIR POLLUTION**
Background, sources and fate of atmospheric pollutants. Air pollution episodes, meteorology, dispersion modeling, air quality measurements, controls, criteria, guidelines and health standards.
- INDH 5334: HUMAN FACTORS ENGINEERING**
Provides an analysis of the principles of human factors and ergonomics. The course covers human information processing, man-machine systems, information design, display and control design, static and dynamic anthropometrics and fundamentals of biomechanics, musculoskeletal injuries, including Cumulative Trauma Disorders such as Carpal Tunnel Syndrome, hand tool design, back injuries, vibrations, shift work, biological rhythms and workload assessment. Emphasis is placed on ergonomic methods and techniques to assess the design of modern work environments.
- INDH 5335: ERGONOMIC METHODS AND ANALYSIS TECHNIQUES**
Provides students with a variety of methods to analyze tasks and make accommodations and redesigns based on the principles of human factors and ergonomics. Emphasis is placed on Human Factors/Ergonomic methods and techniques to assess the design of modern work environments to accommodate people with disabilities or provide suitable redesigns to enhance human performance.
- INDH 5739: INTERNSHIP IN INDUSTRIAL HYGIENE AND SAFETY**
Prerequisites: Master's degree candidacy as well as approval by advisor and dean. Supervised work experience in an approved industrial firm or governmental agency. Written and oral report required.
- INDH 5915: COOPERATIVE EDUCATION WORK TERM**
Prerequisites: Approved Candidate Plan of Study, completed cooperative education file and approval of associate dean and Director of Cooperative Education. Educational paid work assignment by a student in the field of career interest and course of study. A technical report will be required at the end of the semester. (Specific requirements are noted in the Cooperative Education Catalog description.)
- INDH 5919, 5939: INDEPENDENT STUDY IN INDUSTRIAL HYGIENE & SAFETY**
Prerequisites: Approval of instructor, chair and associate dean.
- INDH 5931: RESEARCH TOPICS IN INDUSTRIAL HYGIENE AND SAFETY**
Identified by specific title each time course is offered.
- INDH 6135: RADIATION PROTECTION**
Advanced principles of ionizing and non-ionizing radiation are presented to provide the students who already have a basic understanding of radiation protection with an enhanced competence to solve theoretical and practical problems in radiation protection.
- INDH 6232: ANALYTICAL METHODS FOR EVALUATION OF HEALTH HAZARDS**
Prerequisite: INDH 4232 or equivalent. Survey procedures and instrumental methods of analysis for atmospheric and occupational hazards. Optical microscopy, noise, radiation, colorimetry, gas chromatography, atomic absorption, infrared and mass spectrometry.
- INDH 6332: SAFETY ENGINEERING**
Prerequisite: INDH 3430 or equivalent. Application of engineering principles to produce design, plant layout, construction, maintenance, pressure vessels, power tools, electric equipment, confined spaces and transportation systems. Includes consensus standards and governmental regulations.

MATHEMATICS

- MATH 5031: PROBLEM-SOLVING STRATEGIES**
A focus on the connection between problem-solving, teaching mathematics for understanding and the development of mathematical reasoning. Also highlighted will be the student's own development of problem-solving abilities and ability to communicate their reasoning.
- MATH 5033: INSTRUCTIONAL APPLICATIONS OF ALGEBRA**
A seminar on the content of secondary school courses in algebra and applicable instructional techniques.
- MATH 5034: GEOMETRY SEMINAR**
Topics in Euclidean and Non-Euclidean geometries. An emphasis on the strengthening of proof-writing techniques. Also discussed will be the use of technology and concrete materials in the teaching and learning of geometry.

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- MATH 5035: PRECALCULUS COURSES FOR MATHEMATICS TEACHERS OF GRADES 10-14**
A seminar on various current and potential approaches to the content of precalculus mathematics with applicable instructional techniques.
- MATH 5036: CALCULUS FOR MATHEMATICS TEACHERS OF GRADES 10-14**
A seminar on various approaches to the teaching of introductory calculus.
- MATH 5037: TECHNOLOGY FOR MATHEMATICS CURRICULUM**
Prerequisites: Calculus, MATH 3131 and MATH 4131. Current laboratory applications of computers and calculators in the mathematics curriculum. Symbolic, numerical and graphical computing will be applied to various mathematical problems.
- MATH 5131: ABSTRACT ALGEBRA**
Prerequisite: MATH 4232 or equivalent. Groups, rings, fields, modules; ideal theory, polynomial rings, algebraic and free groups.
- MATH 5132: REAL ANALYSIS**
Prerequisite: MATH 4431 or equivalent. General measure and integration theory. Banach and Hilbert spaces; applications to approximation theory, probability theory and summability.
- MATH 5133: COMPLEX ANALYSIS**
Prerequisite: MATH 4633 or equivalent. The theory of analytic functions and analytic continuation. Branched functions; an introduction to homotopy theory and basic metric space topology. Integration theory, Cauchy's theorem and residue theory.
- MATH 5134: LOGIC**
Prerequisite: MATH 4231 or equivalent. Propositional and predicate calculus; foundations, computability.
- MATH 5136: ORDINARY DIFFERENTIAL EQUATIONS AND DYNAMICAL SYSTEMS**
Prerequisites: MATH 3131, MATH 3231 and MATH 4131 or equivalent. This course covers the dynamical aspects of ordinary differential equations and the relationship between theory and applications. Fundamental theorems of solutions of ordinary differential equations oriented toward dynamical systems, local globe phase portrait analyses of nonlinear autonomous systems and the criteria for the existence of periodic solutions are examined along with various applications.
- MATH 5137: TOPOLOGY AND GEOMETRY**
Prerequisite: MATH 4133 or equivalent. Set Theory, Topological Spaces, Connectedness and Compactness, The Fundamental Group and Covering Spaces, Surfaces and their applications.
- MATH 5231: LINEAR ALGEBRA**
Prerequisite: MATH 3131. Fields and vector spaces, determinants and their characterization, adjoints operators, eigenvalues and eigenvectors, diagonalizability, canonical forms and matrix functions.
- MATH 5232: NUMBER THEORY**
Prerequisite: MATH 4132 or equivalent. An introduction to analytic number theory, which uses the tools of analysis (particularly complex function theory) to investigate questions in number theory. The distribution of the primes is of central interest. Some of the tools developed are Dirichlet series, character theory, formal power series and contour integration. Various topics in arithmetical functions are also considered.
- MATH 5330: MATHEMATICAL SOFTWARE AND MODELING SIMULATION**
Prerequisites: MATH 3131 and MATH 4131 or equivalent. Explores computer software in applied Mathematics using Matlab. A variety of programming paradigms are emphasized. A collection of topics in applied. Mathematics, chaos and neuroscience modelings, are incorporated into Matlab programming.
- MATH 5333: NUMERICAL ANALYSIS**
Prerequisites: MATH 3131, MATH 3231, MATH 4131 and C/C++ or equivalent. Mathematical analysis and numerical computation of solutions to linear and nonlinear systems, ordinary differential equations, integral equations and boundary value problems.
- MATH 5431: MATHEMATICAL MODELING IN THE APPLIED SCIENCES**
Prerequisite: MATH 4235 or equivalent. Techniques for analyzing and simulating physical, chemical and biological processes.
- MATH 5931: RESEARCH TOPICS IN MATHEMATICS**
Identified by specific title each time course is offered.

- MATH 5939: INDEPENDENT STUDY IN MATHEMATICS**
Prerequisites: Approval of instructor, chair and associate dean.
- MATH 6131: INTRODUCTION TO ALGEBRAIC TOPOLOGY AND GEOMETRY**
Prerequisite: MATH 4133 or equivalent. An introduction to topics in algebraic topology; manifold theory and their applications.
- MATH 6837: RESEARCH PROJECT I**
Student will develop and complete a research project which requires integrating knowledge and standard procedures in the discipline. A written paper and presentation will be required.
- MATH 6838: RESEARCH PROJECT II**
Student will complete research project developed in MATH 6837. A written paper and presentation will be required.
- MATH 6939: MASTER'S THESIS RESEARCH**
Prerequisites: Approval of faculty advisor, master's committee and dean.

PHYSICS

Please note: All PHYS graduate courses (5000 or 6000 level) assume the student has a solid background in physics and mathematics, at least through differential equations.

- PHYS 5311: RECITATION FOR ELECTRODYNAMICS I**
Prerequisite or corequisite: PHYS 5331. One hour recitation section to review examples and problems in PHYS 5331.
- PHYS 5331: ELECTRODYNAMICS I**
Prerequisites: PHYS 5531 or instructor approval and PHYS 4331 or equivalent. Introduction to electrostatics, boundary value problems, multipoles, electrostatics of macroscopic media, magnetostatics, time-vary fields, Maxwell's equations, conservation laws.
- PHYS 5332: ELECTRODYNAMICS II**
Prerequisite: PHYS 5331 or equivalent. Dynamics of electric and magnetic fields, Maxwell's equations, electromagnetic radiation, special relativity, wave guides, boundary value problems, multipoles, scattering and radiation from moving charges.
- PHYS 5411: RECITATION FOR CLASSICAL MECHANICS**
Prerequisite or corequisite: PHYS 5431. One hour recitation section to review examples and problems in PHYS 5431. Advanced topics in electrodynamics not normally covered in PHYS 5331 such as radiating systems, diffraction, relativistic particles in electromagnetic fields, collisions of charged particles, radiation damping and radiative beta processes.
- PHYS 5431: CLASSICAL MECHANICS**
Prerequisite: PHYS 5531 or instructor approval. Introduces concepts such as the Lagrangian dynamics of particles, Hamiltonian mechanics and canonical transformations in order to calculate the classical motion of particles.
- PHYS 5511: RECITATION FOR MATHEMATICAL METHODS IN PHYSICS I**
Prerequisite or corequisite: PHYS 5531. One hour recitation section to review examples and problems in PHYS 5531.
- PHYS 5531: MATHEMATICAL METHODS IN PHYSICS I**
Prerequisites: PHYS 4131, PHYS 4132 or equivalent. A review of essential mathematics required to solve graduate level physics problems: differential equations, complex mathematics, linear algebra, infinite series and more.
- PHYS 5532: MATHEMATICAL METHODS IN PHYSICS II**
Prerequisite: PHYS 5531 or instructor approval. This course is a continuation of Mathematical Methods in Physics I. Course content may include: boundary conditions, perturbation theory, group theory, tensor analysis, using mathematical software packages (such as Mathematica, Matlab or Maple) or other advanced mathematical applications to physics.
- PHYS 5533: METHODS IN COMPUTATIONAL PHYSICS**
Prerequisites: PHYS 5531 or instructor approval and a working knowledge of a programming language. An introduction to the numerical methods used to solve various physics problems; evolving differential equations, performing Monte-Carlo simulations, simulate fluid flow and more.

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- PHYS 5611: RECITATION FOR QUANTUM MECHANICS I**
Prerequisite or corequisite: PHYS 5631. One hour recitation section to review examples and problems in PHYS 5631.
- PHYS 5612: RECITATION FOR QUANTUM MECHANICS II**
Prerequisite or corequisite: PHYS 5632. One hour recitation section to review examples and problems in PHYS 5632.
- PHYS 5631: QUANTUM MECHANICS I**
Prerequisites: PHYS 5531, CHEM 5130 or instructor approval and PHYS 4432 or equivalent. Fundamental concepts of non-relativistic quantum mechanics. Solution of simple one-dimensional problems. Hilbert-space description. Matrix representations. Quantum dynamics. Extension to three dimensions. Spin and orbital angular momentum.
- PHYS 5632: QUANTUM MECHANICS II**
Prerequisite: PHYS 5631 or equivalent. Corequisite: PHYS 5612. Sequel to Quantum Mechanics I, Angular momentum theory. Symmetries and conservation laws. Application of approximation methods to realistic problems. Systems of identical particles. Scattering theory. Relativistic single-particle wave equations. Introduction to quantum computing.
- PHYS 5711: RECITATION FOR STATISTICAL MECHANICS AND THERMODYNAMICS**
Prerequisite or corequisite: PHYS 5731. One hour recitation section to review examples and problems in PHYS 5731.
- PHYS 5731: STATISTICAL MECHANICS AND THERMODYNAMICS**
Prerequisites: PHYS 5531, CHEM 5130 or instructor approval and PHYS 4531 or equivalent. An advanced treatment of statistical mechanics and thermodynamics in order to solve problems involving many individual particles. Topics include probability, microcanonical and canonical ensembles and the laws of thermodynamics.
- PHYS 5739: INTERNSHIP IN PHYSICS**
Prerequisites: Master's degree candidacy as well as approval by advisor and dean. Supervised work experience in an approved industrial firm or government agency. Written and oral report required.
- PHYS 5915: COOPERATIVE EDUCATION WORK TERM**
Prerequisites: Approved Candidate Plan of Study, completed cooperative education file and approval of associate dean and Director of Cooperative Education. Educational paid work assignment by a student in the field of career interest and course of study. A technical report will be required at the end of the semester. (Specific requirements are noted in the Cooperative Education Catalog description.)
- PHYS 5919, 5939: INDEPENDENT STUDY IN PHYSICS**
Prerequisites: Approval of instructor, chair and associate dean.
- PHYS 5931: RESEARCH TOPICS IN PHYSICS**
Identified by specific title each time course is offered.
- PHYS 6132: GENERAL RELATIVITY**
Prerequisite: PHYS 5331 or equivalent. Topics include: Manifolds, Spacetime Curvature, Riemann Geometry, Geodesics, Killing Vectors, Einstein's Equation, The Schwarzschild solution and other Black Hole solutions to Einstein's Equations.
- PHYS 6231: PLASMA PHYSICS**
Prerequisite: Core Physics courses or instructor approval. Computer programming experience and PHYS 5533 are desired but not required. The course provides a basic understanding of plasma physics fundamentals and a review of the state-of-the-art of current research of plasma science and engineering (nuclear fusion, industrial plasmas, advanced space propulsion and space plasmas.
- PHYS 6838: RESEARCH PROJECT AND SEMINAR**
Prerequisites: 24 hours completed in approved graduate program. Students will develop a research project that integrates knowledge and standard procedures in the discipline. A written paper and oral presentation will be required.
- PHYS 6939: MASTER'S THESIS RESEARCH**
Prerequisites: Approval of faculty advisor, master's committee and dean.

SYSTEMS ENGINEERING

- SENG 5130: SYSTEMS ENGINEERING PROCESSES**
Prerequisites: Foundation courses. Detailed coverage of the systems engineering process and system engineering tools that facilitate implementation of the process. Covers the complete systems life cycle from needs assessment and feasibility analysis through requirements, design and testing to system retirement and disposal. The student will gain an in-depth understanding of the International Council on Systems Engineering Capability Maturity Model including assessments and process improvement. The student will also gain proficiency in the use of commercial system engineering tools that facilitate the implementation and management of the systems engineering process.
- SENG 5230: SYSTEMS ENGINEERING ECONOMICS**
Engineering and economic fundamentals, issues and goals of SENG. Life and project cycles of systems, supersystems and subsystems. Trade-off studies involving cost-effectiveness analysis; multiple-goal decision analysis; and dealing with uncertainties, risk and the value of information.
- SENG 5231: CONCURRENT ENGINEERING**
Determining needs and organizing teams from the multiple disciplines required for integrated system and product development. Technical and management issues and methods of involving end users, suppliers, service providers and engineering specialists to work with the SENG team on concurrent activities throughout the system's life cycle.
- SENG 5232: ENGINEERING SPECIALTY INTEGRATION**
Coordination of engineering specialties across multiple disciplines in reliability, quality assurance, maintainability, integrated logistics support, verification, predictability, social acceptability, automated support environments, etc.
- SENG 5233: SYSTEMS ENGINEERING ANALYSIS AND MODELING**
Prerequisites: SENG 5231 and SENG 5232 or permission of instructor & advisor. This course presents the fundamentals of systems analysis and modeling. The emphasis is on solving practical modeling problems for continuous, discrete and hybrid systems, both linear and nonlinear. Systems will be modeled using modern tools such as MATLAB and Simulink.
- SENG 5330: RISK MANAGEMENT**
Prerequisites: Foundation courses. Continuous Risk Management is a system engineering practice with processes, methods and tools for managing risks in a project. It provides a disciplined environment for proactive decision making to assess continuously what could go wrong (risks), determine which risks are important to deal with and implement strategies to deal with those risks. The purpose of this course is to explain what Continuous Risk Management is; to help the student understand the principles, functions, methods and tools; to show what it could look like when implemented within a project; and to show how a project could implement its own adaptation.
- SENG 5332: DECISION ANALYSIS FOR SYSTEMS ENGINEERING**
Prerequisites: Foundation courses. Understanding the theory and learning how to apply, formulate, solve and interpret system engineering problems using decision analysis and operations research techniques. Theory and techniques include decision analysis, linear programming, simplex method, sensitivity analysis, network modeling, integer linear programming and goal programming.
- SENG 5334: HUMAN FACTORS ENGINEERING**
Prerequisite: Foundation courses. This course presents the consideration of whether people serve as operators, maintainers or users in the system. The course advocates systematic use of such knowledge to achieve compatibility in the design of interactive systems of people, machines and environments to ensure their effectiveness, safety and ease of performance.
- SENG 5532: ADVANCED DECISION ANALYSIS FOR SYSTEMS ENGINEERING**
Prerequisite: SENG 5332. Builds upon the fundamentals of Decision Analysis for Systems Engineering, with topics in non-linear methods for decision making, numerical techniques, regression analysis and discriminant analysis.
- SENG 5915: COOPERATIVE EDUCATION WORK TERM**
Prerequisites: Approved Candidate Plan of Study, completed cooperative education file and approval of associate dean and Director of Cooperative Education. Educational paid work assignment by a student in the field of career interest and course of study. A technical report will be required at the end of the semester. (Specific requirements are noted in the Cooperative Education Catalog description.)

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- SENG 5931: RESEARCH TOPICS IN SYSTEMS ENGINEERING**
Identified by specific title each time course is offered.
- SENG 5939: INDEPENDENT STUDY IN SYSTEMS ENGINEERING**
Prerequisites: Approval of instructor, chair and associate dean.
- SENG 6837: SYSTEMS ENGINEERING CAPSTONE PROJECT**
Prerequisites: Completion of at least 18 hours of the core curriculum including systems engineering project. Teams will meet on a weekly basis with their faculty mentor to discuss progress.
- SENG 6939, 6969: MASTER'S THESIS RESEARCH**
Prerequisites: Approval of faculty advisor, master's committee and dean.

STATISTICS

- STAT 5135: APPLIED STATISTICAL METHODS**
Not available for mathematics majors. Prerequisite: MATH 3038. One and two sample methods, analysis of variance, correlation and regression, analysis of covariance, statistical modeling and robustness. Introduction to statistical computation using Excel and statistical software packages.
- STAT 5431: THEORY AND APPLICATION OF PROBABILITY**
Prerequisite: MATH 4331 or equivalent. Probability axioms and properties, conditional probability, random variables, probability distributions, moment generating function, laws of large numbers and central limit theorem.
- STAT 5432: THEORY AND APPLICATIONS OF STATISTICS**
Prerequisite: STAT 5431. Point and interval estimation, testing of hypotheses, nonparametric methods, regression, analysis of variance, robustness and model fitting.
- STAT 5531: MULTIVARIATE STATISTICAL ANALYSIS**
Prerequisite: MATH 4435 or equivalent. The study of multivariate normal distribution, estimation of mean and covariance matrix. T2-statistic, Wishart analysis, principal components and factor analysis and other techniques as applied to industrial and decision processes.
- STAT 5532: LINEAR MODELS AND REGRESSION ANALYSIS**
Prerequisite: MATH 4435 or equivalent. Distributions of quadratic forms, general linear models, least squares estimation, hypothesis testing, confidence intervals, multiple regression, variable selection, residual analysis and regression diagnostics.
- STAT 5533: STATISTICAL COMPUTING WITH SAS AND S-PLUS**
Prerequisite: MATH 4435 or equivalent. Data management, reporting, graphical displays, macros, statistical analysis and interpretation and related topics.
- STAT 5534: SAMPLING METHODS**
Prerequisite: MATH 4435 or equivalent. Sampling from finite populations, sampling strategies, estimation procedures including ratio and regression estimation, large scale sample survey methods for quality control and applied research in agriculture, business, social sciences and other fields.
- STAT 5535: EXPERIMENTAL DESIGNS AND ANALYSIS**
Prerequisite: MATH 4435 or equivalent. Completely randomized design, randomized blocks, Latin squares, factorial experiments, confounding and fractional factorial designs for industrial experiments and applications.
- STAT 5537: STATISTICAL MODELING AND METHODS**
Prerequisite: MATH 4435 or equivalent. Univariate statistical modeling, model-fit tests, model comparisons, logistic models, time series and spectral analysis, non-linear models, bootstrap methods and simulations.
- STAT 5631: RELIABILITY AND SURVIVAL ANALYSIS**
Prerequisite: MATH 4435 or equivalent. Measures of failure, reliability function, failure models, life testing and censoring, system reliability, parameter estimation and testing regression models, Cox proportional hazard models and software reliability.
- STAT 5931: RESEARCH TOPICS IN STATISTICS**
Identified by specific title each time course is offered.
- STAT 5939: INDEPENDENT STUDY IN STATISTICS**
Prerequisites: Approval of instructor, chair and associate dean.

- STAT 6837: STATISTICS RESEARCH AND CONSULTING I**
Prerequisite: STAT 5531 or STAT 5532. Each student will develop a research proposal which allows integrating statistics knowledge and data analysis procedures. A written proposal will be required.
- STAT 6838: STATISTICS RESEARCH AND CONSULTING II**
Prerequisite: STAT 6837. Each student will carry out analyses of data and develop inferences. A written paper and a presentation will be required.
- STAT 6939: MASTER'S THESIS RESEARCH**
Prerequisites: Approval of faculty advisor, master's committee and dean.

SOFTWARE ENGINEERING

*Pending Coordinating Board approval

- SWEN 5130: REQUIREMENTS ENGINEERING**
Prerequisite: SWEN 4432 or SWEN 5432. Current techniques, methods, tools and processes used in requirements analysis, definition and specification, including system modeling.
- SWEN 5131: SOFTWARE ENGINEERING TOOLS**
Prerequisite: SWEN 4432 or SWEN 5432. Current tools used in industry to support various phases of software development are covered such as Rational Rose, Objectory Process, as well as coverage of object-oriented modeling using UML (Unified Modeling Language)
- *SWEN 5132: SOFTWARE DESIGN PATTERNS**
Prerequisite: A course in programming in a high level language is required. This course provides an in-depth view of software design patterns; the recurring solutions to common problems in software design. It provides opportunities for learning the most advanced features of modern software development methodology. Topics include Design visualization, Creational, Structural and Behavioral Design Patterns, Anti-patterns, Service Oriented Architecture pattern, Secure usability and Pattern languages.
- *SWEN 5133: ASPECT-ORIENTED DEVELOPMENT**
Prerequisite: A course in programming in a high level language is required. Aspect-Oriented Development (AOD) is a new programming paradigm that increases modularity with a separation of cross-cutting concerns. This course will provide a broad perspective of AOD and will cover the relationship of aspect-oriented development and software product lines. The topics include Separation of concern, Aspect-Oriented program, Patterns and frameworks of AOD, Aspects in enterprise software.
- *SWEN 5134: SERVICE ORIENTED ARCHITECTURE**
Prerequisite: A course in computing or software development or networking is required. Service Oriented Architecture (SOA) is an emerging paradigm that fosters distributed capabilities. It becomes more important for the latest information technology architectures and applications. This course provides an in depth view of SOA concepts, design principles, architecture patterns, interoperability standards, security considerations, runtime infrastructure, web services, e-governance, interoperability standards and technology infrastructure.
- SWEN 5230: SOFTWARE PROJECT MANAGEMENT**
Prerequisite: CSCI 3133. Issues faced in management of large software development projects; estimation, planning execution, monitoring, evaluation and refinement.
- SWEN 5232: SOFTWARE CONSTRUCTION**
Prerequisite: SWEN 4432 or SWEN 5432. Modern development methods, analysis and design, implementation. Emphasis placed on rigor and quality. Case study. Laboratory instruction.
- SWEN 5233: SOFTWARE ARCHITECTURE**
Prerequisites: SWEN 5232. Knowledge of complex programs recommended. Domain models, generic architectures and frameworks as well the context, scope, current and future state of software architecture.
- SWEN 5234 SOFTWARE ENGINEERING PROCESSES**
Prerequisite: CSCI 3333. Theory and application of the Capability Maturity Model: process assessments, modeling and improvement techniques. Interrelated life cycle issues of development

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and maintenance, quality and safety assurance, project management and automated support environments.

SWEN 5430: SOFTWARE METRICS

Prerequisite: SWEN 4432. MATH 3334 recommended. Theory, application and techniques of measurement and analysis. Process and product metrics.

SWEN 5431: TESTING, VALIDATION AND VERIFICATION

Prerequisite: SWEN 4432 or SWEN 5432. Role of software testing, verification and validation (V&V) in the system life cycle. Current techniques, tools and methods are addressed as well as current testing and V&V standards. Laboratory instruction.

SWEN 5432: SOFTWARE ENGINEERING LIFE CYCLE

Prerequisite: A course on data structures or software development work experience. In-depth study of the front end of the software life cycle. Feasibility, Concept, Requirements, Specification, Architecture and detailed design methods are explored and exercised.

SWEN 5435: PERSONAL SOFTWARE PROCESS

Prerequisite: A course on data structures or software development experience. Examination, study and improvement of the students' personal software development practice and study of the process used to effect such improvement.

SWEN 5532: SOFTWARE SAFETY

Prerequisites: SWEN 5233 and SWEN 5234. Analysis, design, verification and validation of mission and safety critical systems. Risk and hazard assessment, certification techniques and standards.

SWEN 5534: REUSE AND REENGINEERING

Prerequisite: SWEN 4432 or SWEN 5432. Engineering for and with reuse. Domain and application engineering and reverse and forward engineering.

SWEN 5931: RESEARCH TOPICS IN SOFTWARE ENGINEERING

Identified by specific title each time course is offered.

SWEN 5939: INDEPENDENT STUDY IN SOFTWARE ENGINEERING

Prerequisites: Approval of instructor, chair and associate dean.

SWEN 6837, 6838: SOFTWARE ENGINEERING CAPSTONE PROJECT

Prerequisites: At least 18 hours of graduate work including SWEN 5233 and SWEN 5234. Students will be grouped into teams to undertake a software project utilizing the tools, techniques and skills acquired during their previous course work. Each team will be assigned to a client and will interact with that client to establish requirements, agree upon a design and achieve a successful acceptance test of the resulting software system. Teams will meet on a weekly basis with their faculty mentor to discuss progress.

SWEN 6939: MASTER'S THESIS RESEARCH

Prerequisites: Approval of faculty advisor, master's committee and dean.

UNIVERSITY OF HOUSTON SYSTEM

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Dean, School of Education	Dennis W. Spuck, Ph.D.
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Interim Associate Dean, School of Science and Computer Engineering.....Dennis Casserly, Ph.D.
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Manager of BookstoreKate Dominguez, M.B.A.

UNIVERSITY OF HOUSTON-CLEAR LAKE FACULTY

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ABEYSEKERA, Krishani, Lecturer/System Administrator of Computer Science and Computer Information Systems; B.S., M.S., University of Houston-Clear Lake

AKLADIOS, Magdy, Assistant Professor Industrial Hygiene and Safety, B.S., Cairo University; M.B.A., M.S.I.E., M.S., Ph.D., West Virginia University

AL-MUBAID, Hisham, Program Chair of Computer Information Systems and Associate Professor of Computer Science and Computer Information Systems; B.S., University of Jordan; M.S., Ph.D., University of Texas at Dallas

AMONETTE, William E., Lecturer in Fitness and Human Performance; B.S., M.A., University of Houston-Clear Lake

ATWATER, Vivian W., Associate Professor of Art History; B.A., University of Washington, Seattle; M.A., University of Washington; Ph.D., University of Washington

AYADI, Mary O., Assistant Professor of Healthcare Administration; B.S., University of Ibadan; M.A., Georgia State University; Ph.D., Georgia State University

BARAKAT, Mounther, Assistant Professor of Finance; B.S., San Francisco State University; M.B.A., Annajah National University; Ph.D., Oklahoma State University

BARTSCH, Robert A., Interim Associate Dean of School of Human Sciences and Humanities and Associate Professor of Psychology; B.A., Rice University; M.A., Ph.D., University of Colorado

BECHTOLD, Joy M., Instructor of Early Childhood Education; B.A., South-Eastern College; M.Ed., Millersville University; Ph.D. candidate, Pennsylvania State University

BENDECK, Yvette M., Associate Vice President for Enrollment Management and Professor of Finance; B.S., M.S., Georgia Tech; Ph.D., Arizona State University

BENSON, James C., Associate Professor of Legal Studies; B.A., Texas A&M University; M.A., Ph.D., Sam Houston State University; J.D., University of Houston

BERGMAN, Judy, Lecturer in Mathematics; B.A., University of Michigan at Ann Arbor; M.Ed., University of Toledo; M.A., University of Houston-Clear Lake

BETTAYEB, Saïd, Associate Professor of Computer Science and Computer Information Systems; Diplôme d'ingénieur, University of Constantine, Algeria; M.S., Ph.D., Northwestern University

BLACK, Ken, Professor of Decision Sciences; B.A., Graceland College; M.A., University of Texas at El Paso; Ph.D., Ph.D., University of North Texas

BLAKELY, Debra E., Assistant Professor of Communication; B.S., Tennessee State University; M.S., University of St. Thomas; Ph.D., University of Southern Mississippi

BOETTICHER, Gary D., Associate Professor of Computer Science, Computer Information Systems and Software Engineering; B.S., University of Delaware; M.S., West Virginia College of Graduate Studies; Ph.D., West Virginia University

BRADLEY, BRENT, Associate Professor of Family Therapy; B.A., University of North Carolina at Charlotte; M.A., Reformed Theological Seminary; M.A., Fuller Theological Seminary; Ph.D., Fuller Graduate School of Psychology

BROWN, Suzanne E., Program Area Chair for Curriculum and Instruction and Associate Professor of Curriculum and Instruction; B.S., Southwest Texas State University; M.S., Ph.D., Texas A&M University

BROWNING, Sandra, Assistant Professor of Curriculum and Instruction; B.A., Sam Houston State University; M.S., Stephen F. Austin State University; Ph.D., University of the Incarnate Word

BRUNO, Joan D., C.P.A, Associate Dean of School of Business and Professor of Accounting; B.S., University of New Orleans; M.S., Ph.D., Louisiana State University

BRUNO, Sam J., Professor of Marketing; B.B.A., Lamar University; M.S., Ph.D., Louisiana State University

BRYANT, Vernon, Lecturer in Computer Systems Engineering; B.S., University of Houston; M.S., University of Houston-Clear Lake

BURT, Winona M., Assistant Professor of Educational Foundations; B.A., Saint Edward's University; Ph.D., University of Texas at Austin

CARMAN, Carol, Assistant Professor of Educational Foundations; B.S., M.S., Texas A&M University; Ph.D., University of Kansas

CARTER, Charlene, Clinical Assistant Professor in Early Childhood Education; B.S., Stephen F. Austin State University; M.Ed., Ed.D., University of Houston

CASE, Kim, Assistant Professor of Women's Studies and Psychology; B.A., University of Tennessee; M.A., Ph.D., University of Cincinnati

CASSERLY, Dennis M., Interim Associate Dean of School of Science and Computer Engineering and Professor of Industrial Hygiene and Environmental Science; B.A., University of St. Thomas; M.S., Ph.D., University of Texas at Houston School of Public Health

CHADWICK, Vicki E., Lecturer in Public Service Leadership; B.S., Thomas Edison State College; M.S.W., University of Houston

CHAN, Tak Shing (Leo), Assistant Professor of Communication and Digital Media Studies; B.A., University of Kentucky; M.A., Ph.D., Southern Illinois University

CHANDRA, Ashish, Director of Healthcare Administration Program and Professor of Healthcare Administration; B.S., Banaras Hindu University; M.B.A., Ph.D., University of Louisiana at Monroe

CHAPMAN, Denise, Assistant Professor of Special Education; B.S., James Madison University; M.Ed., Ed.D., Peabody College of Vanderbilt

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CHAVALA, Terry, Lecturer in Early Childhood Education; B.S., Appalachian State University; M.A.T., Mary Grove College

CHERAMIE, Gail M., Associate Professor of Psychology; B.A., M.A., Nicholls State University; Ph.D., University of Southern Mississippi

CHERRY, Stephen M., Assistant Professor of Sociology; B.A., University of Houston-Clear Lake; Ph.D., University of Texas at Austin

CHHIKARA, Raj S., Professor of Mathematics and Statistics; B.A., Punjab University; M.A., University of Delhi; M.S., Michigan State University; Ph.D., Oklahoma State University

CLAES, Jane, Assistant Professor of School Library and Information Science; B.F.A., University of Cincinnati; M.L.S., Ph.D., Texas Woman's University

CLODY, Michael, Assistant Professor of Literature; B.A., Saint Louis University; M.A., University of Delaware; Ph.D., S.U.N.Y.-Buffalo

COLEMAN, A. Eugene, Professor of Fitness and Human Performance; B.S., Lamar State College of Technology; M.Ed., University of Oklahoma; Ed.D., University of Texas at Austin

COLLINS, George C., Associate Professor of Computer Systems Engineering; B.A., M.E.E., Ph.D., Rice University

COPPENHAVER, Anne P., Director of Center for Educational Programs and Clinical Associate Professor in Educational Leadership; B.A., M.Ed., Ed.D., Duke University

COTTEN, Stephen, Assistant Professor of Economics; B.S., Vanderbilt University; M.A., Ph.D. candidate, University of Tennessee

COX, Lee, Clinical Assistant Professor in Counseling; B.S., Abilene Christian College; M.Ed., Sam Houston State University; Ph.D., University of Houston

CRAWFORD, Caroline M., Associate Professor of Instructional Technology; B.A.T., Sam Houston State University; M.L.A., Houston Baptist University; Ed.D., University of Houston

CUCHENS, Patricia S., Lecturer in Business Writing; B.A., M.A.T., University of West Florida

CUMMINGS, Wm. Theodore, Dean of School of Business and Professor of Marketing; B.S., Indiana University; M.B.A., Western Illinois University; Ph.D., Arizona State University

CUMMINS, Agatha G., Lecturer in Behavioral Sciences and Internship Coordinator; B.S., M.A., University of Houston-Clear Lake

CURTIS, Maria F., Assistant Professor in Anthropology and Cross-Cultural Studies; B.A., Georgia State University; M.A., Ph.D., University of Texas at Austin

DABNEY, James, Associate Professor of Systems Engineering; B.S., Virginia Polytechnic Institute and State University; M.S., University of Houston-Clear Lake; Ph.D., Rice University

DAVARI, Sadegh, Interim Dean, School of Science and Computer Engineering and Professor of Computer Science and Computer Information Systems; B.S., Institute of Advanced Accounting; M.S., Ph.D., University of Oklahoma

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