

2006-2007 Graduate Catalog



www.tamu-commerce.edu

An Equal Opportunity University

It is the policy of Texas A&M University-Commerce to recruit, hire, and promote for all university academic and non-academic staff without regard to race, color, national origin, sex, handicap, or age; except where sex, handicap, or age is a bonafide occupational qualification. Admission to A&M-Commerce is based upon stated academic requirements regardless of race, creed, color, national origin, sex or age.

Directory Information and Its Release

In compliance with Section 438 of the General Education Provisions Act (Title IV of Public Law 90-247 as amended) and generally known as the Privacy Rights of Parents and Students, effective November 19, 1974, Texas A&M University-Commerce gives notice that the following directory information may be released upon request: student's name, address (permanent, local, or email), telephone listing, date and place of birth, major field of study, minor field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student.

Any student who objects to the release of the directory information on file must notify the Registrar's Office, Administration Building, in writing, that he or she does not wish to have such information released. This request will be honored, and the information will be held confidential by the Registrar's Office. Any questions concerning this policy may be directed to the Registrar's Office, Administration Building, Texas A&M University-Commerce, Commerce, Texas 75429.

University Statement of Policies

The policies, procedures, and regulations governing the conduct of students at A&M-Commerce are outlined in the *Student Guidebook*. Copies of the *Guidebook* are available at the time of registration, and additional copies are available from the Dean of Students Office and the Student Life Office. It is the responsibility of the student to make himself/herself aware of said policies. Disciplinary matters are handled by the Dean of Students Office. University policies and procedures are subject to change without prior notice.

For More Information

For additional information about a specific department or office at A&M-Commerce, write to that office c/o Texas A&M University-Commerce, Commerce, Texas 75429.

Texas A&M University-Commerce reserves the right to change regulations, rules, procedures and fees in this catalog at any time during the period this publication is in effect. Effective date of this Graduate Catalog is fall 2006. Graduate students are expected to be familiar with all University policies, regulations, rules, and procedures that affect admission, retention, and graduation. Official rules and procedures are maintained and updated on the University website at http://www.tamu-commerce.edu/administration/policies/.

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Texas A&M University-Commerce P.O. Box 3011 Commerce, Texas 75429-3011

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Texas A&M University-Commerce

is accredited by the

Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone 404-679-4501) to award bachelor's, master's, and doctoral degrees.

Texas A&M University-Commerce

is also accredited by

AACSB, The International Association for Management Education

American Chemical Association

Council for Accreditation of Counseling and Related Educational Programs,

Council on Social Work Education, Masters in Psychology Accredition Council,

National Association of Schools of Music,

National Association of Industrial Technology,

National Athletic Trainer Association,

Texas State Board for Educator Certification, and

is a member in good standing of the

American Association of Colleges for Teacher Education,

American Association of State Colleges and Universities,

American Association of University Women,

Associate of Texas Colleges and Universities

Association of Texas Graduate Schools.

Commission on Accreditation of Allied Health Education Programs

Council for Higher Education Accreditation,

Council of Colleges of Arts and Sciences,

Council of Graduate Schools in the United States.

Federation of North Texas Area Universities,

Inter-University Council of the North Texas Area

National Commission of Accrediting,

National Council of University Research Administrators,

Texas Association of Black Personnel in Higher Education,

Texas Association of Chicanos in Higher Education, and

Teacher Education Council of State Colleges and Universities.

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Official 2006-2007 University Calendar*

Fall Semester 2006

Deadline for undergraduate Admission Applications for Fall 2006	August 11
Faculty meeting	August 24
Orientation & Registration—International Students	August 25
First class day Late registration continues	August 28
Late registration continues	August 28-31
Last day to register or change schedules	August 31
Saturday classes begin	September 2
Schedules removed for non-payment of tuition and fees for Fall 2000	5 September 5
Last day to drop a class with refund, if remaining enrolled	September 12
Deadline for December graduation applicants	September 29
Family Day	October 7
Homecoming	
Thanksgiving Holidays begin at 12:00 Noon	November 22
Classes resume following holiday	November 27
Last day to drop a class or withdraw from school	
Last Class Day	
Final exams	
Commencement	December 16
Spring Semester 2007	
Deadline for undergraduate Admission Applications for Spring 2007	' January 5
Late registration continues	
Faculty meeting	January 11
Orientation & Registration for International Students	January 12
Holiday, Martin Luther King Day	January 15
First class day	January 16
Last day to register or change schedules	
Saturday classes begin	
Schedules removed for non-payment of tuition and fees for Spring 2	
Last day to drop a class with refund, if remaining enrolled	January 31
Deadline for May graduation applicants	February 9
Residence halls close for Spring Break at 5 p.m.	March 11
Spring Break	March 19-23
Classes resume following Spring Break	March 26
Alumni Forum	April 13
Last day to drop a class or withdraw from school	
Last Class Day	
Final exams	
Commencement	
May Mini-term begins	May 14
May Mini-term registration ends	
May Mini-term ends	May 30

Summer	T	2007

Deadline for Undergraduate Admission Applications for Summer I, 2007	May 31
Faculty Meeting	May 31
Holiday, Memorial Day	May 28
Late registration continues	June 4-5
First class day	June 4
Last day to register or change schedules	June 5
Schedules removed for non-payment of tuition/fees for Summer I, 2007	
Last day to drop a class with a refund, if remaining enrolled	June 7
Last day to drop a class or withdraw from school	June 25
Deadline for August graduation applications	June 28
Holiday, Independence Day	July 4
Payment deadline for Summer II	
Orientation for New International Students	
Final exams and last day of classes for Summer I	July 5
Summer II 2007	
Deadline for Undergraduate Admissions application for Summer II, 2007	July 3
First class day	
Late registration continues	July 9-10
Last day to register or change schedules	
Schedules removed for non-payment of tuition/fees for Summer II, 2007.	July 12
Last day to drop a class with a refund, if remaining enrolled	July 12
Last day to drop a class or withdraw from school	August 2
Final exams and last day of classes for Summer II	August 9
Commencement	. August 11

 $[\]hbox{*This calendar is subject to revisions. For the most current calendar, please visit the university website at www.tamu-commerce.edu/registrar_office/calendar.asp.}$

Introduction to the University Overview of Campuses

Texas A&M University-Commerce is a multi-campus university with over 8,000 students in Commerce and the Metroplex Center in Mesquite that provides graduate courses to a large Dallas/Ft. Worth constituency of approximately 1,500 students. Courses also are offered at Navarro College in Corsicana and the Universities Center at Dallas (downtown). This catalog serves the graduate student population of all four campuses.

In addition to classes that are taught in the traditional classroom setting on the Commerce campus and at off-campus sites, a large array of courses are offered via telecommunications, and by internet-based instruction.

Texas A&M University-Commerce Hwy 50, Commerce, Texas

Texas A&M University-Commerce main campus covers 1,883 acres and the 140-acre campus proper is located eight blocks southwest of Commerce's business center. The town of Commerce has a population of 8,650 and is located 65 miles northeast of Dallas, one of the world's leading metropolitan areas. Surrounding the Commerce campus are several recreational lake areas. Commerce is in Hunt County and Greenville, the county seat, has a population of more than 25,700 and is located just 14 miles west of Commerce.

Texas A&M University-Commerce Metroplex Center 2600 Motley Dr., Mesquite, Texas 972-613-7591

Texas A&M University-Commerce Metroplex Center is conveniently located between I-30, LBJ 635 and Hwy 80 in Mesquite, approximately 1.4 miles south of Eastfield Community College. This facility consists of 15 traditional classrooms, three distance learning rooms, two computer labs, a teaching computer lab, a seminar area, a library, a bookstore and faculty/staff offices. This facility is shared by A&M-Commerce and the Mesquite Independent School District. Available through study at this facility are master's degrees in business administration, educational administration, elementary education, secondary education, special education, and training and development as well as courses supporting other programs. On-site security and free parking are provided.

Navarro Partnership Program Navarro College, 3200 W. 7th Ave., Corsicana, Texas

903-875-7617

This partnership offers a four-year undergraduate program in education, a Master of Education in Elementary Education, a Master of Science in Secondary Education, a Master of Science in Higher Education, as well as graduate courses supporting other programs.

Universities Center at Dallas (UCD) 1901 Main St., Dallas, Texas 214-744-6600

Universities Center at Dallas comprises six universities: Texas A&M University-Commerce, Texas Woman's University, the University of North Texas, The University

sity of Texas at Arlington, The University of Texas at Dallas and Midwestern University. Centrally located in downtown Dallas, the Universities Center at Dallas offers classes in the evenings and on Saturdays, making it a convenient location especially for downtown residents and employees. The Center is connected to the walkway and tunnel system linking downtown buildings. It offers secured access and public parking and is served by DART bus routes and the RAIL. Office hours are Monday through Friday, 9:00 a.m.-5:00 p.m.

International Studies Program 903-468-6041

Texas A&M University-Commerce sponsors a number of international studies programs. Students have the opportunity to participate in the British Studies Program (London), Caribbean Studies Program, Mexican Business Studies, Australian-New Zealand Studies, African Studies, French Studies Program, Austrian Studies Program, Irish Studies Program, European Union Business Program, Scottish Studies Program, Spanish in Spain, Cuban Studies, and Spanish in Mexico (Guadalajara and Cuernavaca). For information on these and other international studies programs, contact the director of International Studies.

Our History

Texas A&M University-Commerce began as East Texas Normal College in 1889 when founder William Leonidas Mayo opened the doors to a one-building campus in Cooper. His creed, which continues today, was "ceaseless industry, fearless investigation, unfettered thought, and unselfish service to others." The institution's history of dynamic change began in 1894 when "Mayo's College" moved to Commerce. The State of Texas took over the campus in 1917 and the name was changed to East Texas State Normal College. In 1923, the school was renamed East Texas State Teachers College. The graduate program was added in 1935, and in 1957 the Legislature, recognizing that the purpose of the institution had broadened from teacher education, changed the name to East Texas State College. Following the inauguration of the first doctoral program in 1962, the school became East Texas State University. In 1996, the institution joined The Texas A&M University System and became Texas A&M University-Commerce. Today, at the Commerce campus, the Mesquite Metroplex Center, the Universities Center at Dallas, Navarro College Partnership, and through state-of-the-art distance learning, the University meets the undergraduate, graduate, and professional needs of the citizens of Northeast Texas and beyond. Its mission is achieved through teaching, scholarship, and service activities on its campuses, and in the community and region.

Texas Higher Education Coordinating Board

The Texas Higher Education Coordinating Board is the state agency, created by the Texas Legislature in 1965, that is charged with providing "leadership and coordination for the Texas Higher Education system to achieve excellence for the higher education of Texas students." The Board exercises its leadership and oversight responsibilities through a variety of means that include making recommendations to the state for the enhancement of higher education, approving or disapproving degree programs, and establishing policies for the efficient use of the state's higher education resources.

Our Vision

Texas A&M University-Commerce will be recognized as a premier regional university, distinctive for high expectations, a nurturing environment, and innovations in the enhancement of learning to produce graduates who distinguish themselves in their chosen careers and as active, contributing members of society.

By focusing on access, participation, and success of students in quality undergraduate and graduate degree programs, Texas A&M University-Commerce will become the university of choice for those seeking a higher education in the Northeast Texas area. As a result, Texas A&M University-Commerce will be recognized for the creation of partnerships and initiatives that promote intellectual, social, environmental, economic, and cultural advancement of the region and state.

Our Mission

Texas A&M University-Commerce provides a personal educational experience for a diverse community of life-long learners. Our purpose is to discover and disseminate knowledge for leadership and service in an interconnected and dynamic world. Our challenge is to nurture partnerships for the intellectual, cultural, social, and economic vitality of Texas and beyond.

Our Programs

Texas A&M University-Commerce offers graduate programs in 23 academic departments with more than 40 major areas of study. Six departments offer doctoral degrees.

Graduate degrees now offered by A&M-Commerce are:

Master of Arts Master of Science

Master of Business AdministrationMaster of Science in FinanceMaster of EducationMaster of Social WorkMaster of Fine ArtsDoctor of EducationMaster of MusicDoctor of Philosophy

The Graduate School is one of four academic divisions of the University. The other divisions are the colleges of Arts and Sciences, Business and Technology, Education and Human Services.

The College of Arts and Sciences includes the departments of Agricultural Sciences; Art; Biological and Environmental Sciences; Chemistry; Computer Science and Information Systems; History; Literature and Languages; Mass Media, Communication and Theatre; Mathematics; Music; Physics; Political Science; and Sociology and Criminal Justice.

The College of Business and Technology contains the departments of Accounting, Economics and Finance; Business Administration and Management Information Systems; Industrial Engineering and Technology; and Marketing and Management.

The College of Education and Human Services comprises the departments of Counseling; Curriculum and Instruction; Educational Leadership; Health and Human Performance; Psychology and Special Education; and Social Work.

Within these three colleges, major areas of study at the master's level are agricultural sciences; agriculture education; art; biological sciences; broadfield sciences; business administration; chemistry; computer science; counseling; early childhood education; economics; educational administration; elementary education; English; finance; health, kinesiology, and sports studies; higher education; history; industrial technology; interdisciplinary studies; learning technology and information systems; management; marketing; mathematics; music; physics; psychology; reading; secondary education; social work; sociology; Spanish; special education; theatre; training and development.

Major areas of study leading to a doctoral degree include: counseling; educational administration; educational psychology; English; and supervision, curriculum, and instruction.

Cooperative Alliance Among Universities Academic Common Market

The Academic Common Market (ACM) is an interstate agreement for sharing academic programs through an exchange of students across state lines. Students have access to selected programs not offered in their home states without having to pay nonresident tuition charges. Each of the participating states has designated a State Coordinator for the program. In addition, each institution that has one or more academic programs in the ACM has named an Institutional Coordinator as contact person for that institution. Contact the Office of Graduate Studies and Research for additional information.

Federation of North Texas Area Universities

The Federation of North Texas Area Universities, created by the Texas Higher Education Coordinating Board is a consortium composed of Texas A&M University-Commerce, Texas Woman's University, and the University of North Texas. The Federation is designed to strengthen the resources of higher education in north central Texas through inter-institutional cooperation in graduate research and instruction. To this end, the Federation universities offer joint educational opportunities to their students in numerous program areas with some universities authorized to grant degrees and others authorized to provide support services for the degree programs. The following degrees are awarded through the Federation of North Texas Area Universities:

- -M.F.A. in art
- —M.A., M.S. in computer science
- -M.A., M.S. in interdisciplinary studies
- -M.A., M.S., M.Ed. in reading
- —M.A., M.S., M.Ed. in early childhood education

A student who wishes to enroll in one of the above programs should submit an application to the A&M-Commerce Office of Graduate Studies and Research.

Pathways to the Doctorate Program

The Pathways to the Doctorate Program is dedicated to increasing the number, quality, and diversity of master's and doctoral graduates across all disciplines within The Texas A&M University System. The goal is to attract high-achieving students within The Texas A&M University System to pursue careers in higher education. Consisting of nine universities as well as the Health Science Center, The Texas A&M University System spans the State of Texas. This enables the System to recruit top students from a variety of geographical, socio-economic, racial, ethnic, and cultural environments. Through a variety of activities such as seminars and workshops, inter-institutional exchange programs, a mentoring program, and an annual research symposium with system-wide participation, the Pathways program aims to:

- Create a pathway for talented students from Texas A&M-Commerce who wish to pursue graduate education at any of the other System campuses;
- Attract quality graduate students to Texas A&M-Commerce from other System campuses to pursue master's or doctoral studies unavailable at other campus;
- Foster opportunities for faculty, graduate students, and undergraduate students to collaborate on innovative research and interpersonal communications skills;

- Enlighten and encourages students and teachers (K-12 through college) to see that science and technology are essential for leading a life of discovery and fun;
- Help meet faculty needs as post-secondary enrollment grows and current faculty re-

Additional information is available from major department heads, the Dean of Graduate Studies and Research, and the Pathways to the Doctorate webpage at www.tamus.edu/pathways.

The Texas A&M University System and The University of Texas System

A cooperative arrangement between The University of Texas System and The Texas A&M University System allows graduate students at one institution to use unique facilities or courses at other institutions with little paperwork. The graduate student registers and pays tuition and fees at the home institution and may retain any fellowship or financial assistance awarded by it. Space must be readily available, and the instructor or laboratory director of the proposed work must consent to the arrangement. In addition, approval must be given by the graduate dean of each institution.

Campus Facilities

James G. Gee Library and Other Research Facilities 903-886-5731

The James G. Gee Library, named for Texas A&M University-Commerce's fifth president, is the academic center of campus. The online catalog, which is Internet accessible, provides access to the library's collection containing over 1.8 million monographs, periodicals, microforms, and other processed materials including non-print media. This total includes collections of juvenile and young people's literature, archival materials, curriculum materials, and maps. The university has been a depository for federal government publications since 1937 and for Texas state documents since 1963.

In support of undergraduate and graduate programs, the library provides free access to enrolled A&M-Commerce students, faculty and staff to many electronic databases, including full-text electronic resources, accessible from campus facilities, dorms and off-campus housing. An interlibrary loan service delivers books and articles to Gee Library from libraries throughout the world. Viewing machines are available for microform items, and reader-printers enable students to obtain hard copy of microform materials. Photocopy machines are also available in the library. The library's extensive microform collections include ERIC (Educational Resources Information Center) documents.

A&M-Commerce Library is a member of the AMIGOS Bibliographic Council, and TexShare. These alliances allow A&M-Commerce students access to all state-supported academic libraries plus many of the regional private universities as supplementary resources to the Gee Library collections. The library computer laboratory, located on the first floor, is available to all students. The lab contains computers, printers and software for word processing, spreadsheets, and reports. The lab also provides access to the Internet.

Among other research facilities at A&M-Commerce are the laboratories for arts and sciences, and the University Farm.

Technology Services 903-468-6000

Technology Services (formerly CTIS), located in room 156 of the Business Administration Building, is the centralization of automated data processing, academic computing, academic research, telecommunications, computer hardware, and application support. Technology Services is responsible for the integrity, security, and reliability of all academic and administrative information that supports and enhances the A&M-Commerce campus.

Technology Services is staffed to provide systems analysis, programming, data preparation and computer processing for all divisions. Telecommunications performs installation and maintenance of copper and fiber-optic cable plants that provide voice, video and data service to the core campus and the residence halls. Internet access is available in every occupied building through a traditional wired network as well as an expanding wireless network that covers many of the academic buildings. Off-campus Internet access is made available to students, faculty and staff through dial-up modems or a virtual private network service for broadband users. Technology Services provides a one-stop shop for supporting PC and Macintosh hardware, software and Internet Applications.

Alumni Relations

903-886-5765

The Office of Alumni Relations is responsible for maintaining positive relationships between the University and its more than 60,000 alumni. The office plans and conducts an array of special events to maintain contacts and recognize alumni, including class and organization reunions, commencement receptions, alumni chapter activities, the Alumni Ambassador Forum, and the annual Homecoming celebration. The Alumni Relations Office serves as the headquarters for the Texas A&M University-Commerce Alumni Association and supports the operation of the Association Board of Directors. A variety of services are provided to individual alumni and groups. This office maintains addresses and other data files on the alumni constituency. Records maintained include membership in campus organizations, degrees and majors, biographical data, and employment information. All A&M-Commerce graduates are placed automatically on the mailing list of the Alumni Association. Alumni Relations also facilitates production of *Pride*, the quarterly magazine for alumni and friends of the University. Other programs and services include an affinity credit card program, discounted auto and medical insurance for graduates, legacy scholarship for children of alumni, and recognition of alumni for distinguished achievement and service. Plans are being developed to construct a new Alumni Center on the main campus. The financial support of alumni is making this project possible.

Recreational and Cultural Facilities

The center of student activity at Texas A&M University-Commerce is the Sam Rayburn Memorial Student Center. Housed in the student center are the Office of Student Organizations, Office of International Student Services, Synergy Lab, Campus ID Center, campus post office, a variety of places to eat, the University Bookstore, student government offices, two ballrooms, meeting rooms, lounges, candy corner, a hair salon, a video arcade, recreation room with billiard tables, and information services.

Student Retention, Orientation, and Leadership (Campus Synergy Lab) located in the Memorial Student Center, is home of the Orientation Team, Leader Lab,

and the Freshman Leadership Class. The Graf/X Place and IdeaWorks are there to help students, faculty, and staff with projects and programs.

The Jerry D. Morris Recreation Center features a fitness room, four racquetball courts, large gymnasium, aerobics room, a 45-foot tall climbing rock, three-lane jogging track, and classrooms. In addition, outside facilities include a heated pool, hot tub, two basketball courts, two sand volleyball courts, and a sunbathing area.

Other recreational areas include the **Field House**, **Whitley Gymnasium**, tennis courts, and outdoor intramural fields. A&M-Commerce's **Memorial Stadium**, which seats 10,000, is used for athletics and other special events. In intercollegiate athletics, A&M-Commerce competes in football, basketball, track and field, cross country, golf, soccer, and volleyball. Texas A&M University-Commerce is a member of the Lone Star Conference of Texas and the National Collegiate Athletic Association (NCAA) Division II.

The **Performing Arts Center** has two theatres, a revolving stage in the main playhouse, scene shop, dressing rooms, makeup rooms, studios for the public radio stations KETR FM (100,000 watts) and KKOM, and studios for KETV-Television cable Channel 3. The **University Playhouse** produces several plays during the school year. The Department of Music sponsors 14 musical groups, including Texas A&M-Commerce's Show Band.

The 1,200-seat University Auditorium is housed in the Ferguson Social Sciences Building.

Student publications are *The East Texan*, a weekly newspaper; *A&M-Commerce* Special, a feature magazine; and Forthcoming, a magazine of prose and poetry.

More than 100 social, departmental, special interest, and religious organizations offer numerous opportunities for students to participate in campus life and meet fellow students.

University Police Department

Emergency—911; Non-Emergency—(903) 886-5868

This office provides police services and all security functions for the university. The University Police Department also provides many services for the faculty, staff, students and visitors on campus. The department is responsible for investigation of criminal activity, crime prevention programs, safety awareness, public service assistance for motorists, event security and parking enforcement. The department is responsible for the enforcement of university parking regulations as well as motor vehicle laws. All motor vehicles parking on the Commerce campus must be registered with the department and the parking permit properly displayed.

Officers of the department are certified by the State of Texas as commissioned peace officers the same as other Texas municipal police officers, and have full law enforcement authority.

The department publishes a weekly crime log in order to better inform the University of current crime trends. Anyone wishing more information on crime statistics should contact the University Police or visit our website at www.tamu-commerce.edu/ upd/.

The University Police Department is open 24 hours a day for assistance. The office is located on the first floor of Henderson Hall on Monroe Street. Emergency-911; Non-Emergency—(903) 886-5868.

Student Services

Areas of student services and activities at A&M-Commerce are organized and administered by the Office of Student Affairs. Included in the components are:

The Assistant Dean of Students (903) 886-5153

Working collabratively with the Dean of Students, the Assistant Dean of Students provides leadership within areas of Student Affairs. The Assistant Dean of Students is responsible for student personnel records, student service fee advisory committee, Student Government Association, the student judicial process, and working with faculty regarding student concerns.

Clarence G. Allen Student Health Center (903) 886-5853

Medical services are available at the Student Health Center to those students who are currently attending classes at A&M-Commerce. Services include diagnosis and treatment of minor illnesses and injuries, minor surgery, and X-ray and lab procedures. Students are seen only during regular clinic hours; all after-hour illnesses and emergencies must be seen at the local hospital at the expense of the student. The Student Health Center is located on the first floor of Henderson Hall.

Counseling Center (903) 886-5145

The Center offers a wide range of programs and services to assist students in accomplishing their personal, academic, and career goals. The staff provides both individual and group counseling. Services include relaxation training to help alleviate stress-related problems, as well as career assistance facilitated by the use of various computer-delivered career guidance systems. Legal advice is available by appointment with the student attorney. Numerous groups, seminars, and workshops are presented each semester. All programs and services are free to University students, and the staff respects each student's right to confidentiality and privacy.

Student Housing

(903) 886-5797

The Department of Residence Life at Texas A&M University-Commerce offers a variety of living environments, including traditional residence halls, suite-style residence halls, single student apartments, and family housing apartments.

New Pride Apartments opened in Fall 2001 for single juniors, seniors, and graduate students. These two- and four-bedroom apartments each have two bathrooms, a patio/balcony, and a full kitchen equipped with a dishwasher.

Single student housing includes cable, telephone and utility services, double occupancy rooms, central heat and air-conditioning, and continuous maintenance service. The halls designated for family housing include 150 air-conditioned and centrally heated, furnished apartments. Utilities, including basic telephone service are furnished by the Department of Residence Life.

The Department of Residence Life strives to create a living-learning environment in each residence hall that will enable each resident to succeed academically and developmentally. The Department of Residence Life is located in the first floor of Whitley Hall. For more information about student housing, contact the Department of Residence Life at 903-886-5797 and/or visit the department's website at www.tamucommerce.edu/housing.

Children's Learning Center (903) 886-5769.

This is a licensed day care/learning center located on campus for children six weeks to five years of age. The Children's Learning Center provides the latest in curricula and educational play equipment for all ages in a consistent learning environment.

Rated a Four-Star Facility in 1995, the Children's Learning Center prides itself on exceptional, quality care and an academic environment.

Services for Students with Disabilities (903) 886-5835

Each division within the University recognizes of the needs students with disabilities and is ready and willing to work with each student to solve problems as they arise. The Director of Disability Resources and Services is located in the Halladay Student Services Building, third floor. Services for those with disabilities are provided through the Student Support Services/Trio Program (tutoring, mobility assistants, readers, interpreters), the Counseling Center, the Communication Skills Center, the Mathematics Skills Center, and Disability Resources and Services. Students with learning disabilities must file an application during the first semester of enrollment at the university for eligibility for assignment to the Academic Support Committee. Applications are available through the Trio Program, Disability Resources and Services, and Advisement Services. Other campus services are available to the disabled through the Department of Housing, the University Police Department, the Clarence G. Allen Student Health Center, the James G. Gee Library, and the Student Recreation Center. In addition, the Texas Rehabilitation Commission and the Texas Commission for the Blind work closely with the university to offer support to students who qualify.

Greek Life

(903) 886-3087

Students who belong to Greek organizations have the opportunity to develop special friendships, participate in service projects, improve leadership skills, maintain scholastic excellence, and participate in social and sporting events. To be eligible to join, one must be an A&M-Commerce student enrolled in a minimum of twelve semester hours and meet the government bodies cumulative GPA requirement as well as other requirements of the Greek organization.

International Student Services

Phone (903) 886-5097, Fax (903) 468-3200.

The office of International Student Services offers assistance to international students and exchange visitors in regards to academic, personal and immigration-related concerns, and refers them to other services (on and off campus) as needed. Services include issuance of I-20 and DS2019 documents, new international student orientation, and coordination of special activities for international students. Other services include liaison with the Department of Homeland Security (DHS), formerly known as the INS, regarding nonimmigrant students and exchange visitors, re-entry authorization for traveling outside the United States, employment authorization, and extension of stay. The

office is located in the Memorial Student Center, 2nd floor, Room #212. E-mail Noi_Prapan@tamu-commerce.edu.

Minority Affairs

(903) 886-5087

Minority Affairs is responsible for servicing the needs of a culturally diverse student body population. The programs provide opportunities for students to enhance their growth as individuals, encourage academic success and community service. Some events sponsored by Minority Affairs include V.I.S.I.O.N.S., African American History Month, Hispanic Awareness Week, Cinco de Mayo, Martin Luther King Celebration.

Veterans' Affairs

(903) 886-5123

This office administers Veterans' Administration Educational Benefit Programs for veterans and their dependents who may be eligible to receive benefits under any one of several programs. Applications and further information are available in the Office of Veterans' Affairs or by calling. General information about both the G.I. Bill and the Hazlewood Tuition exemption can also be found at www.tamu-commerce.edu/careerservice/veteransaffairs.htm.

Career Services 903-886-5123

This office serves students, alumni, and employers, as well as Texas A&M-Commerce's academic departments with programs and publications to provide a bridge between academic preparation and professional careers. Regularly-scheduled programs include Job Fairs in October and February, Teacher Career Days in April, and on-campus interviews with business and government recruiters from October through April.

Information about Texas A&M-Commerce, its degree programs, and its students is disseminated to representatives of business, industry, government, and education. Career Services also links employers with candidates both by sending resumés, credentials, and contact information on qualified candidates to potential employers, and by referring employers directly to academic departments whenever appropriate.

For students and alumni, Career Services publishes bi-monthly job vacancy bulletins for public schools, higher education, and businesses; maintains credential files of registrants and makes these files available to prospective employers; provides job-search publications designed specifically for teachers and business-oriented careers; maintains a reference library of occupational literature; and schedules on-campus interviews with business, government, and school district recruiters. Staff members also provide individualized instruction and advice on constructing and revising resumés and curriculum vitas, and conducts mock interviews (by appointment) to help students sharpen their interview skills.

Scholarship Office

903-886-5915

Graduate students with a high GPA are encouraged to apply within their graduate department for available scholarships.

Financial Aid

(903) 886-5096

Graduate students who have full admission to a graduate degree program or a teacher certification program may be eligible for several forms of financial aid. These programs include the Texas Public Education Grant, College Work-Study, and several loan programs.

Withdrawing on Financial Aid/Return of Title IV Aid

A student who receives Title IV aid and withdraws or is suspended from the University during a term in which the student began attendance, will have his or her eligibility for aid recalculated as prescribed by the 1998 amendments to the Higher Education Act of 1965. Title IV aid is earned in a prorated manner on a per diem basis up to and including the 60% point in the term. After the 60% point all aid is considered earned. The percentage earned is calculated by dividing the number of days completed by the total number of days in the term. It is the unearned percentage of aid that determines the amount that must be returned to the Title IV program(s).

The University, as well as the student, may be required to return to the federal government the unearned portion of the Title IV funds. When the University returns its unearned portion of the Title IV funds, a portion of the student's institutional charges may be left outstanding. The University will require students to pay any portion of institutional charges that are left outstanding after the University returns Title IV funds. This may cause the student to owe both the University and the Federal government.

Students considering withdrawing, should contact the Office of Financial Aid for a thorough explanation of how this policy will affect them. Additional information on the Return of Title IV Aid policy, including examples, is available from the Office of Financial Aid. This policy is accessible on the A&M-Commerce Financial Aid website, http://sus.tamu-commerce.edu/sus/financialaid.

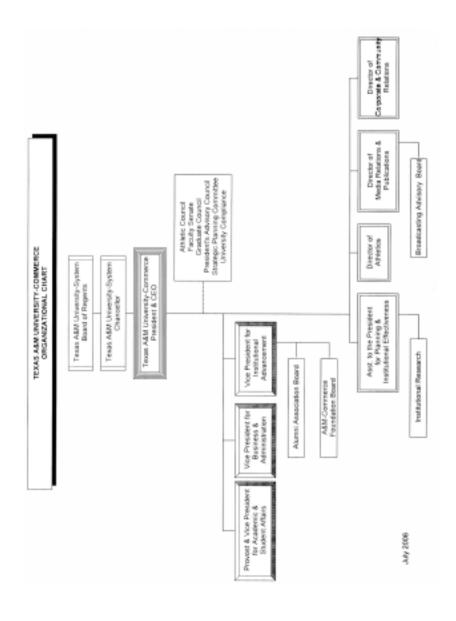
Satisfactory Academic Progress Policy

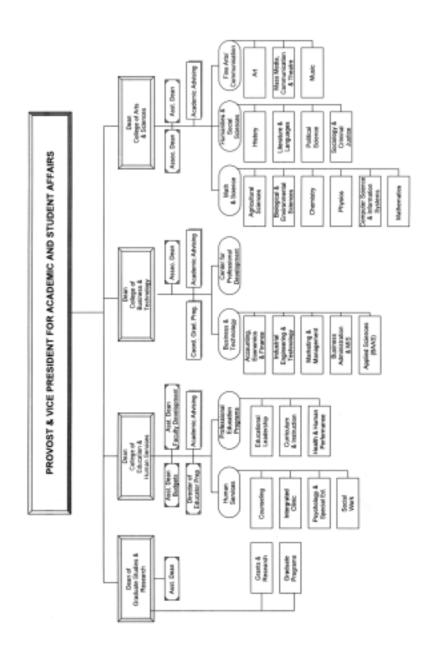
- This is an official statement of University policy related to the financial aid operational definition of "Satisfactory Academic Progress" of graduate students for the Texas A&M University-Commerce Complex (A&M-Commerce, A&M-Commerce Metroplex Center) effective for the 1999-2000 and subsequent academic years.
- Evaluation of satisfactory academic progress of graduate students receiving financial aid will be completed each semester by the Office of Financial Aid. Grade point averages will be checked each semester. Number of hours completed will be checked at least once each academic year.
- 3. The maximum number of hours students may attempt will be limited to 150% of their A&M-Commerce catalog degree program. A master's student who exceeds 45 student credit hours attempted, and a doctoral student who exceeds 90 student credit hours (or 45 student credit hours above the master's degree) will not be deemed making satisfactory academic progress until he/she has documented that he/she will graduate within the 150% limit.
 - Enrollment status (hours attempted) will be determined by the number of hours the student is enrolled on the twelfth class day roll. Nine or more hours will be considered full-time. Six to eight hours will be considered halftime.
 - Students enrolled on a full-time status must complete 18 semester credit hours per academic year (an academic year equals two semesters plus summer sessions).
 - Students enrolled less than full-time must complete a proportional number of hours.

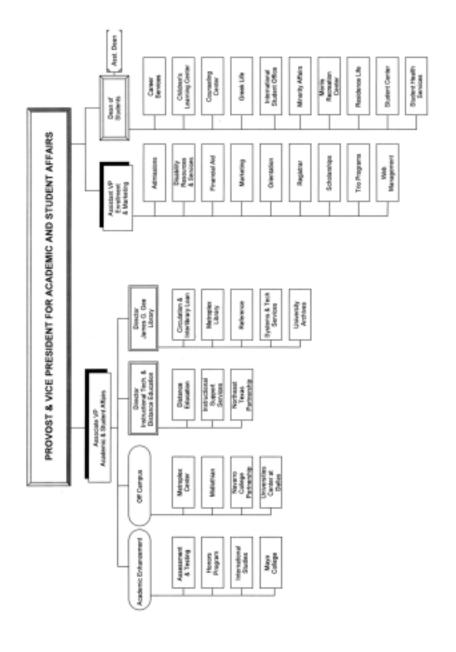
Courses in which a grade earned of A, B, C, D, and S will be used to compile hours completed. Six hours of "X" in 518 and 12 hours of "X" in 718 will be counted as courses completed.

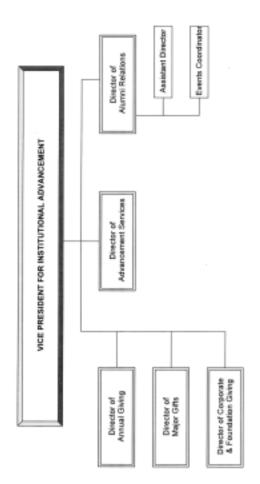
Certification students and students seeking a second bachelor's degree must submit and follow a definite plan.

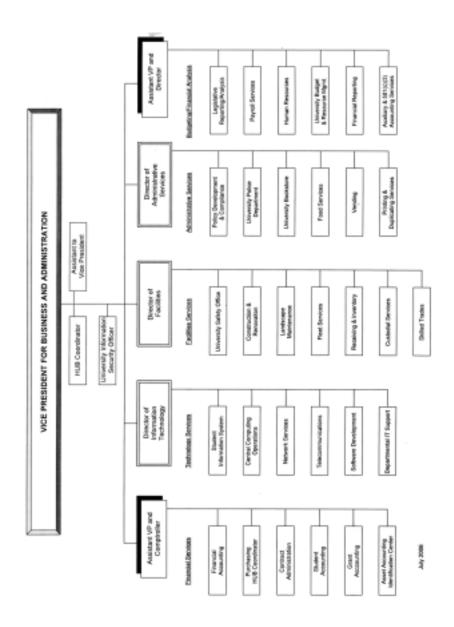
- 4. Graduate students whose cumulative grade point average is 3.0 or above and who meet the requirements of item 3 above will be considered making satisfactory academic progress. Certification and second bachelor's students must meet the minimum requirements of their respective programs.
- 5. A graduate student who withdraws from the University while receiving financial aid will not be eligible for financial aid until a like number of hours has been completed at the student's **own** expense.
- 6. Provisionally admitted students and students admitted on probation are not eligible for financial aid (*not an appeal item*).
- 7. Graduate students who have been suspended from the Graduate School will not be eligible for financial aid.
- 8. A graduate who is denied aid under this policy will again be eligible for aid when he/she documents that he/she meets the requirements of item 4 above.
- 9. Student aid regulations allow a student to appeal an adverse satisfactory academic progress finding based on (a) the death of a relative, (b) an injury or illness of the student, or (c) other special circumstances. A student who wishes to appeal shall do so in writing to the Office of Financial Aid within 14 calendar days of notice of the adverse finding. A student whose appeal is denied by the Office of Financial Aid may appeal to the Financial Aid Committee. The student must provide written notice of the intent to appeal within 14 calendar days of notice of the appeal denial. If denied, by the Financial Aid Committee, within five working days, a student may seek administrative appeal from the Dean of Enrollment Management (Item 6 is not an appeal item).











Office of Graduate Studies and Research

Allan D. Headley, Dean Jon Travis, Assistant Dean

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Fax: 903-886-5165

Mission

The mission of the Office of Graduate Studies and Research is to provide leadership and direction for all aspects of graduate education and to promote research at Texas A&M University-Commerce.

Purpose and Nature of the Office of Graduate Studies and Research

Graduate work offered by the University is distinguished from undergraduate work in that the graduate student is expected to show increased maturity in scholarship, seriousness of purpose, and ability to think independently. In accordance with this distinction, graduate courses are designed to develop the student's ability to gather relevant facts, analyze them, and make reasonable generalizations and sound conclusions through independent research.

Master's degree programs provide for the needs of students seeking professional employment, research opportunities, advanced degrees, including the doctoral degree, or personal satisfaction by increasing their depth of knowledge in their fields of specialization. Our students are prepared to be school and college teachers and administrator; advanced professional in business, industrial technology, social work, the arts and various science disciplines. Some of our programs also prepares students for professional and administrative certificates.

The doctoral programs are distinct in purpose and more selective in admitting candidates than the master's programs. The purpose of the doctoral program is to produce a graduate who has developed breadth of vision, a capacity for interpretation, and the ability to carry out critical investigation.

From association with fellow scholars, the doctoral student is expected to gain many new concepts, a zeal for adding to the sum of human knowledge, and development of ability to conduct original research and to think clearly and independently. The student also must develop the professional competencies necessary for giving application of knowledge in the essential areas of human and public interest. Guidance toward extended reading and research is an integral part of graduate study.

Major Areas of Study

We offer a master's degree with the following majors:

Agricultural Education Management*
Agricultural Sciences Marketing
Art Mathematics
Biological Sciences Music Education
Broadfield Science Music Performance
Business Administration*
Music Theory

Chemistry Music

Computer Science

Counseling

Early Childhood Education

Economics

Educational Administration Elementary Education

English Finance

Health, Kinesiology, and Sports Studies Higher Education Administration

Higher Education Teaching

History

Industrial Technology

Interdisciplinary Studies

Learning Tech. & Information Systems:

Educational Computing or

Library & Information Science or

Media & Technology

Physics Psychology Reading

Secondary Education

Sociology Social Work Spanish

Special Education

Theatre

Training & Development

We offer doctoral degrees with the following majors:

English (Ph.D.)

Counseling (Ph.D.)

Educational Administration (Ed.D.)

Educational Psychology (Ph.D.)

Supervision, Curriculum and Instruction—Elementary Education (Ed.D.)

Supervision, Curriculum and Instruction—Higher Education (Ed.D.)

Graduate Faculty

Since the academic reputation of any graduate program rests upon the quality of its faculty, great care is given to the awarding of graduate faculty status. The selection of graduate faculty rests with the Graduate Council.

Graduate Faculty membership is limited to full-time faculty who have a terminal degree or its equivalent. There are two types of membership for Texas A&M University-Commerce faculty and two types for visiting scholars: Associate and Senior Graduate Faculty, and Associate and Senior Visiting Scholars. Associate Graduate Faculty and Associate Visiting Scholars are eligible to teach graduate courses, direct master's theses, and serve on doctoral committees, while Senior Graduate Faculty and Senior Visiting Scholars can teach graduate classes and direct both master's theses and doctoral dissertations. Minimum qualifications for associate faculty membership are:(1) holds academic rank of assistant professor or above; (2) holds the highest earned terminal degree in the teaching discipline; (3) has a minimum of one year full-time university assignment that includes teaching graduate courses; and (4) provides evidence of current interest and involvement in scholarship, research, and/or creative activity. New faculty members may be granted a three-year associate membership if qualifications 1, 2 and 4 are met. Request for three-year membership can be initiated by the faculty member's department, either immediately upon hire or at such time that the faculty member is called upon by the department to teach graduate courses. After the three-year membership, the faculty member must submit an application for continued Associate Faculty membership and show evidence of all required qualifications.

Minimum qualifications for senior faculty membership are: (1) has academic rank of associate professor or above; (2) holds the highest earned terminal degree in the teaching discipline; (3) has a minimum of three years of full-time university assignment that includes teaching graduate courses and/or service on thesis and dissertation committees; (4) and shows evidence of competence as a scholar, including research capability

^{*}The Business Administration and Management programs are available as online programs.

and/or creative activity as evidenced by publications, creative endeavors, and thesis or dissertation supervision. The University will recognize the graduate faculty status that the visiting scholar holds at his/her home institution. Anyone not affiliated with an institution of higher education will be evaluated on an individual basis to determine associate or senior visiting scholar status.

Requests for Graduate Faculty membership and for visiting scholar status may be initiated by the faculty member or by the head of the department in which the faculty member serves. All requests initially go to the departmental Graduate Faculty for a recommendation. The request is then forwarded through the department head, college dean, and graduate dean for a recommendation from each. It is then sent to the Graduate Council, who makes the decision as to the type of membership to be awarded.

Each Senior Graduate Faculty member's and Senior Visiting Scholar's scholarly research, creative activity and involvement in the discipline, and graduate education is reviewed by the Graduate Council every six years. The purpose of this review is to determine if the faculty member's current graduate faculty status is appropriate and warranted.

The review process is the same as for the initial selection process; however, the options open to the Council are more numerous and include:

- 1. approve continued membership in the current status for six years,
- 2. change the status of a senior member to associate member,
- 3. refuse to approve any level of graduate faculty status, or
- 4. provide a three-year provisional term at the current level. If this option is chosen, the faculty member must be reviewed again after three years and either approved for a regular six-year membership, changed in status, or dropped from Graduate Faculty membership. Graduate Faculty whose status is terminated may, after one calendar year, reapply for graduate faculty status.

Under extenuating circumstances the Dean of Graduate Studies and Research can grant temporary exception for other faculty members who do not hold graduate faculty status to teach graduate courses and/or serve on theses or dissertation committees. Information on such exceptions is submitted to the Graduate Council each semester and does not require Council action except in such cases as it deems necessary. Questions relating to Graduate Faculty membership should be directed to the Dean of Graduate Studies and Research.

Texas A&M University System Graduate Faculty

The Texas A&M University System has established a System Graduate Faculty which enables and facilitates the collaborative research and teaching among faculty members of the nine universities and the Health Science Center within the System. By acquiring status through the System Graduate Faculty, a member of the Texas A&M University System Graduate Faculty may teach graduate courses and serve as member or co-chair (but not as chair) with a member of the Texas A&M University Graduate Faculty.

System Graduate Faculty Guidelines

- I. Purpose. The Texas A&M University System Graduate Faculty has been developed for the following purposes:
 - A. To facilitate participation in graduate education for The Texas A&M University System students.
 - B. To provide graduate students access to the expertise of faculty members throughout the System.
 - C. To increase inter-institutional faculty collaboration throughout The Texas A&M University System.

D. To promote the development of multi-disciplinary educational and research programs and the capacity to study complex scientific and social issues.

II. Membership Background

- A. Membership on The Texas A&M University System Graduate Faculty provides the opportunity to participate in graduate education at The Texas A&M University System universities through serving on graduate committees, advising graduate students, and teaching graduate courses.
- B. Appointment to membership on The Texas A&M University System Graduate Faculty is designed to assure rigor in the directing, counseling, and teaching of graduate students.
- C. All of The Texas A&M University System Graduate Faculty members can serve as members of any graduate committee.
- D. The chair of a graduate committee must be from the institution that is conferring the graduate degree.
- III. Membership Qualifications. Consideration for membership on The Texas A&M University System Graduate Faculty requires meeting the following qualifications.
 - A. The individual must hold the terminal degree, usually an earned doctorate. Exception swill be considered only if justified in accordance with the Commission on Colleges of the Southern Association of Colleges and Schools.
 - B. The individual must be a tenured or a tenure-track faculty member of a Texas A&M University System university and hold a professional rank.
 - C. A person holding the title of instructor or lecturer may not be considered for membership on The Texas A&M University System Graduate Faculty.
 - D. Individuals holding professorial rank at an agency of The Texas A&M University System are eligible for membership.
 - E. The individual must be a member of the graduate faculty at his/her home institution.
 - F. The individual must be an active participant in his/her graduate program through teaching, directing or administering graduate work.
 - G. The individual must show evidence of active research and scholarly work within the past five years. This should include publication as primary author of scholarly books, presentations at professional meetings, or creative works, such as performances, work in juried exhibitions, or other creative works appropriate to the individual's discipline.
 - H. A graduate student at any Texas A&M University System institution may not be a member of The Texas A&M University System Graduate Faculty. Membership on The Texas A&M University System Graduate Faculty is forfeited upon a faculty or staff member's admission to a graduate program at any institution in The Texas A&M University System.
- IV. Nomination, Appointment and Review Process
 - A. Nomination for membership to The Texas A&M University System Graduate Faculty is made by submission of an official application by a faculty member and an accompanying letter of endorsement from the individual's department head or chair and college dean. The application and letter of endorsement are sent to the graduate dean, who certifies institutional graduate faculty appointment status, and forwards the nomination to the Texas A&M University System Council of Graduate Deans for consideration and action.
 - B. The application from the faculty member must identify the institutional graduate faculty of which he or she is a member, specify the graduate degree(s) that he or she is qualified to supervise under the conditions of the institutional appointment, and specify the graduate program(s) in which he or she wishes to participate as a System graduate faculty member. The application should be accompanied by a current curriculum vitae.

- C. The Council of Graduate Deans will appoint faculty from member institutions as needed to a Graduate Faculty Review Advisory Committee to consider applications and reappointments and to make recommendations to the Council of Graduate Deans.
- D. A Graduate Faculty member of The Texas A&M University System is appointed for a five-year term. At the end of the five-year term, the member will be reevaluated for reappointment by the Council of Graduate Deans. Failure to maintain membership criteria will result in removal from The Texas A&M University System Graduate Faculty. The Council of Graduate Deans will notify by letter a faculty member who is non-voluntarily removed from membership on The Texas A&M University System Graduate Faculty. The faculty member's department head, dean, provost, and graduate dean will also receive notification.
- V. Graduate Faculty Membership List. A list of the current membership of The Texas A&M System Graduate Faculty will be maintained in the Office of the Vice Chancellor for Academic and Student Affairs, the graduate office at each System university and on The Texas A&M University System Graduate Education website at tamusystem.tamu.edu/graduate-education/graduate-faculty-membership.

Administrative Procedures

Administration of the Office of Graduate Studies and Research is entrusted to the Dean of Graduate Studies and Research. A Graduate Council, consisting of 17 elected and appointed members, formulates and recommends to the President of the University policies and procedures related to graduate education. The Dean of Graduate Studies and Research is the executive officer of the Council and has authority to act for the administration and the Council. Faculty membership on the Graduate Council is limited to senior and associate members of the Graduate Faculty. Student membership is limited to graduate students who are classified as full-time resident students. All Council members have full voting rights.

Class Attendance Rule

Students are expected to be present for all class meetings of any course for which they are enrolled. Students are responsible for learning about and complying with the attendance policy stated in the catalog, *Student's Guidebook*, and/or faculty syllabus. Faculty members will provide details on requirements and guidelines for attendance in their classes in their course syllabi. Faculty members will keep students' attendance records.

Students are responsible for requesting makeup work when they are absent . They will be permitted to make up work for absences that are considered excused by the faculty member. The method of making up this work shall be determined by the faculty member.

The student is responsible for providing the faculty member reason(s) for his/her absence. The faculty member then determines the validity of the reason(s) for the absence and whether the student is to be excused for the absence. Faculty members may consider the following as excusable reasons for absence.

- 1. Participation in a required/authorized university activity;
- 2. Verified illness;
- 3. Death in a student's immediate family;
- Obligation of a student at legal proceedings in fulfilling responsibility as a citizen;

5. Others determined by individual faculty to be excusable (e.g., elective University activities, etc.).

Appeals can be made through normal administrative channels.

A record of excused and unexcused absences will be maintained by a faculty member for reference since certain financial assistance and other programs may require attendance records.

When requested by the student, teachers will inform the student who has been absent whether makeup work is allowed and whether absences jeopardize the student's standing in a class.

It is the prerogative of the faculty to drop students from courses in which they have accrued excessive absences as defined in the course syllabus. In such cases, faculty recommend through the department head to the appropriate college dean that a student be dropped from a class. The faculty member will document absences and will make a reasonable effort to communicate with the student prior to recommending the drop. If approved, the college dean will forward the recommendation to the Registrar's Office.

Students who wish to drop a course or withdraw from the university are responsible for initiating this action.

If a student believes the final course grade is unfairly impacted by attendance requirements, an appeal can be made. This appeal process is explained in "Student Appeal of Instructor's Evaluation" (Rule 13.02.99.R14), on page 33 of this catalog.

Good Standing Rule

This policy defines good standing for graduate students enrolled at Texas A&M-Commerce. Entering students who have been fully admitted (without any type of probationary admission, provisional admission, or other restriction) will be considered in good standing. A student will remain in good standing if, and only if, he or she has a cumulative grade point average of at least 3.00 and is free of the following holds: holds indicating delinquent financial indebtedness, academic suspension, academic probation, provisional status, and disciplinary suspension. Students who are not in good standing are not eligible to graduate until good standing has been achieved.

Academic Honesty of Students

Graduate students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all their scholastic work. Faculty are expected to uphold and support student integrity and honesty by maintaining conditions that encourage and enforce academic honesty. Conduct that violates generally accepted standards of academic honesty is defined as academically dishonest. "Academic dishonesty" includes, but is not limited to, plagiarism (the appropriation or stealing of ideas or works of another and passing them off as one's own), cheating on exams or other course assignments, collusion (the unauthorized collaboration with others in preparing course assignments) and abuse (destruction, defacing, or removal) of resource material.

If a student is accused of academic dishonesty, the faculty member making the accusation is responsible for initiating disciplinary proceedings. The penalty assessed should be related to the severity of the infraction. If the student and faculty member agree on the penalty, assessment of the penalty concludes the disciplinary action.

However, certain violations of academic honesty, such as plagiarism, infringe upon the academic community's basic tenets of scholarly inquiry. Therefore, if a faculty member believes the infraction is severe enough to warrant further action and/or if the problem may be cumulative, occurring in other classes in which the student is enrolled, the faculty member may file a report of the infraction with the Dean of Graduate Studies and Research. The student must be notified that the report has been filed with the Dean of Graduate Studies and Research to allow the student the opportunity to file a response. If a faculty member believes the infraction is so severe that a penalty greater than failure on a project and/or course is warranted, the faculty member may recommend to the Dean of Graduate Studies and Research through the department head and academic dean that the student be suspended or expelled.

If the student disagrees with the charge or level of penalty, he/she is entitled to due process in accordance with the University policy for student appeals. The appeal process for this policy is through the following channels: department head; Dean of Graduate Studies and Research; and the Administration Committee of the Graduate Council, which will present its recommendation to the full Graduate Council for final disposition of the appeal. Final jurisdiction on graduate student appeals is the Graduate Council.

In addition, international students must comply with current Department of Homeland Security (DHS) and U.S. Citizenship and Immigration Services (USCIS) regulations

Academic Honesty of Faculty and Professional Staff

Graduate faculty and professional staff at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all their scholastic work. Faculty are expected to uphold and support integrity and honesty by maintaining conditions that encourage and enforce academic honesty.

If a faculty or staff member is accused of academic dishonesty, the department head or supervisor is responsible for initiating a timely investigation. Any necessary disciplinary actions that result from this investigation should be related to the severity of the infraction.

If a faculty or staff member disagrees with the charge or level of penalty, he/she is entitled to due process in accordance with the usual procedures available to faculty who are accused of any other infraction.

Registration

Registration dates, times, and instructions are available on the Registrar's website at http://tamu-commerce.edu/registrar/registration.asp. MyLeo (A&M-Commerce WEB application for Students) allows eligible students to register through the Internet. Students can access MyLeo through http://MyLeo.tamu-commerce.edu.

The academic year is divided into a long session of two semesters, Fall and Spring, and a summer session of two terms.

Courses: Definition, Value and Number

A Course. A course is one subject carrying three or four semester hours of credit. One- and two-semester-hour subjects may, in certain cases, be converted to course equivalents by adding the semester hours and dividing by three. Subjects carrying six semester hours of credit count as two courses. Each major or minor department has the right to refuse substitution of one-hour courses or their equivalents to a graduate program when it deems such substitution inappropriate for the planned program of study.

Semester Hour. The semester hour is a unit of credit. It is defined as one hour of lecture per week, or its equivalent in laboratory work, for one semester or its equivalent, as defined by the Texas Higher Education Coordinating Board. Each course has a value of three semester hours unless otherwise specified.

Course Numbers. Graduate courses are numbered at the 500, 600, and 700 levels.

Graduate Student Load

During the fall or spring semester the load for a full-time graduate student is 9-12 hours. A student taking 9-12 hours is considered full-time. A student taking six hours is considered half-time. The maximum load for a full-time graduate student during each summer term is seven hours. A student taking six hours in each summer term is considered full-time. The maximum load for a mini-term is three hours. Doctoral students who are enrolled in nine-credit hours of organized classes and who are performing research related to their dissertation may be required to register for an additional three hours of dissertation for a total of twelve credit hours.

Only in unusual circumstances shall a doctoral student register for more than 12 semester credit hours in a given semester (fall or spring), and then only if approved in advance by the Dean of Graduate Studies and Research or other comparable official. See the section "Graduate Assistantships" for information about course loads for graduate assistants.

Student Class Schedule Adjustments

Students are expected to make all necessary adjustments in their class schedules by the fourth class day of a regular semester and the second class day of a summer semester. Eligible students may use MyLeo (A&M-Commerce Web Applications for Students) to process drops and adds. Students not eligible to use MyLeo may obtain a drop/add sheet at the Registrar's Office. The student must obtain approval to add and drop courses from the department/instructor and return the drop/add sheet to the Registrar's Office. Students may add classes until fourth class day during the Fall and Spring semesters and second class day during the summer terms. Students may drop a class with a full refund (if remaining enrolled) until the twelfth class day during the Fall and Spring semesters and fourth class day during the summer terms.

The student desiring to add a course(s) after the fourth class day of a regular semester or second class day of a summer semester should pick up a drop/add sheet at the Registrar's Office. The student should proceed to the department(s) where he/she obtains department/instructor approval and then to the appropriate dean for approval. The drop/add sheet is then returned to the Registrar's Office. Students will not be allowed to add classes after the twelfth class day during Fall/Spring or the fourth class day during a summer semester.

No course may be added to student schedules after the last day to change schedules as stated in the university calendar, except in very special cases and then only by approval of the instructor and appropriate dean.

After the census date in a term (see University Calendar for specific dates) a student who drops a course that she/he is passing will receive a grade of "DP" (dropped passing).

After the first twelve days of classwork during the fall or spring or after the first four days of classwork of any summer term, the instructor may permit a student to officially drop a class in which the student is not passing. See the University Calendar for specific drop dates. A grade of "DF" (dropped failing) will be reported at the end of the semester.

Auditing Courses

Students desiring to audit a course may do so with the consent of the instructor and department head. Enrollment for audit courses occurs on the first day of classes. Students auditing courses must meet the same admission requirements and pay the same tuition and fees required for credit courses. Students enrolling for a course for audit must notify the Registrar's Office prior to completing registration for the course. A

student may not change from credit to audit after the twelfth class day during the fall or spring semester or after the fourth class day in a summer term.

Withdrawal from the University

A student leaving the University before the end of a semester or summer term for which he/she is registered must clear his/her record by filing an application for voluntary withdrawal on a form available in the Registrar's Office or at http://tamucommerce.edu/registrar/withdrawal.asp. This action must be taken by the date stated in the University Calendar as the last day to drop a class or withdraw.

Grading System

Grades—Their Meaning and Value

Grade	Grade	Points Per
Marks	Meaning	Semester Hour
A	Excellent	4
В	Good	3
C	Average	2
D Passing	(Minimum)	1
F	Failure	0
X	Incomplete	0
I	Incomplete	0
	(thesis & dissertation only)	
IP	In Progress	0
W	Withdrew	0
DP	Dropped Passing	0
DF	Dropped Failing	0
S	Satisfactory	0
U	Unsatisfactory	0
DS	Dropped Satisfactory	0
DU	Dropped Unsatisfactory	0

Satisfactory-Unsatisfactory (S-U) Grading

In certain graduate courses, students will be evaluated on a satisfactory-unsatisfactory (S-U) grading basis rather than by the traditional letter-grade system. Students in these specially designated courses will receive the grade of "S," or "satisfactory," for graduate level work equivalent to a regular "B" grade or better. Grades of "U," or "unsatisfactory," will be assigned to those students whose work falls below the "B" level. In such courses only a grade of "S" may be counted toward fulfillment of degree requirements. Neither "S" nor "U" grades will be included in the calculation of grade point average to determine academic standing. The courses in which the satisfactory-unsatisfactory grading system will be used are indicated by their separate course descriptions in the current *Graduate Catalog*. All other courses, not so identified, will be graded on the traditional letter-grade basis. Each department may prescribe further rules regulating the use of the satisfactory-unsatisfactory grade system within its specific graduate degree programs, but in no case may more than 50 percent of the courses presented toward fulfillment of the requirements for any graduate degree have been graded on the satisfactory-unsatisfactory basis.

Dropped Courses

After the census date in a term (see Unviersity Calendar for specific dates), a student who drops a course that she/he is passing will receive a grade of "DP". If the student's grade is less than a "C", a grade of "DF" will be recorded. Students who officially withdraw from school prior to the date stated in the current University Calendar will receive a grade of "W".

Incomplete Courses

Students, who because of circumstances beyond their control are unable to attend classes during finals week or the preceding three weeks will, upon approval of their instructor, receive a mark of "X" (incomplete) in all courses in which they were maintaining passing grades.

When an "X" is given for a grade in a course, the credit hours are not included for one semester (exclusive of summer) in calculating the grade point average. Grades of "X" earned during the spring or summer are to be completed by the end of the following fall semester. If the "X" is not removed by that time, the grade becomes an F, and the hours are included in the number of hours attempted.

Recording a grade of "X" requires the filing of a plan for completion. The plan will be submitted with the official grade record sent to the department head who will forward it to the Dean of the College. The plan will include why the grade was given and steps necessary for the student to receive the final grade.

A grade of "IP" (in progress) will be used for courses that are scheduled over more than one semester. The grade of IP will not be computed in the grade point average and will be removed when the final grade is filed by the instructor.

A grade of "I" will be given for courses in dissertation and thesis (including undergraduate honors thesis) for all registrations prior to the semester in which the final document is completed. The time limit imposed on the grade of "X" (one semester) does not apply for these courses.

Repeating a Course

When a course is repeated, only the last enrollment for the course will be used in computing the grade point average. Any student who enrolls in the same course a second time must notify the Registrar's Office during the semester in which the course is being repeated. When the semester is completed, the Registrar's Office will then update the grade point average to reflect the duplication of the course. After a degree is awarded, courses taken before the degree was awarded (regardless of whether the course is applied to the degree) cannot be repeated and the grade point average recalculated.

Semester Grade Reports

At the end of each semester of the regular session and the end of the summer session, grades will be updated to the student information system. Students may check the status of their grades by accessing MyLeo at http://webtrax.tamu-commerce.edu. A PIN (Personal Identification Number) is required for access.

Student Appeal of Instructor Evaluation

- 1. The final grades awarded by faculty members are their expert judgment concerning student performance. Students challenging a final grade must show that the instructor's judgment was unfair based on:
 - a. some basis other than performance or

- standards different from those applied to other students in the same course section, or
- a substantial, unreasonable, and unannounced departure from previously articulated standards or the syllabus.
- Students who believe their grade to be unfair must first discuss the matter with the instructor.
- 3. If no satisfactory resolution is reached with the instructor, or if the instructor is unavailable, the student shall appeal to the department head. A grade appeal must be initiated in writing with the department head (or dean of the college if the department head is the instructor) within six months of the last day of the semester in which the grade was awarded. The department head will examine the student's appeal to determine whether the student has established an apparent case of unfair academic evaluation.
- 4. The instructor or the student may appeal the department head's decision (with respect to findings and remedies) to the dean of the college in which the course is offered within 30 days of the date on which the department head offered his or her judgment.
- 5. Upon receipt of an appeal, the dean will appoint a three-person advisory committee of faculty to hear the case. The chair of the committee will be from a department other than the one offering the course in question. The two remaining will be from the department offering the course. One of these faculty members may be suggested by the author of the appeal. The instructor and the student may file additional statements. The committee will review all written materials and may seek other information, as they deem appropriate. After reviewing all information, the committee will communicate their findings and suggested remedies, if any, to the dean of the college.
- 6. The dean of the college is the final authority on issues of fairness in course evaluation. He or she will consider the recommendations of the committee but has wide latitude in resolving the matter.

Graduate Assistantships

Assistantships that require teaching, laboratory instruction, and/or research are available to master's and doctoral students in most departments. The awarding of assistantships is a staffing function of the department making the appointment. Inquiries about applications should be addressed to the head of the department in which the applicant wishes to undertake graduate study. Applicants for such positions must satisfy both the Office of Graduate Studies and Research and departmental requirements.

Academic and creative excellence and maturity are the primary qualifications considered in the appointments. Graduate students whose native language is not English must demonstrate a sufficient level of oral and written proficiency (successful completion of the Speak Test) before they can be awarded a teaching assistantship.

Minimum requirements for holding assistantships are:

- 1. Master's assistants must have full admission to a graduate degree program and either have an undergraduate GPA of 3.0 or higher or have a graduate GPA of 3.25 or higher on a minimum of twelve semester hours of graduate credit.
- 2. Doctoral assistants must have full admission to a doctoral degree program and have a graduate GPA of 3.5 or higher.
- 3. Teaching assistants are required to have a minimum of 18 graduate hours in the field to be taught.

Once an assistantship is offered and the graduate student has accepted verbally or in writing, the student has an obligation to stay in that position for the duration of the semester.

Stipends

Stipends for master's and doctoral assistantships will be set by the Chief Executive Officer after consultation with the Graduate Council, Dean of Graduate Studies and Research, and the Provost and Vice President for Academic Affairs.

Waiver for Out-of-State Tuition and Fees

Students who have not established residency in Texas and who hold full-time assistantships in their academic area are entitled to a waiver of out-of-state tuition and fees. Students must be employed by the twelfth class day for fall or spring semesters and by the fourth class day for summer terms to receive this waiver.

Work Load

The work load for a full-time assistant in the fall or spring semester is teaching six hours or working 20 hours per week. The summer teaching load is three hours per term. A lesser assignment is possible with a reduced stipend.

Course Load for Graduate Assistants

The course load for a full-time assistant is 6-12 hours for the fall or spring semester and 3-7 hours for each summer term. A doctoral student shall not be required to register for more than nine credit hours during any semester with the exception of a doctoral student who also is doing research related to his or her dissertation who may be required to register for an additional three hours of research or dissertation, for a total of twelve credit hours.

Teaching Appointments

Master's or doctoral assistants who have primary responsibility for teaching a course for credit and/or for assigning final grades for such a course must, according to the Southern Association of Colleges and Schools Criteria for Accreditation, be under the direct supervision of a faculty member experienced in the teaching field, receive regular in-service training, be regularly evaluated, and have earned at least 18 graduate semester hours in their teaching discipline.

Time Limitations

Graduate assistantships may be held for a maximum of four semesters (exclusive of summer sessions) by master's students. Graduate assistantships may be held for a maximum of six semesters (exclusive of summer sessions) by doctoral students. Appointments can be extended for up to two semesters at the discretion of the department head. All appointments are subject to satisfactory performance of assigned duties and progress toward the degree.

Performance and Evaluation

All appointments are subject to satisfactory performance of assigned duties, progress toward the degree or program goal, and maintenance of a 3.00 graduate grade point average. Appointment corrective action may be initiated by the department head at any time during the semester. In case of termination, the graduate assistant shall have the right to appeal through normal administrative channels.

Persons holding assistantships have the right to develop to the best of their ability, both academically and professionally, and to be treated fairly and with respect. It is the responsibility of the assistant to carry out, in a professional manner, such duties as may be reasonably assigned by the department head or supervisor.

Individuals holding teaching assistantships will be evaluated every semester, both orally and in writing, by the department head or faculty supervisor. Such evaluations will be forwarded to the college dean. Graduate assistants who are teachers of record must be evaluated by their students.

Tuition and Fees for the 2006-2007 Academic Year

Tuition rates are subject to change by the Legislature. Current rates are available on the University webpage.

State Residency

A student's tuition and fees are impacted by the student's state of residency. The Texas Legislature, the Texas Higher Education Coordinating Board, and Texas College and University System have established guidelines for determining residency status. Texas residency for tuition purposes is generally obtained by working in Texas for 12 months immediately prior to enrollment in any college or university, by being a dependent of a Texas resident, or by being classified as a Texas resident for the first five of the six years immediately preceding registration. Full regulations are available in the Office of Graduate Studies and Research.

Any student who has lived outside Texas or who has a possibility of being a nonresident is coded accordingly. Upon receipt of a completed residency questionnaire, determination of eligibility to pay in-state tuition will be finalized.

It is the student's responsibility to insure that the application for admission is properly completed for tuition purposes. Any change in residency status must be reported to the Office of Graduate Studies and Research.

Students who reside in the counties that border the state of Texas (Arkansas, Oklahoma, Louisiana, and New Mexico) are eligible to receive a reduced rate in non-resident tuition.

Due to legislative changes, doctoral students who have accumulated over 99 doctoral hours will be charged non-resident tuition and fees.

Estimated Special Fees

Motor vehicle operation and parking permits are issued for the academic year. They are \$22 if purchased in the fall, \$18 in the spring, and \$13 in the summer. All permits expire August 31 of each academic year.

Diploma fee (payable when applying for degree)—\$20

Certificate—Fee based on type of certificate earned.

Late registration fee—\$50

Installment payment plan fee—\$17

Late installment payment plan fee—\$20

Returned check fee-\$20

Lab fees—\$5 to \$45

Course Fees—\$3 to \$1,200

Testing Fees:

Quick THEA—\$35 CLEP Test—\$75 Practice TExES—\$15 TExES—\$82

Graduate Application Fees:

U.S. Citizen—\$35 International—\$50.

Career Services User Fee:

Basic—\$10 Extended—\$15

Master Thesis Fees:	Doctoral Dissertation Fees:
Binding—\$50	Binding—\$50
Microfilm—\$13	Microfilm—\$13
Copyright—\$45	Copyright—\$45
Publishing—\$45	Publishing—\$55
Postage—\$3	Postage—\$3

Room and Board

For specific room and board costs, contact the Department of Housing (903-886-5797).

Overdue Financial Obligations

In the case of overdue financial obligations to Texas A&M-Commerce by the student, future registrations, transcripts, and other benefits may be withheld.

Refunds for Dropped Courses

Tuition and fees collected for courses from which students drop within the first 12 days of a fall or spring semester or within the first four days of a summer term will be refunded provided the student remains enrolled at the institution for that semester or term. There is no refund for courses dropped after the 12th class day for the long semesters or the fourth class day for the summer term.

Refund of Tuition and Fees for students who withdraw from the university is based on the following scales:

Fall or Spring

prior to the first class day	100 percent
during the first through fifth class day	80 percent
during the sixth through tenth class day	70 percent
during the eleventh through fifteenth class day	50 percent
during the sixteenth through twentieth class day	25 percent
after the twentieth class day	none

Summer

prior to the first class day	100 percent
during the first, second or third class day	80 percent
during the fourth, fifth, or sixth class day	50 percent
seventh day of class and thereafter	none

Ten-Week Summer Session

prior to the first class day	100 percent
during the first, second, third, or fourth class day	80 percent
during the fifth, sixth, seventh or eighth class day	50 percent
ninth day of class and thereafter	none

Shortened Format Courses (3-week courses)

prior to the first class day	100 percent
during the first or second class day	80 percent
during the third or fourth class day	50 percent
fifth day of class and thereafter	none

No refunds will be made unless the student applies for a refund within the same school year as he/she withdraws from the course or courses. All fees are subject to change.

Withdrawal refunds for students receiving federal funds is based on how much

Title IV aid a student has received and not earned at the time of withdrawal. The amount of aid earned is calculated on a pro rata basis through 60 percent of the term. Contact our Financial Aid Office *before* withdrawing.

Admission to Graduate Studies

Admission to Graduate Studies permits the student to enroll in graduate courses, but does not guarantee admission to a program leading to the master's or doctoral degree. All students must consult with their major departmental adviser concerning specific departmental admission requirements. Departments have the right, and many exercise that right, to have program admission requirements that are higher than those set by Graduate Studies. In no case, however, can a department set criteria lower than the Graduate Council minimum.

General Requirements for Admission to Graduate Studies

An applicant for admission to Graduate Studies who is seeking a graduate degree must hold a bachelor's degree from a regionally accredited institution. The Bachelor's degree must be substantially equivalent in content to degrees granted by Texas A&M University-Commerce. Each applicant will submit to the Office of Graduate Studies and Research the following:

- an application for admission to Graduate Studies, available online: www.tamu-commerce.edu/gradschool/
- 2. a \$35.00 non-refundable application fee,
- 3. an official bachelor's degree transcript from an approved institution and a transcript from any school at which the student has completed graduate courses (these transcripts should be sent directly to the Office of Graduate Studies and Research by the issuing institutions). Students applying to the BPA/MBA five-year program should contact their major adviser. A bachelor's degree transcript is not required for admission for students applying to the BPA/MBA (accounting) program. The BPA/MBA program is only available to Texas A&M University-Commerce students.
- 4. an official copy of the aptitude portion of the Graduate Record Examination (GRE) must be submitted to the Office of Graduate Studies and Research through the Educational Testing Service. Students applying for admission to a master's in art or a master's in music are not required to submit GRE/GMAT scores. Applicants to a master's degree in business administration, early childhood, e-commerce, economics, elementary education, finance, industrial technology, management, marketing, reading and social work should contact the specific department for optional criteria in regard to the GRE/GMAT exam. Students pursuing a master's degree in computer science may submit either the GRE or GMAT exam. Applicants for nondegree status or holders of a master's degree from a regionally accredited institution who are seeking a second master's degree may be exempt from this requirement, pending departmental requirements.

Admission is invalid if granted on the basis of incorrect information or on the omission of facts which, if known, would have caused the applicant to be ineligible. Students on academic suspension from another institution will not be admitted to A&M-Commerce until their specific period of suspension expires.

Admission for Students Receiving Their Bachelor's Degree from an Unaccredited Institution

Students desiring admission to Graduate Studies at Texas A&M University-Commerce who have received their bachelor's degree from an institution not recognized

and accredited by one of the regional accrediting agencies must be approved for admission by the Dean of Graduate Studies and Research. Materials must be submitted to the Office of Graduate Studies and Research thirty days in advance of the initial enrollment. In addition to the General Requirements for Admission (covered in the previous section), student must submit a catalog from their bachelor's degree-granting institution.

Factors considered by the Dean in making the determination include, but are not limited to, GRE/GMAT scores, undergraduate grade point average, nature of undergraduate program, and educational qualifications of the undergraduate institution's faculty.

International Students

An international student is any degree-seeking student holding a non-immigrant visa. International students who desire to enter the university must submit all admission documents to the Office of Graduate Studies and Research a minimum of ninety days prior to the semester in which they wish to enroll. Each applicant must submit in one package:

- 1. an application for admission to Graduate Studies, available online: at www. tamucommerce.edu/gradschool,
- 2. a \$50.00 USD non-refundable application fee,
- 3. official transcripts and official copies of diplomas, translated into English, from each college or university attended. The bachelor's degree earned at a foreign institution must be equivalent to a U.S. institution's degree.
- 4. a sponsor's statement with a current bank statement showing a balance of at least \$15,500 in U.S. currency.
- 5. if English is not the native language, an official transcript of the Test of English as a Foreign Language (TOEFL) with a score of at least 500, or a computerized test score of at least 173. The TOEFL score must not be older than 2 years.
- 6. an official Graduate Record Examination (GRE) score or a Graduate Management Admission Test (GMAT) score sent by Educational Testing Service to A&M-Commerce. Master's students pursuing a degree in Art or Music are not required to submit a GRE/GMAT score. Applicants to a master's degree in business administration, early childhood, e-commerce, economics, elementary education, finance, industrial technology, management, marketing, reading and social work should contact the specific department for optional criteria in regard to the GRE/GMAT exam. Students pursuing a master's degree in computer science may submit either the GRE or GMAT exam.

Grade point average (GPA) requirements are the same as those for the appropriate degree program as set forth in the Admission to Graduate Studies Policy. Each applicant is subject to departmental approval. Individual departments may establish additional requirements for admission. International students must be admitted to a degree program in order to enroll in graduate courses unless visa classification indicates otherwise.

All international students are required to attend orientation. New international students must bring their immigration documents with them to orientation.

All international students must purchase hospitalization insurance and repatriation insurance. No student will be permitted to register before he/she has purchased the university-approved policy or has shown proof of equal and continuing coverage provided through another carrier. Contact the International Student Office, 903-886-5097 or e-mail: Noi_Prapan@tamu-commerce.edu for further information. Failure to comply with this regulation will result in withdrawal from the University.

International students who hold an F-1 visa are not eligible for non-degree student status or provisional admission status.

Submitting an Application

Documents must be submitted to the Office of Graduate Studies and Research at least thirty days before registration for master's level and doctoral level enrollment and ninety days before international student enrollment. We will continue to process applications beyond these deadlines within a reasonable length of time prior to registration. However, in order to ensure consideration of your application, please submit your application and official bachelor's transcript as early as possible. Applications submitted after the deadline may not receive full consideration in time by the Office of Graduate Studies and Research and the academic department to consider them and to allocate available resources such as scholarships and financial aid.

Applications should be mailed to: Office of Graduate Studies and Research, P. O. Box 3011, Commerce, TX 75429-3011. Alternatively, you may email your application to: graduate_school@tamu-commerce.edu

Non-Degree Admission Status

Students who hold a bachelor's degree from a regionally accredited institution, but who are not seeking a graduate degree may enroll in graduate courses for certification, career enhancement, or personal development. International students are ineligible to enroll under non-degree student status. Financial Aid is not available for students in a non-degree status.

Applicants for non-degree status must submit the following to the Office of Graduate Studies and Research:

- 1. an application for admission to nondegree status,
- 2. a \$35.00 non-refundable application fee,
- an official bachelor's degree transcript sent directly to the Graduate School by the issuing institution

Non-degree students will not be subject to grade point average or Graduate Record Examination (GRE) requirements, nor will they fall under the academic suspension policies applicable to degree-seeking students.

Certification Status

Students holding a bachelor's degree from a regionally accredited institution and who are not seeking a degree but are working toward a state or professionally mandated certification may enroll in graduate courses. Such students will not be subject to Graduate School grade point average or Graduate Record Examination requirements, nor will they fall under the academic suspension policies applicable to degree-seeking students.

Applicants must submit the following to the Office of Graduate Studies and Research:

- 1. an application for admission to Graduate Studies for certification,
- 2. a \$35.00 non-refundable application fee, and
- an official bachelor's degree transcript which must be sent directly to the Graduate School by the issuing institution.

Such students will not be subject to grade point average or GRE/GMAT requirements, nor will they fall under the academic suspension policies applicable to degree-seeking students.

Changing from Non-Degree or Certification Status to a Degree Program

A student wishing to change status from non-degree student status to a degree program must file a new application for admission to the Office of Graduate Studies and Research, and satisfy all admission requirements for the specific degree program.

No more than 12 graduate credit hours taken in non-degree status may be applied toward a master's or a doctoral degree. Individual departments will make the final determination on how many semester credit hours (up to 18) a student may transfer from certification status to a master's degree program. All students should consult with the degree granting program concerning specific departmental transfer criteria.

Master's Degree Programs

Master of Arts Master of Music Master of Business Administration Master of Science

Master of Education Master of Science in Finance Master of Fine Arts Master of Social Work

Admission to Master's Degree Programs

Students desiring acceptance into a master's program first must meet the general requirements for admission to Graduate Studies. For master's degree students, there are three types of admission status: full, probationary and provisional. Financial aid is available for full admission status only.

Full Admission Status

The applicant must satisfy the following requirements for full admission:

- 1. hold a bachelor's degree from a regionally accredited institution or equivalent training from a foreign insitution. The bachelor's degree must be substantially equivalent in content to degrees granted by Texas A&M-Commerce. Texas A&M-Commerce students in the BPA/MBA five-year (accountancy) program are not required to have earned a bachelor's degree prior to admission into the program.
- 2. have an overall undergraduate grade point average of 2.75 on a 4.00 scale, or a 3.00 on the last 60 undergraduate hours, and
- 3. meet all departmental requirements such as GRE, letter of recommendation, interviews, portfolios, etc. Applicants who hold a master's degree from a regionally accredited institution in the United States and are seeking a second master's degree may be exempt from the GRE/GMAT requirement.

Probationary Admission Status

Applicants not qualifying for full admission may be granted probationary admission status. Probationary status must be removed by the completion of twelve hours at the graduate level with a minimum grade point average of 3.00. Failure to remove "probationary" admission status after completing twelve graduate hours will result in suspension of the student from further graduate study in any degree program for three years.

Provisional Admission Status

Most programs will allow a student to enroll for one semester (initial semester of enrollment in graduate studies) with one of the following deficiencies:

1. an official bachelor's transcript from a regionally accredited institution is not on file.

- 2. an official GRE or GMAT score is not on file at Texas A&M University-Commerce.
- 3. one or more departmental requirements have not been met.

Students admitted provisionally must be sure their missing documents are received by the Office of Graduate Studies and Research before the end of the first semester of enrollment. Submitting necessary GRE/ GMAT scores or departmental requirements on time is the student's responsibility. Students whose files are not complete during the semester of provisional enrollment will not be permitted to re-enroll or early register until the necessary documentation is received and approved.

Suspension from Other Universities

Students on academic suspension from another institution will not be admitted to Texas A&M-Commerce until their specific period of suspension expires. All courses completed while the student is on probation and those completed upon enrollment following suspension must be appropriate to the degree sought.

Academic Probation and Suspension from Master's Degree Programs

- 1. Students with **full admission status** who fail to achieve and maintain an overall graduate GPA of 3.00 after the completion of twelve semester hours of graduate enrollment will be placed on academic probation. A student who fails to achieve a 3.00 overall graduate GPA by the end of the next semester of enrollment will be placed on academic suspension for a period of two semesters. (Two summer terms count as one semester.) After the academic suspension is served, the student may be allowed to reenroll only upon the recommendation of the major department head and with the approval of the graduate dean. Failure to achieve an overall 3.00 graduate GPA during any subsequent semester of enrollment will result in suspension and the student will not be allowed to pursue further graduate study in a degree program for three years.
- 2. As noted above, students with **probationary admission status** who fail to achieve a 3.00 graduate GPA after the completion of twelve semester hours will be suspended and will not be allowed to pursue further graduate study in a degree program for three years.
- 3. A student receiving a grade of "C" or lower in four graduate courses will be suspended and will not be allowed to pursue further graduate study at Texas A&M-Commerce for three years. This provision applies to all courses taken, with the exception of duplicated courses (courses with the same prefix, number, and title), in which case only the most recent grade will be used. This provision also applies to all drop/ fail courses, and all incomplete courses where an "X" has changed to an "F".
- 4. A student who fails to meet the professional expectation of the field for which they are preparing may be suspended from further study in that program by the department administering that program.
- Courses taken from other institutions will not be transferable if taken during a period of suspension from Texas A&M University-Commerce.

Requirements for the Master's Degree

Prerequisite Coursework. Admission to Graduate Studies does not imply that the
applicant has the necessary background to earn a degree in a specific department.

To major or minor in a department, the candidate must have or must obtain adequate preparation to assure successful graduate work. Background courses cannot be applied toward the graduate major.

- 2. Course Requirements. All master's degrees required completion of at least 30 hours.
 - a. **Major.** A minimum of eighteen hours is necessary to complete a major. The student should check the major department section of this catalog for specific course requirements. Students desiring to change majors, must be in good standing with the Office of Graduate Studies and Research, and must complete a Change of Major/Degree form.
 - b. **Minor.** A student must complete an approved sequence of twelve hours (four courses) before a minor designation can be posted to a transcript. Completion of a minor is not, however, a mandatory requirement. Students receiving a minor must satisfy candidacy and comprehensive examination requirements of the minor department.
- 3. **Grade Point Average.** A GPA of 3.00 or better on all graduate work completed at Texas A&M-Commerce; on all graduate courses taken toward the degree; and on all major courses in the student's major field, as well as an overall GPA of 3.00 or better on all graduate courses completed, is required for graduation. If a course is retaken, the last grade will be counted in the computation of the overall GPA. No grade of "D" or below will count toward a graduate degree. A course in which an "F" is received is considered a course completed. A "DF" is calculated the same as an "F" and counts as a grade below "B". A student receiving a grade of "C" or lower in four graduate courses will be suspended and will not be allowed to pursue further graduate study at this institution for three years. This provision applies to all courses taken, except duplicated courses. Note: Only grades earned at A&M-Commerce are calculated into the student's GPA.
- 4. A graduate student who has not been enrolled for a period of at least six years may petition the Dean of Graduate Studies and Research to have previous graduate grades from courses at Texas A&M-Commerce eliminated from the calculation of the official grade point average provided the courses were taken over ten years previously. No courses eliminated from the student's grade point average calculation can be used toward a graduate degree.
- 5. **Residency.** A minimum of two-thirds of the course work applied to a master's degree must be taken from Texas A&M-Commerce. Students should check with the department for any departmental residency requirements.
- 6. **Time Limitation.** All work for the master's degree must be completed during the six years immediately preceding the date on which the degree is to be awarded. Credit earned over six years prior to graduation requires specific written departmental justification and approval by the Dean of Graduate Studies and Research to be counted toward a master's degree. The discipline in which the course(s) was taken shall be involved in the validation of an old course. In no case may courses more than 10 years old be applied toward the master's degree. These same limitations apply to all transfer courses.
- 7. Catalog Privileges. A student is entitled to use the degree provisions of any catalog in effect between the semester the student is admitted to the master's degree program and the semester the student's degree is conferred, provided the catalog used is not more than six years old at the time the degree is conferred.
- 8. Admission to Candidacy for Master's Degree. In those programs requiring candidacy, the student must apply and be admitted to candidacy at least one semester prior to graduation. Not all programs require candidacy. Degree programs requiring candidacy are: Art, Biological Sciences, Chemistry, Computer Science, Coun-

seling, History, Music, Physics, Psychology, Sociology, and Social Work. Admission to candidacy requires:

- a. full admission into the master's program and satisfactory completion of all background courses and other departmental requirements,
- b. completion of at least four and not more than six Texas A&M University-Commerce graduate courses. Three of the courses must be in the major field, and
- c. a grade point average of 3.00 or higher on all graduate work at Texas A&M-Commerce and on all graduate courses in the major.

When the above requirements have been met, the student should petition the major (and minor, if applicable) department for admission to candidacy. The major and/or minor department may require a written and/or oral qualifying examination before granting approval. It is the student's responsibility to see that the candidacy forms are submitted to the Office of Graduate Studies and Research prior to the semester in which the student expects to graduate.

- 9. Thesis Proposal. All students writing a thesis must submit a thesis proposal to the Office of Graduate Studies and Research at least one semester prior to graduation. Completed in consultation with the student's major advisor, this proposal must be approved by all members of the thesis committee and the Dean of Graduate Studies and Research. Proposal forms and instructions for preparation of the thesis are available from the Office of Graduate Studies and Research.
 - Any research that involves human subjects must be in compliance with University Rule 15.99.01.R0.01 Human Subjects Protection. The student must obtain written approval from his/her department and the University Institutional Review Board prior to contacting any research subjects. Failure to gain appropriate approval before interacting with research subjects could result in denial of the student's thesis proposal and also could result in legal ramifications for the student. The Human Subjects Research form must be approved before the thesis proposal can be approved.
- 10. Thesis (518) and Research Literature and Techniques (595) Credit. All degree programs require the satisfactory completion of either the 518 or the 595 course. A student who is writing a thesis is required to register for 518 to receive guidance from a member of the faculty or while utilizing university facilities. Credit for no more than six hours of 518 or three hours of 595 will be given upon satisfactory completion of the requirement. Unless approved by the department head or program coordinator, 518 or 595 must be taken in the students major department. A reduced fee for 518 may be approved by the Registrar's Office after all other course work for the degree is completed. Students writing a thesis must be enrolled in 518 during the semester the thesis is approved by the Office of Graduate Studies and Research. A student's completion of the 595 course must result in a product available for reference in the department for a minimum of three years.
- 11. Final Comprehensive Examinations. The candidate must pass a comprehensive examination administered by the advisory committee and covering all the work within the master's degree program, including an acceptable defense of the thesis, if applicable.

The student must be fully admitted to a master's degree program and be in good academic standing with the Office of Graduate Studies and Research to be eligible to take the final examination. The Final Comprehensive Examination Report must be submitted to the Office of Graduate Studies and Research prior to graduation according to the deadline found in the current Graduate Catalog or Class Schedule. A candidate who fails this examination must complete whatever further courses or additional study are stipulated by the advisory committee or by the major de-

partment to correct the weaknesses or deficiencies revealed by the examination. The candidate who fails the examination may retake it no sooner than mid-term of the following semester. Should the candidate fail the examination upon the second attempt, a third and final attempt may be taken only with the recommendation of the advisory committee and approval of the Dean of Graduate Studies and Research.

12. Submission of Thesis.

- a. Initial submission. One copy of the thesis in its final form must be submitted to the Office of Graduate Studies and Research by the deadline indicated in the Class Schedule or the Graduate Catalog for that particular semester (this deadline is approximately five weeks prior to commencement). Accompanying this copy will be the following:
 - (1) the Final Comprehensive Examination Report,
 - (2) receipt showing payment of the master's fees (binding and mailing the thesis), plus fees for copyright, if applicable. (Payment is to be made to the Business Office, cashier's window, Administration Building.)
 - (3) four signature pages on 100 percent white cotton bond, at least 20 lb. paper, with each page signed by the committee members,
 - (4) the Office of Graduate Studies and Research forms: Agreement Form (copyright); Information Data Sheet; one extra copy of the abstract and title page.
- b. Final submission. The candidate will be contacted as to any changes that need to be made in the manuscript. After making these changes, the candidate must take the four final copies of the thesis printed on 100 percent white cotton bond, at least 20 lb. paper to the Office of Graduate Studies and Research. The Office of Graduate Studies and Research distributes the copies to the student's major department, major advisor, the library, and the student. An additional copy on regular paper will be required for students who are submitting a thesis for copyright.
- c. Final approval of the thesis rests with the Dean of Graduate Studies and Research.
- 13. Filing for Graduation and Commencement. Commencement exercises are held three times each academic year in May, August, and December. Students must file for graduation with the Registrar's Office during the semester they plan to graduate. Students will be approved for graduation and the degree after they have completed all degree requirements satisfactorily and been approved by the Graduate Committee of the department and the Graduate School. Graduation applications are accepted beginning with the first class day of each semester. Please check the University Academic Calendar for deadline dates for filing. Graduation information and a graduation application form are available online at www.tamucommerce.edu/registrar/graduation.asp. A student must be in good academic standing in order to complete graduation requirements. Participation in the commencement ceremony does not guarantee conferring of any degree. Texas A&M University-Commerce has the right to rescind any conferred degree if the University becomes aware that the student did not meet degree requirements before the degree was conferred.

Second Master's Degree

Subject to the approval of the Graduate Dean, the department head, and the dean of the college, students holding master's degrees from a regionally accredited graduate institution in the United States may apply certain courses that were a part of a previously earned graduate degree toward a second master's degree, provided such courses

are not more than six years old at the time the second master's degree is conferred. The number of courses so permitted will be:

- 1. For 30-semester-hour programs, no more than nine approved hours;
- 2. For 36-semester-hour programs, no more than twelve approved hours;
- 3. For the 62-semester-hour M.F.A., no more than 20 approved hours, but not including Thesis or Research Literature and Techniques (or their equivalency). All remaining courses applied to satisfy the requirements for the second master's degree must be Texas A&M University-Commerce courses.

The second master's degree will be subject to the general regulations governing master's degrees except as stated above.

Earning Graduate Credit

Graduate Courses

Graduate courses that are applied toward a master's degree are numbered 500 and above. Course requirements for specific degree programs can be found in the academic department section of this catalog.

Undergraduate Courses Taken for Graduate Credit

Under some circumstances a student may take a 300- or 400-level course for graduate credit. In such cases a student will be expected to complete additional work beyond the normal course requirements at a level commensurate with graduate instruction. In order to obtain graduate credit for a 300- or 400-level course the student must, prior to enrollment, obtain an approval form from the Office of Graduate Studies and Research, have the form signed by the major or minor advisor, the head of the major department, the head of the department in which the course is offered, the course instructor and the Dean of the college, and submit the form to the Office of Graduate Studies and Research for final approval by the Dean of Graduate Studies and Research. Up to two such courses may be applied toward a master's degree.

Transfer of Credit

Up to one-third of the credit required for a master's degree may be accepted as transfer credit from another regionally accredited institution in the United States. For example, a maximum of 12 semester hours can be transferred for a 36-hour program; for a 30-hour program, a maximum of nine hours can be transferred. Transfer courses applied toward a master's degree must be in a graduate academic area taught at Texas A&M University-Commerce. Transfer credit will be granted for only those courses in which the student received a grade of "B" or better. However, only grades earned at Texas A&M-Commerce will be calculated into the student's grade point average. Time limitations on transfer courses are the same as for Texas A&M-Commerce courses (see General Requirements).

Students desiring to use transfer courses toward their degree requirements must be fully admitted to a degree program. They must also submit a Graduate Transfer/Substitution Course Request form and an official transcript sent directly from the institution to Texas A&M-Commerce. These courses will be evaluated by the Coordinator of Articulation Services and posted to the Texas A&M-Commerce transcript. Approval from both the major department head and the Dean of Graduate Studies is required before these courses can be applied toward master's degree.

Students concurrently enrolled or enrolled at another institution during the final semester in a program should anticipate a one-semester delay in graduation. Only grades earned at A&M-Commerce will be calculated into the student's grade point average.

Extension Credit

Extension credit toward a master's degree may not exceed 12 semester hours or 1/3 of the credit required for a master's degree. The combination of transferred credit and credit earned by extension will not exceed 12 semester hours or 1/3 of the credit required for the master's degree.

Correspondence Courses

Credit earned by correspondence will not apply toward a master's or doctoral degree.

Graduate Experiential Credit

The University does not generally award graduate academic credit for experiential learning. The University may consider the awarding of graduate credit for experiential learning in order to meet emerging state educational priorities and mandates. Awarding of this credit will be based solely on experiential learning that is part of a formal agreement between the University and another regionally accredited educational institution or certifying agency licensed by the State of Texas to provide professional certifications, which have historically been limited to universities. The formal agreement shall require the approval of the departmental faculty, the academic dean, the graduate dean, and the provost, and will comply with the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501).

Seniors in Graduate Courses

A last semester Texas A&M-Commerce senior who lacks 12 hours, or fewer, to graduate and has a grade point average of 2.75 or higher may enroll for 3 to 6 hours of graduate credit, subject to prior written recommendation from the major undergraduate department head and approval by the Dean of Graduate Studies and Research. Seniors desiring to take Business Administration courses for graduate credit must have permission from the Director of Graduate Programs in Business. Graduate hours taken cannot apply toward an undergraduate degree. The maximum load for seniors who register for graduate credit is 12 credit hours per semester or six hours per summer term. Students in the five-year MBA (accountancy) program may be exempt from the requirements for seniors taking graduate courses with the approval of the department head and the Dean of Graduate Studies and Research.

Independent Studies Courses

The maximum number of individually arranged courses ("89") permissable toward a master's degree program is 25% of the required coursework.

Enrollment Limitation or Administrative Withdrawal

Enrollment in any graduate course is subject to approval by the department offering the course, the instructor teaching the course, and the Dean of Graduate Studies and Research, whether or not such is specifically stated in the course description. A student may be prevented from enrolling in the course or dropped from the course if it is already in progress if the Graduate Dean, department head, or a faculty member considers the student physically or mentally incapable of performing satisfactorily or safely in a course, or if the student becomes a threat to the instructor or others in the course or is disruptive in any way. In such cases, the Graduate Dean will confer with the faculty member and department head involved and then take appropriate action. Any tuition refund to which the student is entitled will be determined according to the

University schedule for refunds and will be based on the date on which the student was dropped from the course.

Requirements for Specific Master's Degrees

In addition to the Requirements for Master's Degrees covered above, shown below are some requirements for specific master's degrees.

A. Requirements for the Master of Arts Degree

- 1. Requirements. The candidate must fulfill all requirements for a graduate degree.
- 2. *Minimum Graduate Courses*. A minimum of 30 graduate semester hours is required for the M.A. Degree.
- 3. *Major*. From 18-30 graduate semester hours within the major department are required to constitute a major field of concentration for the Master of Arts degree. Up to six hours of master's thesis can be applied to a degree.
- 4. *Electives*. From six to twelve graduate hours may be taken outside the major and twelve hours in one subject may be designated as a minor.
- 5. Foreign Language Requirement. The candidate for the Master of Arts degree must meet the language requirement for the Bachelor of Arts degree at this institution. That requirement is as follows:
 - a. completion of at least 12 semester hours (four courses) in one foreign language, or
 - completion of six semester hours (above elementary courses) if two years of high school credit in the language have been submitted as part of the regular university admission requirements, or
 - c. completion of three semester hours if the student presents three or four years of high school credit.
- Research Courses. Students may choose either a 518 or 595 depending on departmental requirements.
- Final Comprehensive Examination. Candidate must successfully complete the comprehensive exam.

B. Requirements for the Master of Business Administration Degree

- 1. Requirements. The candidate must fulfill all requirements for a graduate degree.
- 2. Background. The candidate must have earned a bachelor's degree from a regionally accredited institution. His/her academic background in completed undergraduate and/or graduate level courses should include work in the fundamental principles of each of the following areas: accounting, legal environment, economics, finance, management and organizational behavior, production and operations management, information systems, marketing, and statistics (see the program description in the College of Business and Technology section of this catalog). Candidates will be required to complete the necessary prerequisites before taking advanced graduate courses in any of the above areas. Students in the BPA/MBA five-year (accountancy) program are not required to have earned a bachelor's degree prior to admission into the program.
- 3. Program Requirements. Beyond the background courses, the non-thesis degree program consists of a six-course managerial component, a two-course information analysis component, and BA 595 Applied Business Research. Elective courses complete the program. For complete details, see the College of Business and Technology section of this catalog. Students seeking a thesis option should contact the

- Office of Graduate Programs in Business for specific details at 903-886-5190 or MBA@tamu-commerce.edu.
- 4. Final Comprehensive Examination. Candidate must successfully complete the comprehensive exam.

C. Requirements for the Master of Education Degree

- 1. Requirements. The candidate must fulfill all requirements for a graduate degree.
- 2. Background. Candidates should have a teaching certificate and 18 semester hours of education.
- 3. Program Requirements. Specific course requirements are set forth in this catalog under the department granting the degree. All programs require a minimum of 36 semester hours which consist of the following:
 - a. Major. A major of 18-24 hours including one departmental course numbered 595, Master's Degree Research Component. A minimum of 24 hours in three fields arranged in a 12-6-6 pattern is required for a broad-field major.
 - b. *Electives*. In addition to the 18-24 hours required within the major field, 12-18 hours in approved fields must also be satisfactorily completed. If the student wishes, an approved sequence of 12 hours within a second subject area fulfilling the elective requirements may be designated as a minor. A minimum of 12 hours in education is required for those who do not major in education.
- 4. Final Comprehensive Examination. Candidate must successfully complete the comprehensive exam.

D. Requirements for the Master of Fine Arts Degree

- 1. Requirements. The candidate must fulfill all requirements for a graduate degree.
- 2. Background. The candidate may enter this program only with faculty approval no earlier than the second regular, full-time semester of study. Until such admission is applied for and approved, the student is temporarily enrolled in an M.A. or M.S. program of study. Applicants must have a bachelor's degree, or its equivalent, with an art major or comparable experience, 9 semester hours of art history and minimum grade average of "B" in all undergraduate studio art courses.
- 3. Program Requirements. Specific requirements are set forth in the catalog under the Department of Art. The M.F.A. degree requires at least 62 hours in the following areas:
 - a. Studio Art (32 sh)
 - b. Art History, Theory, and Seminars (12 sh)
 - c. New Learning Context (12 sh)
 - d. Thesis/Creative Exhibit (6 sh)

E. Requirements for the Master of Music Degree

- 1. Requirements. The candidate must fulfill all requirements for a graduate degree.
- 2. Background. The candidate must have completed a bachelor's degree with a major (or equivalent thereof) in the area of specialization. An audition and/or interview with music faculty and satisfactory completion of the Graduate Diagnostic Music Examination are required.
- 3. Program Requirements. The Master of Music degree is offered in performance and in music education. All Master of Music degrees require a minimum of 30 semester hours, with approximately one third of the coursework taken in the major area, and the remaining hours selected from music literature, music theory, composition, conducting, pedagogy, music education, and performance. The major in music

education provides specialized course structures designed for band and choral directors; and also features a non-thesis 36-hour option including 595 Research Literature and Techniques. More specific details of each option are outlined in the music portion of this catalog.

4. Final Comprehensive Examination. Candidate must successfully complete the comprehensive exam.

F. Requirements for the Master of Science Degree

- 1. Requirements. The candidate must fulfill all requirements for a graduate degree.
- 2. Options. The candidate will complete an approved program under one of the following options:

Option I: Complete a 30 semester hour program which includes six hours of thesis. From six to twelve hours may be taken outside the major and four courses in one subject may be designated as a minor.

Option II: Complete a 36 semester hour academic program which consists of the following:

- a. Major. A major of 18 hours including 3 hours in the major department numbered 595, Master's Degree Research Component. A minimum of 24 hours in three fields arranged in a 12-6-6 pattern is required for a broad-field major.
- b. *Electives*. In addition to the major described above, up to 18 hours in additional fields may be chosen with departmental approval. An approved sequence of at least 12 hours within a second subject area may, if the student wishes, be designated on the graduate record as a minor.
- 3. Final Comprehensive Examination. Candidate must successfully complete the comprehensive exam.

G. Requirements for the Master of Social Work Degree

- 1. Requirements. The candidate must fulfill all requirements for the Master of Social Work.
- 2. Program Requirements. Thirty-five hours are required for students who completed a BSW Degree within the past seven years. Eight foundation courses plus four hours of field practicum and two electives are required for students who lack the Bachelor of Social Work Degree. Some foundation courses may be waived if prior proficiency can be demonstrated. One departmental course numbered 595 Research Literature and Techniques is required.
- 3. Final Comprehensive Examination. Candidate must successfully complete the comprehensive exam.

Interdisciplinary Studies

A Master of Arts or Master of Science degree with a major in Interdisciplinary Studies is offered through the Federation of North Texas Area Universities in cooperation with the University of North Texas. This program is designed for students with a particular intellectual interest not met by any specific degree program available through the traditional disciplines. Requirements are the same as for general admission to Graduate Studies, including satisfactory scores on the Graduate Record Examination. The Interdisciplinary Studies program involves work in three or more disciplines with a primary area of no fewer than 12 hours, including 595 and a minimum of 6 hours in each allied area. Interdisciplinary programs are developed with an adviser in the primary area and must be approved by the Dean of Graduate Studies and Research. Program approval should be received prior to the completion of 12 hours. The course requirements for the MA and MS Option I degree are a minimum of 30 semester hours, six of which must include the thesis. Course requirements for the MS Option II degree are a minimum of 36 semester hours, three which must include the course 595 for the MS Option II.

As with other master's degrees, a final comprehensive examination is required. The program is coordinated by the Dean of Graduate Studies and Research, who will assign an appropriate adviser to plan the program. The adviser is responsible for overseeing the student's program and is responsible for setting up and administering the comprehensive examination.

Doctoral Degree Programs

Texas A&M-Commerce offers the following Doctor of Education (Ed.D.) and the Doctor of Philosophy (Ph.D.) degree programs:

Ed.D. in Educational Administration

Ed.D. in Supervision, Curriculum and Instruction—Elementary Education

Ed.D. in Supervision, Curriculum and Instruction—Higher Education

Ph.D. in Counseling

Ph.D. in Educational Psychology

Ph.D. in English

Admission to Doctoral Degree Programs

Students desiring acceptance into a doctoral program must meet the general requirements for admission to Graduate Studies (page 38); have an overall undergraduate grade point average of 2.75 on a 4.00 scale, or a 3.00 on the last 60 undergraduate hours, or a 3.40 for a master's degree and work beyond the master's level; and must meet all departmental requirements, such as GRE, letter of recommendation, interviews, portfolio, etc.

The student will be provided with a statement of goals form to be completed and returned and reference forms for distribution to at least four persons, two of whom should hold doctoral degrees. The student will be responsible for seeing that completed reference forms are submitted to the Office of Graduate Studies and Research.

Individual departments may establish additional requirements for admission to a specific degree program. Applicants will be required to fulfill any additional requirements established by the major department.

Applications of students who have met the requirements listed above will be forwarded to the major department. The department will review each application and make a recommendation regarding admission status to the Dean of Graduate Studies and Research who will send written notice of the admission decision to the applicant.

A student is either granted or denied full admission; there is no provisional or probationary admission status.

A doctoral student who has not enrolled for five calendar years must apply for readmission under current admission standards for doctoral programs.

Some departments have specific dates for the departmental review of applications. Please contact your department for specific deadline dates.

Requirements for the Doctoral Degree

1. **Degree Plan.** Upon acceptance into a doctoral program, the student will be notified by the Office of Graduate Studies and Research, who his/her major adviser will be for the doctoral program. The student should contact his/her major adviser to discuss the doctoral degree plan. The degree plan will then be completed with the major and minor advisors (if a minor is selected) and forwarded to the Office of Graduate Studies and Research for approval no later than the first semester of enrollment as a doctoral student. An official copy of the degree plan will then be sent to the student.

- 2. Course Requirements. A minimum of 90 semester hours beyond the baccalaureate degree or 60 semester hours beyond the master's degree is required for the doctoral degree. At least 45 hours of graduate course credit must be earned from Texas A&M-Commerce. All courses applied toward a doctoral degree must be 500-level or higher. No more than twelve graduate credit hours (including hours completed in nondegree status) beyond the master's degree taken prior to admission to a doctoral program can be applied toward a doctoral degree.
 - a. Major. A major requires at least 36 semester hours excluding dissertation hours (718); however, a specific program may require additional semester hours for a major. (Specific program requirements are listed under each departmental section of this catalog.)
 - b. Minor. Students selecting the 60 hours beyond the master's degree option are not required to have a minor. A minor consisting of a minimum of 30 semester hours is required in all 90-hour programs except counseling, psychology and English programs. The minor requirement can be fulfilled by one of the following options:
 - (1) A comprehensive minor with all course work in one academic area. A committee member will be assigned from the academic area and will determine the courses to be taken and be involved in evaluating the written and oral qualifying examinations, the dissertation, and the dissertation defense.
 - (2) A split minor is two academic areas with at least twelve hours in each area (a 12-18 or 15-15 format). Committee members will be assigned from both academic areas, and they will determine the courses to be taken and to be involved in the written and oral qualifying examinations, the dissertation, and the dissertation defense.
 - (3) An interdisciplinary studies minor in three academic areas (a 12-9-9 format). In rare cases, an interdisciplinary studies minor consisting of at least nine hours in each of three academic areas may be approved. Committee members will be assigned from each of the academic areas, and will be involved in the written and oral qualifying examination, the dissertation proposal, and the dissertation defense.

Regardless of the option chosen the following conditions will apply: assignment of minor advisors rests with the head of the minor department or departments; all courses applied to the minor areas must be approved by the head of the appropriate minor department; at least one committee member must be from outside the student's major department; transfer courses applied toward a minor must be in academic areas taught at Texas A&M University-Commerce.

- c. Other Requirements:
 - (1) Credit for no fewer than nine semester hours and not more than twelve semester hours of dissertation (718).
 - (2) Electives and other course requirements as indicated under each departmental section of this catalog.
 - (3) Research Tools (see No. 9).

Specific program requirements are listed under each departmental section of this catalog.

3. **Grade Point Average.** A grade point average of 3.00 or better on all graduate work completed at A&M-Commerce and in the student's major, as well as an overall grade point average of 3.00 or better on all graduate courses completed, is required for graduation. If a course is retaken, the last grade will be counted toward graduation and computation of the overall grade point average. No grade of "C" or be-

low will count toward a doctoral degree. A course in which an "F" is received is considered a course completed. Only grades earned at A&M-Commerce will be calculated with student's grade point average.

- 4. Enrollment Limitation or Administrative Withdrawal. Enrollment in any graduate course is subject to approval by the department offering the course, the instructor teaching the course, and the Dean of Graduate Studies and Research, whether or not such is specifically stated in the course description. A student may be prevented from enrolling in the course or dropped from the course if it is already in progress if the Graduate Dean, department head, or a faculty member considers the student physically or mentally incapable of performing satisfactorily or safely in a course, or if the student becomes a threat to the instructor or others in the course or is disruptive in any way. In such cases, the Graduate Dean will confer with the faculty member and department head involved and then take appropriate action. Any tuition refund to which the student is entitled will be determined according to the University schedule for refunds and will be based on the date on which the student was dropped from the course.
- 5. Academic Probation and Suspension from Doctoral Degree Programs. A student who fails to achieve and maintain an overall 3.00 graduate grade point average during any semester of enrollment will be placed on academic probation. A student who fails to achieve a 3.00 overall graduate grade point average by the end of the next semester of enrollment will be placed on academic suspension for a minimum of two semesters (two summer terms count as one semester). After the academic suspension is served, the student may be allowed to re-enroll only upon the recommendation of the major department and with the approval of the Dean of Graduate Studies and Research. Failure to achieve an overall 3.00 graduate grade point average during any subsequent semester of enrollment will result in dismissal, and the student will not be allowed to pursue further study toward the doctoral degree at A&M-Commerce. No course with a grade of "C" or lower will count toward a doctoral degree. A student receiving a grade of "C" or lower in a third graduate course will be disenrolled and will not be allowed to pursue further doctoral study at A&M-Commerce. This provision applies to all courses taken, including all duplicated courses. Courses taken from other institutions will not be transferable if taken during a period of suspension from Texas A&M University-Commerce. Students on academic suspension from another institution will not be admitted to A&M-Commerce until their specific period of suspension expires. A student who fails to meet the professional expectations of the field for which they are preparing may be suspended from further study in that program by the department administering that program.

A graduate student who has not been enrolled for a period of at least six years may petition the Dean of Graduate Studies and Research to have previous graduate grades eliminated from the calculation of the official grade point average. No courses eliminated from such calculation could be used toward a graduate degree.

- 6. **Residency.** After admission to a doctoral degree program, each student is required to engage in activities that fulfill departmental residency requirements. The departmental residency plan specifies requirements in the following areas:
 - a. involvement in events that broaden intellectual growth,
 - b. use of academic support resources,
 - c. faculty-student interactions that promote scholarship, mentoring, and opportunities for evaluation,
 - d. involvement with cognate disciplines and research scholars in those disciplines,
 - e. engagement in meaningful peer interactions.

Please check with the major department for specific requirements. Successful completion of residency is conferred by approval of the department.

- 7. Time Limitation. All degree requirements beyond the master's must be completed within ten calendar years from the date of admission to the doctoral program. However, course work taken beyond the master's degree and that is over ten years old at the time the doctoral degree is to be conferred cannot be used toward the doctoral degree.
- 8. **Catalog Privileges.** A student is entitled to use the degree provisions of any catalog in effect between the semester the student is admitted to the doctoral degree program and the semester the student's degree is conferred, provided the catalog used is not more than ten years old at the time the degree is conferred.
- 9. Research Tools. Candidates for the doctoral degree must possess proficiency in the use of the research skills necessary to successfully complete the doctoral dissertation. It is desirable for students to demonstrate these proficiencies early in their program, and they must demonstrate such proficiency prior to taking the qualifying examinations. These requirements are to be viewed as minimal requirements. Consequently, a department may require additional research tools courses either for all of their students or as a requirement for an individual student.
 - a. Research tool requirements for the Doctor of Education (EdD) and the Doctor of Philosophy (PhD) in the College of Education can be met by successfully completing one course from each of the following four levels with a grade of "B" or better:

Level I: 695 Doctoral Research Seminar

Level II: Psy 612 Psychological and Educational Statistics; or Soc 576 Data Analysis in Social Research; or Kine 617 Statistical Procedures in Health and Physical Education; or HiEd 617 Statistical Procedures for Education and Research.

Level III: Coun 613 Advanced Statistical Techniques or Psy 681 Intermediate Statistics

Level IV: EdAd 698 Ethnography of Education Organizations; or HiEd 696 Advanced Research Methodology: Interpretive Inquiry; or Psy 610 Non-Parametric Statistics; or Psy 670 Multivariate Analysis; or Coun 690 Practicum in Qualitative Research.

All research tool courses must be taken in sequence (i.e., Level I should be taken before Level II).

These courses are to be approved, in advance of their offering, by the Graduate Council. The second level research tool (Introductory Statistics) may be satisfied by the successful completion of a proficiency examination covering these courses. Contact the Office of Graduate Studies and Research for proficiency examination information.

- b. The research requirement for the Doctor of Philosophy (Ph.D.) in English is twelve semester hours of appropriate college-level classes in one foreign language. Students with native or near-native competence in a relevant foreign language may consult with the departmental Director of Graduate studies regarding this requirement.
- 10. Qualifying Examinations. Upon the completion of approximately two full years of study, doctoral students take written and oral qualifying examinations. The examinations must be taken and passed a minimum of eight months before the degree is conferred. The qualifying examinations are designed to test the student's knowledge in the major and minor fields and are administered under the direction

of an advisory committee consisting of representatives from the major and minor departments. An application for taking qualifying examinations, and a current Texas A&M University-Commerce transcript must be submitted to the major department at least three weeks prior to the examinations.

An applicant who does not pass the qualifying examinations may be suspended from the doctoral program, or upon the recommendation of the advisory committee and with the approval of the Dean of Graduate Studies and Research, may be permitted to repeat the examinations.

- 11. **Admission to Candidacy for Doctoral Degree.** After the qualifying examinations have been satisfactorily completed and all requirements have been verified by the Graduate School, the student will be admitted to candidacy.
 - Notification of admission to candidacy will be made by the Dean of Graduate Studies and Research. After a student has been admitted to candidacy and all course work (except 718 Dissertation) has been completed, the student may qualify for reduced tuition. The degree can be conferred no sooner than eight months after admission to candidacy.
- 12. **Dissertation.** A candidate must present a dissertation which is acceptable to the student's advisory committee and the Dean of Graduate Studies and Research. To be acceptable, the dissertation must give evidence that the candidate has pursued a program of research, the results of which reveal superior academic competence and a significant contribution to knowledge in the field.
 - a. Advisory committee. The student should check with the head of the major department concerning the membership of the dissertation committee. The committee will consist of a minimum of three faculty members from the student's major and minor areas of study (at least one committee member must be from outside the student's major department).
 - b. Proposal. The student should secure from the Office of Graduate Studies and Research the following forms: (1) Dissertation Proposal (including human subject policy information) and (2) Schedule for the Presentation of the Dissertation Proposal. The student will work with the members of the advisory committee in developing the dissertation proposal. That proposal will be presented to the advisory committee and a Graduate Council representative in a session that will be open to all graduate faculty members. The Dean of Graduate Studies and Research must be informed of this session by the 25th of the month prior to the month the session is scheduled. The Dissertation Proposal form must be presented to the Dean of Graduate Studies and Research and approved at least one semester prior to graduation.
 - c. Human Subjects Protection. Any research that involves human subjects must be in compliance with University Rule 15.99.01.R0.01 Human Subjects Protection. The student must obtain written approval from his/her department and the University Institutional Review Board prior to contacting any research subjects. Failure to gain appropriate approval before interacting with research subjects could result in denial of the student's proposal and also could result in legal ramifications for the student. Therefore, students should obtain IRB approval prior to their proposal presenta-
 - d. Dissertation Credit. After admission to candidacy, the student is required to enroll in at least three hours of 718 each fall and spring semester until the dissertation is completed and approved by the advisory committee and the Graduate School. Enrollment during the summer term is not required unless the student is using the counsel of the major adviser and/or University facilities. Students who fail to enroll for dissertation during a fall or spring semester after

- admission to candidacy will be prohibited from enrolling until the tuition has been paid for those semesters.
- e. Scheduling the final examination/dissertation defense. A "Schedule for the Final Examination/Dissertation Defense" form must be filed in the Office of Graduate Studies and Research by the 25th of the month prior to the month the examination is to be held. The Final Examination/Defense Report will then be forwarded to the committee chairperson for recording the results.
- 13. Final Examination/Dissertation Defense. The student will defend the completed dissertation and respond to any questions related to his/her program of study before the advisory committee in a session open to all graduate faculty members. A Graduate Council representative will attend the examination to help assure that general graduate standards related to format and quality are upheld. Students must be in good academic standing with the Office of Graduate Studies and Research to be eligible to take the final examination.
- 14. **Submission of Dissertation.** Registration in the dissertation course (718) is required the semester that the dissertation is submitted.
 - a. Initial submission. One copy of the dissertation in its final form must be submitted to the Office of Graduate Studies and Research by the deadline indicated in the schedule of classes or the Graduate Catalog for that particular semester (this deadline is approximately five weeks prior to commencement). Accompanying this copy will be the following:
 - (1) Final Examination/Dissertation Defense Report,
 - (2) Receipt showing payment of the doctoral fees, plus fees for copyright, binding and mailing the dissertation. (Payment is to be made to the Business Office, cashier's window, Administration Building.),
 - (3) four signature pages on 100 percent cotton bond, at least 20 lb. paper, with each page signed by the committee members and dean of the college,
 - (4) Survey of Earned Doctorates; Agreement Form (copyright); one extra copy of the abstract and title page.
 - (5) the Office of Graduate Studies and Research forms.
 - b. Final Submission. The candidate will be contacted with any changes to the manuscript. After making these changes, the student will have final copies made on 100 percent white cotton bond, at least 20 lb. paper.
 - The Office of Graduate Studies and Research requires five final copies (four copies on the 100 percent white cotton bond, at least 20 lb. paper, and one copy on regular paper) of the dissertation. Four copies will be bound and distributed to the student's major department, major adviser, the library and the student.
 - c. Final approval of the dissertation rests with the Dean of Graduate Studies and Research
- 15. Filing for Graduation and Commencement. Commencement exercises are held three times each academic year in May, August, and December. Students must file for graduation with the Registrar's Office during the semester they plan to graduate. Students will be approved for graduation and the degree after they have completed all degree requirements satisfactorily and been approved by the Graduate Committee of the department and the Graduate School. Graduation applications are accepted beginning with the first class day of each semester. Please check the University Academic Calendar for deadline dates for filing. Graduation information and a graduation application form are available online at www.tamucommerce.edu/registrar/graduation.asp. A student must be in good academic standing in order to complete graduation requirements. Participation in the commencement ceremony does not guarantee conferring of any degree. Texas A&M University-Commerce has the right to rescind any conferred degree if the University be-

comes aware that the student did not meet degree requirements before the degree was conferred. Doctoral candidates are required to attend commencement. Permission from the Dean of Graduate Studies and Research must be obtained if circumstances prevent a candidate from attending commencement.

Earning Graduate Credit Transfer of Credit

Credit for work taken from other regionally accredited graduate schools in the United States is granted in accordance with an evaluation by the Graduate School and upon approval by the student's advisory committee. Transfer courses applied to a doctoral degree must be in a graduate academic area taught by Texas A&M University-Commerce. Time limitations on transfer courses are the same as for A&M-Commerce courses. Transfer credit will be granted for only those courses in which the student received a grade of "B" or better. Only grades earned at A&M-Commerce will be calculated into the student's grade point average.

Correspondence Courses

Credit earned by correspondence will not apply toward a doctoral degree.

Independent Studies

Registration in an individual studies (589 or 689), research, or similar course shall imply an expected level of effort on the part of the student comparable to that associated with an organized class with the same credit value. No more than twelve graduate semester hours (including master's credit) of individual studies courses may be applied to a doctoral degree. Independent Studies course credit cannot be used toward fulfilling the residency requirement.

Enrollment Limitation or Administrative Withdrawal

Enrollment in any graduate course is subject to approval by the department offering the course, the instructor teaching the course, and the Dean of Graduate Studies and Research, whether or not such is specifically stated in the course description. A student may be prevented from enrolling in the course or dropped from the course if it is already in progress if the Graduate Dean, department head, or a faculty member considers the student physically or mentally incapable of performing satisfactorily or safely in a course, or if the student becomes a threat to the instructor or others in the course or is disruptive in any way. In such cases, the Graduate Dean will confer with the faculty member and department head involved and then take appropriate action. Any tuition refund to which the student is entitled will be determined according to the University schedule for refunds and will be based on the date on which the student was dropped from the course.

College of Arts and Sciences

James Klein, Dean Linda Matthei, Assistant Dean

Charles J. Austin Industrial Engineering Technology Building, Room 116, 903-886-5175

The College of Arts and Sciences is the largest in the university and is responsible for providing the core general education curriculum, academic enrichment, and alternative learning opportunities. The college houses thirteen academic departments that offer a wide variety of graduate master's degree programs. In addition, doctoral studies can be pursued through the Department of Literature and Languages. The College encourages cooperative interdisciplinary studies to promote a broad understanding of and preparation for a complex and changing society.

Increasing specialization in business, industry, and the professions have dramatically increased the importance of graduate and professional studies beyond the bachelor's degree in the arts and sciences. The College of Arts and Sciences offers flexible graduate curricula, adaptable to the students' needs and goals, that prepares students for vocations, businesses and the professions. In a society characterized by rapid changes in technology and social behavior, graduate studies in the arts and sciences must maintain a high level of currency in each discipline in order to provide each student with instruction relevant to his or her personal and career objectives. To accomplish this, the college provides the faculty, research facilities, equipment, and professional staff necessary to support quality graduate programs.

Agricultural Sciences

C. Pat Bagley, Head 903-886-5358; Agricultural Science/Industrial Technology Building

Program of Graduate Work

The Department of Agricultural Sciences offers a Master of Science degree program in which students may choose to emphasize course work in agricultural economics, agricultural education, agricultural mechanization, animal science, plant and soil science or horticulture. Graduate-level research is encouraged through the use of oncampus and University Instructional and Research Farm facilities.

The Department of Agricultural Sciences also coordinates the *Transition to Teaching* program for degreed professionals who wish to become certified to teach Agricultural Science and Technology or Family and Consumer Sciences in secondary schools. This program consists of graduate-level courses in agricultural education that focus on professional development competencies required for a successful career in teaching, as well as preparation for the Texas Examination of Educator Standards (TExES). Courses may be applicable to a master's degree with emphasis in Agricultural Education, provided the student is admitted to a degree program. Individuals interested in *Transition to Teaching* should contact the department for specific information regarding admission.

The department additionally has signed agreements with other cooperating institutions to conduct research project at off-campus locations.

Admission

Students desiring to pursue a Master of Science program in the Department of Agricultural Sciences should consult with the department head before enrolling in any courses. To pursue a Master of Science degree, the student must be accepted by a member of the Graduate Faculty from the Department of Agricultural Sciences. Acceptance will be based on admission to The Graduate School, scores on the Graduate Record Examination (GRE), undergraduate grade point average, and availability of qualified advisors in the desired area.

Degree Requirements

All students receiving an assistantship through the Department of Agricultural Sciences must complete a thesis and a Master of Science Option I degree. Other students may choose either the Option I or Option II (non-thesis) program. All Option I students must complete a research project and write a thesis.

Master of Science in Agricultural Sciences Option I (30 semester hour minimum)

Required Courses:

Ag 518—Thesis (6 sh)

Additional eight courses to be selected by the student in consultation with his/her advisor.

A minor is not required, but if the student chooses to complete a minor, the required courses work is four courses taken in a subject area that complements the student's major.

Master of Science in Agricultural Sciences Option II (36 semester hour minimum)

Required Courses:

Ag 595—Research Literature and Techniques

Eight additional Agricultural courses to be selected by the student in consultation with his/her advisor.

Three electives approved by the department.

Note: The Department reserves the right to suspend from the program any student who in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

Agriculture (Ag)

505. Experimental Design and Data Analysis. Three semester hours.

Discussions of the use of statistical design including randomized complete block, factorial, Latin-square, split-plot, and other structured designs to test hypotheses in plant, soil, and animal sciences. Conventional t-test analysis of variance, covariance, regression, correlation, and data transformation are covered. Prerequisite: One of the following: Quantitative Biology 412, Psychological Statistics 405, or Introduction to Mathematical Statistics 453.

506. Laboratory in Statistical Analysis System. One semester hour.

Experimental design and statistical analysis of linear and nonlinear systems using statistical software packages that include SAS, Excel, and Sigma Plot. To be taken concurrently with Ag 505.

518. Thesis. Three to six semester hours.

Development of a research project under the supervision of a staff member. Granting of credit for this project is dependent upon the completion and approval of the thesis.

530. Scientific Methodology in Agricultural Research. Three semester hours.

The course is for graduate students in an option I (thesis) graduate program and introduces students to the processes of scientific investigation, research, methodologies and techniques, data interpretation, experimental design options, and scientific methodologies involved with planning, executing, interpreting and the scientific writing of research projects.

595. Research Literature and Techniques. Three semester hours.

A careful study of the latest research literature and techniques available in different fields of agriculture. A research paper will be required according to the interests of the individual student.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

599. *Seminar*. One semester hour.

Topics on the latest research and techniques in the agricultural sciences. Must be taken two times for credit.

Agricultural Economics (AEc)

540. Advanced Theory of Demand and Price Analysis. Three semester hours.

The development and use of economic models for price analysis and forecasting with emphasis on the interpretation of economic relationship in agriculture. Analysis of the effects of consumer behavior upon marketing firms and upon the demand for agricultural products.

550. Market Organization and Structure. Three semester hours.

Analysis of the conduct and performance of agricultural firms under imperfect market conditions. Sources of imperfections, managerial strategies, and welfare considerations under imperfect market conditions.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Agricultural Education (AgEd)

518. Thesis. Six semester hours.

Research in an appropriate problem area in agricultural education will be conducted under the direction of Texas A&M University-Commerce personnel. The report will be prepared and submitted in the standard thesis form. An oral examination is required with the thesis.

570. *Instructional Management*. Three semester hours.

Provides students with a review of the ethical and pedagogical principles and practices needed to organize and deliver instructional programs in Agricultural Sciences and Family and Consumer Sciences.

571. Program Development. Three semester hours.

This course addresses the theoretical and practical principles of planning, funding, and conducting effective educational programs in Agricultural Sciences and Family and Consumer Sciences.

572. Special Populations. Three semester hours.

Principles, procedures, and policies associated with teaching students who are representative of special populations as defined by federal career-technical education guidelines.

573. Practicum in Teaching. Three semester hours.

Supervised teaching practicum in Agricultural Science or Family and Consumer Sciences at the secondary level. Course includes field-based teaching component and monthly seminars on strategies and issues related to the teaching profession.

574. Assessment and Evaluation. Three semester hours.

Theories and techniques used in assessing student learning and skill development and evaluating educational programs in Agricultural Science and Family and Consumer Sciences.

578. Fitting and Showing Livestock. Three semester hours.

Developing skill and techniques in selecting, fitting, handling, and showing livestock.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

595. Research Literature and Techniques. Three semester hours.

This course provides a review of significant research studies produced by investigators in the student's major field with emphasis on the investigative and verification techniques that were used. The student is required to demonstrate his competence in using systematic research techniques through the investigation and formal reporting of a problem.

Agricultural Mechanics (AMc)

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Animal Science (AnS)

511. Advanced Reproductive Physiology. Three semester hours.

Recent advances in mammalian reproductive physiology. Special emphasis on endocrine chemistry and cellular action. Prerequisite: AnS 311.

513. Environmental Physiology of Domestic Animals. Three semester hours.

Principles of environmental physiology and animal adaptation with emphasis on mechanisms of temperature regulation and related nutritional and metabolic-hormonal functions. Prerequisite: AnS 319.

514. Embryology of Domestic Animals. Three semester hours.

Embryology with special emphasis on early embryonic development. Management tools available to the scientist including embryo splitting gene transfer and embryo transfer techniques. Prerequisite: AnS 319.

521. Advanced Poultry Production. Three semester hours.

A study of the principles involved in the incubation, brooding, rearing, and management of chickens and turkeys. An intensive review and reporting of literature on incubation, breeding, poultry feeding, and management problems.

522. Animal Breeding. Three semester hours.

An advanced course dealing with problems in population genetics as applied to domestic animals. Heredity and environmental interaction, methods of selection, mating systems, and biometrics of animal improvements. Prerequisite: AnS 310.

535. Advanced Principles of Livestock Management. Three semester hours.

Course presents the latest technologies in animal management of various livestock species. Topics include nutrition, reproductive physiology, waste management for protecting the environment and ground water reserves, along with integrated management practices for complimentary animal species.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Plant and Soil Science (PIS)

500. Soil Fertility. Three semester hours.

The essential elements in the soil will be discussed, and soil samples will be analyzed to determine the level of elements that are contained. Prerequisites: PLS 309, 320 and CHEM 111, 112, 211.

501. *Agricultural and Biological Instrumentation*. Three semester hours. (2 lecture, 2 lab) Principles, equipment, and techniques for measuring variables in plant, soil, and environmental sciences. Spectrophotometry, chromatography, atomic absorption, weather sensors and data loggers, and tissue culture are covered.

515. Pasture Management. Four semester hours.

A careful study of the literature concerning the soil and vegetative problems in regard to establishing, restoring, and maintaining pastures. Consideration will be given to pasture plans for this section of Texas, fertilizers to use, and good pasture practices to be observed. Prerequisite: PLS 326.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Art

Michael Odom, Interim Head 903-886-5208; Art Building

Michael Miller, Graduate Coordinator and Graduate Student Advisor for Studio Art, 903-886-5242

Virgil Scott, Communication Arts Director (UCD), 214-752-9009

The Department of Art inspires and prepares students to excel in the art profession, including the fine and applied arts, art history, and art teaching fields, and also expands the educational experiences of non-majors.

The general objectives of graduate study in art include: (1) the refinement of technical skills in chosen studio areas; (2) the development of a critical understanding of one's own art in its historical, theoretical, and conceptual context; and (3) the mastery

of communication skills both in practice and in teaching. These objectives are achieved through a close working relationship among students and faculty, wherein a student may pursue a course of study designed for his or her particular educational goals.

Programs of Graduate Work

Master of Arts and Master of Science in Art

The Department of Art offers general programs in studio art leading to the Master of Arts and Master of Science degrees. The graduate curriculum includes painting, sculpture, photography, drawing, ceramics, and mixed and multi-media art. The University Gallery hosts an annual series of exhibits of interest to the University and the Commerce community.

Studio/Fine Arts emphasis areas include ceramics, experimental studies, painting, and sculpture.

In photography facilities are available for both digital color and black and white photography. Students wishing to improve their portfolios, while pursuing graduate degrees in the Studio Arts or Communication Arts (new media, art direction, design communications, illustration, and copywriting), may count two upper-level undergraduate courses toward the master's degree with prior approval of the Graduate School.

Master of Fine Arts

The M.F.A. program is intended for graduate students both committed to and capable of intensive, advanced study culminating in an individual and self-generated language of expression.

M.F.A. students are initially encouraged to explore a broad range of issues meaningful to their work, while simultaneously mastering their technical skills. These explorations may touch upon individual modes of expression, formal elements, experimentation with media and methods, themes and symbols, and relationships among the visual arts and other disciplines. Subsequent courses direct the student toward more mature and self-critical art, leading ultimately to a sustained and coherent body of work which forms the M.F.A. Thesis Exhibit.

Students entering the M.F.A. program will select a committee of four members of the graduate art faculty, one of whom (usually the chair) will represent the student's primary area of concentration within the studio arts. In consultation with the committee, the department head and the graduate coordinator, the student will devise a degree plan based on the primary area of emphasis. This area may be selected from painting, drawing, sculpture, ceramics, mixed and multi-media art, photography, and communication art areas. The student's work in the chosen area is complemented by courses in art history, theory, and multimedia. It is expected that the student will gain from this study a sound conceptual and historical understanding of the visual arts, as well as the ability to communicate this understanding in writing and speech.

The New Learning Context

Designed to broaden the student's education, the New Learning Context is an essential component of the M.F.A. degree. Lasting a full academic term and providing twelve semester hours credit, the New Learning Context encourages the student to seek out new ideas and experiences of benefit to his or her art. A student may choose between two options: (1) The semester away, and (2) The Planned Program Alternative. The first option requires the student to live and work away from Texas A&M-Commerce. Whether by taking courses at another institution, through extensive traveling, or by living in a major artistic center in the United States or abroad, this option provides

experiences invaluable to the student's artistic and intellectual growth. The second option, for students whose economic or personal circumstances preclude extended travel, allows for similar experiences within the region. An example of the second option would be a planned sequence of visits to museums, galleries and artists' studios in the Dallas-Fort Worth Metroplex. Whichever option is selected, the student's art will be expected both to represent the efforts of a full academic term and to reflect the knowledge and experience gained from the New Learning Context.

Admission

Master of Arts and Master of Science in Art

Admission to pursue the M.A. and M.S. degrees in Art must be granted by both The Graduate School and the Department of Art. In the latter instance, the applicant should submit slides of work and other supportive materials that the department requires. Contact the Graduate Coordinator for these requirements.

The graduate degree programs in Art are individually designed to meet the unique educational and professional needs of the student. In consultation with the graduate coordinator and the department head, students pursuing the M.A. and M.S. degree will devise an appropriate degree plan during the first semester of their residency.

Master of Fine Arts in Art

Students intending to apply for subsequent admittance into the Master of Fine Arts program should follow the course of study established for that degree. Department guidelines for the M.F.A. are available upon request or can be found online at www.tamu-commerce.edu/art//programs/graduate.html.

The candidate may enter the M.F.A. program only with faculty approval no earlier than the second regular, full-time semester of study. Until such admission is applied for and approved, the student is temporarily enrolled in an M.A. or M.S. program of study. Applicants must have a bachelor's degree, or its equivalent, with an art major or comparable experience, nine semester hours of art history and a minimum grade point average of "B" in all undergraduate studio art courses.

In addition to the requirements of The Graduate School, applicants for the M.F.A. degree will submit an application to the Department of Art that includes a slide portfolio, a statement of intent, transcripts of all previous college-level work, and three letters of recommendation. Copies of transcripts are acceptable if the originals are on file at The Graduate School. All of these materials are important in considering an applicant's suitability for graduate study, but the slide portfolio is of paramount importance because it represents the extent of a student's education in art. Care should be taken in the selection and photographing of works for the slide portfolio (CD portfolio is acceptable).

Degree Requirements

Master of Arts and Master of Science in Art

The M.A. and M.S. Option I are 10-course (30 semester hours) programs culminating in a thesis. Two to four courses outside the major may be taken as electives. These courses must be in a related field. Four courses in the same subject may be designated as a minor. The M.S. Option II is a 12-course (36 semester hours) program without the Master's thesis.

Master of Fine Arts

The M.F.A. program requires at least 62 hours, as follows:

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Studio Art Emphasis (a suggested minimum of 8 courses)	Totaling 32 sh
Art History and Theory (minimum of 2 courses)	6 sh
Seminars (two courses)	6 sh
New Learning Context (choose either semester away or planned progr	ram) 12 sh
Thesis: Creative Exhibition	6 sh

Note: The department reserves the right to suspend from the program any student who, in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

Art History (ArtH)

506. American Art and Architecture. Three semester hours.

This course focuses on the development of ideals and principles in art and architecture in the United States from the Colonial Period to the Twentieth Century. The characteristics of American art movements will be compared to those in Europe as social and cultural phenomena. Illustrated lectures, outside readings, and a research paper are required.

510. Readings in Modern Art. Three semester hours.

This course focuses on modern and avant-garde movements in the visual arts from the late 1800s until the 1950s and 1960s. Selected readings in modern art history and criticism underscore important developments in art and related fields.

Art (Art)

503. Seminar: Practicum. Three semester hours.

The course focuses on the development of written, verbal, and documentation capabilities in matters of practical concern to the contemporary, visual fine artist, including problems and methods of college-level studio art teaching, development of course outlines, teaching philosophy, the job market in the arts, resume writing, artists' statements, grant writing, methods of giving slide lectures, legal contracts and communication methods with galleries and museums, and documenting works of art. Generally to be offered every third semester.

504. Contemporary Issues. Three semester hours.

This course considers selected topics in contemporary art. Topics include the ideas, theories, media, and processes represented in the visual arts of our age. May be repeated for a maximum of six semester hours.

529. Workshop. Three to six semester hours.

A practical workshop on various topics in studio art, includes developing projects and subject matter to be used in the classroom. Prerequisite: Permission of the instructor.

Studio Art (ArtS)

518. Thesis. Six semester hours.

This course is for students in the M.F.A. program: its focus is experimentation with a central, individually derived visual focus, culminating in an exhibition with accompanying written statement and slide documentation (five slides of works and the written statement to be submitted with the creative thesis). The M.F.A. Creative Thesis may be completed and presented only during a regular term of study. For students in the M.A. program: research on a selected art topic culminating in a written thesis.

524. Studio Problems: Second Area. Four semester hours.

This course focuses on individual problems and experimentation in the student's second studio area. For students in M.A. or M.S. program: topic or media may vary each term. Students may register for up to eight concurrent semester hours in a given term, with a maximum of twelve hours overall.

525. Special Problems: Studio Emphasis. Four semester hours.

This course focuses on individual problems and experimentation in the selected area of studio emphasis. For students in M.A. or M.S. program: individual problems and experimentation in selected areas of study leading to either a body of work with a central focus or a varied body of work with a consistent high quality. Students may register for up to eight concurrent semester hours in a given term, with a maximum of twelve semester hours overall.

526. Advanced Problems: Studio Emphasis. Four semester hours.

This course focuses on individual advanced problems and experimentation in the student's area of studio emphasis with stress upon developing an individual, expressive body of work. For students in M.A. or M.S. program: advanced problems and experimentation in selected areas of study leads to either a body of work with a central focus or a varied body of work with a consistent high quality. Student may register for up to eight concurrent semester hours in a given term, with a maximum of twelve semester hours overall.

530. New Learning Context. Three to twelve semester hours.

For students in the M.F.A. program there are two options to this course. Both are offered in order to expand upon the scope of choices, influences and challenges available in a single art department. In both options the student is to encounter and experiment with new ideas and methods within a new context. Option I: Semester Away student may (1) pursue advanced, graduate-level work in a school other than A&M-Commerce, (2) live in an environment that is unique compared to the student's background or (3) work with an accomplished professional artist. Option II: Planned Program Alternative—student pursues advanced, graduate-level work in a manner comparable to Option I, but without the necessity for moving to another local. This option is only for students whose personal, marital or economic conditions emphatically dictate an alternative approach. To exercise either option, the student must submit and receive approval from the advisory committee and department head of a proposal that offers significant creative, intellectual and cultural growth, provides unique contextual experiences and is in keeping with high professional standards. An example of Option II would include a planned sequence of regular visits to artists' studios in the Dallas/Ft. Worth area, with development of appropriate documentation (photographs, slides, interview tapes, notes) indicating the depth of investigations in respect to the development and nature of each artist's work. The student's own work produced within the scope of this option is expected to mature in a manner that is responsive to the contextual investigations.

For both of the above options, the student is required to submit a report at the beginning of the next regular term of study as the final stage in the completion of the course. The report is to contain works produced, a narrative description and related documentation (slides, interview tapes, photographs, notes or other materials). Student may register for twelve concurrent semester hours during a regular term, and a maximum of eight concurrent semester hours during a summer term.

595. Research Literature and Techniques. Three semester hours.

Biological and Environmental Sciences

Arun Goval, Head 903-886-5378; Science Building

The Department of Biological and Environmental Sciences offers graduate research training and coursework for public school teachers who wish to improve their knowledge and skills, for students preparing to enter doctoral programs, for students who seek additional training and coursework prior to applying to professional schools, and for those who plan to seek employment with private industry or with a wide variety of state or federal agencies. The department offers graduate courses in plant/animal/human biology, geology, environmental science, wildlife biology, oceanography, meteorology and science education.

Programs of Graduate Work

Master of Science in Biological Sciences (Thesis Option) Master of Science in Biological Sciences (Non-Thesis Option) Master of Education in Biological Sciences

Admission

Acceptance is based on admission to the Graduate School, scores on the Graduate Record Examination (GRE), and undergraduate grade point average.

Degree Requirements

Upon being accepted for admission into The Graduate School, each student will either select or be assigned an advisor from the graduate faculty within the Department of Biological and Environmental Sciences. This faculty member will chair the student's advisory committee, which will include at least two additional graduate faculty members, one of whom may be from another department. Courses may be applied to a particular master's degree program only with the approval of the student's advisory committee. Courses taken before a committee is chosen may not be approved by the committee for the student's particular degree program. Course selections will be based upon unique student needs as revealed by academic records and career goals. Course selections will include graduate course offerings in the Department of Biological and Environmental Sciences as well as supporting courses if deemed desirable or necessary from other departments. With committee recommendation, and approval of the Graduate Dean, a maximum of two upper level undergraduate courses may be applied to certain degree programs.

Master of Science in Biological Sciences (Option I) 30 sh. Thesis

The student will complete six hours of BSc 518, plus eight courses selected and approved by the student's advisory committee.

Master of Science in Biological Sciences (Option II) 36 sh. Non-Thesis

The Student must complete BSc 595, plus eleven courses (five of which must be in biological sciences) selected and approved by the student's advisory committee.

Master of Education in Biological Sciences

The student must complete BSc 595, seven courses from the biological and earth sciences curriculum selected and approved by the student's advisory committee, and four courses from the College of Education.

In addition, a broadfield science major for teachers is offered in several fields of science, with a concentration in biology. The broadfield science major will consist of four courses in the field of concentration, and a minimum of two courses in each of two additional areas.

A comprehensive minor in biological sciences is also available for doctoral degree students majoring in supervision, curriculum, and instruction—higher education. This program is recommended for junior and senior college teachers of biology and for school supervisors. (See Doctor of Education degree programs, Department of Curriculum and Instruction.)

Departmental Requirements

The Department of Biological and Environmental Sciences does require candidacy for all graduate degree programs. Although the department does not administer qualifying (candidacy) exams before granting approval, all students must apply and be admitted to candidacy at least one semester prior to the semester in which they expect to graduate.

Students in all programs of graduate work in the biological sciences must pass a final comprehensive examination. For students in the M.S. Option I program, the final comprehensive exam will include, but not be limited to, an acceptable defense of the thesis. The final comprehensive exam will normally be an oral exam administered by the student's advisory committee, with other departmental graduate faculty invited to participate, as well as faculty from a minor department when appropriate. Students in programs other than the M.S. Option I program, may petition their advisory committees to give them written comprehensive exams rather than oral exams.

Note: The Department reserves the right to suspend from the program any student who in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

Biological Sciences (BSc)

500. Graduate Seminar. One semester hour.

Discussions and presentations of issues of current interest in the biological sciences and of related career opportunities. Prerequisite: Graduate standing.

504. Quantitative Biology. Three semester hours.

A study of advanced contemporary knowledge in quantitative biology. Prerequisite: Graduate standing.

505. *Methods in Field Ecology*. Three semester hours.

A study of advanced contemporary knowledge in field ecology. Prerequisite: Graduate Standing.

512. Ecological Genetics. Three semester hours.

A study of advanced contemporary knowledge in ecological genetics. Prerequisite: Graduate standing.

513. Human Genetics. Three semester hours.

A study of advanced contemporary knowledge in human genetics. Prerequisite: Graduate standing.

515. Eukaryotic Cell Biology. Three semester hours.

A study of advanced contemporary knowledge in eukaryotic cell biology. Prerequisite: Graduate standing.

516. Pathogenic Microbiology. Three semester hours.

A study of advanced contemporary knowledge in pathogenic microbiology. Prerequisite: Graduate standing.

518. Thesis. Six semester hours.

A problem is chosen in the student's major field of interest with approval of the major professor. No credit is given until an acceptable thesis is completed. Prerequisite: Graduate standing.

520. *Immunology*. Three semester hours.

An advanced detailed study of the immune response and related events. Emphasis is placed on cellular and humoral branches of immunity.

522. Reproductive Physiology. Three semester hours.

A study of contemporary knowledge in reproductive physiology. Prerequisite: Graduate standing.

524. Toxicology. Three semester hours.

A study of advanced contemporary knowledge in toxicology. Prerequisite: Graduate standing.

525. Fundamentals of Neuroscience. Three semester hours.

Fundamentals of Neuroscience focuses on understanding the structure and function of the human brain. This course will be an advanced study of the principles of neuroanatomy, neurochemistry, neurophysiology, neurodevelopment, and neuropharmacology.

530. Virology. Three semester hours.

An advanced detailed study of contemporary knowledge of virology.

531. Environmental Biology. Four semester hours.

A study of advanced contemporary knowledge in environmental biology. Prerequisite: Graduate standing.

532. Behavioral Ecology. Three semester hours.

A study of advanced contemporary knowledge in behavioral ecology. Prerequisite: Graduate standing.

533. *Invertebrate Zoology*. Three semester hours.

A study of advanced contemporary knowledge in invertebrate zoology. Prerequisite: Graduate standing.

534. *Vertebrate Zoology*. Three semester hours.

A study of advanced contemporary knowledge in vertebrate zoology. Prerequisite: Graduate standing.

535. Evolution. Three semester hours.

A study of advanced contemporary knowledge in evolution. Prerequisite: Graduate standing.

536. Plant Diversity and Conservation. Three semester hours.

An advanced study of plant diversity and conservation strategies at the species, population and landscape levels. Prerequisites: BSc 204 and 307.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

- 595. Research Literature and Techniques. Three semester hours. (Same as ESci 595)
- 597. *Special Topics*. One to four semester hours. Organized class. May be repeated when topics vary.

Earth Sciences (ESci)

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Chemistry

Nenad M. Kostić, Head 903-886-5392; Science Building

The Department of Chemistry provides a broad range of subjects, courses and opportunity for independent research at the master's level. Programs are designed to provide suitable preparation for public school teaching, for governmental and industrial employment, and for research.

Chemistry laboratories are equipped for research in physical, organic, inorganic, biological, and analytical chemistry. Modern chemical instrumentation includes NMR, infrared, visible, ultraviolet, and atomic absorption spectrophotometers; gas and liquid chromatographs; an ultracentrifuge; a cold room; and standard laboratory instruments.

Program of Graduate Work

The Department of Chemistry offers the Master of Science degree.

Admission

Acceptance will be based on admission to the Graduate School, recommendation, scores on the Graduate Record Examination (GRE), and undergraduate academic record.

Degree Requirements

Master of Science in Chemistry, Option I

The M.S. Option I program requires completion of ten courses (30 hours) as noted below. In addition, students are required to enroll in Chemistry 501 each semester they are in residence completing degree requirements.

- 1. Chemistry 518, Thesis (6 hours)
- 2. Four courses (12 hours) of the following five core courses must be taken:

Chemistry 513, Organic Mechanisms and Structure

Chemistry 521, Thermodynamics

Chemistry 531, Theoretical Inorganic Chemistry

Chemistry 541, Advanced Analytical Chemistry

Chemistry 514, Biochemistry

- 3. Chemistry 501, Graduate Seminar (1 hour)
- 4. Four graduate-level courses (12 hours) in chemistry or appropriate supporting fields (biology, earth sciences, physics, mathematics, computer science, etc.)

Other courses may be substituted for the aforementioned six core courses upon consent of the department head and/or a majority vote of all Chemistry faculty. A student who does not wish to pursue a higher graduate degree in chemistry, upon consul-

tation with department head, may substitute other courses better suited to meet their career objectives.

Substitutions can be made from some of the graduate courses in physics, chemistry, biology, mathematics, etc.

Master of Science in Chemistry, Option II

The M.S. Option II program requires completion of 12 courses (36 hours).

- 1. Chemistry 595, Research Literature and Techniques
- 2. Eleven courses, five of which must be in chemistry.

Graduate Courses

Chemistry (Chem)

501. Graduate Seminar. One semester hour

This course may be taken each of four semesters for credit. Graded on a satisfactory (S) or unsatisfactory (U) basis.

502. Safety in the Chemical Laboratory. Three semester hours.

An introduction to the safety problems encountered in the operation of the chemical laboratory. Topics include types of hazardous materials, proper storage procedures, causes of accidents, identifications and minimization of laboratory hazards, safety devices, emergency procedures, safety codes.

513. Organic Mechanism and Structure. Three semester hours.

A study of the fundamental mechanisms of organic reactions, with emphasis on the effects of structural and stereochemical changes on the course of reactions. Prerequisites: Chemistry 212.

514. Introductory Biological Chemistry. Three semester hours.

This is a one-semester graduate-level course in biochemistry that will develop mastery in the nomenclature and function of the major classes of molecules associate with living organisms. The subject matter is appropriate to prepare students for doctoral programs in chemistry biochemistry, or molecular biology. Emphasis will be given to learning the underlying physical and chemical principles that control enzyme catalyzed reactions important in basic metabolic pathways. The structure and function of proteins and nucleic acids will also be covered at a level that will give students an appreciation of the modern subfield of "genomics" and "proteomics." This course also covers analytical and spectroscopic methods for analysis of biopolymers that are useful in modern research laboratories. Prerequisites: Successful completion of Chem 352 and Chem 441 and consent of instructor.

515. Synthetic Organic Transformations. Three semester hours.

Course will cover major themes of synthetic organic chemistry and biochemistry. As the subject matter changes, the course may be repeated up to two times with department head approval. Graded on a satisfactory (S) or unsatisfactory (U) basis. May be taken by M.S. Option I students only. Prerequisite: Consent of department head.

518. Thesis. Three to six semester hours.

Graded on a satisfactory (S) or unsatisfactory (U) basis.

521. Thermodynamics. Three semester hours.

A study of the theories and applications of classical thermodynamic functions. Prerequisites: Chemistry 351 and 352.

522. Quantum Chemistry. Three semester hours.

A study of the mathematical aspects of quantum mechanics including blackbody radiation, fundamental postulates, rotation, vibration, hydrogen atom, variational calculation, pertubational calculation, electron spin, chemical bonding, and spectroscopy. Prerequisite: Consent of department head.

523. Mathematical Methods in Chemistry. Three semester hours.

Mathematical methods and their utilities in the various fields of chemistry will be covered. As the subject matter changes, the course may be repeated up to two times with department head's approval. Graded on a satisfactory (S) or unsatisfactory (U) basis. Prerequisite: Consent of the department head.

527. Spectroscopic Methods. Three semester hours.

The course will cover methods and principles of spectroscopic techniques for analysis and structure determination of chemical compounds. As the subject matter changes, the course may be repeated up to two times with department head approval. Graded on a satisfactory (S) or unsatisfactory (U) basis. Prerequisite: Consent of the department head.

529. Workshop in Chemistry. Three to six semester hours.

This course is designed to cover subject matter in areas of secondary science teaching, or to give some more advanced topics for enrichment in teaching for public school teachers. Consult instructor for descriptive content. Prerequisite: Consent of the instructor

531. *Theoretical Inorganic Chemistry*. Three semester hours.

A study of the application of modern concepts of bonding and energetics to problems of the structure and reactions of inorganic compounds.

533. Reaction Mechanisms of Inorganic Chemistry. Three semester hours.

Principles of reaction mechanisms of inorganic chemical transformations will be studied. As the subject matter changes, the course may be repeated up to two times with department head's approval. Graded on satisfactory (S) or unsatisfactory (U) basis. May be taken by M.S., Option I students only. Prerequisite: Consent of department head.

536. Organometallic Chemistry. Three semester hours.

Major themes of organometallic chemistry will be covered. As the subject matter changes the course may be repeated up to four times with department head's approval.

541. Advanced Analytical Chemistry. Three semester hours.

This course will include a study of modern theories and techniques as related to analytical chemistry. Prerequisite: Consent of the instructor.

547. Analytical Chemical Techniques. Three semester hours.

Principles and techniques of analytical chemistry will be covered. As the subject matter changes, the course may be repeated up to two times with department head approval. Graded on a satisfactory (S) or unsatisfactory (U) basis. Prerequisite: Consent of the department head.

581. *Nuclear Science*. Three semester hours.

Principles of nuclear reactions, nuclear-decay laws, nuclear structure, and radiochemical techniques will be covered. This course is designed for advanced study in nuclear science. Prerequisite: Consent of the instructor.

595. Research Literature and Techniques. Three semester hours.

A course designed to acquaint the student with the role of research in the initiation, development, and modification of concepts and theories in chemistry. Articles in professional journals in the field will be assigned for review. The student will also be assigned laboratory research in varying degrees.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Computer Science and Information Systems

Sam Saffer, Head

903-886-5409; Journalism Building

To meet the diverse needs of the computing industry, the Department of Computer Science and Information Systems offers a master's degree program that blends applied and theoretical computer science concepts.

The computing facilities include both PC- and UNIX-based environments on an assortment of modern, general-purpose computing systems. All systems are networked for local and worldwide communications. Specialized multimedia and graphics facilities also are available within the department.

The department offers service courses for the University in the areas of introductory computer applications and applications in education.

Program of Graduate Work

Master of Science in Computer Science

The M.S. in Computer Science program consists of core courses, which are required of all students, course electives, and specialized courses within one of three tracks: database, networking, and artificial intelligence. Electives and track areas of study are chosen by the student. The core courses, specialized track courses, and electives enable students to devise a degree plan that meets their individual professional interests as well as the needs of industry. In addition, each student may choose a thesis or a non-thesis option. Upon approval of the departmental graduate advisor and the graduate school, the department will allow the transfer of up to six graduate hours in Computer Science.

Admission

Admission Inquiries: csdept@tamu-commerce.edu

Acceptance will be based on admission to the Graduate School, scores on the Graduate Record Examination (GRE) or Graduate Management Admissions Test (GMAT), and undergraduate grade point average. Students entering the graduate program must satisfy the specified computer science deficiency requirements by appropriate course substitution or by passing a competency examination prior to enrollment in graduate courses. International students who do not achieve a score of at least 550 on the TOEFL must successfully complete Speech 111.

Degree Requirements

Required core courses: CSci 520, 530, 532, 540, and 549.

Students must also complete the courses in one of the following five tracks:

Database: CSci 526 and 527

Computer Engineering: CSci 542 and 552 Computer Networks: CSci 525, 543, and 553 Information Security: CSci 563, 581, and 587 Artificial Intelligence: CSci 538, 539 and 560

Option I, Non-Thesis: Thirty-six credit hours, including core courses, CSci 595, electives, and selected track courses.

Option II, Thesis: Thirty credit hours, including core courses, CSci 518 (Thesis), electives, and selected track courses.

Up to six elective credit hours may be taken in an appropriate supporting field on approval of the graduate advisor.

Requirements for a minor will be determined by evaluating a student's background in computer science.

Department Requirements

After completing at least 15 and no more than 18 hours, the student will take a qualifying exam covering the material in the designated prerequisite foundation courses, in order to be admitted to candidacy for the master's degree. A comprehensive exam will be given during the semester in which a student expects to graduate. Deficiency Requirements: CSci 504, 515, 516. Students must have a "B" or better in these deficiency courses to continue in the Master's program. Undergraduate courses may be substituted with departmental approval. Students with deficiencies in mathematics will be required to complete one or more of the following: Math 191, 192, 331, 401, and 225 or 315 or 335. In addition, English 341 (Technical Writing) is strongly recommended for all international students.

Note: The Department reserves the right to suspend from the program any student who in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

Computer Science (CSci)

504. *Introduction to Computer Applications*. Three semester hours.

A study of automatic data processing systems, software, computer hardware, and an introduction to procedure-oriented programming language with general applications. 506. *Introduction to Visual Basic Programming*. Three semester hours.

An introduction to object-oriented computer programming for business majors using the Visual Basic language. This course will cover algorithms and problem-solving, fundamental programming constructs, object-oriented design, and event-driven programming. Prerequisite: CSci 504 or consent of the instructor.

510. Graphic Visualization. Three semester hours. (Same as Art 510)

Concepts in multi-media presentation that incorporate design and layout. Students will learn techniques in organizing the elements of composition as related to multi-media design. Prerequisite: CSci 504 or consent of the instructor.

514. *Internet Development*. Three semester hours.

This course provides students with a hands-on overview of current Internet programming languages and Web multimedia technologies. Client/Server concepts will be discussed and implemented into student Web projects. The course will also explore how multimedia tools and features can be used to enhance Web sites.

515. Fundamentals of Programming. Three semester hours.

This is an advanced programming course using a high level programming language. Specific objectives are to introduce the development of algorithms as a disciplined approach to problem solving; to present programming practices in design, decoding, debugging, testing and documentation of computer programs; to provide the student with the basic knowledge necessary for further study in the field of computer science. Prerequisite: CSci 504 or consent of the instructor.

516. Fundamental Concepts in Computing and Machine Organization. Three semester hours.

Concepts of assembly language programming and machine organization of a modern digital computer are presented. Students will have the opportunity to study machine addressing, stack operations, subroutines, programmed and interrupt driven I/O, machine organization and computer architecture at the register level. Students will utilize the 80x86 instruction set and will perform programming exercises. Prerequisite: CSci 515 or programming experience in a higher level language.

518. Thesis. Six semester hours.

520. *Information Structure and Algorithm Analysis*. Three semester hours.

The concept of abstract data structures forms the basis for the study of the data structures introduced in this course. Well known, basic data structures and the algorithms associated with them form the primary subject matter. Knowledge of these basic data structures will allow the student to create large scale programs which process meaningful amounts of data. Comparative efficiency analysis of the algorithms studied in the course will be introduced. The student will also become acquainted with formal methods for specifying abstract data types as well as algorithms. Prerequisite: CSci 515.

524. Systems Analysis and Design. Three semester hours.

This course will provide the student with the opportunity to experience the several phases of conventional software development. Established software engineering practices will be presented. Various software architectures will be introduced. Each student is expected to fully participate in a team project over the course of the semester. Prerequisites: CSci 515 and 520.

525. Networking I—Local Area Networks. Three semester hours.

This course covers the basic principles and operations of Local Area networks or LANs. Such topics include basic data communications, and the OSI model, protocols and topologies. In addition, the networking aspects of Netware 3.12 and Windows NT will be studied in depth. Students will have the opportunity to gain "hands on" experience with the installation, administration, and operating characteristics of Netware 3.12 and Windows NT. Those wishing to take the various networking certification exams will find this course helpful. Co-requisites: CSci 516 and 520.

526. Database Systems. Three semester hours.

Basic database concepts, organization, and definitions; data and management systems; data description languages; logical and physical differences of database; indexed and multiple-key organization; relational database concepts and examples; and comparison of database systems. Prerequisite: CSci 515 or consent of instructor.

527. Intelligent Database Systems. Three semester hours.

General theory, concept, and techniques related to allow students the design of intelligent databases will be discussed. Other topics to be covered include expert systems, neural networks, hypermedia, and text retrieval. A moderate-size semester project will be assigned to practice the design of an intelligent database. Prerequisite: CSci 526.

528. Object-Oriented Methods. Three semester hours.

This course investigates object-oriented methods including object-oriented programming, analysis and design. Current methodology is emphasized. The use of object- oriented features such as encapsulation, information hiding, inheritance and polymorphism is reinforced by class assignments and programming exercises. Prerequisites: CSci 516 and 520.

530. Operating Systems. Three semester hours.

The course objectives are two-fold: (1) to learn general theory, concept, and techniques related to the design of operating systems; (2) to practice the design of an operating system by performing a design project. The course is basically divided into four sections: Introduction to Operating Systems, Process Management, Storage Management, and UNIX (Shell and Interpreter). Prerequisites: CSci 516 and 515 or consent of instructor.

531. *Java Language Programming*. Three semester hours.

This is a computer programming course designed to teach the use of the Java Programming Language. The course will emphasize Java applets and their use in HTML files as applied to Internet web pages. Students will learn how to write Java applets, how to utilize pre-existing Java controls, and how to write new Java controls. Students will be expected to complete numerous programming assignments and programming projects. Experience with C++ programming language and object oriented methods are required. Prerequisite: CSci 515. Co-requisite: CSci 520.

532. Algorithm Design. Three semester hours.

This course provides an introduction to the design and analysis of algorithms. Topics include correctness of algorithms, asymptotic notation, time complexity of algorithms, and NP-completeness. Several algorithm design techniques will be discussed in detail including divide and conquer algorithms, dynamic programming algorithms and greedy algorithms. Algorithms based on these techniques will be studied for solving a wide variety of problems in networks, graph theory, optimization, sorting, string processing, mathematical applications, and other areas. Prerequisite: CSci 520.

534. Networking II Routers. Three semester hours.

This course is designed to introduce networking devices, the Cisco 2500 series router and the 1900 series data switch. Students will gain experience in the use and configuration of routers and the switches through labortory exercises. Also, such common network security techniques as Virtual Local Area Networks (VLANs) and Access Control Lists will be presented along with other network security topics. About 50% of class time will be spent in the CCNA Networking Labortory. Prerequisite: CSci 525.

535. Electronic Commerce. Three semester hours.

The advances in telecommunications technology have revolutionized network computing as well as the traditional marketplace. As a result, a new specialty field, known as electronic commerce, has emerged. This courses is a collaboration between the Department of Marketing and Management and the Department of Computer Science and Information Systems and seeks to combine the strategic concepts of marketing and management with an overview of the Internet and telecommunications technology. Students will have the opportunity to gain experience with practical applications in the emerging electronic commerce industry. The course is open to majors in both Mkt/Mgt and CSci. Business students need not have the advanced knowledge in computer science to succeed in this course, nor do CSci students need to have a background in business administration.

536. *Computer Graphics*. Three semester hours.

Current graphics software and hardware, with an emphasis on the mathematical and artistic consideration in two and three-dimensional computer generated graphics. Topics include windowing, clipping, transformations, raytracing, and photorealistic scene generation. Current industrial and commercial computer graphics will be presented via videotape and other means. Assignments will include the design and rendering of computer graphics images. Prerequisites: CSci 528 or consent of instructor.

537. Introduction to Graphical Rendering. Three semester hours.

This course will teach students how to use a high end 3D graphics package. It will familiarize students with the layout of the screen(s) and the terminology used in the 3D graphics community. Students will be expected to have experience working with windows and other 2D graphics packages. Prerequisite: CSci 515 or experience with a Programming Language.

538. Artificial Intelligence. Three semester hours.

An overview of artificial intelligence techniques such as problem solving, knowledge representation, learning, deduction and heuristic search; application areas will also be examined. Prerequisites: CSci 520.

539. Expert Systems. Three semester hours.

The purpose of the course is to introduce the fundamental concepts of Expert Systems, their development and implementation and have the students create an expert system. Prerequisite: CSci 538.

540. *Computer Architecture*. Three semester hours.

Introduction to current high level computing machines in both hardware and software design. Topics include the design decisions involved in the development of computer architectures, hardware organizations needed to implement various instructions sets, and future trends in computer architectures. Prerequisites: CSci 516.

542. Microcomputer Instrumentation and Control. Three Semester hours. (Same as Phys 542)

The electronics for real-time microcomputer controlled systems. Topics include the physics of sensors and actuators, sensor signal conditioning, real-time data acquisition, elementary signal processing, motion control, and software for instrumentation and control. Prerequisite: Consent of the Instructor.

543. UNIX Network Administration. Three semester hours.

An examination of wide area computer networks (WAN) utilizing current technology. TCP/IP; transmission media; Ethernet; Internetworking (bridges, routers, hubs); WAN network operating systems (UNIX); standard services (FTP, Telnet, etc.); network security, reliability, stability, and design. Prerequisites: CSci 525 and CSci 504. 549. Automata Theory. Three semester hours.

This course teaches the general theory, concept, and techniques related to the theory of automata. Practical examples related to programming languages are emphasized. Students will have the opportunity to utilize theoretical aspects of automata theory by performing a medium-scale design project. Topics include: Finite Automata, Transition Graphs, Nondeterminism, Finite Automata with Output, Context-Free Grammars, Regular Grammars, Chomsky Normal Form, Pushdown Automata, Context-Free Languages, Non-Context-Free Languages, Parsing, and Turing Machines. Prerequisite: CSci 515 and Math 192.

552. Advanced Micro-controller Electronics. Three semester hours. (Same as Phys 552) Embedded logic design and programming. Topics include micro-controller selection, peripheral interfacing, low and high-level programming languages, and microcontroller development tools. Prerequisite: Consent of the Instructor

553. Networking III—UNIX Based Networks. Three semester hours.

This course is designed to introduce advanced concepts of networking applications of UNIX-based mini and micro based computing environments. The UNIX-model of networking, interprocess communication, and TCP/IP sockets are the major topics to be discussed. A moderate-sized course project involving intensive coding will be implemented to exercise and demonstrate TCP/IP aspects and other networking concepts introduced in class. Prerequisite: CSci 520, 525, 530 or consent of the instructor. 555. Compilers. Three semester hours.

This course is intended as a first course in compiler design. The emphasis is on solving problems universally encountered in designing a language translator, regardless of the source or target machine. Major topics in compiler design are covered in depth. The topics to be covered are lexical analysis, static semantic checking, parsing, intermediate code generation, machine code generation, and optimization of machine code. Some of the existing compilers that have been constructed using these techniques are studied as case studies. Prerequisite: CSci 515, 520.

560. Neural Networks. Three semester hours.

This course introduces the various models and concepts of neural networks as

applied to Artificial Intelligence. A variety of neural networks will be studied along with the methodologies for solving problems from many different disciplines. As a project, students will have opportunities to formulate a particular problem for solution by a selected neural network method. Prerequisite: CSci 538.

562. Signal Processing. Three semester hours. (Same as Phys 562)

Theoretical models of information, processing; includes methods of signal representation, data conversion, decision making, filtering, and digital error problems. Prerequisites: CSci 317 or Phys 317, and CSci 435 or Phys 435.

563. Fundamentals of Information Security and Assurance. Three semester hours.

This course provides an introduction to the study of information security and assurance. Topics include confidentiality, integrity and availability; threats, vulnerabilities, attacks and countermeasures; access control; authentication; malicious logic; security policy, system models and mechanisms for security and information assurance.

568. Cryptography. Three semester hours. (Same as Math 536)

The course begins with some classical cryptanalysis (Vigenere ciphers, etc.). The remainder of the course deals primarily with number-theoretic and/or algebraic public and private key cryptosystems and authentication, including RSA, DES, AES and other block ciphers. Some cryptographic protocols are described as well.

572. Parallel Computing. Three semester hours. (Same as Phys 572)

Computer topologies and networks, programming techniques, and parallel algorithms for multiprocessor and multi-computer systems including microprocessor clusters. Prerequisites: Phys 319 or CSci 322.

581. Computer and Network Security. Three semester hours.

This course provides an introduction to computer and network security. Topics include security threats, security services and security mechanisms, cryptography, and methods of assuring confidentiality, integrity and availability in networks such as authentication, e-mail security, IP security, web security and system security. Prerequisite: CSci 525.

587. Secure Protocols. Three semester hours.

This course introduces students to advanced protocols that provide information and communications security. Basic protocol building blocks are discussed. Advanced protocols will be analyzed to determine if they satisfy specific security requirements, to discover security loopholes, and to discuss modifications to remove the loopholes. Prerequisites: CSci 525.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. No more than three hours of independent study may be counted towards the degree. Prerequisite: Consent of department head and supervising faculty member.

595. Research Literature and Techniques. Three semester hours.

A course designed to acquaint the student with the role of research in the initiation, development and modification of concepts and theories in computer science. A final written report and presentation and/or demonstration of results obtained during the course will be made to interested faculty members and students. Prerequisite: Completion of the required core courses.

597. Special Topics. One to four semester hours.

Organized class in a specialized area of current interest. May be repeated when topics vary.

History

Ricky Dobbs, Head 903-886-5928; Ferguson Social Sciences Building Judy Ford, Graduate Advisor 903-886-5225

The graduate program in History strives to promote independent thinking and to contribute to the development of a well educated person. Graduate training helps prepare the student for teaching in a high school, a junior college, a four-year college; for continued study of history at the doctoral level; or for one of the many non-academic areas in which historians work

Programs of Graduate Work

The Department of History offers students the choice of a Master of Arts or Master of Science degree. The M.A. has a foreign language requirement while the M.S. does not. For both the M.A. and the M.S., students may choose a thesis or non-thesis option.

Admission

Acceptance will be based on admission to the Graduate School, scores on the Graduate Record Examination (GRE), and undergraduate program and grade point average.

Degree Requirements

The student beginning a program of study toward the master's degree in history should consult with the History Department graduate advisor at the beginning of his or her first semester of study toward the degree.

Master of Arts and Master of Science in History (Option I)

The student completing either a Master of Arts or a Master of Science Option I program takes 30 semester hours and must take at least nine of ten required courses in the Department of History. These nine courses include six hours of thesis. The candidate takes one graduate course outside history as an elective, although with special approval from the head of the department this may be in history as well.

Ten-course program to be completed:

- History 590.
- 2. Choose three courses from History 521, 542, 543, 544, 551, 552, 553 and 554.
- 3. Choose three courses from History 520, 540, 550, 555, and 597 (may be repeated as topics change).
- 4. History 518—Thesis, 6 hrs.
- 5. Choose one additional graduate course outside of History.

Master of Arts and Master of Science in History (Option II)

A student completing a Master of Arts or a Master of Science Option II program is required to complete 36 semester hours and to take at least ten of the twelve required courses in the Department of History and the remaining two outside of History.

Twelve-course program to be completed:

- 1. History 590
- 2. Choose four courses from History 521, 542, 543, 544, 551, 552, 553, and 554.

- 3. Choose three courses from History 520, 540, 550, 555, and 597 (may be repeated as topics change).
- 4. Choose one elective within History.
- 5. History 595.
- 6. Choose two additional graduate courses outside of History.

Minor in History

A minor in history at the master's level consists of four courses in history as approved by the departmental graduate advisor or the head of the department.

Note: The Department reserves the right to suspend from the program any student who in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

History (Hist)

- 518. Thesis. Three to six semester hours.
- 520. Topics in World/Comparative History. Three semester hours.

This course provides a focused and thorough analysis of a topic in World or Comparative History through reading and discussing the relevant historiography, and through guided student research. Topic will vary from semester to semester. Students may retake the course for credit as the topic changes.

521. Readings in Latin American History. Three semester hours.

This course will offer in-depth readings in various topics relating to the political, economic, social, cultural and diplomatic history of Mexico, Central and South America from pre-Columbian times to the present. Regional emphasis may vary from semester to semester.

540. Topics in European History. Three semester hours.

This course provides a focused and thorough analysis of a topic in European History through reading and discussing the relevant historiography, and through guided student research. Topic will vary from semester to semester. Students may retake the course for credit as the topic changes.

542. Readings in Medieval European History. Three semester hours.

This course provides an introduction to the wide range of research questions and historiographical debates which occupy historians of Europe from approximately 500 to 1500. Readings will concentrate on the collapse of the Roman Empire, the establishment and nature of medieval Christianity, the Carolingian Renaissance, the characteristics of a "feudal" economy and society, medieval technology.

543 Readings in Early Modern European History. Three semester hours.

This course provides an introduction to the wide range of research questions and historiographical debates which occupy historians of Europe from approximately 1500 to 1789. Readings will concentrate on the Renaissance, the Reformation, the Scientific Revolution, urbanization and economic change, European expansion and the world economy, the witch craze, the Enlightenment, and the French Revolution.

544. Readings in Modern European History. Three semester hours.

This course provides an introduction to the wide range of research questions and historiographical debates which occupy historians of Europe from approximately 1789 to the present. Readings will concentrate on the French Revolution; ideas and movements such as liberalism, socialism, nationalism, imperialism, feminism, and modernism; industrialization; war and society; mass media and popular culture; and the rise and fall of Communism.

550. Topics in American History. Three semester hours.

This course provides a focused and thorough analysis of a topic in American History through reading and discussing the relevant historiography, and through guided student research. Topic will vary from semester to semester. Students may retake the course for credit as the topic changes.

551. Readings in U.S. History to 1775. Three semester hours.

This course provides an introduction to the wide range of research questions and historiographical debates which occupy historians of the United States from the colonial period through 1775. Readings will concentrate on European contact, exploration, and settlement; the emergence of American social, cultural, economic and political institutions; and the origins of the struggle for American independence.

552. Readings in U.S. History, 1775-1850. Three semester hours.

This course provides an introduction to the wide range of research questions and historiographical debates which occupy historians of the United States from 1775 to 1850. Readings will concentrate on the origins and course of the American Revolution; the shaping of the fundamental constitutional and political institutions of the American people; westward expansion; and Jacksonian America.

553. Readings in U.S. History, 1850-1920. Three semester hours.

This course provides an introduction to the wide range of research questions and historiographical debates which occupy historians of the United States from 1850 to 1920. Readings will concentrate on the origins and course of the Civil War; Reconstruction; the economic, political, social and cultural changes caused by industrialization; and the rise of the United States to preeminence as a world power.

554. Readings in U.S. History from 1920. Three semester hours.

This course provides an introduction to the wide range of research questions and historiographical debates which occupy historians of the United States from 1920 to the present. Readings will concentrate on American involvement in the World Wars; the rise of the United States to military, economic, and technological dominance; the social and cultural upheavals which accompanied that rise; and recent challenges to that hegemony.

555. Topics in History for Middle and High School Teachers. Three semester hours.

This course provides a variety of investigations into World, European, and American histories designed for history and social studies teachers in grades four through twelve. Topic will vary from semester to semester. Students may retake the course for credit as the topic changes. This course will count as PDAS continuing education hours for public school teachers.

589. *Independent Study*. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

590. Historiography and Methodology. Three semester hours.

A study of selected research materials of significance in history with emphasis on investigative and verification techniques. The student is required to demonstrate competence in systematic research procedure. This course is required of all MA and MS students in history. It is recommended that this course be taken as early as possible in the student's graduate career.

595. *Research Literature and Techniques*. Three semester hours.

A study of selected research materials of significance in history with emphasis on investigative and verification techniques. The student is required to demonstrate competence in systematic research procedure.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Literature and Languages

Paul Zelhart, Interim Head Bill Bolin, Assistant Department Head 903-886-5260; Hall of Languages Donna Dunbar-Odom, Director of Graduate Studies (English) Shannon Carter, Director of First-Year Writing Program Maria Fernandez-Babineaux, Director of Graduate Studies (Spanish)

Programs of Graduate Work

The Department of Literature and Languages includes graduate studies in English and Spanish.

English

For the preparation of college teachers of English, the Department of Literature and Languages offers a Certificate in TESOL (Teaching English to Speakers of Other Languages), a Master of Arts in English, and a Ph.D. in English. For the preparation of high school teachers of English, the department offers the Certificate in TESOL, Master of Arts in English, and a Master of Science in English. In addition, doctoral students may pursue a comprehensive minor in English recommended especially for supervisors of programs in English education.

For the Ph.D. degree, the student may choose to concentrate in either Written Discourse: Theory and Practice (composition, rhetoric, and linguistics) or Critical Literacy (literature, literary theory, and reading). The Ph.D. program stresses both substantive knowledge of the various divisions within the field of English and an extensive introduction to the profession, including classroom teaching, tutoring, and computer-assisted instruction.

Specific requirements and procedures for graduate work and applications for assistantships may be obtained from the Head of the department or the Director of Graduate Studies.

Spanish

Graduate work in Spanish provides students with a thorough command of another language, prepares students for scholarly research, and helps train teachers of Spanish.

The Department of Literature and Languages offers a Master of Arts in Spanish. A student pursuing this degree has two options: one option is a 30-hour course requirement, plus thesis. A second option is a non-thesis, 36-hour course requirement, plus reading knowledge of a second foreign language. Students seeking either option must perform satisfactorily on a comprehensive written and oral examination with sections devoted to prose, drama, poetry, and language.

The foreign language faculty also prepares students for the doctoral research tool proficiency in Spanish. Candidates for this examination may apply to the Department of Literature and Languages for information.

A comprehensive minor in Spanish is available for doctoral degree students majoring in supervision, curriculum, and instruction. This minor is recommended for junior and senior college teachers of foreign languages.

Admission

English

Acceptance will be based on admission to the Graduate School, scores on the Graduate Record Examination (GRE), undergraduate grade point average, three references, a writing portfolio, and a statement of goals.

Spanish

Acceptance will be based on admission to the Graduate School, scores on the Graduate Record Examination (GRE), and undergraduate grade point average.

Degree Requirements

Master of Art and Master of Science in English

Students seeking a master's degree in English may choose either a thirty-semester-hour program that includes a thesis (English 518 counting for six hours) or a thirtysix-hour program that includes an independent research project (English 595 counting for three hours). Both programs of study lead to an M.A. degree for students who demonstrate foreign language proficiency or to an M.S. degree for students without a foreign language.

All master's students should consult with the Director of English Graduate Studies about which program would be most relevant to their future plans. Most coursework for both thirty and thirty-six-hour programs is elective, but students will want to select courses that reflect their interests and future needs and that will prepare them to write a final project (English 595 paper or English 518 thesis). Final projects may be written on literature, composition, linguistics, children's literature, or some combination thereof. With agreement of the student's committee, the project also may focus on creative writing by the student.

Summary of Requirements for a Master's Degree in English

Program	Thesis Option	Non-Thesis Option
Course Work (Major Dept.)	30 sh, at least 18 sh in English, including Eng 599	36 sh, at least 24 sh in English
Minor	12 of the 30 sh may be outside of English	12 of the 36 sh may be outside of English
Final project	6 sh of 518 Thesis (included in total 30 sh)	3 sh of 595 Paper (included in total 36 sh)
Examinations	Written and oral proposal of Thesis and final defense	Written and oral proposal of 595 paper
Foreign Language*	2 yrs. of same language in college, or equivalent language skills	2 yrs. of same language in college, or equivalent language skills

^{*}Students who do not satisfy the foreign language requirement will receive an M.S. degree rather than an M.A.

Master of Arts in Spanish

Summary of Requirements for a Master's Degree in Spanish

Requirement	M.A. (Thesis)	M.A. (Non-Thesis)
Course Work	30 sh including FLL/Eng 599	36 sh including FLL/Eng 599 and
(Major Dept.)	(at least 18 sh in major dept.)	Spa 595 (pending approval) (at least 24 sh in major dept.)
Minor Dept.	12 of the 30 sh may be outside the major dept.	12 of the 36 sh may be outside the major dept.
Foreign Language	a. 2 yrs of language in college, orb. Dept. FLPE, orc. 50 percentile on GSFLT, or	Reading competency of second foreign language (must satisfy criteria a or b c or d for this second language.)
	d. 6 sh, graduate level	a. 2 yrs. of language in college, orb. Dept. FLPE, or
		c. 50 percentile on GSFLT, or
		d. 6 semester hours, graduate level
Examinations	Final Comprehensive and Oral Defense	Final Comprehensive and Oral Defense
Thesis	6 sh maximum (included in total 30 sh)	n/a

Doctor of Philosophy in English

The Ph.D. in English requires 90 semester hours beyond the bachelor's degree or 60 semester hours beyond the master's, including 36 hours of core coursework, 9-12 hours in an area of specialization, 3-6 hours in electives, and a 9-hour dissertation. A student with master's degree work may petition the Director of Graduate Studies and the Head of the Department of Literature and Languages to use relevant master's level course work to satisfy some distribution requirements.

Summary of Course Requirements for a Doctoral Degree in English:

Doctoral distribution requirements beyond the Master's degree:
Pedagogical and Professional Core

Bibliography and Research Teaching Seminars Teaching Colloquiums	English 599 English 571/677 English 675/676	3 sh 6 sh 6 sh
Either Literary Theory and Teaching Literature in College OR	English 520 English 775	6 sh
Multi-Cultural Literature and Language and Approaches to the Teaching of Writing	English 503 English 776	6 sh Total 21 sh
Area 1 : Written Discourse Theory and Practice (One course in composition, one course in linguisti	ics)	6 sh
Area 2: Critical Literacy (One course in each: British, American, World Lite	erature)	9 sh
Total: Written Discourse (Area 1) + Critical Literacy (Area 2)		Total 15 sh

Additional hours in specialization

9-12 sh

Core Total 36 sh

Students focusing on Written Discourse: Theory and Practice will need 12 additional hours in the specialization, for a total of 18 hours of courses in Written Discourse. Those in Critical Literacy will need an additional 9 hours, for a total of 18 hours in Critical Literacy courses.

Electives 3-6 sh

Students who submit master's course work in English to satisfy some of the above requirements and those who do not have a master's degree in English will need to take additional electives, in consultation with a faculty advisor, the Director of Graduate Studies, and the head of the department.

Dissertation 9 sh

Grand Total 60 sh

Foreign Language (Research Tool Requirement)

12 sh of appropriate college-level classes in one foreign language. Students with native or near-native competence in a relevant foreign language may consult with the departmental Director of Graduate Studies regarding this requirement.

Residency

The residency requirement for a Ph.D. in English is satisfied by the student's participation in the following activities and experiences:

- a. All doctoral students must serve at least one year as a teaching assistant within the department. During that year, the student takes a full class load (6-9 hrs.), tutors undergraduates, has a faculty mentor, and teaches in the first-year program under faculty guidance.
- b. Doctoral students enroll in a series of graduate seminars in both their specialization and related areas. These seminars should require interaction with other students, interaction with a professor, and extensive use of library facilities.
- c. Doctoral students also enroll in a series of professional and pedagogical seminars and colloquia that will introduce them to the issues and history of the profession of teaching college English and that will provide them with mentors. They will observe senior faculty and other assistants teach and be observed by the Director of First-Year English, the Director of Graduate Studies, the department head and/or their faculty mentor.
- d. Doctoral students are encouraged to participate in professional conferences held by English Graduate Students for Academic Development (EGAD) and the annual Rhetoric Symposium held by the Federation of North Texas Area Universities, both in planning and arranging and by appearing on the program.
- e. Doctoral students are trained as tutors and work in the Communication Skills Center within the Department. In addition, all doctoral students work in the Computer Classroom and become familiar with the Educator software system.
- f. Doctoral students are encouraged to become involved in the profession by subscribing to relevant journals and by attending and presenting papers at local and national professional conferences.

Examinations

In addition to the coursework, foreign language, and residence requirements, doctoral students must take a qualifying examination.

An examination, consisting of both written and oral portions, is required at or near the completion of course work and before officially beginning work on the dissertation. Consult the Director of English Graduate Studies for details about timing and structure of the Ph.D. examination.

Dissertation

Requirements for the dissertation are as follows:

- a. Student writes a dissertation in the area of concentration under the direction of an advisor and two other committee members from the department, plus one member from another department.
- b. The dissertation process requires a written proposal and oral defense of the proposal before the committee. The proposal defense is open to the university community.
- c. The dissertation requires a final oral defense after completion. The oral defense is open to the university community.

Additional details regarding qualifying exams and the doctoral dissertation are on pages 54-56.

Certificate in TESOL

The Department of Literature and Languages of Texas A&M University-Commerce in conjunction with the Department of Curriculum and Instruction offers the 19-hour Certificate in Teaching English to Speakers of Other Languages (TESOL).

Coursework for the Certificate includes five basic Applied Linguistics/ESL courses: Eng 501, 555, 557, 558, 562. In addition, a candidate completes a one-semester-hour practicum and one elective course. To pursue a TESOL Certificate, a student must be registered either as an M.A. or M.S. candidate or as a Non-Degree student or a Certification student

Note: The Department reserves the right to suspend from the program any student who in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

English (Eng)

501. Structure of the English Language. Three semester hours.

A thorough analysis of the grammatical structure of English employing contemporary as well as more traditional methodologies. Emphasis varies among phonology, morphology, syntax, text/discourse analysis and historical developments in the language.

503. Multicultural Literature and Languages. Three semester hours.

An examination of selected works from Africa, Europe, Latin America, or different cultures within the United States. Considers multicultural groups in relation to their literature, language, and culture.

504. Picture Books and the Art of Illustration. Three semester hours.

An approach to the modern art of the picture book, stressing the relationship between art and text. Authors and illustrators examined may include Caldecott, Greenaway, Wildsmith, de Paola, and Sendak.

505. History and Survey of Children's Literature. Three semester hours.

An overview of children's literature, emphasizing the history and development of classic works. Authors treated may include Potter, Carroll, Alcott, Baum, MacDonald, and Kipling.

506. Problems in Adolescent Literature. Three semester hours.

Designed for parents, teachers, prospective teachers, and librarians in middle, junior high, and senior high schools, this course focuses on the major authors and genres of adolescent, or "young adult" literature. Emphasis is given to specific problems such as censorship and book reviewing.

507. The Oral Tradition and Modern Fantasy for Children. Three semester hours.

A study of fables, folk and fairy tales, myths, and modern fantasy for children. Special attention will be paid to the relationship between oral and written forms. Works by Aesop, Grimm, Perrault, Sendak, Lewis, Tolkien, and Cooper may be included.

508. Historical and Realistic Literature for Children. Three semester hours.

An examination of representative works of historical and realistic fiction for children. Authors treated may include O'Dell, Wilder, Sutcliff, Twain, Cleary, and Paterson.

509. Literary Genres. Three semester hours.

An examination of one or more literary genres. Topics and approaches may vary, but might include a focus on a particular historical period, theme, or critical approach to selected poetry, drama, non-fiction prose, fiction, or film. May be repeated for credit when the emphasis changes.

513. *Learning Through Composing*. Three semester hours.

Examines to what extent and how composing influences learning and knowledge, how the nature of knowledge is affected by composing and the kinds of knowledge transformations that occur through composing. Includes attention to uses of writing for learning across the curriculum.

515. *History and Theory of Rhetoric*. Three semester hours.

A study of the major theories and theorists of rhetoric from classical times to the

twentieth century. Emphasis varies from semester to semester. Attention is given to such theorists as Aristotle, Sophists, Plato, Cicero, Quintilian, Perelman, Richards, Weaver, and Moffett. May be repeated for credit when the emphasis changes.

516. Colonial and Federalist Literature. Three semester hours.

This course will treat journals, sermons, reminiscences, poetry, and other writings beginning with John Smith and spanning the colonial writers such as William Bradford, John Winthrop, Joseph Cotton, the Mathers, Jonathan Edwards, and Anne Bradstreet in order to capture the spirit of a vibrant New England, experiencing social, religious, and economic change, from the Puritan dominance in New England society and its fragmentation, through the Federalist period and the founding of the nation by Thomas Jefferson, Benjamin Franklin, James Madison, and others.

518. Thesis. Three to six semester hours.

Required of candidates seeking the 30-hour Master's. Graded on a satisfactory (S) or unsatisfactory (U) basis.

519. American Literary Realism. Three semester hours.

Studies in various aspects of American literature from about 1865 to about 1920, the time usually spoken of as the Age of Realism but often called the Age of Realism and Naturalism. Some important authors of this period include Twain, Dickinson, H. James, S. Crane, Dreiser, Eliot, and Frost.

520. Approaches to Literary Theory. Three semester hours.

A study of major trends in literary theory from Plato and Aristotle to the present. Primary focus is on various approaches to analyzing literature, including formalist, psychological, Marxist, structuralist, feminist, reader-response, and new historicism.

521. Modern American Literature. Three semester hours.

Studies in various aspects of the period in American literature extending roughly from 1920-1950. Important authors during this period may include Hemingway, Fitzgerald, Wright, Faulkner, Warren, Frost, Eliot, Stevens, K.A. Porter, Miller, and O'Neill. Topics which might be covered include imagism, vorticism, the war novel. proletarian literature, the Great Depression in literature, agrarianism, and the Lost Generation. May be repeated for credit when the emphasis changes.

522. *Major Figures in American Literature*. Three semester hours.

A treatment of outstanding figures in American literature, such as Twain, Thoreau, Hemingway, Dickinson, Ellison, Bellow, Cather, or Warren, or a treatment of two or three important figures who bear some kind of close relationship to one another as members of a particular school or through personal relationships. May be repeated for credit when the emphasis changes.

525. Contemporary Literature. Three semester hours.

A study of the literature of the last two or three decades, reviewing the international scene or concentrating perhaps on a single genre or topic, such as recent American fiction or post-War British poetry.

526. Studies in Shakespeare. Three semester hours.

A study of selected comedies, tragedies, histories, and the major critical theories. Also emphasizes the historical, intellectual, and social background of Shakespeare's England.

527. American Renaissance. Three semester hours.

Studies in various aspects of American literature from the Romantic period, especially the period of Poe, Hawthorne, Melville, Emerson, Thoreau, and Whitman, often labeled the American Renaissance. Dates covered range from about 1820 to around 1865. Topics covered may include transcendentalism, the development of the American short story and novel, and the origins of American nature poetry.

529. Workshop for Public School Teachers. Three semester hours.

A practical workshop on various topics, including teaching literature, languages, and composition in elementary and secondary schools, evaluation of written assignments or developing writing projects, how media interacts with composition and literature. Graded on a satisfactory (S) or unsatisfactory (U) basis.

531. *Major Figures in British Literature*. Three semester hours.

A thorough study of the age, the work, and the influence of a selected literary figure such as Chaucer, Spenser, Samuel Johnson, Blake, Hardy, Dickens, Auden, Lawrence, Fowles, and Greene; or treatment of two or three important figures who have some close relationship to one another. May be repeated for credit when topic changes.

534. Selected British Literature Before 1660. Three semester hours.

Individual investigation and group discussion of selected topic. May focus on major figures, critical or historical approaches, themes, or genres in British literature before 1660. May be repeated for credit when the emphasis changes.

536. Selected British Literature, 1660-1830. Three semester hours.

Individual investigation and group discussion of selected topic. May focus on major figures, critical or historical approaches, themes, or genres in British literature from 1660-1830. May be repeated for credit when the emphasis changes.

537. Selected British Literature, 1830-1945. Three semester hours.

Individual investigation and group discussion of selected topic. May focus on major figures, critical or historical approaches, themes, or genres in British literature from 1830-1945. May be repeated for credit when the emphasis changes.

540. Development of the British Novel. Three semester hours.

A study of the origin and development of the novel in Great Britain from the eighteenth century to the present. Novels by authors such as Fielding, Austen, Dickens, Hardy, Woolf, and Joyce may be included.

555. General Linguistics. Three semester hours.

An advanced survey of applied language science with an emphasis on the relationship between the structural systems of language and the mental representation of ordinary experience. Stresses phonology, morphology and syntax.

557. Teaching English as a Second Language. Three semester hours.

This course focuses on the linguistic, psychological, and socio-cultural foundations for teaching English to native speakers of other languages. It surveys historical as well as current trends in the methods and materials of ESL, of language testing, and of language-program evaluation.

558. Sociolinguistics. Three semester hours.

This course focuses on the various aspects of human behavior and sociocultural interaction that affect language structure, use, learning, and acquisition. Topics discussed include sociolinguistic methodology, multilinguistics, speech-act types, language styles, language and sex roles, and the sociolinguistics of literature.

559. Language and Culture in the Classroom. Three semester hours.

This course will focus on language diversity in education. Of particular interest will be societal factors that influence education—racism, ethnicity, sexism, bilingualism and bidialectalism and how these dynamics often affect the decisions educators make in designing and implementing language curriculum in the classroom.

562. Psycholinguistics. Three semester hours.

A survey of the cognitive, affective and developmental constraints on language acquisition and use. Topics include multilingualism; language, mind and brain; language processing and comprehension; first and second language acquisition; and research tools.

570. Strategies in Composition. Three semester hours.

A survey of approaches and strategies in the composing process and in the analysis of forms in composition, with particular emphasis on professional writing.

571. Theory and Practice of Teaching Reading and Writing in College. Three semester hours

Study of the objectives of college English; methods and materials for the teaching of college English, including the audio-visual; testing techniques; and curriculum planning and administration of English programs.

578. Workshop on Writing. Three semester hours.

A workshop in writing poetry, fiction, non-fiction prose, or screenplays. Extensive writing and peer critiques. May be repeated for credit when the emphasis changes.

579. Style and Stylistics. Three semester hours.

A study of style using the techniques of linguistic and rhetorical analysis. The course will emphasize writing in various styles, their functions and effects, and techniques of criticism that employ stylistic analysis.

580. Texts and Genders. Three semester hours.

A critical examination of how gender differences influence reading and writing strategies of fiction, non-fiction, poetry, and film, including issues of gender and style, gender and usage, and gender stereotyping. Crossover course: May count for either area of specialization.

581. Major Figures in World Literature. Three semester hours.

A study of major literary works from both classical and contemporary literature in diverse genres outside the English language tradition. May be repeated for credit when the emphasis changes.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

595. Research Literature and Techniques. Three semester hours.

Required of students who opt for the 36-hour Master's. This course requires an extensive investigation into a topic agreed upon by the student and the advisory committee. Graded on a satisfactory (S) or unsatisfactory (U) basis.

596. Practicum in TESOL. One to three semester hours.

Hands-on application of TESOL methods and techniques. In coordination with an Applied Linguistics adviser, candidates will teach in a mutually-agreed upon ESL setting. Graded on a satisfactory (S) and unsatisfactory (U) basis.

599. Bibliography and Methods of Research. Three semester hours.

For beginning literature and languages graduate students who have not had an equivalent graduate-level course, this course covers manuscript preparation, format; research techniques for literary, linguistics, and composition/rhetoric studies.

675. Colloquium: Teaching College Reading and Writing. Three semester hours.

A practicum in formulating syllabi in rhetoric that integrate selected textbooks and the theory of composition, and in the daily problems inherent in teaching expository writing. The class is required of all English assistant instructors in either the first or second semester they hold an assistantship. Graded on a satisfactory (S) and unsatisfactory (U) basis. Not applicable to hours for MA/MS degree. Prerequisite: Permission of the department Head.

676. Colloquium: Teaching Written Argument and Research. Three semester hours.

A practicum in the methods and daily problems inherent in teaching argumentative writing to college students. The class is required of all English assistant instructors in either the first or second semester they hold an assistantship. Graded on a satisfactory (S) and unsatisfactory (U) basis. Not applicable to hours for MA/MS degree. Prerequisite: Permission of the department Head.

677. Theory and Practice of Argumentative Discourse. Three semester hours.

A study of the problems and procedures involved in teaching argumentative writing to college students. The course includes study of traditional deduction, induction, and material fallacies, plus more modern concerns such as Toulmin logic and stasis theory. The course stresses how these processes of analyzing reasoning can be used and misused in teaching writing and in current textbooks. Students write a series of illustrative argumentative essays. The course also covers the documented paper.

680. Reading Theory for College English Teachers. Three semester hours.

An examination of the relationship between reading and writing developments and applications to instruction. Approaches reading and writing as cultural and cognitive activities. Integrates theoretical readings with classroom practices. Crossover course: May count for either area.

689. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

697. Special Topics. Three semester hours.

Organized class. May be repeated when topics vary. Prerequisite: Permission of the department Head.

718. Doctoral Dissertation. Three to nine semester hours.

Credit not to exceed nine semester hours. Graded on a satisfactory (S) and unsatisfactory (U) basis.

775. Teaching of Literature in College. Three semester hours.

Methods and theories of teaching the interpretation of literary and nonliterary texts to college students.

776. Approaches to the Teaching of Writing. Three semester hours.

Methods and daily problems inherent in teaching composition to specialized college audiences with stress on basic writers, the learning disabled, and students being tutored. May include measurement of writing, administration of writing centers, and tutoring practices.

Foreign Languages and Linguistics (FLL)

511. Teaching a Second Language. Three semester hours.

An advanced analysis of linguistic structures and cultural patterns important in second language instruction, emphasizing methodology and sociolinguistic applications for bilingual and Spanish instructors. Taught in Spanish.

512. Advanced Review of Spanish Grammar. Three semester hours.

A course designed for students who already have knowledge of the Spanish language. Emphasis will be placed on all essential aspects of grammar. Oral proficiency will also be stressed. This course will address the needs of teachers of Spanish and bilingual teachers as well as those who wish to improve their Spanish language skills.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department Head.

597. Special Topics. Three semester hours.

Organized class. May be repeated when topics vary. Prerequisite: Permission of the department Head.

599. Bibliography and Methods of Research. Three semester hours.

For beginning literature and languages graduate students who have not had an equivalent graduate-level course, this course covers manuscript preparation, format; research techniques for literary, linguistics, and composition/rhetoric studies; and research methods for foreign language majors.

Spanish (Spa)

503. Advanced Spanish Composition and Stylistics. Three semester hours.

Emphasis on writing and editing expository prose in Spanish. Analysis of style, genre, tone and other aspects of essays, narratives, and other forms of non-fictional prose. Students devote much time to editing and evaluating their own work.

505. Children's Literature in Spanish. Three semester hours.

Designed for teachers or prospective teachers. Emphasis will be placed on class, group, and individual study and discussion of special problems that may arise in the pupil's reading of literature, particularly questions that relate to the bilingual-bicultural child. Prerequisite: Undergraduate courses in Spanish or Spanish language proficiency.

514. Mexican American Literature. Three semester hours.

Reading and analysis of selected works by major Chicano and U.S. Hispanic authors who write in Spanish. Ideas, writing techniques, language, and cultural aspects will be examined.

516. Latin American Literature. Three semester hours.

A study of Latin American literature with emphasis on prose fiction or poetry and drama. Authors treated in prose fiction may include Isaacs, Borges, Garcia Marquez, Fuentes, and Vargas Llosa; in poetry and drama, authors treated may include Sor Juana Ines de la Cruz, Hernandez, Marti, Ruben Dario, Mistral, Neruda, Paz and Carballido. May be repeated for credit when the emphasis changes.

518. Thesis. Six semester hours.

Graded on a satisfactory (S) or unsatisfactory (U) basis.

535. Comparative Literature. Three semester hours.

A comparative study of movements or themes in Hispanic Literature with those of other literatures. Comparative studies may include the Don Juan legend, the Picaresque novel, the Romancero in western literature, the impact of the *qestes* in French literature, and the Symbolist, Parnassian, and Modernist movements in western poetry. May be repeated for credit when the emphasis changes.

550. Major Literary Figures. Three semester hours.

A seminar on major literary writers of either Peninsular or Latin American Literature. Selections may include works of Cervantes, Calderón de le Barca, Fray Luis de León, Pérez Galdós, García Lorca, Bécquer, Cela, Ortega y Gasset, Cortázar, Neruda, Allende, Storni. May be repeated for credit when the emphasis changes.

555. Literary Movements. Three semester hours.

A study of one of the significant literary movements in Peninsular or Latin American literature. The course may focus on a topic such as Renaissance and Golden Age, Generation of '98, Romanticism, Realism and Naturalism, Modernism, Multiculturalism and Representation. May be repeated for credit when the emphasis changes.

560. Studies in Genres. Three semester hours.

Studies by genre (fiction, drama, poetry, cinema) of selected works from Peninsular or Latin American literature in which the emphasis is on the type of literature rather than on the period or author. May be repeated for credit when the emphasis changes.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content

area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

595. Research Literature and Techniques. Three semester hours.

Required for the students who opt for the 36-hour Master's. This course requires an extensive investigation into a topic agreed upon by the student and the advisory committee. Graded on a satisfactory (S) or unsatisfactory (U) basis.

597. Special Topics. One to four semester hours.

Organized class. May be repeated for credit when the emphasis changes.

Mass Media, Communication, and Theatre

John Hanners, Head

903-886-5346; Performing Arts Center

The Department of Mass Media, Communication, and Theatre offers graduate courses in theatre and speech communication and graduate degrees in theatre.

The goals of the graduate program in theatre are to:

- Develop an understanding of the relationship between dramatic theory and onstage practice;
- 2. Study the dramatic tradition and the history of the performing arts;
- 3. Prepare students for doctoral programs in theatre studies;
- 4. Prepare students for community college teaching;
- 5. Provide the skills and experience necessary for entry into professional theatre, film and television; and
- 6. Supplement the knowledge and skills of secondary education teachers.

Performing Arts Center laboratories are available in two theatres, shops, a complete television studio and two radio stations. Several graduate assistantships are available.

Programs of Graduate Work

The Theatre Division of the Department of Mass Media, Communication, and Theatre offers the following degrees in theatre: Master of Arts, Master of Science-Option I, and Master of Science-Option II. In addition, comprehensive minors in both threatre and speech communication are available for doctoral degree students.

The Theatre Division also develops programs that meet the needs of individual students by working with other disciplines to develop an Interdisciplinary Degree. These degrees must have the approval of the Dean of The Graduate School and a degree plan must be on file in the Department of Mass Media, Communication, and Theatre and The Graduate School.

Admission

Acceptance will be based on admission to the Graduate School, scores on the Graduate Record Examination (GRE), undergraduate grade point average, two references, a résumé, and a statement of goals.

Degree Requirements

General Requirements

Students completing degrees in any one of the three programs must take the following four-course series.

History and Theory: 2 courses from The 511, 542, 543

Management and Technical Theatre: 1 course from The 512, 545, 548

Directing and Playwriting: 1 course from The 541, 544

Master of Arts in Theatre

In addition to the general theatre requirements listed above, students must complete the following:

2 courses (electives in theatre, which may include courses from the general requirements or additional theatre course offerings.)

2 courses, The 518—Thesis.

2 courses, general electives in theatre, or with the approval of the graduate theatre advisor, outside the program.

Master of Science in Theatre—Option I

Students must meet the general theatre requirements listed above and must complete the following:

2 courses, The 518—Thesis.

2 courses (electives) in theatre, which may include courses from the general requirements or additional theatre course offerings.

2 courses, general electives in theatre, or with the approval of the graduate theatre advisor, outside the program.

Master of Science in Theatre—Option II

Students must meet the general theatre requirements listed above and must complete the following:

The 595—Research Literature and Techniques.

3 courses (electives) in theatre, which may include courses from the general requirements or additional theatre course offerings.

4 courses, general electives inside or outside of theatre that may be designated as a minor with the approval of the graduate theatre advisor and the graduate advisor in the selected minor.

Individual Master of Science-Option II programs may be arranged with the approval of the Theatre Graduate Advisor, the Department Head, and the Dean of The Graduate School.

Note: The Department reserves the right to suspend from the program any student, who in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

Speech Communication (Spc)

518. Thesis. Six semester hours.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

595. Research Literature and Techniques. Three semester hours.

A review of current research publications in speech communication with emphasis on methodologies used. The student is required to research and write a formal paper using current research methodologies. Prerequisite: Consent of Department Head.

Theatre (The)

511. Dramatic Theory. Three semester hours.

Studies of the major documents in the evolution of dramatic theory, from classical foundations through major movements to contemporary criticism.

512. Theatre Management. Three semester hours.

Study of the practical problems of operating educational and community theatres. Problems of organization, business, and audience development are explored.

- 518. Thesis. Six semester hours.
- 529. Workshop. Three or six semester hours.
- 541. Seminar in Stage Direction. Three semester hours.

A study of theories and techniques of producing the play: style, genre, movement, business, and visual components.

542. Development of Modern Theatre. Three semester hours.

A survey of the modern theatre from the rise of Naturalism to the present day, with attention being given to the theatrical conditions and changing intellectual climate of the Twentieth Century.

543. Development of American Theatre. Three semester hours.

A study of the theatre as it reflects the social, artistic, and literary interests in America from the colonial period to the contemporary scene.

544. Playwriting. Three semester hours.

An individual study of dramatic theory, development of the script, and analysis of original scenes and plays. Prerequisite: Consent of the instructor.

545. Stage Lighting. Three semester hours.

Theory of color, optics, electrical instruments, and control for stage production and television.

548. *Design as Scenic Metaphor*. Three semester hours.

Projects in scenic design stressing the role of the designer as a member of the creative interpretative team, expressing style, genre, and functional needs of the stage setting.

560. Acting. Three semester hours.

Intensive approach to acting styles to help the advanced student (1) sharpen technical skills; (2) gain experience in problem-solving situations for the actor; and (3) increase awareness of the complexities of the actor's craft. Memorized scene work; exercises in language, movement and characterization.

589. *Independent Study*. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

595. Research Literature and Techniques. Three semester hours.

A review of current research publications in theatre with emphasis on methodologies used. The student is required to research and write a formal paper using current research methodologies.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

599. Rehearsal and Performance. Three semester hours.

Preparation and performance, with laboratory, of Summer Theatre, touring, indoor and outdoor productions. Techniques, practices, problems, and processes in lighting, costume, scenic, sound, management, and acting for the graduate student.

Mathematics

Rick Kreminski, Head Binnion Hall, 903-886-5157

The graduate program in mathematics aims to give thorough training to the student in one or more areas of mathematics, to stimulate independent thinking, and to provide an apprenticeship for the development of creative research. These experiences prepare the student for employment in a high school, a junior college, a four-year college, continued study of mathematics at the doctoral level, or in one of the many nonacademic areas in which mathematicians work.

Graduate students in mathematics have access to powerful software packages, and many courses include computer applications.

Programs of Graduate Work

Graduate work leading to a Master of Arts or a Master of Science degree is offered with an emphasis in algebra, analysis, or probability-statistics, in addition to many special topic offerings. Emphases for secondary and middle school teachers are specially planned to meet their individual and particular objectives.

Also, students may select courses leading to a minor in applied mathematics.

Admission

Students entering the M.S. or M.A. program for a career in higher education, professional work, or further advanced study in mathematics must meet the background requirements, which include the calculus sequence, discrete mathematics, and at least two upper-level undergraduate mathematics courses from the areas of algebra, analysis, topology, statistics, and probability.

Secondary mathematics teachers and other students entering the master's degree program with goals other than work as a professional mathematician or advanced study in mathematics should have an undergraduate minor in mathematics, that is, Calculus I, II, and III, and three advanced math courses.

Acceptance will be based on admission to the Graduate School, scores on the Graduate Record Examination (GRE), undergraduate grade point average, and mathematics background as outlined above.

Degree Requirements

Master of Arts and Master of Science in Mathematics (Option I)

Option I of the M.A. and the M.S. in Mathematics requires 10 courses and a thesis as follows:

- 1. At least four courses including one sequence from: 501-502; 511-512; 538-539; 543-544 (12 sh).
- 2. At most four courses from: 516, 517, 531, 536, 537, 561, 571, 572, 573, 580, 597 (12 sh).
- 3. 518—Thesis (6 sh).

Master of Arts and Master of Science in Mathematics (Option II)

Option II of the M.A. and the M.S. in mathematics requires 12 courses as follows:

- A core of at least eight courses in mathematics, including 595, with a minimum of four courses, including at least one sequence from: 501-502; 511-512; 538-539; 543-544
- The remaining four graduate electives may be selected in math from those courses not used in the core, or from courses outside of mathematics with the approval of the mathematics department.
- 3. Math 529 may not be used.

Minor in Applied Mathematics

Satisfactory completion of four to six of the following courses will meet requirements for a minor in mathematics: Math 501, 502, 511, 512, 516, 517, 531, 536, 537, 538, 539, 543, 544, 561, 597; Phys 517.

Note: The Department reserves the right to suspend from the program any student, who in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

Mathematics (Math)

500. Discrete Mathematics. Four semester hours.

Study of formal logic; sets; functions and relations; principle of mathematical induction; recurrence relations; and introductions to elementary number theory; counting (basic combinatorics); asymptotic complexity of algorithms; graph theory; and NP-completeness. This course is useful to those taking graduate classes in computer science. It may be taken for graduate credit towards a masters in mathematics only by consent of the department. Prerequisite: Consent of the instructor.

501-502. Mathematical Statistics. Six semester hours.

Probability, distributions, moments, point estimation, maximum likelihood estimators, interval estimators, test of hypothesis. Prerequisite: Math 225.

511-512. Advanced Calculus. Six semester hours.

Properties of real numbers, continuity, differentiation, integration, sequences and series of functions, differentiation and integration of functions of several variables. Prerequisite: Math 436 or 440.

516. Dynamical Systems. Three semester hours.

Iteration of functions; graphical analysis; the linear, quadratic and logistic families; fixed points; symbolic dynamics; topological conjugacy; complex iteration; Julia and Mandelbrot sets. Computer algebra systems will be used. Recommended background: Math 192 and Math 331.

517. Calculus of Finite Differences. Three semester hours.

Finite differences, integration, summation of series, Bernoulli and Euler Polynomials, interpolation, numerical integration, Beta and Gamma functions, difference equations. Prerequisite: Math 225.

518. Thesis. Six semester hours.

This course is required of all graduate students who have an Option I degree plan. Graded on a (S) satisfactory or (U) unsatisfactory basis. Prerequisite: Consent of instructor.

529. Workshop in School Mathematics. Three semester hours.

This course may be taken twice for credit. A variety of topics, taken from various

areas of mathematics, of particular interest to elementary and secondary school teachers will be covered. Consult with instructor for topics.

531. *Introduction to Theory of Matrices*. Three semester hours.

Vector spaces, linear equations, matrices, linear transformations, equivalence relations, metric concepts. Prerequisite: Math 334 or 335.

536. *Cryptography*. Three semester hours. (Same as CSci 568)

The course begins with some classical cryptanalysis (Vigenere ciphers, etc). The remainder of the course deals primarily with number-theoretic and/or algebraic public and private key cryptosystems and authentication, including RSA, DES, AES and other block ciphers. Some cryptographic protocols are described as well. Prerequisites: Graduate standing in mathematics or consent of the instructor.

537. Theory of Numbers. Three semester hours.

Factorization and divisibility, diophantive equations, congruences, quadratic reciprocity, arithmetic functions, asymptotic density, Riemann's zeta function, prime number theory, Fermat's Last Theorem. Prerequisite: Consent of instructor.

538-539. Functions of a Complex Variable. Six semester hours.

Geometry of complex numbers, mapping, analytic functions, Cauchy-Riemann conditions, complex integration. Taylor and Laurent series, residues. Prerequisite: Math 511.

543-544. Abstract Algebra. Three semester hours.

Groups, isomorphism theorems, permutation groups, Sylow Theorems, rings, ideals, fields, Galois Theory. Prerequisite: Math 334.

571. Higher Order Approximations for Teachers. Three semester hours.

This course, specifically for teachers, explores algebra-based techniques for powerful, highly accurate numerical approximations. Graphing calculators and some computer software will be used. Approximations for areas and volumes of regions, solutions to equations and systems of equations, sums of infinite series, values of logarithmic and trigonometric functions, and other topics are covered.

572. *Modern Applications of Mathematics for Teachers*. Three semester hours.

This course, specifically designed for teachers, covers a range of applications of mathematics. Specific topics may vary but have included classical (private key) encryption, data compression ideas, coding theory ideas (Hamming 7,4 code), private and public key cryptography, data compression including wavelets, difference equations (populations models, disease models) and stochastic difference equations (stock), GPS systems, computer tomography (e.g. CAT scans), polynomial interpolation/Bezier curves, coding theory, and topics from student presentations.

573. Calculus of Real and Complex Functions for Teachers. Three semester hours.

This course is designed for teachers, and explores similarities and differences between functions whose domain and range consist of sets of real numbers, and sets of complex numbers. Complex numbers are reviewed, with nontraditional applications to plane geometry. Alternate approaches to the meaning of the derivative are given so as to provide links between the notions of f'(x) and f'(z) (x real, z complex), and ways of understanding derivatives of inverse functions and composite functions. The geometry of functions of a complex number are explored. Cauchy-Riemann equations are derived and utilized. Power series in both the real and complex context are compared.

595. Research Literature and Techniques. Three semester hours.

This course provides a review of the research literature pertinent to the field of mathematics. The student is required to demonstrate competence in research techniques through a literature investigation and formal reporting of a problem. Graded on a (S) satisfactory or (U) unsatisfactory basis. Prerequisite: Consent of instructor.

597. *Special Topics*. One to four semester hours. Organized class. May be repeated when topics vary.

Applied Mathematics with Computer Applicability

561. Statistical Computing and Design of Experiments. Three semester hours.

A computer oriented statistical methods course which involves concepts and techniques appropriate to design experimental research and the application of the following methods and techniques on the digital computer: methods of estimating parameters and testing hypotheses about them, analysis of variance, multiple regression methods, orthogonal comparisons, experimental designs with applications. Prerequisite: Math 401 or 501.

Curriculum for Secondary Teachers (MTE)

520. Foundations of Complex Analysis. Three semester hours.

The properties of complex numbers are studied, and some emphasis is given to analytic functions and infinite series. Teachers of analysis or trigonometry will benefit from this course. Recommended background: Math 225.

530. Foundations of Mathematics. Three semester hours.

The fundamental properties of sets, logic, relations, and functions will be studied. This course will be helpful to secondary teachers by giving them a better understanding of the terms and ideas used in modern mathematics.

550. Foundations of Abstract Algebra. Three semester hours.

The fundamental properties of algebraic structures such as properties of the real numbers, mapping, groups, rings, and fields. The emphasis will be on how these concepts can be related to the teaching of high school algebra. Recommended background: Math 331 or 530.

560. Foundations of Euclidean Geometry. Three semester hours.

Various geometries, including Euclidean geometry, will be studied. Background for a better understanding of Euclidean geometry will be emphasized. Recommended background: High school geometry or Math 301.

580. *Topics from the History of Mathematics*. Three semester hours.

A chronological presentation of historical elementary mathematics. The course presents historically important problems and procedures. Prerequisite: Graduate standing with equivalent of undergraduate minor in mathematics.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Music

Chris White, Head

903-886-5303; Music Building

The Department of Music is a member of the National Association of Schools of Music and the Texas Association of Music Schools. The Department of Music offers the Master of Music degree with two areas of emphasis: Performance and Music Education.

Maintained within the Music Building are ample facilities for developing the various phases of musical ability. The recording and score collection in the general university library provides a valuable supplement for music scholarship and research. Private instruction is available in voice, keyboard, winds, percussion, strings, and conducting.

Program of Graduate Work

Master of Music degree

The Master of Music with an emphasis in performance develops specific music skills and abilities to a high degree in the fields of instrumental, keyboard, and vocal performance and conducting. The Master of Science degree, while bearing potentially an emphasis on teacher training, offers opportunity for developing broader academic backgrounds in conjunction with the music major. The music education program can be suited to the needs of band directors and choral directors and students interested in piano pedagogy. Students in the M.M. program choose either an emphasis in performance (applied music) or in music education.

Admission

For performance majors, the prerequisite is a Bachelor of Music (or equivalent). For music education majors, the prerequisite is a bachelors degree with a music major.

Degree Requirements

Master of Music

Performance Major

Performance students complete 30 semester hours as detailed below. In addition, graduate students pursuing the Master of Music degree with an emphsis in performance must perform a fifty-minute public recital.

Prerequisite: Bachelor of Music degree (or equivalent).

erequisite. Bueneror or music degree (or equivalent).	
Applied major [instrumental, conducting (10), piano, voice (8)]	(10-8)
Applied minor [major: instrumental; voice (piano minor)]	(2)
Applied elective [major: instrumental]	(2)
Pedagogy [major: instrumental, voice (2); piano (6)]	(2-6)
Literature [major: instrumental, voice (2); piano (6)]	(2-6)
Conducting [major: instrumental, voice]	(2)
Music history and theory [minimum 2 sh history and 2 sh theory]	(6)
Research literature and techniques	(3)
Music electives—not major applied [major: voice (5); piano (1)]	(1-5)
Recital [required]	(0)
TOTAL	30 sh

Music Education Major (non-thesis program)

Music education students choose one of three programs of study—piano pedagogy; band direction, or choral direction—and complete 36 semester hours, as outlined below.

Prerequisite: A bachelor's degree (or equivalent) with a music major (or equivalent).

Band Direction	(36)

Required: (10) 526 Seminar in Band Literature; 531 Pedagogy of Brass; 531 Pedagogy of Woodwinds; 531 Pedagogy of Percussion, 514 Advanced Instrumental Conducting

Elective Music Education	Seminars, Methods and Workshops	(11)

Choose from the following: 505 Advanced Theory; 517 Advanced Analysis; 522 Music of the Baroque; 523 Music of the Classic Era; 524 Music of Romantic Era; 525 Music of the 20th Century; 532 Seminar in Theory.

595 Research Literature and Techniques	(3)
Electives	(6)
Choral Direction	(36)
550 Music Education Seminars, Methods and Workshops	(16)
Selected from the following: *526 Choral Literature I & II; 526 V	ocal Litera-
ture (Art Song); 526 Vocal Literature (Opera and Oratorio); 529	Workshops;
531 Vocal Pedagogy; 513 Advanced Conducting; and three hours of	of additional
course work	
505 D 1 L' (1 T 1 '	(2)

595 Research Literature and Techniques (3)

Music History and Theory

(6)

Recommended Choices: 505 Advanced Theory (2); 517 Advanced Analysis (2); 522 Music in the Baroque Era (2); 523 Music in the Classic Era (2); 524 Music in the Romantic Era (2); 525 Music in the Twentieth Century (2).

Music Electives (11)

Music Minor

The music minor at the graduate level will include a minimum of 12 semester hours of graduate work in music. A comprehensive minor of 30 semester hours in music is available for doctoral degree students majoring in supervision, curriculum, and instruction. This program is recommended for junior and senior college teachers of music and for school supervisors. (See Doctor of Education in Supervision, Curriculum, and Instruction—Higher Education degree plan program, Department of Educational Leadership.) A music minor (or its equivalent) at the undergraduate level constitutes the normal prerequisite for declaring a graduate minor in music.

Department Requirements

Qualifying (Advisement) Examinations

Graduate students are required to audition (performance or teaching demonstration) and complete the diagnostic examinations at the beginning of the first semester of graduate study. Students with a Bachelor's degree from A&M-Commerce may use a letter of recommendation from their applied teacher(s) in lieu of an audition. Students may petition to defer all or part of the diagnostic examinations to the beginning of the second semester of graduate study; however, the diagnostic examinations cannot be repeated.

All graduate students will take diagnostic examinations in music history and theory. Depending on the student's intended graduate major, additional examinations may be required in music education, major and/or minor applied music, piano, orchestration, conducting, and foreign language diction. Students with a Bachelor's degree from A&M-Commerce may use a letter of recommendation from their applied teacher(s) in lieu of an audition. The results of the diagnostic examinations are used for academic advisement and normally do not constitute a basis for actual admission. Once the student completes the diagnostic examinations, the student is assigned a committee which will deterimine a degree plan to address the student's strengths, needs, and areas of interest.

Final Comprehensive Examinations

The Department of Music requires the candidate to pass a written examination over the course work listed on the degree plan prior to taking an oral examination.

Applied Music

Graduate students can enroll for a maximum of four semester hours of applied music each semester or two semester hours of applied music in the graduate music summer term. Graduate assistants are limited to four semester hours of applied music and/or ensembles as part of the minimum required course load of six semester hours. Voice performance majors with advanced piano skills may petition to use the piano minor credits as elective credits. Instrumental performance majors may use the applied electives on the same instrument as the applied minor or on one other instrument.

Elective Courses

Other than major or principal applied music, any graduate course offered by the Department of Music may be used as an elective unless specifically limited in a degree program.

Note: The Department reserves the right to suspend from the program any student, who in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

Music (Mus)

505. Advanced Theory. Two or three semester hours.

A study of advanced ideas of theoretical thinking. May be repeated for credit when topics vary.

513. Advanced Choral Conducting. Two or three semester hours.

Advanced application of techniques developed in Mus 413. Prerequisite: Mus 413.

514. Advanced Instrumental Conducting. Two or three semester hours.

Advanced application of techniques developed in Mus 414. Prerequisite: Mus 414.

517. Advanced Analysis. Two semester hours.

A study of advanced means of analyzing music. May be repeated for credit when topics vary.

518. Thesis. Six semester hours.

Required of all graduate students who wish to write a thesis in the field of music or music education regardless of the individual's particular area of academic concentration. This course exploits bibliography and techniques fundamental to music research. Prerequisite: Approval of the department chairman.

522. Music of the Baroque Era. Two semester hours.

Music from 1600 to the death of Bach; styles, forms, and principal composers.

523. Music of the Classic Era. Two semester hours.

Styles, forms, and composers from the pre-classic school to the death of Beethoven.

524. Music of the Romantic Era. Two semester hours.

Early romantic elements in music. The development of the art song, piano music, opera, and instrumental music during the Nineteenth Century.

525. Music of the Twentieth Century. Two semester hours.

Representative music literature from Debussy to the present.

526. Music Literature and Repertoire. One, two, or three semester hours.

Approved subtitles will include Levels I and II of the following areas: piano, voice, instrumental, opera, and oratorio. May be repeated for credit when subtitles vary.

529. Workshop. One to six semester hours.

Workshops in elementary music, vocal, instrumental, keyboard, and other selected areas of music.

531. *Pedagogy*. One to three semester hours.

Approved subtitles will include Levels I and II in each of the following areas: woodwinds, brass, percussion, voice, strings, organ, piano, theory, and literature. May be repeated for credit when subtitles vary.

532. Seminar in Theory. Two or three semester hours.

Analysis of 20th Century music by major composers including Bartok, Copland, Britten, Barber, Prokofief, Shostakovich, Schoenberg, Schumann and Ives. Prerequisites: Satisfactory completion of Theory portion of the Graduate Diagnostic Exam.

550. Seminar in Music Education. Two or three semester hours.

Approved subtitles will include Source and Research Techniques, Historical Studies, Theoretical Studies, and Experimental Studies. May be repeated for credit when subtitles vary.

551. Applied Music. (Minor applied) One to four semester hours.

Private instruction for graduate performance majors. Prerequisites: Satisfactory level assessed in the applied music performance audition.

552. Applied Music. (Principal applied) One to four semester hours.

Private instruction for music majors in conducting, composition, instrumental, keyboard, and vocal study. May be repeated for credit.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

595. Research Literature and Techniques. Three semester hours.

Bibliographical material, library resources, and research techniques applicable to graduate study in music will be surveyed.

Physics

Bao-An Li. Head

903-886-5488; Science Building

The Department of Physics provides course work, training, and research experience to students who wish to further their education beyond the bachelor's level to achieve a greater degree of competence and recognition in their profession. The department offers two Master of Science degree programs. In addition to the M.S. in Physics, the department offers a broad-field program with a concentration in physics for students who wish to prepare to teach in several science fields in secondary schools.

The physics department provides well-equipped instructional and research laboratories. Sophisticated equipment and faculty direction are available for experimental research in solid state physics, X-ray spectroscopy, X-ray photoelectron, auger electron, appearance potential spectroscopy of surfaces, signal analysis of speech signals, microcomputer hardware and software development, and digital electronics.

Faculty conduct theoretical investigations in statistical properties associated with step formations on crystals. In addition, the department has an active space physics research program and maintains extensive equipment to help prepare teachers to introduce and teach the latest physics curriculum developments.

Programs of Graduate Work

Master of Science in Physics (Option I)

The Master of Science in physics with research thesis is ordinarily chosen by those students preparing for industrial employment, college teaching, or for further graduate study leading to the Ph.D. degree. This degree program includes a research thesis consisting of a 10-course sequence (30 sh), including two courses allotted to the thesis.

Master of Science in Physics (Option II)

The Master of Science without thesis is usually chosen by students preparing to teach in middle and secondary public schools or by students who plan to pursue applied physics careers in industry. This program consists of a 12-course sequence (36 sh).

Broad-field Program

A broad-field program, offered primarily for teachers, is available over the several fields of science with a concentration in physics. This program requires 12 hours (normally 15 hrs.) in physics, including Physics 595, and 6 hours each in two other science areas.

Minor in Physics

A physics minor is appropriate for several majors, including mathematics, chemistry, computer science, and technology. The digital electronics, signal processing, and microprocessor hardware courses are relevant particularly for computer science and telecommunications students.

A comprehensive minor in physics is available for doctoral degree students majoring in curriculum, and instruction. This program is recommended for community and senior college teachers of science and for school supervisors. (See Doctor of Education degree program, Department of Curriculum and Instruction.)

Admission

Acceptance will be based on admission to the Graduate School, scores on the Graduate Record Examination (GRE), and undergraduate grade point average.

Degree Requirements

Master of Science in Physics (Option I)

Required core courses include:

Phys 511—Introduction to Theoretical Mechanics

Phys 512—Classical Electricity and Magnetism

Phys 517—Principles of Mathematical Physics

Phys 520—Introduction to Quantum Mechanics

Phys 518—Thesis, 6 hrs.

Plus four courses on approval of graduate advisor.

Master of Science in Physics (Option II)

Physics Teaching Emphasis

Phys 526—Modern Physics

Phys 531—Physical Science for Teachers

Phys 532—Electrical Circuits

Phys 561—Astronomy Problems

Phys 595—Research Literature and Techniques

Plus three physics courses on approval of graduate advisor.

Plus four courses—chosen to support major teaching field.

Applied Physics Emphasis

Phys 511—Introduction to Theoretical Physics

Phys 512—Classical Electricity and Magnetism

Phys 517—Principles of Mathematical Physics

Phys 595—Research Literature and Techniques

The physics component of this program may be completed by either of two blocks of four courses:

Phys 520—Introduction to Quantum Mechanics

Phys 521—Introduction to Solid State Physics

Phys 523—Advanced Atomic Physics

Phys 524—Surface Physics or

Phys 514—Statistical Physics

Phys 542—Micro-controller Instrumentation and Control

Phys 552—Advanced Micro-controller Electronics

Phys 562—Signal Processing

Plus four courses chosen in consultation with graduate advisor

Department Requirements

All physics graduate students must register for Phys 501 (Seminar) each semester in residence. An "Admission to Candidacy Examination" is required of all students majoring in physics.

Note: The Department reserves the right to suspend from the program any student who in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

Physics (Phys)

501. Graduate Seminar. One semester hour.

This course may be taken each of four semesters for credit. Graded on a (S) satisfactory or (U) unsatisfactory basis.

511. Introduction to Theoretical Mechanics. Three semester hours.

A course in classical mechanics including the methods of Lagrange, Hamilton, matrices, tensors, and Hamilton-Jacobi theory. Prerequisite: Consent of instructor.

512. Classical Electricity and Magnetism. Three semester hours.

Electrostatics, magneto-statics, multiple expansions, solution of boundary value problems, slowly varying currents, electromagnetic energy and momentum, Maxwell's equations and applications.

514. *Statistical Physics*. Three semester hours.

General principles of statistical thermodynamics, equilibrium statistics of special systems, kinetic theory, diffusion and transport phenomena, and classical and quantum statistical mechanics. Prerequisite: PHYS 511 or consent of the instructor.

517. Principles of Mathematical Physics. Three semester hours.

Covers mathematical methods used in classical and modern physics and in the engineering sciences. Topics include vectors and curvilinear coordinates, matrices and linear algebra, operators and eigenvalues, boundary value problems, Fourier and Laplace transforms, partial differential equations of physics, Green's functions, and variational methods. Emphasis is placed on problem solving.

518. Research Leading to the Master's Thesis. Three or six semester hours.

520. Introduction to Quantum Mechanics. Three semester hours.

An introduction to modern quantum mechanics as applied to the hydrogen atom, the diatomic molecule, and solids.

521. Introduction to Solid State Physics. Three semester hours.

A study of crystal structure, lattice vibrations, thermal and magnetic properties of solids; semiconductors and transistors.

523. Advanced Atomic Physics. Three semester hours.

A study of theoretical and applied aspects of atomic structure. Topics include atomic models, ionization phenomena, X-ray, X-ray diffraction, and atomic collisions. Experimental investigations of atomic phenomena will be stressed. Prerequisite: Phys 520 or equivalent or Consent of instructor.

524. Surface Physics. Three semester hours.

Theory, principles and applications of surface characterization techniques to modern technological problems. Topics covered include ultra-high vacuum techniques, x-ray, ion and electron spectroscopes. Prerequisite: Consent of instructor.

526. Modern Physics. Three semester hours.

A course designed to acquaint teachers and others with the principles of atomic and nuclear science to prepare them to have a more adequate understanding of technical and news articles.

529. Science Workshop. Three to six semester hours.

Topics will be selected with reference to the needs of teachers. Prerequisite: Consent of the instructor.

531. Physical Science for Teachers. Three semester hours.

Basic and contemporary topics in motion, forces, properties of matter, energy, and related topics will be explored. The emphasis will be placed on physical science content but the class format will model methods of instruction based upon educational learning research. This course is appropriate for teachers and others who desire a strong conceptual understanding in these topics.

532. Electricity and Magnetism for Teachers. Three semester hours.

Basic and contemporary topics in electricity, magnetism, electrical circuits and related topics will be explored. The emphasis will be placed on physics content but the class format will model methods of instruction based upon educational learning research. This course is appropriate for teachers and others who desire a strong conceptual understanding in these topics.

542. *Micro-computer Instrumentation and Control*. Three semester hours. (Same as CSci 542)

The electronics for real-time micro-computer controlled systems. Topics include the physics of sensors and actuators, sensor signal conditioning, real-time data acquisition, elementary signal, motion control, and software for the instrumentation and control. Prerequisite: Consent of the instructor.

552. Advanced Micro-Controller Electronics. Three semester hours. (Same as CSci 552) Embedded logic design and programming. Topics include micro-controller selection, peripheral interfacing, low and high-level programming languages, and micro-controller development tools. Prerequisite: Consent of the instructor.

561. Astronomy Problems. Three semester hours.

This is a basic non-mathematical course designed to introduce public school teachers to current concepts in astronomy. Topics covered include motions of the earth, stellar evolution, stellar classes and spectroscopy, telescopes and observatories, galaxies and cosmology.

562. Signal Processing. Three semester hours. (Same as CSci 562)

Theoretical models of information processing; includes methods of signal representation, data conversion, decision making, filtering, and digital error problems. Prerequisite: Phys 317 or consent of instructor.

572. Parallel Computing. Three semester hours. (Same as CSci 572)

Computer topologies and networks, programming techniques, and parallel algorithms for multiprocessor and multi-computer systems including microcomputer clusters. Prerequisites: Physics 319 or CSci 319. Cross-listed with CSci 572.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

595. Research Literature and Techniques. Three semester hours.

A course designed to acquaint the student with the role of research in the initiation, development, and modification of concepts and theories in physics. Articles in professional journals in the field will be assigned for review, especially in areas in which theories are in a state of flux. The student will be encouraged to devise experiments through which clarification of concepts may result.

597. Special Topics. One to Four semester hours.

Organized class. May be repeated when topics vary. Some sections are graded on a Satisfactory (S) or Unsatisfactory (U) basis.

Political Science

Paul Lenchner, Head

903-886-5317; Ferguson Social Sciences Building

The Department of Political Science does not offer a graduate degree, but it does provide a limited range of graduate courses in support of other graduate degree programs. Students who are interested in such courses should contact the Head, Department of Political Science.

Graduate Courses

Political Science (PSci)

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

Sociology and Criminal Justice

Willie J. Edwards, Head

903-886-5332; Ferguson Social Sciences Building

The mission of the Department of Sociology and Criminal Justice is to provide quality academic and practical learning experiences to equip students with social, intellectual, leadership, and research skills that will serve them in a wide variety of careers

In addition to the major objective of contributing to the development of an educated person, some of the specific departmental objectives are as follows:

- 1. prepare students for teaching roles at all educational levels;
- develop students' skills and knowledge that will enable them to conduct and interpret empirical research;
- prepare students for professional careers in the fields of sociology and criminal justice;
- 4. prepare students for Ph.D. programs in sociology and criminology;
- develop programs designed to provide community services, extending from the local to regional and national levels;
- 6. provide curriculum support to other departments and university programs.

Programs of Graduate Work

Master of Science in Sociology

The Department of Sociology and Criminal Justice offers a Master of Science degree program in sociology with core courses in sociological theory, research methodology, data analysis, and research report writing. The master's program is conducted through a selection of appropriate courses within the framework of either a thesis (Option I) or a non-thesis (Option II) program. For additional information, students are advised to read the most recent departmental Graduate Handbook, available free from the department.

Minor in Sociology

A minor in sociology is available to master's degree students majoring in other selected programs at A&M-Commerce.

Admission

Acceptance will be based on admission to the Graduate School, scores on the Graduate Record Examination (GRE), undergraduate grade point average, two references, a résumé, and a sample of student's writing. Students are required to take a graduate diagnostic exam before initial enrollment or at the latest during the first semester of work in the department.

Degree Requirements

Students may contact Department Head to request a waiver of the following prerequisite coursework:

Soc 111—Introduction to Sociology

Soc 331—Research Methods or equivalent

Soc 332—Social Statistics or equivalent

Soc 436—Social Theory or equivalent

Master of Science in Sociology (Option I)

Soc 535—Readings in Sociology

Soc 572—Classical Sociological Theory

Soc 573—Contemporary Sociological Theory

Soc 575—Logic and Method of Social Inquiry

Soc 576—Data Analysis in Social Research

Soc 518—Thesis, 6 hrs.

Plus any three graduate sociology courses

Master of Science in Sociology (Option II)

Soc 535—Readings in Sociology

Soc 572—Classical Sociological Theory

Soc 573—Contemporary Sociological Theory

Soc 575—Logic and Method of Social Inquiry

Soc 576—Data Analysis in Social Research

Soc 595—Research Literature and Techniques

Plus 4-6 graduate electives in sociology and 2-4 approved electives outside sociology.

Note: The Department reserves the right to suspend from the program any studentwho in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

Sociology (Soc)

504. Studies in Contemporary Sociology. Three semester hours.

An in-depth study of contemporary theoretical and methodological issues in an area of study within sociology. Topics to be covered may include: suicide terrorism; teaching sociology; applied sociology; qualitative methodology; and the state of sociology. May be repeated when topics vary.

512. Sociological Perspectives on Marriage and the Family. Three semester hours.

A critical sociological analysis of the origin, structure, and functioning of the institutions of marriage and family in human society. Four theoretical perspectives in sociology (namely: functionalism, conflict theory, exchange theory and symbolic interactionism) will be employed for discussing and evaluating various problems and issues in marriage and family, particularly in the contemporary American society.

514. Family Violence. Three semester hours. (Same as CJ 514)

A thorough and critical examination of family violence from a sociological perspective. Topics include the meaning, nature, and types of family violence; biological, psychological, anthropological, and sociological theories which attempt to explain hostility, aggression, and violence among intimate people; the philosophy of non-violence; the consequences of violence; and preventive measures and strategies for dealing with violence in the family. Although the course focuses on the American family, illustrations of family violence from other cultures are provided.

515. *Medical Sociology*. Three semester hours.

This course will examine research and theory on the changing concepts of health, illness and medical practice as well as place these understandings in socio-historical and comparative context. Topics will include: social epidemiology, the social construction of health/illness, the experience of illness, health professions, alternative medicine and the health care system. Emphasis on how social factors such as gender, race, social class and sexual preference affect both illness and health care. The course will be applicable for students in sociology, criminal justice, social work, and psychology. This

course contributes 3 credit hours toward students' fulfillment of degree requirements. There is no lab or prerequisite for this course.

516. Sociology of Education. Three semester hours.

A study of the structure of the social organization of the school and the social and cultural forces which influence the school and those who teach and learn in it. The classroom is analyzed as a social system with special emphasis on the role of teachers. The relationships of education to other social institutions such as the family, economy and political system are examined.

518. Thesis. Six semester hours.

The student will work on the thesis under the supervision of an advisory committee. Major work will include the development of a prospectus, collection, analysis and interpretation of data and the final writing of the thesis. No credit will be given until the thesis is completed and approved. Graded on a (S) satisfactory or (U) unsatisfactory basis. Prerequisites: Sociology 572, 575, and 576 or permission of Department Head.

535. Readings in Sociology. Three semester hours.

This graduate seminar explores advanced sociological principles through the use of selected classic and contemporary readings. Students will be expected to read, synthesize, and integrate a wide variety of sociological materials and to analyze and discuss them from divergent theoretical perspectives.

553. *American Subcultural Groups*. Three semester hours.

An examination of cultural diversity in American life, focusing particularly on Black Americans, Mexican Americans, Native American Indians, and Anglo Americans. Describes dynamics of intergroup relations; the impact of ethnicity and social class on cultural patterns; the causes and effects of racism and prejudice. Special emphasis is placed on problems and strengths of multicultural education.

572. Classical Sociological Theory. Three semester hours.

This course will study the classical foundation of sociology, focusing on the writings of Durkheim, Weber, Marx and Mead. Attention will be given to how these theories have given rise to the major theoretical perspectives in sociology, particularly functionalism, conflict theory and symbolic interactionism. Prerequisites: Soc 436 or its equivalent or Department Head's permission.

573. Contemporary Sociological Theory. Three semester hours.

This course will build on the foundation of classical theory to focus on the construction and application of contemporary theories used in current sociological research. The major theoretical perspectives to be studied include: neofunctionalism, neomarxism, critical theory, feminist theory, post-modernism, as well as significant theorists dating from Parsons to the more recent theorists. Emphasis will be placed on the basic assumptions of the various theories, and the relevance of these ideas for understanding contemporary society. Prerequisites: Soc 436 or its equivalent or Department Head's permission.

575. Logic and Method of Social Inquiry. Three semester hours.

The coverage of the basic techniques and procedures used in social research process. Special attention given to defining research problems, selecting and measuring variables, stating hypotheses, developing sampling designs and gathering data. Students are exposed to methodological designs such as experimentation, observation, content analysis, evaluation research and survey research. Prerequisites: Soc 331 and 332 or their equivalents or Department Head's permission.

576. Data Analysis in Social Research. Three semester hours.

Students are exposed to basic techniques of data analysis in social research, particularly by use of computers. Special attention is given to tabulation, statistical testing,

and interpretation of data. Analysis of variance, multiple regression, dummy variable regression, path analysis and related topics will be covered with computer application for problem solving. Prerequisites: Soc 332, its equivalent, or Department Head's permission.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of Department Head.

595. Research Literature and Techniques. Three semester hours.

Students will write a formal research report based upon primary or secondary data. Emphasis will be given to methods of interpretation and writing a formal paper in sociology. Prerequisites: Soc 572, 575 and 576 or permission of the Department Head.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Criminal Justice (CJ)

514. Family Violence. Three semester hours. (Same as Soc 514)

A thorough and critical examination of family violence from a sociological perspective. Topics include the meaning, nature, and types of family violence; biological, psychological, anthropological, and sociological theories which attempt to explain hostility, aggression, and violence among intimate people; the philosophy of non-violence; the consequences of violence; and preventive measures and strategies for dealing with violence in the family. Although the course focuses on the American family, illustrations of family violence from other cultures are provided.

530. Seminar in Crime and Delinquency. Three semester hours.

This graduate level seminar in criminology is designed to help students develop an understanding of crime and delinquency in American society by applying sociological perspectives to the creation, causation, and societal reaction to crime and delinquency.

531. Contemporary Issues in Criminal Law. Three semester hours.

The course examines current as well as emerging criminal law issues in the United States. The course will have in-depth discussions on the theoretical, philosophical, ethical, and historical underpinnings of American substantive criminal law and its application to current issues such as the death penalty, forfeiture, and strict liability crime.

568. Seminar in Corrections. Three semester hours.

A study of popular issues in community-based and institutional corrections with emphasis on organizational goal setting and achievement, program evaluation, client supervision, agency administration, and problem solving. An analysis of current research and its applicability to the criminal justice system and society will be performed.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

College of Business & Technology

Harold Langford, Dean

903-886-5191; Business Administration Building, Room 215

Jerry D. Parish, Associate Dean

903-886-5191

Kim Leard, Coordinator, Graduate Programs in Business & Technology 903-468-6051

Steven Shwiff, Interim Head, Accounting, Economics and Finance 903-886-5679

Bob Collins, Interim Head, Department of Industrial Engineering & Technology 903-886-5474

Joe Stauffer, Interim Head, Department of Marketing and Management 903-886-5703

Graduate study in the College of Business & Technology is available in business administration, economics, finance, management, marketing, and industrial technology. The graduate programs in business are accredited by both AACSB and the International Association for Management Education.

Courses for the M.B.A. and M.S. programs are offered live, and/or by distance learning to the Metroplex in Rockwall, McKinney, the Universities Center at Dallas, and other areas.

Admission

E-Mail: MBA@tamu-commerce.edu

Applications for admission are accepted throughout the year. Candidates are encouraged to submit applications as early as possible to ensure consideration for the semester desired.

In addition to the admission documents required by the Graduate School, the College of Business & Technology requires

- An application letter describing career objectives and how the M.B.A., M.A., M.S., or M.S.F. becomes a part of that plan. Additional information on leadership positions, previous work experience and other factors should also be highlighted when appropriate.
- A current resume.
- Three references from current or past business associates or professors who will describe your professional or academic career, as appropriate.
- 4. If the student's undergraduate grade point average (GPA) is less than 2.75 overall or 3.00 for the last 60 undergraduate hours of coursework used towards the bachelor's degree, an official GMAT or GRE score must be submitted. Students who do not meet the 2.75 or 3.00 undergraduate GPA will be considered for admission in probationary status.

Programs of Graduate Work in Business

Graduate studies in business, economics, and finance are designed to prepare individuals for professional careers in business organizations, government agencies, and educational institutions, or for further graduate study. Graduate degrees in business and economics include the M.B.A., the M.S. and M.A. in Economics, the M.S.F. in Finance, the M.S. in Management, and the M.S. in Marketing. More specifically, the goals are to:

- 1. insure knowledge of the functional areas of management;
- 2. improve each individual's decision-making abilities;
- develop each individual's ability to succeed in a rapidly changing global business environment;
- 4. provide for increased understanding of current and future social, economic, political, and technological conditions affecting the business world; and
- 5. promote the desire for continuing self-education and self-development.

Master of Business Administration

The Master of Business Administration degree offered by the College of Business & Technology (CBT) of Texas A&M University-Commerce prepares the graduate student for advanced management positions that demand analytic and strategic leadership solutions to an interrelated set of economic, ethical, and environmental issues. The curriculum stresses the development and use of analytical skills, for both quantitative and qualitative applications, which will assist managers in their decision-making and leadership responsibilities.

Texas A&M University-Commerce also offers a complete M.B.A. online. Please contact the Office of Graduate Programs in Business & Technology (903-886-5190 or MBA@tamu-commerce.edu) for information.

Degree Requirements

Master of Business Administration

Undergraduate Background Requirements. Generally, for students who have completed the following body of knowledge at the undergraduate level, the 30-hour format is appropriate.

Acct 221, 222—Principles of Accounting

Eco 231—Principles of Macro Economics

Eco 232—Principles of Micro Economics

Fin 304—Introduction to Business Finance

BA 302—Business and Economics Statistics

Mgt 305—Management and Organizational Behavior

Mgt 307—Operations Management

Mkt 306—Principles of Marketing

30-Hour Format. The basic M.B.A. program includes a six-course managerial component, a two-course information analysis component, and two elective courses as detailed below.

48-Hour Format. For individuals who have not completed all of the above listed undergraduate background requirements, the 48-hour format is appropriate. Credit will be given for previously taken courses. The program structure is similar to the 30-hour format with the same Managerial, Information Analysis, and elective components.

Managerial Component—18 hours

Acct 525—Advanced Managerial Accounting

Eco 562—Managerial Economics (or Eco 576—Macroeconomics Theory and Policy may be substituted)

Fin 504—Financial Management

Mgt 585—Management Skills Development

Mkt 521—Marketing Management

Mgt 527—Strategic Management

Information Analysis Component—6 hours

BA 578—Statistical Methods

BA 595—Applied Business Research (should be taken in the student's first semester of core courses in the Management orientation of the M.B.A. degree plan)

Elective Component—6 hours

Two elective courses complete the 30-hour program requirements. These electives may be taken from any combination of business fields.

Minor Areas of Concentration

At least 12 advanced hours must be completed in an academic field (Accounting, Economics, Finance, Human Resources Management, International Business, Management Information Systems, Marketing, and Management of Technology) to meet the requirements for a minor concentration area. The details of each particular minor are shown below.

Accounting. At least four courses from Accounting (includes Acct 525).

Economics. At least four courses from Economics (includes Eco 562 and 576).

Finance. At least four courses from Finance (includes Fin 504).

Human Resource Management. Mgt 585 and 592 plus two courses from Mgt 567, 587, 589 (approved topic), 594, 597 (approved topic).

International Business. Any four courses from Eco 528, Fin 571, Mgt 590 or 597 (approved topic), Mkt 586.

Management Information Systems. Prerequisites (credit will given to previously taken courses): MIS 128, 502; CSci 515. Advanced courses: MIS 524, 526, 579, Mkt 573.

Marketing. At least four courses from Marketing (includes Mkt 521).

Management of Technology. Two courses from Mgt 590, 591, 594, 597 (approved topic), plus two courses from the Department of Industrial Engineering and Technology.

Background Courses

Acct 501—Accounting for Managers

Eco 501—Economics for Decision Makers

Fin 501—Finance for Decision Makers

BA 501—Quantitative Analysis for Managers

Mgt 501—Operations and Organization

Mgt 502—Human Behavior in Organizations

These courses **cannot** be used to satisfy elective requirements for degrees in the College of Business & Technology. Minors are also available subject to the previously stated requirements.

Bachelor's of Professional Accountancy/ Master's of Business Administration Joint Degree Program

This five-year program is designed for students who wish to complete the educational requirements for the CPA examination. Graduates will simultaneously receive both the Bachelor's of Professional Accountancy and the MBA (Minor in Accounting) degrees upon completion of this 151-hour program, of which 33 hours constitutes the graduate component. The student is urged to consult the Undergraduate Catalog for the specific undergraduate and graduate course requirements for this degree program. The graduate minor in accounting will require twelve graduate semester hours of accounting. For additional information, please contact the Department of Accounting, Economics, and Finance.

Master of Science and Master of Arts in Economics

The focus of the graduate program in economics is Managerial/Applied Economic Analysis, which is essential to business and governmental planning, decision making, and public policy analysis. The program offers a flexible curriculum in which students select and arrange study areas in consultation with the department advisor. The curriculum is designed as a terminal graduate program in business and financial economics. It also provides the essential core of graduate courses for those students who wish to pursue doctoral studies in economics. Both the Master of Arts and the Master of Science are offered with a major in economics. The Master of Arts requires 30 hours, including eight courses and the completion of a six-semester-hour thesis. The Master of Science program may be either a thesis or non-thesis plan. Course requirements for the non-thesis option are ten courses consisting of:

Eco 562—Managerial Economics

Eco 576—Macroeconomic Theory and Policy

BA 595—Applied Business Research (should be taken in the student's first semester of core courses in the economic orientation of the M.S. or M.A. degree plan)

Elective Component—12 hours (choose 4 courses)

Eco 528—International Economic Problems

Eco 533—Applied Economic and Financial Forecasting

Eco 572—Monetary Theory

Eco 589—Independent Study

Eco 597—Special Topics

In addition, students may select advanced courses in areas such as financial economics, managerial/applied economics, monetary theory, public regulation, economic forecasting, international trade and global competition, economic development, and credit and financial markets.

A student may use toward a degree up to three graduate level courses outside economics and approved by the head of the Department of Accounting, Economics, and Finance, such as finance, statistics or quantitative methods, computer science, or business administration

Master of Science in Finance

The Master of Science in Finance offers students from Business and non-business backgrounds the opportunity to learn the various facets of finance and to develop expertise in corporate and non-corporate finance. Students complete 30-39 hours of graduate coursework, depending on their backgrounds. Students without undergraduate preparation in finance are required to take 39 hours while students with the appropriate previous coursework can waive one, two, or all three of the foundation courses.

Foundation Study in Finance—9 hours

Eco 501—Economics for Decision Makers

Fin 501—Finance for Decision Makers

BA 501—Quantitative Analysis for Managers

Finance Core—18 hours

Fin 504—Financial Management

Fin 510—Investment Seminar

Fin 512—Advanced Security Analysis and Portfolio Management

Fin 533—Applied Economic Forecasting

Fin 570—Financial Markets, Institutions and Instruments

Fin 571—International Business Finance

Research Component—6 hours

BA 595—Āpplied Business Research

BA 578—Statistical Methods

Elective Component—6 advanced hours from Economics

Eco 528—International Economic Problems

Eco 552—Economics for Public Policy

Eco 562—Managerial Economics Eco 572—Monetary Theory

Eco 576—Macroeconomics Theory and Practice

Master of Science in Management

The Master of Science in Management program offers students from business and non-business backgrounds an opportunity to develop management and leadership skills appropriate for all kinds of organizations. Students complete 30 to 36 hours of graduate coursework, depending on their background.

Thirty-six hours of graduate credit are required for students without undergraduate preparation in management. However, students with appropriate previous coursework can waive one or both of the foundation courses.

Students complete either a general option or an information technology option. Students selecting the information technology option must complete a minimum of 18 graduate hours in the management field, including BA 595 and any five courses with

Texas A&M University-Commerce also offers a complete M.S. in Management online. Please contact the Office of Graduate Programs in Business & Technology (903-886-5190 or MBA@tamu-commerce.edu) for information.

Foundation Study in Management—6 hours

These courses can be waived for students with appropriate undergraduate coursework.

Mgt 501—Operations and Organizations

Mgt 502—Human Behavior in Organizations

Support Coursework Outside of Management—6 hours

Fin 501—Finance for Decision Makers or

Fin 504—Financial Management or Approved Finance Elective

Mkt 521—Marketing Management

Advanced Breadth in Management—9 hours

Mgt 585—Management Skills Development

Mgt 591—Quality Management

Mgt 527—Strategic Management (should be taken in the last semester)

Research Component—3 hours

BA 595—Applied Business Research (should be taken in the student's first semester of core courses in the management orientation of the M.S. or M.A. degree plan)

General Option—12 hours (choose 4 courses)

Mgt 567—Managing Groups and Teams

Mgt 586—Managing at the Edge

Mgt 587—Executive Development

Mgt 590—Global Competitiveness

Mgt 592—Current Issues in Human Resource Management

Mgt 594—Transforming Organizations

Mgt 597—Topics in Management

Other graduate courses may be approved by the Graduate Programs in Business & Technology office.

Information Technology Option—12 hours (4 courses)

IT option can be awarded to the Master of Science student who completes the following:

Choose 1 of the courses listed under "General Option" (3 hours)

Choose 3 of the following courses:

CSci 516—Fundamental Concepts in Computing and Machine Organization

CSci 525—Networking I—Local Area Networks

CSci 526—Database Systems

MIS 526—Database Management

MIS 502—Business Information Systems

Additional or substitute courses must be approved by the Graduate Programs in Business & Technology office.

Master of Science in Marketing

The Master of Science in Marketing program offers students from business and non-business backgrounds an opportunity to develop expertise in the art and science of business marketing. Students complete 30 to 36 hours of graduate coursework, depending on their background.

Thirty-six hours of graduate credit are required for students without undergraduate preparation in marketing. However, students with appropriate previous coursework can waive one or both of the foundation courses.

Courses for the M.S. programs are also offered live, and/or by distance learning to the Metroplex in Rockwall, McKinney, the Universities Center at Dallas and other areas. Online courses are available per Department Head approval.

Foundation Study in Marketing and Management—6 hours

These courses can be waived for students with appropriate undergraduate coursework.

Mkt 501—Marketing Environment

Mgt 502—Human Behavior in Organizations

Support Coursework Outside of Marketing—6 hours

Fin 501—Finance for Decision Makers or

Fin 504—Financial Management or Approved Finance Elective

Mgt 585—Management Skills Development

Advanced Breadth in Marketing Management—15 hours

Mkt 521—Marketing Management

Mkt 571—Business-to-Business Marketing

Mkt 572—Seminar in Marketing Research

Mkt 586—International Marketing

Mgt 527—Strategic Management (should be taken in last semester)

Research Component—3 hours

BA 595—Applied Business Research (should be taken in the student's first semester of core courses in the marketing orientation of the M.S. degree plan)

Specialized Courses in Marketing—6 hours (choose 2 courses)

Mkt 568—Advertising and Promotion

Mkt 573—Internet Marketing

Mkt 597—Topics in Marketing

Other graduate courses may be approved by the Graduate Programs in Business & Technology office, provided the student has a minimum of six courses (18 sh) in Marketing.

Program of Graduate Work in Industrial Technology

The M.S. program in Industrial Technology is designed to prepare graduates for advanced and future technology positions in business, industry, government and service enterprises. Specific goals are to:

- 1. develop a knowledge and application of current and future practices in industrial/ technical management;
- 2. develop an understanding and application of advanced and future industrial technologies;
- 3. develop an understanding of effective workforce management, training, and communications:
- 4. develop knowledge and application of methodologies for continuous productivity improvement;
- 5. effectively compete in a global environment; and
- 6. manage change in an effective and productive manner.

Master of Science in Industrial Technology Degree

The goal of the Master of Science in Industrial Technology program is to develop individuals in advanced technologies and managerial areas. The curriculum is centered around real-world topics found in contemporary business and industrial environments. Learned competencies are designed to meet the needs of practicing professionals as well as those with limited industrial and/or business experience. Thirty total semester hours are required for this degree.

Industrial Technology Degree Required Courses (9 semester hours)

IT 525 Problems in Industrial Technology

IT 595 Applied Industrial Research

IT 599 Collaborator Technology (Capstone)**

Industrial Technology Electives (select 9 semester hours):

IT 501 Management of Technology

IT 502 Manufacturing Systems

IT 509 Human Factors Engineering

IT 516 Total Productive Maintenance (TPM)

IT 520 Risk Analysis

IT 523 Systems Simulation

IT 524 Engineering Project Management

IT 525 Problems in Industrial Technology

IT 530 Industrial Hygiene and Safety Technology

IT 540 Systems Analysis and Design

IT 550 Life Safety and Hazard Control

IT 570 Legal Aspects of Occupational and Environmental Health

IT 589 Independent Study*

IT 597 Special Topics*

*May be repeated when the topic varies.

**Must be taken in final semester.

Electives (select 12 semester hours):

Elective courses may be selected from the following disciplines:

Accounting, Industrial Technology/Engineering, Computer Science, Management, Economics, Mathematics, Business and Physics.

Note: Elective courses must be approved by the IET Graduate Advisor, Elective courses may be selected from more than one discipline. A maximum of 9 semester hours may

be transferred to Texas A&M University-Commerce from another institution to count toward the M.S. Industrial Technology degree.

Minor in Industrial Technology (15 Semester Hours)

Required Courses: IT 525, 595, 599 and two (2) graduate level IT courses.

Graduate Courses

Accounting (Acct)

501. Accounting for Managers. Three semester hours.

Study of the accounting concepts and procedures used by managers in making decisions. The focus in the course will be on users, not preparers, of accounting and management information. This course satisfies the accounting background requirement for MBA candidates and may be utilized as part of a graduate program in a field other than business administration. Prerequisite: Math 141 or 175.

518. Thesis. Six semester hours.

Graded on a (S) satisfactory or (U) unsatisfactory basis.

521. Advanced Financial Accounting. Three semester hours.

A continuation of the financial accounting sequence. The primary emphasis is on accounting for business combinations and consolidations. Other contemporary issues in financial accounting will also be covered with an emphasis on reading and interpreting professional accounting literature. Prerequisite: Acct 322.

525. Advanced Managerial Accounting. Three semester hours.

A study of accounting as related to making decisions. Readings, cases, and problems dealing with managerial accounting issues, accounting concepts, budgeting and cost control, using accounting information in planning and control. Prerequisite: Consent of the instructor.

527 Financial Auditing. Three semester hours.

This course is a study of the professional auditing standards followed by public accountants in performing the attest function for financial statements and supporting data. Prerequisites: Acct 322, 433.

530. Business Ethics for Accountants. Three semester hours.

The course will provide a background in the process of ethical reasoning, the ethical environment, application of ethical rules and guidelines to case problems, and a framework for ethical decision-making. The focus will be on the ethical environment within which professional accountants and business operate. The objective is to provide the student with an educational background in what constitutes ethical conduct in businesses and accounting.

539. Taxation for Decision Makers. Three semester hours.

A study of basic federal income tax considerations for managers. Emphasis will be on cultivating: (1) the ability to recognize the important tax consequences of decision making in many common business transactions and (2) the use of tax research of authoritative sources to make informed decisions. The current literature and a basic tax library will be utilized to identify and research contemporary problem areas for decision makers. Prerequisite: Consent of the professor.

540. Advanced Income Tax Accounting. Three semester hours.

A study of taxation of partnerships, corporations, estates, and trusts under current federal income tax law. An emphasis will be on solving practical problems using tax research tools and software. Prerequisite: Acct 440.

541. *Contemporary Issues in Financial Accounting*. Three semester hours. Selected contemporary and international issues in financial accounting will be

covered with an emphasis on reading and interpreting professional accounting literature to prepare financial statements according to generally accepted accounting principles. This course is designed as a capstone overview of professional literature on financial accounting for majors in professional accountancy. However, the content is also appropriate for controllers and others interested in the application of generally accepted accounting principles. Prerequisites: Acct 322, 521.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Business Administration (BA)

501. Quantitative Analysis for Managers. Three semester hours.

This course satisfies the MBA background requirements for quantitative analysis and production management techniques. The course will cover descriptive statistics, inferential statistics and math models with business applications to analyze management and organizational problems. Specific topics include: measures of central tendency and variation, probability distributions, estimation, hypothesis testing, regression and correlation, decision theory, linear programming, transportation and assignment models, and inventory management and queuing theory models. Prerequisites: Math 175 or

530. Ethical Issues in Organizations. Three semester hours.

Ethical issues applied to individuals in an organizational setting. Included are theories of moral philosophy and the development and professional business codes and laws. 578. Statistical Methods. Three semester hours.

A course dealing with the study and applications of sampling, estimation, hypothesis testing, analysis of variance, correlation, regression analysis, time series decision theory and nonparametric statistical methods. Prerequisite: BA 302 or BA 501 (or equiva-

582. *Contemporary Business Issues*. Three semester hours.

This seminar deals with important trends, developments, and policies in the economy of the United States. Prerequisite: Undergraduate course in economics or consent of the instructor.

589. *Independent Study*. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

595. Applied Business Research. Three semester hours.

A course to investigate the techniques of the research process as applied to business and economics. Experience is gained in defining research problems and in collecting, analyzing, recording and interpreting data. Also, an analysis of pertinent research literature in business and economics. Required of all graduate majors in business administration under Option II.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Economics (Eco)

501. Economics for Decision Makers. Three semester hours.

An introduction to the primary concepts and methods of micro and macroeconomics as they apply to decision makers within the business unit—all within the context of expanding global markets. This course satisfies the economics background requirement for MBA candidates.

518. Thesis. Six semester hours.

Graded on a (S) satisfactory or (U) unsatisfactory basis.

528. International Economic Problems. Three semester hours.

An analysis of current global issues and their impacts on the United States. Emphasis is on gains from trade, balance of payments and adjustment to national international equilibria, determination of exchange rates under various monetary standards, international capital flows, and trade policy considerations in a changing world economy.

533. Applied Economic and Financial Forecasting. Three semester hours.

Introduces students to the tools, techniques and computer software used to create a structural process by which future economic, finance, and business variables are forecasted. Prerequisites: Eco 231 and 232, or Eco 501. Cross-listed with Fin 533.

562. Managerial Economics. Three semester hours.

The study and application of concepts and models, primarily microeconomic, to various types of management problems. While analysis is primarily in terms of cost, demand, revenues, and market structure, the process combines ideas and methods from other functional fields of business administration. The case method is used to provide illustration and application of concepts. Prerequisites: Eco 231, 232, or Eco 501.

572. Monetary Theory. Three semester hours.

A study of contemporary monetary theory and the role of the banking system in the economy. Special emphasis is given to the development of central banking and the international aspects of monetary policy. Prerequisites: Eco 231, 232 or equivalent, or Eco 501.

576. Macroeconomic Theory and Policy. Three semester hours.

Analyzes the use of various instruments of monetary and fiscal policy and their effects on output, employment, prices, and international economic variables. Data sources and indicators of aggregate economic activity are emphasized. Prerequisites: Eco 231, 232, or Eco 501.

589. *Independent Study*. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Finance (Fin)

501. Finance for Decision Makers. Three semester hours.

This course is designed for nonbusiness undergraduate degree holders to prepare for making financial decisions. Basic concepts of finance are applied in both the public and private sectors. Graduate students will learn about financial analysis, financial forecasting, asset management, financial markets and security valuation (including state and local bonds). This course satisfies the finance background requirement for the MBA candidates and may be appropriate for graduate programs in a field other than business administration.

504. Financial Management. Three semester hours.

A study of business finance within the economic environment including financial reporting, analysis, markets and regulations, with emphasis on global and ethical issues. Risk, valuation, planning and analysis including working capital management and capital budgeting, and other decision rules help maximize the value of the firm. Focus on total quality management and financial considerations in the production of goods and services. Prerequisite: Fin 304 or Fin 501, or consent of instructor.

510. Investment Seminar. Three semester hours.

A comprehensive study of security selection and analysis techniques and of security markets and how they are affected by the domestic and international economic, political, and tax structures. Group discussion, individual and group research, and the computer are utilized. Prerequisite: Fin 504 or consent of instructor.

512. Advanced Security Analysis and Portfolio Management. Three semester hours.

A study of portfolio policies for individuals and institutions; thorough study of investment and analysis; selecting an investment strategy; evaluation of current research; and review of empirical research on portfolio models. Prerequisite: Fin 504 or consent of instructor.

533. Applied Economic and Financial Forecasting. Three semester hours.

Introduces students to the tools, techniques and computer software used to create a structural process by which future economic, finance, and business variables are forecasted. Prerequisites: Eco 231 and 232, or Eco 501. Cross-listed with Eco 533.

570. Financial Markets, Institutions and Instruments. Three semester hours.

A study of structure and functions of financial markets and institutions focusing on political, social, regulatory and legal effects, as well as demographic diversity, ethical considerations and changing global financial conditions, in finance decision-making. Prerequisite: Fin 304 or Fin 501.

589. *Independent Study*. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Industrial Technology (IT)

501. Management of Technology. Three semester hours.

Examination of competencies required of technology managers in contemporary industry. Study includes multi-disciplinary topics in industrial engineering, operations management, manufacturing technology and global manufacturing.

502. *Manufacturing Systems*. Three semester hours.

Study of manufacturing as a system. Topics include production systems design, group technology, just-in-time (JIT), AGILE manufacturing, continuous improvement, Lean Manufacturing, Supply-Chain Management, materials management, and other contemporary manufacturing systems.

503. Industrial & Engineering Leadership Studies. Three semester hours.

An examination of research relating to historical, contemporary, and future leadership concepts, styles, philosophies, and practices. Students will be required to conduct extensive research into a selected topic on leadership and to prepare a manuscript suitable for publication in a professional journal.

509. Human Factors Engineering. Three semester hours.

This course focuses on humans who have roles in systems. The student will ac-

quire and use scientific knowledge about human capabilities and behavior in the design, analysis, and use of human-machine systems. This knowledge will be used to improve system efficiency and minimize human error.

516. Total Productive Maintenance (TPM). Three semester hours.

Study of contemporary plant maintenance systems. Includes study of conventional productive maintenance and total employee involvement. Emphasis on designing, operating, and analyzing a maintenance system and upgrading the skills of workers through technical training.

520. Risk Analysis. Three semester hours.

Study of risk management, loss control, and system and product safety. Instructional topics include system and product safety. Instructional topics include system safety analysis, product liability and reliability, program management and evaluation, behavioral science, and safety management. Disaster and contingency planning will also be addressed.

523. Systems Simulation. Three semester hours.

This course places emphasis on methods of simulation in production systems. Simulation is used to aid in decision making for process layout, method selection, and work station design. The student will use simulation software to build and analyze virtual production systems. Previous exposure to statistical methods will be helpful.

524. Engineering Project Management. Three semester hours.

Techniques and application of managing time and resources in order to maintain schedules and budgets. Emphasis on designing initial and target schedules, resource leveling, and reporting. Appropriate computer software packages will be used by students to complete class studies and exercises.

525. Problems in Industrial Technology. Three to six semester hours.

Study, research, investigation of a specific contemporary engineering/technology area. Students may work individually or in teams. Course may be taken two times for a total of 6 semester hours of credit.

589. Independent Study. One to three semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

595. Applied Industrial Research. Three semester hours.

Study of the research methods and processes applicable to industrial engineering/ technology. Emphasis on defining research problems and collecting, analyzing, recording, and interpreting data. Students will be required to conduct a research project.

597. Special Topics. Three semester hours.

Organized class. May be repeated when topics vary.

599. Collabratory Technology. Three semester hours (Capstone)

Comprehensive investigations and readings of managerial, engineering, environmental, and regulatory paradigms consistent with prevailing processes and practices of the millennium's emerging global competitiveness. Instructional methods will include studying multinational views and analyzing case studies for the four areas. This is a graduate capstone course and must be completed the semester/term of graduation.

Industrial Technology and Safety Management (ITSM)

525. Problems in Safety Management I. Three semester hours.

Development of a research project that is related to the students career objective. Advanced investigation of a specific safety topic is required. Students will complete a professionally written document worthy of a graduate level credit. A panel of safety

professionals will provide evaluation and feedback on the students final work and report their findings to the course instructor.

526. Problems in Safety Management II. Three semester hours.

Development of a research project that is related to the students career objective. Advanced investigation of a specific safety topic is required. Students will complete a professionally written document worthy of graduate level credit. A panel of safety professionals will provide evaluation and feedback on the students final work to the course instructor.

527. *Ergonomics*. Three semester hours.

Ergonomics is the field of study that involves the application of knowledge about human capacities and limitations to the design of workplaces, jobs, tasks, tools, equipment, and the environment. Ergonomics is essentially fitting the workplace to the worker. To meet this premise, this course provides specific critical analysis through interactive classroom lectures to cumulative trauma, disorders, defining ergonomics, identifying and recognizing ergonomic risk factors in the workplace.

528. Risk Management. Three semester hours.

An advanced study of risk management applied to a business/industrial environment. Includes functions, methods and tools of risk management along with accident investigation and analysis. There is an emphasis on the benefits of a successful risk management program from the financial and human perspective.

530. *Industrial Hygiene and Safety Management*. Three semester hours.

An advanced study of industrial hygiene and the application of scientific and engineering principles to the analysis of processes, equipment, products, facilities, and environments in order to optimize safety and health effectiveness for private, state and federal safety programs. Topics include fundamental units of mass, length and time, fundamental chemistry of gases and vapors, safe spill response, medical monitoring, protective equipment/clothing, instrumentation and study of OSHA regulations.

540. Systems Analysis and Design. Three semester hours.

A study of the specialized integration of safety skills and resources into all phases of a System's Life Cycle. Topics include accident prevention, systems engineering, systems management, design concepts, testing, maintenance, electrical hazard control and advanced machinery safeguarding.

550. Life Safety and Hazard Control. Three semester hours.

Advanced study of Life Safety and Fire Codes. Includes building construction/ maintenance, fire protection, occupancy, code compliance, design of buildings, construction contracts, construction injuries, costs, and investigation.

570. Legal Aspects of Occupational and Environmental Health. Three semester hours. Advanced study of the legal aspects of safety and occupational health and environmental law. Study includes Clean Air Act; Clean Water Act; Oil Pollution Act; Safe Drinking Water Act; Toxic Substances Control Act; Pesticides; Resource Conservation and Recovery Act; Underground Storage Tanks; Federal Facilities Compliance Act; National Environmental Policy Act; Comprehensive Environmental Response, Compensation, and Liability Act; Emergency Planning and Community Right-to-Know Act; Pollution Prevention Act; and the Occupational Safety Health Act. Case studies are utilized.

Management Information Systems (MIS)

502. Operations and Organizations. Three semester hours.

A study of the major design and operating activities of the goods-producing and services organizations that includes product and process design decisions, and basic

quality, inventory and operations planning and control. The study also includes the basic managerial functions of planning, organizing, leading and controlling.

524. Networking and Telecommunications. Three semester hours.

This course provides an in-depth knowledge of data communications and networking requirements including networking and telecommunications technologies, hardware, and software. Emphasis is upon the analysis and design of networking applications in organizations. Management of telecommunications networks, cost-benefit analysis, and evaluation of connectivity options are also covered. Students learn to evaluate and select different communication options within an organization.

526. Data Base Management. Three semester hours.

This course provides a foundation for the design, implementation, and management of database systems. Students will study both design and implementation issues, however, database management issues will be emphasized. Management issues will include transaction management and concurrency control, distributed database management systems, and database administration. Prerequisites: MIS 128 or CSci 126 or ETec 224 or IET 101 or consent of instructor.

579. Quantitative Methods. Three semester hours.

A study of statistical and mathematical techniques related to operations research. Topics include: inventory models, linear programming, game theory, queuing theory, network models, transportation models, assignment algorithms and simulation. Prerequisite: BA 302 or BA 501 (or equivalent).

Management (Mgt)

501. Operations and Organizations. Three semester hours.

A study of the major design and operating activities of the goods-producing and services organizations that includes product and process design decisions, and basic quality, inventory and operations planning and control. The study also includes the basic managerial functions of planning, organizing, leading, and controlling.

502. Human Behavior in Organizations. Three semester hours.

A study of the dynamics of individual and group behavior in organizations and their effects on organizational practice and employee outcomes. Topics include individual and group behavior, job design, organizational structure, power and politics, conflict, stress, leadership, motivation and rewarding behavior compensation and benefits, training and development, organizational change and development and communication. This course satisfies the MBA background core requirements in organizational behavior for MBA students.

518. Thesis. Six semester hours.

Graded on a (S) satisfactory or (U) unsatisfactory basis.

522. Electronic Commerce. Three semester hours.

This course addresses key business and strategic management applications relevant to the use of Internet technologies, including but not limited to Internet business models, customer interface, market communications, and valuation. Some exposure to technical issues will also be provided.

527. Strategic Management. Three semester hours.

A study of administrative processes and policy determination at the general management level through the use of case analysis. Course open to business majors only. Should be taken during semester of graduation.

528. Current Issues in Strategic Management. Three semester hours.

This course addresses current issues in strategic management, including but not limited to such topics as competitive analysis, mergers and acquisitions, managerial

ethics, global strategy, and corporate culture. Emphasis is placed on the development of critical thinking skills.

537. Strategic Management of Electronic Commerce. Three semester hours.

This course emphasizes the application of strategic management concepts to companies predominantly functioning in electronic commerce. It will include coverage of social, political, economic, and technological factors affecting the success or failure of electronic commerce ventures. Students will learn how to strategically analyze such ventures and identify strategic factors associated with their success.

567. Managing Groups and Teams. Three semester hours.

Techniques for managing individuals and groups in a supervisory situation are developed. Specific attention will be given to problems in communications, counseling and morale. Team building, the roles and responsibilities of supervision in a team environment, and the roles and responsibilities of teams will be presented. Nature and use of teams in various forms and activities are emphasized.

581. Entrepreneurship. Three semester hours.

Starting and running new ventures and small/mid-size entrepreneurial organizations; components of comprehensive business plans and feasibility studies; perceptual processes of opportunity recognition; entrepreneurial innovation and creativity; assessing career interest in intrapreneurship and entrepreneurship; strategic gap analysis.

585. Management Skills Development. Three semester hours. (same as BA 585)

This course provides an in-depth seminar emphasizing the development of the skills and knowledge required for successful managerial performance. It focuses on such areas as developing self awareness, creative problem solving, supportive communication, the use of power and influence, motivation techniques and managing conflict.

586. Managing at the Edge. Three semester hours.

This seminar course provides an investigation companies using participatory management and unique organizational practices. Cases and current readings will provide the background for review of companies' practices which when compared to normal organizational practices may be characterized as radical, revolutionary, nontraditional, maverick, unorthodox, and visionary.

587. Executive Development. Three semester hours.

An in-depth seminar on the impact of current issues and environmental factors on management and organizations. The primary emphasis of the course is on the development of the skills and knowledge required for successful managerial performance. Prerequisite: Mgt 305 or consent of instructor.

589. *Independent Study*. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

590. Global Competitiveness. Three semester hours.

A study of those factors that contribute to the competitiveness of businesses, industries, and societies operating within a world economy. Primary focus is on the interaction of management, labor, and government policies.

591. Quality Management Concepts and Tools. Three semester hours.

Quality Management is a course in which students learn continuous improvement philosophies and methodologies. The focus is on the continuous improvement of processes, relationships, products and services. Students completing this course will be able to establish and improve process baselines in educational institutions, engineering and manufacturing organizations, healthcare facilities, financial institutions, governmental agencies, and service organizations, Examples of process baselines are safety, customer satisfaction, quality, cycle time, and on-time delivery.

592. Current Issues in Human Resource Management. Three semester hours.

This course provides an analysis of current human resource management issues emphasizing their impact on an organization's success.

594. Transforming Organizations. Three semester hours.

This course examines issues related to organizational redesign and specifically to the changes processes used by organizations to respond to changes in internal and/or external environments. Sources of change, change strategies and the analysis of change efforts on environments. Use of case analysis is incorporated into the course to provide an opportunity to apply the concepts and issues studied.

596. New Business Ventures. Three semester hours.

Students are provided an opportunity to work with a business on a consulting basis. Problem areas are identified and students, normally in teams, analyze the problem area(s) for the duration of the semester. At the conclusion, a formally written report is prepared and an oral presentation of the findings is made to the business owner. Prerequisite: Consent of the instructor.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Marketing (Mkt)

501. *Marketing Environment*. Three semester hours.

A study of the marketing environment of business with an emphasis on major aspects of sociocultural, demographic, technological, global, legal, political, and ethical issues. The study of marketing emphasizes the functional areas of marketing including product and service selection and development, marketing channels, promotion, and pricing. Marketing research, consumer behavior, industrial buying and international implications are also considered.

521. *Marketing Management*. Three semester hours.

A comprehensive study of the effective application of marketing strategies in international and domestic organizations. A case analysis approach and current professional literature are utilized. Prerequisite: Mkt 306.

568. Advertising and Promotion. Three semester hours.

An extensive study of the managerial role of decision-making in the promotion of commercial products and services. Contemporary problems of adaptation and development of promotional programs will be analyzed by institutions, government, nonprofit organizations, and consumers with emphasis on the relationship of company goals, ethics, and evaluation methods. Prerequisite: Mkt 521 or 491.

571. *Business-to-Business Marketing*. Three semester hours.

This course gives students a thorough understanding of how key marketing concepts apply to institutional markets. Students will learn to develop an appreciation of the way standard marketing approaches can be modified to fit the needs of a customer base comprised of large corporations and entrepreneurial enterprises. The course focuses on the managerial process involved in identifying and evaluating marketing opportunities to effectively serve industrial markets.

572. Seminar in Marketing Research. Three semester hours.

This course emphasizes the analysis of marketing research information as an aid to decision making. It will provide students with a working knowledge of the analytical tools available to market researchers and managers. Techniques of data collection, evaluation of alternative sources of information, and the methods for evaluating data and presenting results are covered. The course also deals with how to define information needs, the use of test marketing procedures and the role of models in decision making. Prerequisite: BA 595 or consent of instructor.

573. Internet Marketing. Three semester hours.

This course exposes students to key marketing applications relevant to the use of Internet technologies. The goal of the course is to give students the necessary background of concepts, technologies, and applications required for marketing-related activities in the rapidly growing electronic commerce industry. Example topic areas: Topics around which discussions may focus include: E-Corporation, Internet technologies, online advertising, online retailing, customer acquisition, customer service, and marketing to e-customers.

586. International Marketing. Three semester hours.

A study of the significance of international trade for imports and exports. Adaptation to different cultures and ethics for global competition in U.S. markets are extensively analyzed. Prerequisite: Mkt 521.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

599. Internship in Electronic Commerce. Three semester hours.

This course provides the student with an opportunity to obtain professional experience in an electronic business under the direction of a university faculty member.

College of Education and Human Services

James Vornberg, III, Interim Dean

903-886-5181; Young Education Building

Sandy Weeks, Assistant Dean for Finance and Business Administration

Sharon Chambers, Assistant Dean for Academic Student Affairs

Graduate study in the College of Education and Human Services includes, but is not limited to, programs that prepare school personnel such as supervisors, administrators, and counselors. Degrees offered include the following:

Counseling, MS, MEd, PhD

Early Childhood Education, MS*, MEd*, MA

Educational Administration, MS, MEd, EdD

Elementary Education, MS, MEd, EdD

Health, Kinesiology and Sports Studies, MS, MEd

Higher Education, MS, EdD

Learning Technology and Information Systems, MS

Psychology, MA, MS, PhD

Reading, MA*, MS*, MEd*

Secondary Education, MA, MS, MEd

Special Education, MA, MS, MEd

Social Work, MSW

Training and Development, MS

*Federation Program with University of North Texas and Texas Woman's University. Additional information about the various programs can be found in departmental divisions of this catalog.

The College of Education and Human Services offers state-approved programs leading to standard certification for teachers in early childhood education, elementary, secondary, and bilingual education; and for all-level certification in art, music, physical education, and special education. Education requirements for initial all-level certification are available at the graduate level.

Professional certificate programs have been approved by the Texas State Board for Educator Certification in the following areas: school administrator, school counselor, educational diagnostician, school librarian, reading specialist, and master reading teacher.

Teacher education students may pursue work toward professional certification simultaneously with work toward a graduate degree. Some of the required academic course work as well as requirements for additional standard certificates may apply toward a master's degree. To be a candidate for the M.Ed. degree, a student must have completed the academic requirements for initial teacher certification. Candidates for other master's degrees also may qualify for teacher certification and are urged to pursue certification if their individual objectives will be furthered by it.

Center for Educator Certification and Academic Services

Donna Tavener, Director of Educator Preparation Young Education Building, 903-886-5182

Admission

Application to an initial certification (e.g., Alternative Certification Program) or professional certification program should be made in the Center for Educator Certification and Academic Services. Formal admission to a certification program is required

before Texas A&M University-Commerce can recommend that the initial or professional teaching certificate be issued. Information regarding all Teacher Education/Certification Programs may be viewed at www.tamu-commerce.edu/teacher.

Alternative Certification Program (Teacher Certification)

Requirements for admission to the Alternative Certification (AC) Program are:

- Bachelor's degree;
- 2. Minimum overall GPA of 2.5:
- 3. Acceptable scores on THEA/TASP test;
- 4. Successful written and/or oral interview by program staff;
- 5. Orientation to the program; and
- 6. Meet admission requirements for specific certificate area (see website for details).

Professional Certificate Program

Requirements for admission to the Professional Certificate Program are:

- 1. Completion of the application in the Office of Educator Certification and Academic Services. http://www.tamu-commerce.edu/teacher-cert/Misc/graduate.html
- 2. Documented full admission to the Graduate School.
- 3. Professional recommendation from an appropriate person from the educational sector, i.e., principal, supervisor, director, superintendent.
- 4. A current copy of the professional certification plan.
- 5. Texas teaching certificate (Master Reading Teacher Only).

Program Requirements

Teacher Education Program

In order to be retained in the Teacher Education Program, a student must:

- 1. Continue to meet all admission requirements;
- 2. Successfully complete courses in the time-frame listed on the certification plan.
- 3. Meet and adhere to all requirements listed on the certification plan.
- 4. Pass subject (content teaching field) state certification test on initial attempt, prior to the end of the first year in the program.
- 5. Maintain employment at all times during internship, from the beginning to end of the public school academic calendar year. If at anytime the student resigns or is dismissed from employment, the student will be automatically dismissed from the
- 6. Comply with the Texas Teacher Code of Conduct and exhibit professional behavior at all times.
- 7. Enroll, fund, and attend all prescribed coursework and training sessions in the designated semesters and at the designated times. This includes being punctual and remaining in attendance for the entire training.
- 8. Comply with all practices, policies, and requirements listed in "Complete Program" Guidelines."

After completion of all certification program requirements, students must apply for their certificate. Filing for certification is an online process.

Requirements for Certification

- 1. Continued admission and retention in the Teacher Education Program;
- Successful completion of all program requirements, including all phases (pre-internship, internship, and post-internship), required GPAs, and appropriate tests (i.e., ExCET/TEXES and TOPT);
- 3. Service Record
- Letter of recommendation from school district principal where teacher taught during the internship phase.

Failure to receive this school district recommendation will result in dismissal from the Teacher Education Program.

Professional Certificate Program

In order to successfully complete the Professional Certification Program, the following are required:

- A minimum grade-point average of 3.25 for reading specialists and 3.5 for diagnosticians in the coursework applied toward the professional certification. Only grades "C" or better will be accepted toward certification.
- 2. Successful completion of the appropriate state certification exam(s).
- 3. The completion of all departmental requirements for certification.
- Service record indicating two years of acceptable teaching experience (three years are required for Master Reading Teacher).

Counseling

Stephen Freeman, Head

Young Education Building; 903-886-5637

The Department of Counseling offers the Master of Science, Master of Education, and Doctor of Philosophy degrees. These programs prepare students for a variety of professional work settings, including community agencies, schools, student affairs, practice in higher education, and private practice. All graduate programs are accredited by CACREP.

Due to the nature of counseling and the faculty's responsibility to prepare effective counselors, students participate in experiential activities in practice-oriented courses and may be encouraged to participate in experiential activities in other courses. Student rights with regard to self-disclosure are protected.

At the master's level, field site placements are under the direction of the Director of Training and Placement, as outlined in the *Practicum and Internship Handbook* for Community Counseling and the *Practicum and Internship Handbook* for School Counseling. Doctoral internship placements are under the direction of the Doctoral Internship Coordinator.

Programs of Graduate Work

Master of Science and Master of Education in Counseling

Flexibility in program planning for the M.S. and the M.Ed. degrees permits the student to prepare for positions in community agencies, schools, or student affairs in higher education. Both master's degree options require 48 semester hours. With proper

advisement, course work required for the degree may include courses required in Texas for licensure as a professional counselor (LPC) and/or certification as a professional school counselor, as outlined in later sections.

Doctor of Philosophy in Counseling

The Ph.D. in Counseling program includes approximately 69 hours of coursework beyond the equivalent of a 48-hour CACREP-accredited master's degree. This total includes doctoral field experience, specified doctoral courses, cognate area, elective cluster, research tools, and dissertation.

Admission

Those who apply to the Texas A&M-Commerce Graduate School for admission to one of the master's degree programs in counseling must meet the general Graduate School admissions requirements as described elsewhere in this catalog as well as additional departmental requirements. Application materials collected by the Graduate School will be forwarded to the Department of Counseling for review, and applicants are required to have approval of the department before the Graduate School will grant admission to the master's degree program in counseling.

After full admission to the Graduate School is granted, the department requires students to meet its admission to candidacy requirements for the master's degree, including completing the following courses with a grade of A or B in Coun 501, Coun 510, Coun 516, and Coun 528. All students must meet *admission to candidacy requirements* prior to taking Coun 551. More information regarding admission to candidacy is available in the departmental office.

Degree, Licensure, and Certification Requirements Master of Science and Master of Education in Counseling

Satisfactory performance is required on the Department's Master's Comprehensive Examination that includes both a nationally developed core component and a speciality component covering School Counseling, Community Counseling, or Student Affairs. This examination is given once each fall and spring semester, and once during the summer. Details about the examination and scheduled dates are available in the departmental office.

Master's degrees in Counseling require the courses listed below:

Core Instruction (24 semester hours)

Coun 501—Introduction to the Counseling Profession

Coun 510—Counseling Theories and Techniques

Coun 512—Career Development

Coun 517—Assessment in Counseling

Coun 522—Counseling Diverse Populations

Coun 528—Introduction to Group Dynamics and Procedures

Coun 595—Research Literature and Techniques

Psy 545—Developmental Psychology

Clinical Instruction (12 semester hours)

Coun 516—Pre-Practicum

Coun 551—Practicum

Coun 552—Internship (6 sh)

plus

Professional Specialty (12 semester hours)

Professional Specialty course work prepares students to work in specialized settings, such as community agencies, schools, or student affairs, and must be chosen under the careful advisement of a faculty member.

Licensure as a Professional Counselor (LPC)

Students seeking to be recommended to the Texas State Board of Examiners of Professional Counselors who do not already hold a master's degree must complete the master's degree requirements. To meet LPC requirements, courses must include Psy 503—Advanced Abnormal Psychology; one course selected from Coun 513—Communication in Marriage, Coun 564—Family Crises and Resources, or Coun 611—Introduction to Marriage and Family Counseling/Therapy. In the School Counseling option, these LPC-required courses must be taken as the two electives. In the Community Counseling option, these LPC-required courses are required in the core, and two approved additional courses selected with adviser approval. In addition, Texas requires a passing score on the state licensure examination and the additional hours of state-approved supervised experience prior to licensure.

Certification as a Professional School Counselor

Students who do not already hold a master's degree in any field must complete the master's degree requirements listed above to be recommended by Texas A&M-Commerce to the State Board for Educator Certification for professional school counselor certification.

Students who already hold a master's degree who seek a recommendation from Texas A&M-Commerce for professional school counselor certification and who are not seeking a master's degree from the Texas A&M-Commerce counseling department must complete a deficiency plan and can initiate this process by consulting an adviser regarding the 39-hour deficiency plan requirements. In addition, the Department requires passing scores on the *Master's Comprehensive Examination*, including the School Counseling speciality component, as specified in the Master's Degree section above, even if the student is seeking certification only and not completing a degree within the Department.

The State Board for Educator Certification also requires a passing score on the TEXES (formerly the ExCET), and two years of classroom teaching experience. The department's Master's Comprehensive Examination, including the school counseling speciality component, must be passed before the department will approve a student's application to take the TEXES. Also the student must complete all coursework on the deficiency plan with the possible exceptions of Coun 551, 552, and 595 before the department will approve a student's application to take the TEXES.

Doctor of Philosophy in Counseling Course Requirements

Doctoral students must have met the equivalent of the 48-hour CACREP master's program requirements, plus complete approximately 69 hours of additional coursework, as outlined below. Upon request by the student and with approval of the department's Doctoral Admissions Review Committee, a student may apply to the Ph.D. a maximum of six semester hours of coursework above the master's degree, taken at a regionally accredited graduate school.

1. Master's Degree—A minimum of 48 semester hours, equal/equivalent to a

CACREP-accredited master's degree, must be completed prior to finishing the doctorate.

- 2. Doctoral Field Experience—9 semester hours of class, which includes a combination of supervised clinical training, teaching, and clinical supervision.
- 3. Core Doctoral Courses—15 hours of required doctoral counseling courses.
- Cognate Area—9 semester hours from one of several department-approved content areas.
- 5. Elective Cluster—12 semester hours selected with adviser to build competencies in an area that meets the student's professional needs.
- Research Tools—12 semester hours in research methodology and statistics (or documented proficiency) from the University-approved Research Tools options. One of the research tools courses must be a qualitative research course.
- 7. Dissertation—9 to 12 semester hours.

In addition to the courses above, all general catalog requirements for the degree must be met.

Residency

In addition to these courses, doctoral students in the Department of Counseling must meet departmental criteria for the following three areas:

- 1. Full-time enrollment. Students must be enrolled in at least nine semester hours during each fall, spring, or full summer of residency. Independent study courses, doctoral practicum/internships that meet on the Commerce campus periodically throughout the semester, off-campus courses taught by Texas A&M-Commerce faculty, and web-supported and web-based courses all count toward residency. Dissertation credit cannot be used toward fulfilling the residency requirement.
- 2. Research and scholarly activities. Students will meet with their doctoral adviser to develop a plan for research/scholarly activity during their residency.
- 3. Department activities. Students will meet with their doctoral adviser to develop a plan for department activities during their residency.

Note: The Department reserves the right to suspend from the program any student who, in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field. A copy of the Department's *Retention/Dissmissal Procedure* may be obtained from the departmental office.

Graduate Courses

Counseling (Coun)

501. Introduction to the Counseling Profession. Three semester hours.

Recommended as initial course in a student's program to serve as an introduction to the counseling profession. Roles of counselors and related professionals in various settings are presented. Professional goals and objectives, trends, professional associations, ethical and legal issues, history, credentials, and preparation standards for counselors are explored.

510. Counseling Theories and Techniques. Three semester hours.

A study of the philosophical and theoretical bases of the helping process. Includes study of major counseling theories, basic helping skills, and applications to diverse populations. Also includes professional issues related specifically to the counseling process.

512. Career Development. Three semester hours.

Interrelationships among lifestyle, work place, and career planning are explored. Career development theories; occupational, educational, and personal/social information sources and delivery systems; and organization of career development programs are studied.

513. Communication in Marriage. Three semester hours.

Theories and techniques of verbal, and nonverbal communication in marriage relationship are studied.

514. School Counseling and Development. Three semester hours.

As the foundation course for those planning to enter school counseling, this course covers organization, planning, management, and evaluation of comprehensive school counseling programs. Appropriate roles and functions of school counselors at various school levels, coordination of professional services; and professional issues such as ethics and associations as they specifically relate to school counseling are included. Recommended for non-counselor educational professionals as well as counselors. Prerequisites: Coun 501 and 510 or consent of instructor

516. Pre-Practicum. Three semester hours.

Provides the foundation for all practicum and internship experiences. Students learn communication and interpersonal skills under faculty supervision. Demonstration of these skills is a prerequisite for enrollment in practicum (Coun 551). Students will examine their intrapersonal issues and interpersonal styles and will follow ACA Ethical Standards. Prerequisites: Application form returned to department several months before actual enrollment in this course (check department for availability and due dates), Coun 501, 510, and completion of or current enrollment in Coun 528.

517. Assessment in Counseling. Three semester hours.

Includes group and individual appraisal techniques to be used to support career, educational, and personal planning and development. Standardized and non-standardized data information gathering methods, validity, reliability, psychometric statistics, factors influencing appraisals, and use and interpretation of appraisal results with a variety of populations are explored.

522. Counseling Diverse Populations. Three semester hours.

Emphasis on developing knowledge, skills and attitudes for more effective counseling with persons different from the counselor regarding characteristics such as culture, race, gender, sexual orientation, physical disability, and religious preference. Substantial attention is given to developing awareness of one's own values, attitudes and beliefs as they relate to counseling in a diverse society. Provides an understanding of how diverse values and mores, interaction patterns, social conditions, and trends related to diversity affect counseling.

528. Introduction to Group Dynamics and Procedures. Three semester hours.

A study of group development, dynamics, and theories in relation to group guidance, group counseling, and group therapy. Leadership styles, techniques and roles are explored, and ethical and legal issues related to group interventions are discussed. Prerequisite: Coun 510 or consent of instructor with concurrent enrollment in 510.

530. Community Counseling. Three semester hours.

As the foundation course for those planning to be counselors in community/agency settings, this course includes theoretical and applied information regarding community counseling services in the context of the larger social services system. A variety of delivery systems, staffing procedures, case management procedures, emergency services, treatment paradigms, and the need for consultation and collaboration among mental health professionals in community counseling setting are discussed. Prerequisite: Coun 501 and 510 or consent of instructor.

534. Counseling Children and Adolescents. Three semester hours.

Prepares counselors to address the specific needs of children and adolescents, with emphasis on developmental needs, specific therapeutic interventions, and common emotional issues. Group and individual counseling techniques and treatment planning are included. Prerequisite: Coun 516

539. Introduction to Play Therapy. Three semester hours.

Students will develop an effective philosophy of and approach to play therapy and an increased understanding of children and of children's world views. Through an experiential component, the student will learn to communicate with children at an affective level, to promote children's self-exploration and understanding, and to increase children's sensitivity to and acceptance of others. Prerequisite: Coun 516.

545. Developmental Issues and Strategies in Counseling. Three semester hours.

This course provides an overview of theory and research related to human growth and development over the lifespan. In addition to meeting the core curricula objectives required for accreditation, the course provides specific developmentally appropriate interventions supported by research that are designed to enhance the growth and development of clients who seek counseling services. Students also will engage in experiential activities designed to enhance their own growth and development.

551. *Practicum*. Three semester hours.

Provides for continued development and practice of skills learned in Coun 516. Students develop conceptual and professional skills related to their practice at a field site and practice various specified counseling and related activities during a minimum of 100 hours at an agency or educational setting. Satisfactory performance at the field placement and during on-campus class meetings must be demonstrated before students can proceed to internship (Coun 552). Prerequisites: Application form returned to department several months before actual enrollment in this course (check with department for availability and due dates), a grade of "B" or better in 516, and successful completion of Admission to Candidacy requirements (or the equivalent for those seeking school counselor certification only) within the Department of Counseling. Graded on a satisfactory (S) or unsatisfactory (U) basis, with a grade of "S" required to progrees to Coun 552.

552. Internship. Three semester hours.

Primary interest is on integration of process, conceptual, professional, and personal skills. Provides extensive supervised experience in a setting closely aligned with student's chosen program. Course is repeated for two, three-credit hour courses, each requiring approximately 20 weekly hours (300 total in each) of field experience, to meet master's degree requirement of six hours of internship. Prerequisites: Application form returned to department several months before actual enrollment in this course (check department for availability and due dates); grade of "B" or better in Coun 516. Students must receive a grade of "S" in the first semester of 552 to progress to the second semester of 552, and an "S" in the final semester of 552 to graduate and/or be recommended for school counselor certification.

560. Crisis Intervention: Theory and Practice. Three semester hours.

An overview of crisis intervention. Major theoretical models of situational crises are described and operationalized across a variety of service delivery systems. Students will develop conceptual competency necessary for professionals engaged in crisis intervention. Special emphasis is given to contemporary research in suicidology, disaster psychology, and crisis management for schools.

564. Family Crises and Resources. Three semester hours.

Crises and special problems encountered in family living with individual and community resources pertinent to them.

580. Chemical Dependency in Perspective. Three semester hours.

Covers a broad range of topics related to chemical dependency that school, community, student affairs, marriage/family, career, and other counselors should know. Topics include prevention, abused substances and their effects, symptoms of chemical dependency, an introduction to various chemical dependency treatment models, applications in a multicultural society, chemical dependency counseling with children and families, twelve-step and other support groups, employee assistance programs, relapse prevention, HIV/AIDS and other current issues.

581. Assessment and Treatment of Chemical Dependency. Three semester hours.

Provides in-depth information regarding the assessment and treatment of chemical dependency. Topics include coping skills; motivation for change; management of stress, anxiety, and anger; screening for chemical dependency in health care settings; various chemical dependency interventions; and planning specific treatments to match individual clients.

589. Independent Study. One to three semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisites: Consent of department head.

590. Legal Issues in College Student Affairs. Three semester hours.

Provides information about the legal issues common to college student affairs administrators. Includes student-university relationship, risk management techniques, civil rights, contracts and federal regulations.

595. Research Literature and Techniques. Three semester hours.

Emphasizes research in the student's major field, basic statistics, literature review, proposal and report development, research implementation, needs assessment, program development, and ethical and legal considerations regarding research through the presentation of a formal research proposal and/or completion of presentation of a research report.

597. Special Topics. One to three semester hours.

Organized class. May be repeated when topics vary.

606. Student Affairs Services in Higher Education. Three semester hours.

As the foundation course for those planning to enter student affairs work in higher education, this course offers students opportunities to examine the historical and contemporary role and scope of college student personnel services. Provides students with in-depth understanding of major theories of student development and the application of these theories to student development practice.

607. The Contemporary College Student. Three semester hours.

Examines various aspects of contemporary college student life and characteristics of present and future college students. Presented as a seminar to identify and examine salient issues facing college students including, but not limited to, sources of motivation, learning styles, development of values, relationship development, mental-health/psychosocial development and issues related to gender, health, and intercultural concerns.

610. Advanced Counseling Theories and Techniques. Three semester hours.

In-depth study of various counseling approaches with opportunities for demonstration and evaluation of each student's counseling skills. Prerequisite: Doctoral status or consent of the instructor.

611. Introduction to Marriage and Family Counseling/Therapy. Three semester hours.

A survey of the historical development and principal conceptualizations of marital and family counseling/therapy. Goals include an initial examination and comparison of various theories currently employed in the field with an emphasis on interview techniques. Subject areas to be covered include the various schools of family counseling/therapy, along with current trends and issues in marriage and family counseling/therapy.

612. Advanced Seminar in Marriage and Family Counseling/Therapy. Three semester

A didactic and experiential seminar course in marital and family counseling/therapy

for advanced students. Emphasis is on the development of the student's therapeutic expertise in structural and strategic family intervention techniques. Prerequisites: Coun 611 and doctoral status or consent of the instructor.

613. Advanced Statistical Techniques. Three semester hours.

Includes a review of introductory statistics, presentation of basic concepts of analyses of variance, advanced correlational methods, and multiple regression, as well as other advanced statistical methods. Focuses on use of the computer for data. Meets requirements for a Level III research tool course. Prerequisites: Level I and Level II research tools or equivalent or permission of the instructor.

614. Counseling Strategies for Parent-Child Relationships. Three semester hours.

A didactic and experiential course dealing with counseling techniques applied to the improvement of parent-child relationships. The course focuses on intervention skills of transgenerational family therapy, play therapy, and parenting education based on an understanding of the family life cycle and family structure. Prerequisites: Coun 510 or consent of instructor.

615. Marital Counseling/Therapy. Three semester hours.

A study of counseling theories applied to marital and other dyadic relationships. Emphasis will be placed on the assimilation, integration, and application of information pertaining to such topics as marital/divorce developmental tasks theory, object relations theory, systemic family of origin theory, interaction patterns in marriage, divorce process, and post-divorce adjustment. Techniques and historical development of marriage enrichment, marital counseling/therapy, and divorce counseling/therapy interventions will be included. Prerequisites: Coun 611 and doctoral status or consent of the instructor.

620. Supervision in Counseling and Human Development. Three semester hours.

A didactic and experiential course for post-graduate and doctoral students who wish to assume the role of supervisor. Goals include the assimilation and application of major theoretical/conceptual models and supervision approaches in counseling and human development. Prerequisite: Doctoral status or consent of the instructor.

621. Psychoeducational Consulting and Program Evaluation. Three semester hours. Psychological, educational, and sociological theories, models, and processes applied to human and organizational systems of change. Special attention is directed to applying theory to practice and to differentiating between human and structural problems and interventions.

625. Research Application. Three semester hours.

A doctoral course which focuses on the development of research skills and inquiry methods. The student is exposed to various quantitative and qualitative approaches. In addition, the course provides students with an understanding of scientific inquiry, purpose and benefits of research, research-related ethical and legal issues, and sampling procedures. Prerequisite: Doctoral status.

660. Doctoral Field Experience. Three to nine semester hours.

The doctoral field experience is repeated for a minimum of nine semester hours, during which time students are involved in various supervised experiences. The first three semester hours include 300 clock hours of supervised clinical work in The Community Counseling and Psychology Clinic, an integrated university-based facility where students engage in counseling activities with individuals, families, couples, and groups, with attention to broadening and refining advanced counseling skills. The remaining six semester hours (600 clock hours) include 300 clock hours of clinical experience in an approved site (during which time students are expected to expand their counseling, group work, and career development skills), plus 300 clock hours of supervised teaching and clinical supervision (during which time students are expected to expand their teaching and supervision skills). Students must meet the departmental standard regard-

ing instructional theory and method prior to the teaching portion of internship. Perquisites: Coun 610 and 620; consent of Doctoral Internship Coordinator.

689. Independent Study. One to three semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisites: Consent of department head.

690. Practicum in Qualitative Research. Three semester hours.

This practicum experience is a level IV research tools course designed to compliment and build upon knowledge gained in SHEd 696 or EdAd 698. The course is intended for advanced doctoral students who plan to do a qualitative study for their dissertations and/or seek in-depth practical experience in the use of qualitative research methods used in educational research (e.g., interview strategies, participant observation, and case studies). Students will engage in practice and skill development in analyzing and interpreting qualitative data, communicating results, and evaluating qualitative research. Each student will complete a qualitative research project and write a journal length article based on the research. Prerequisite: SHEd 696 or EdAd 698.

695. Research Methodology. Three semester hours.

An overview of research methodology including basic concepts employed in quantitative and qualitative research methods. Includes computer applications for research. Meets requirements for a Level I research tool course. Prerequisites: Doctoral status or consent of the instructor.

717. Ethics and Professional Development. Three semester hours.

Examines ethical and professional development issues in counseling and the behavioral sciences. Prerequisite: Doctoral status.

718. Doctoral Dissertation. Three to nine semester hours.

A candidate must present a dissertation acceptable to the student's advisory committee and the Dean for Graduate Studies and Research on a problem in the area of his specialization. To be acceptable, the dissertation must give evidence that the candidate has pursued a program of research, the results of which reveal superior academic competence and significant contribution to knowledge. Graded on a (S) satisfactory or (U) unsatisfactory basis.

Curriculum and Instruction

Martha Foote, Head

Education South; 903-886-5537

The Department of Curriculum and Instruction holds as its central mission the study of curriculum and instructional design and its implementation at all levels of education. To realize a broad range of curricular aims and goals, the department engages in rigorous study of teaching and learning to enhance teaching effectiveness. Five strands of emphasis at the graduate level include:

- 1. offering master's and doctoral degree programs;
- being actively involved in the public schools for mutually beneficial purposes, i.e., updating and enhancing skills of current teachers while allowing departmental faculty to remain current with public school trends and issues;
- offering doctoral programs that develop effective teacher educators through research and intensive study of learning paradigms and instructional strategies;
- 4. promoting within faculty and students the rigorous scholarship as they participate

in basic and applied research, educational program development, and implementation and dissemination of knowledge in enlightening and utilitarian ways.

5. providing courses to support teaching certification at the graduate level.

Programs of Graduate Work

The department offers the following endorsements, certificates, and degrees:

Certificates

Certification courses leading to EC-4, 4-8, 8-12 (see Alternative Certification Program) Reading Specialist Certificate Master Reading Teacher Certificate

Endorsements

Gifted and Talented Endorsement Bilingual Education Endorsement English as a Second Language (E.S.L.) Endorsement

Students may qualify for these certificates and endorsements as they progress through the normal program for the master's degree, provided the student has the Provisional or Standard Teaching Certificate, has appropriate teaching experience, receives barcode approval, and successfully completes the appropriate TExES exams.

Students pursuing initial teacher certification while teaching in the elementary, middle, or secondary level schools in Texas may complete courses at the graduate level to support their initial teacher certification once they have been admitted to the Alternative Certification Program. However, they must be certified before being admitted to the master's program or taking additional master's coursework.

For information about the Alternative Certification and Alternative Post-Baccalaureate Certification program, please visit the Center for Educator Certification and Academic Services website at: www.tamu-commerce.edu/teacher.

Endorsements in Bilingual Education and All-Level English as a Second Language

For teachers who hold or qualify for the Provisional or Standard Teaching Certificate, the Department of Curriculum and Instruction offers endorsement programs in Bilingual Education, and English as a Second Language.

Students who complete the Bilingual Education program of studies should (1) possess the competencies necessary to teach, both in English and in Spanish, students in pre-kindergarten and elementary grades whose dominant language is Spanish and (2) meet the qualifications required by the State of Texas for appointment to such positions. Those who complete the English as a Second Language (ESL) program of study should (1) possess the competencies necessary to teach English to students in pre-kindergarten through grade 12 whose dominant language is other than English and (2) meet the qualifications required by the State of Texas for appointment to such positions.

Professional Certificates: Reading Specialist and Master Reading Teacher Certificate

Students who complete the program of study for the Reading Specialist Certificate should possess the competencies necessary to earn the master's degree; teach reading in pre-kindergarten through grade 12 gifted and talented; development, remedial or clinical settings; supervise or direct reading programs; and qualify for professional positions in the State of Texas for which the Reading Specialist Certificate is required.

Students who complete the program of study for the Master Reading Teacher Cer-

tificate should have a Texas Provisional or Standard Teaching Certificate, at least three years of teaching experience, and completed coursework required for certification.

Master of Education and Master of Science in Early Childhood Education

The M.Ed. and M.S. degrees in Early Childhood Education is for certified teachers interested in the human growth and development of young children, birth through age eight years, and in the improvement of teaching young children through advanced studies in the content and methodology of the subjects taught in preschools through grade three. The major in early childhood education prepares graduates for careers in both public and private educational settings in which the primary focus is children between the ages of three and eight. A graduate with a major in early childhood education should possess knowledge in these areas: physiological and psychological development of children aged birth to eight years, curriculum theory and development, effective instructional strategies for young children, and the administration and management of classrooms and facilities for young children.

Master of Education and Master Science in Elementary Education

The Master's of Education degree (M.Ed.) in Elementary Education is for certified teachers interested in the improvement of classroom teaching through advanced studies in the content and methodology of subjects taught in elementary classrooms. The major in elementary education, available primarily to experienced classroom teachers, prepares graduates to (1) improve student engagement and teaching effectiveness, and (2) qualify for leadership positions in settings for which the master's degree is required. A graduate with a major in elementary education should possess knowledge of the research and literature in elementary education, curriculum and instructional design in subjects taught in elementary schools, effective teaching practices, and the teaching of students who are culturally diverse.

Master of Education, Master of Science, and Master of Arts in Reading

The M.Ed. degree in Reading is primarily for certified teachers interested in advanced studies in literacy learning, with emphasis on both developmental and remedial reading and writing instruction pre-kindergarten through grade 12. The M.Ed. in Reading Program can lead to an All-Level Reading Certification and Master Reading Teacher Certification. The M.S. in Reading is primarily for certified teachers who seek a program that focuses their coursework on content directly related to the teaching of literacy and can lead to Master Reading Teacher Certification. The Master of Arts in Reading is primarily for certified teachers interested in literacy's role in the development of learning and can lead to Master Reading Teacher Certification. The major in reading prepares graduates for careers in both public and private educational settings in which the primary focus is on teaching, supervising, or directing literacy learning in developmental, remedial, and/or enrichment settings. A graduate with a major in reading should possess knowledge of the physiological and psychological growth of children and the research literature in literacy learning, and in the ability to diagnose, prescribe, instruct, and evaluate learners in the area of listening, reading, speaking, writing, and other skills related to literacy.

Master of Education and Master of Science in Secondary Education

The M.Ed. or M.S. in Secondary Education is for certified teachers interested in the improvement of education through advanced studies of curriculum and instruction in secondary education. The major in Secondary Education prepares graduates to (1) improve student engagement, classroom management, and teaching effectiveness; and (2) qualify for leadership positions in settings for which the masters is required. A graduate with a major in secondary education should possess knowledge of the research and literature in secondary education, curriculum and instructional design, effective teaching practices, and equity in excellence in teaching for all students. Individualized degree plans may be designed to prepare teachers for classroom instruction, for educational opportunities beyond the classroom, and for other advanced academic studies.

Doctor of Education in Supervision, Curriculum, and Instruction

The Department of Curriculum and Instruction offers a doctoral degree in Education with a major in Supervision, Curriculum, and Instruction—Elementary Education (Ed.D. in SCI-Elementary). The doctoral program is designed for education practitioners and constitutes a balance of professional courses in supervision, curriculum, instruction, and research. The program prepares graduates for careers in public and private elementary schools, regional educational training facilities, college and university settings, and research and development centers. A graduate with an Ed.D. degree in elementary education should possess competencies in research methods and statistics, curricula and instructional design, and instructional strategies; and should have knowledge regarding research on effective teaching the learner and learning, and literacy education. The competencies are addressed in a variety of preservice and inservice settings.

Admission

Master of Education, Master of Arts, Master of Science

- 1. Application Procedures. Applications may be picked up in the Graduate School (BA 142) or on other campuses—Navarro, Mesquite Metroplex, or UCD. They can also be accessed on-line at www.tamu-commerce.edu.
- 2. Admission Requirements.
 - a. Application to the Graduate School
 - b. Official undergraduate transcript with a 2.75 GPA overall or 3.00 on the last 60 undergraduate hours.
 - c. One of the following: Proof of a current valid teaching certificate; Passing scores on ExCET or TExES, or TeCAT; acceptable GRE score; or Official transcript of a completed master's degree with a least a 3.00 GPA.

If a student does not meet the above criteria, he/she must provide an official bachelor's transcript from a regionally accredited institution and two of the following:

- a. Portfolio
- b. Two letters of reference
- 3. Prerequisites. In addition to those elements listed in the "Policy for Admission to Candidacy," undergraduate prerequisites for graduate majors and minors are currently in force:
 - a. Graduate Majors: Only candidates holding at least a provisional or standard teaching certificate or whose graduate program includes courses for meeting requirements of an official deficiency plan may be admitted to candidacy for an advanced degree.
 - b. Graduate Minors: The head of the Department of Curriculum and Instruction through his/her standing committee on admissions will determine whether the minimum number of courses required by the catalog for a minor in elementary education will enable the candidate to function effectively in the field. This will be based upon each individual's professional preparation and experience.

Alternative Certification Program

Students pursuing teacher certification as a graduate student should contact the Center for Educator Certification and Academic Services at 903-468-8186 for admission requirements. Some of the graduate-level courses may be counted toward a master's degree. Visit www.tamu-commerce.edu/teacher for more information.

Doctor of Education in Supervision, Curriculum, and Instruction— Elementary Education

Admission details are listed in the section "Admission to Doctoral Degree Programs" earlier in the general section of this catalog. All candidates seeking admission to the doctoral program should confer with a doctoral adviser within the department prior to intiating the admissions process.

Admissions to the SCI Doctoral Program in the Department of Curriculum and Instruction will occur twice each year. Once in the fall semester and once in the spring semester. Applicants interested in applying must have three years of teaching experience, submit their resume, and attend a doctoral information session to be considered for admission. Applicants will complete a departmental writing sample during the information session. To be considered for admission to the doctoral program applications must be completed by July 15 for admission for the fall semester and November 15 for admission for the spring semester. Once the application is complete, the applicant must complete an interview with the core doctoral faculty.

When initially admitted to the doctoral program by the Graduate School, students must complete a departmental orientation session, have a degree plan approved, and have a doctoral residency plan approved before being fully admitted to the program by the department. Once fully admitted to the doctoral program, the student has 12 months to identify his or her qualifying exam committee. This committee consists of one major adviser and two committee members made up of doctoral faculty within the department.

Degree and Certification Requirements

The following undergraduate prerequisites for graduate majors and minors are currently in force:

Graduate Majors: Only candidates holding at least a provisional or standard teaching certificate or whose graduate program includes courses for meeting requirements of an official deficiency plan may be admitted to candidacy for an advanced degree with a major in elementary education.

Graduate Minors: The head of the Department of Curriculum and Instruction through his/her standing committee on admissions will determine whether the minimum number of courses required by the catalog for a minor in elementary education will enable the candidate to function effectively in the field. This will be based upon each individual's professional preparation and experience.

Master's Degrees

Several master's degree plan options are presented. In certain cases courses may be substituted for those listed but only with the permission of the major adviser. A field-based Master's Degree in Elementary and Secondary Education is available to cohort groups in some school districts and many courses in the Alternative Certification Program can be included as coursework toward the Master's Degree (see Program Admissions for a Degree Plan).

Master of Education in Early Childhood Education

The curriculum for the Master of Education in Early Childhood Education involves a minimum of 36 semester hours of study, 24 semester hours of which must be in ECE. The suggested outline of studies is as follows:

1. Common Core Requirements (9 sh):

ElEd 595—Research Literature and Techniques

ECE 536—Literacy Development in the Early Years

ElEd 559—Multicultural Education in Today's School

Early Childhood Methods (15 sh):

ECE 560—Early Childhood Curriculum Design

ECE 535—Math, Science and Social Studies Curriculum

ECE 537—Creative Expression in the Arts

ECE 538—Classroom Management for Teachers

ECE 561—Foundations in Early Childhood Education

3. Approved Electives and/or Minor Studies (12 sh). Students complete ECE/ElEd 529, Workshop in Elementary Education (in early childhood), and a minimum of 9 sh of course work in approved electives and/or minor studies. Electives may be taken in studies in the Department of Elementary Education (early childhood, elementary education, reading, and bilingual/ESL) or in studies in other departments within the College of Education or departments outside the College. Electives do not need to be concentrated within any particular discipline. However, if the student desires a minor field of study in a specific discipline, at least 12 semester hours must be taken in that declared minor area. Approved disciplines for minor studies include art, bilingual education, biology, earth sciences, elementary education, English, English as a second language (ESL), health, history, mathematics, music, foreign language, physical education, physical science, reading, speech, and theater arts.

Master of Science in Early Childhood Education

Candidates for the Master of Science degree in Early Childhood Education should read the section Requirements for a Master of Science Degree in the general section of this catalog and consult with an adviser in Early Childhood Education. The 36-semester-hour suggested curriculum includes: ElEd 595, ElEd 559, 535, 536, 537, 538, 560, 561, plus four approved graduate courses.

Written Comprehensive Examination in Early Childhood Education

Courses for which students will be responsible on the master's written comprehensive examination include ECE 535, 536, 537, 538, 560, 561, and EIEd 559.

Master of Education in Elementary Education

The curriculum for the Master of Education in Elementary Education involves a minimum of 36 semester hours of study, 18 hours of which must have an EIEd prefix. The suggested outline of studies is as follows:

1. Required Core Courses (9 sh):

ElEd 595—Research Literature and Techniques

ElEd 538—Classroom Management for Teachers

ElEd 559—Diversity and Equity in Education

2. Support Courses (9-12 sh):

ElEd 524—Language Arts Curriculum for Grades One Through Eight

ElEd 529*—Workshop in Elementary Education

ElEd 530—Mathematics Curriculum for Grades One Through Eight

ElEd 535—Leadersh and Supervision in the Elementary School

ElEd 545—Issues in the Development of the Elementary Curriculum

ElEd 557—Social Studies Curriculum for Grades One Through Eight

ElEd 558—Science Curriculum for Grades One Through Eight

ElEd 597*—Special Topics (May be repeated when title varies)

*Limit of one 529 and no more than two 597s in this area.

3. Approved Electives and/or Minor (15-18 sh). Approved electives must be sufficient to meet the 36-hour minimum program for the master's degree. Electives may be taken in studies within the Department of Elementary Education (early childhood, elementary education, reading, and bilingual/ESL) or in studies in other departments within the College of Education or departments outside the college. Electives do not need to be concentrated within any particular discipline. However, if the student desires a minor field of study in a specific discipline, at least 12 semester hours must be taken in that declared minor area. Approved disciplines for minor studies include art, biology, early childhood education, physical sciences, English, health, history, mathematics, music, foreign languages, health and kinesiology, reading, speech, and theater arts.

Candidates for the Master of Science degree in Elementary Education should consult the section entitled "Requirements for a Master of Science Degree" in the general section of this catalog and consult with an adviser in Elementary Education.

Master of Education in Elementary Education with Specialization in Bilingual Education

1. Required Core Courses (9 sh):

ElEd 595—Research Literature and Techniques

ElEd 538—Classroom Management for Teaching

ElEd 559—Diversity and Equity in Education

2. Support Courses (Minimum of 9 sh):

ElEd 524—Language Arts Curriculum for Grades One through Eight

ElEd 529—Workshop in Elementary Education

ElEd 530—Mathematics Curriculum for Grades One through Eight

ElEd 545—Issues in the Development of Elementary Education Curriculum

ElEd 557—Social Studies Curriculum for Grades One through Eight

ElEd 558—Science Curriculum for Grades One through Eight

ElEd 597—Social Studies Curriculum Grades One through Eight

Limit of one 529 and no more tha 597s in this sequence.

3. Specialization Courses (12 sh):

Eng 557—Teaching English as a Second Language

BIEd 501—Theoretical Foundations of Bilingual/ESL Education

BIEd 502—Social and Academic Language Development for Bilingual Learners

BlEd 503—Bilingual Content Instruction

FLL 511—Teaching a Second Language

4. Interdisciplinary Electives (6 sh):

ECE/ElEd 529—Workshop in Early Childhood or Elementary Education

ECE 535—Math, Science, and Social Studies Curriculum

ECE 536—Literacy Development in the Early Years

ECE 537—Creative Expression in the Arts

ECE 560—Early Childhood Curriculum Design

ECE 561—Foundations in Early Childhood Education

Eng 555—General Linguistics

Eng 558—Sociolinguistics

Eng 562—Psycholinguistics

Rdg 515—Reading and Learning in Content Areas

Rdg 520—Literacy and Instruction I

Rdg 525—Teaching Reading Comprehension

Rdg 540—Prescriptive Reading Content Area Classrooms

Rdg 550—Language and Literacy Development

Spa 505—Children's Literature in Spanish

Spa 514—Mexican American Literature

Spa 516—Latin American Literature

Other approved coursework in ElEd, SEd, EdL and SpEd may also be used.

Master of Education in Elementary Education English as a Second Language (ESL)

1. Required Core Courses (9 sh):

ElEd 595—Research Literature and Techniques

ElEd 538—Classroom Management for Teachers

ElEd 559—Diversity and Equity in Education

2. Support Courses (Minimum of 9 sh):

ElEd 524—Language Arts Curriculum for Grades One through Eight

ElEd 529—Workshop in Elementary Education

EIEd 530—Mathematics Curriculum for Grades One through Eight

ElEd 545—Issues in the Development of Elementary Education Curriculum

ElEd 557—Social Studies Curriculum for Grades One through Eight

ElEd 558—Science Curriculum for Grades One through Eight

ElEd 597—Special Topics (may be repeated when topic varies)

Limit of one 529 and no more tha 597s in this sequence.

3. Specialization Courses (12 sh):

Eng 557—Teaching English as a Second Language

BIEd 501—Theoretical Foundations of Bilingual/ESL Education

BIEd 512—Social and Academic Language Development in English for Bilingual

Learners

BlEd 513—Advanced Sheltered Content Area Instruction

4. Interdisciplinary Electives (6 sh):

ECE/ElEd 529—Workshop in Early Childhood or Elementary Education

ECE/ElEd 538—Classroom Management for Teachers

ECE 535—Math, Science, and Social Studies Curriculum

ECE 536—Literacy Development in the Early Years

ECE 537—Creative Expression in the Arts

ECE 560—Early Childhood Curriculum Design

ECE 561—Foundations in Early Childhood Education

Eng 555—General Linguistics

Eng 558—Sociolinguistics

Eng 562—Psycholinguistics

Rdg 515—Reading and Learning in Content Areas

Rdg 525—Teaching Reading Comprehension

Rdg 540—Prescriptive Reading Content Area Classrooms

Rdg 550—Language and Literacy Development

Other approved coursework in ElEd, SEd, EdL and SpEd may also be used.

Students seeking ESL specialization are not required to demonstrate proficiency in a language other than English, but are encouraged to develop any foreign language skills they may have.

Master of Education, Master of Science, and Master of Arts in Reading

Core course requirements in the 36-hour Master of Education in Reading are: Rdg 520, 521, 523, 525, 540, 556, 560, 566, and ElEd or SEd 595. Students interested in the Reading Specialist Certificate must also take SEd 513 or a curriculum course assigned by the adviser, Psy 545, and ElEd 524.

Core course requirements for the Master of Science in Reading for the 36 semester hour program are: Rdg 520, 521, 523, 525, 540, 556, 560, 566, ElEd or SEd 595, and 3 approved graduate courses outside the field of Reading.

Course requirements for the ten-course 30 semester hour Master of Arts in Reading are: Rdg 520, 521, 523, 525, 540, 556; ElEd 524; one course from LS 535, Eng 504, 505 or 509; ElEd/SEd 518 (6 hours of masters thesis) and additional requirements (see specific requirements for the Master of Arts Degree in the General Section of this catalog).

Reading Specialist Certificate

This certificate requires the core courses for a master's degree in reading, two professional development courses, two support area courses (linguistics and multicultural awareness), three years of teaching experience in an accredited school and a passing score on the TExES exam. Students who seek to qualify for this certificate must file a plan of study that meets certification requirements; this plan must be approved by an adviser in reading and should be filed as soon as possible after initiation of the program of study to ensure that the program planned meets the certification requirements. An overall-grade point average of 3.25 in all certificate coursework is required. The requirements for this certificate may be met as part of the master's degree program of studies or in addition to it. Please consult a departmental adviser for details.

Master Reading Teacher Certificate

The requirements for this certificate may be met as part of the master's degree in Reading. Graduate reading courses specifically supporting Master Reading Teacher certification include Rdg 520, 521, and 523. Interested students should consult a departmental adviser for more details.

Master of Education and Master of Science in Secondary Education (SED) (36 Semester Hours)

*SEd 513—The Secondary School Curriculum

*SEd 521—Models of Teaching in the Secondary School

*SEd 528—The Philosophy of Education

*SEd 595—Research Methodologies

Plus two to four graduate-level SEd courses to be selected in consultation with adviser.

Plus four to six graduate-level electives outside SEd

*Core Courses

Secondary Alternative Certification Programs

Students may pursue certification in Secondary Teaching. Many of the courses required for this program may be applied toward a master's degree. Courses required for the secondary alternative certification program are:

SEd 514—Management and Curriculum Development for Diverse Learners

SEd 515—Effective Teaching in a Diverse Environment

SEd 516—Educational Research for Effective Teaching

Additional course requirements:

Psy 500—Learning Processes and Development Rdg 515 or SEd 517—Teaching Reading in the Content Area ETec 557—Integrating Technology in the Content Fields And any teaching field requirements

Gifted and Talented Endorsement

The following courses are required for the Talented and Gifted Endorsement: SEd 506, SEd 507, SEd 508, SEd 509, and SEd 650. If the individual pursuing the endorsement has taught talented and gifted students for a minimum of two years, then SEd 650 may be omitted. Students can take SEd 506, 507, 508, 509 and take the test or just take the test. These courses can be counted toward a master's degree in Secondary Education.

Doctor of Education in Supervision, Curriculum, and Instruction— **Elementary Education**

All candidates for the degree must complete the Supervision, Curriculum, and Instruction Core (30 sh), either the support area in Elementary Education (18 sh) or the support area in Literacy/Reading Education (18 sh), and the dissertation (12 sh) for a total minimum of 60 semester hours excluding university research tool courses. Students without a master's degree or with a master's degree not appropriate to the selected area must complete an additional 15 semester hours of studies in a cognate area and 15 semester hours of approved electives, raising the total minimum to 90 semester hours, excluding the university research tool courses.

In addition, the candidate must demonstrate proficiency in the use of research tools to the satisfaction of the major department. (See "Research Tools" under "Requirements for the Doctoral Degree" earlier in this catalog.) The candidate also must complete a doctoral residency; detailed information on satisfying this requirement is given at the end of this section.

Written comprehensive or qualifying examinations as well as oral examinations will be conducted in the major area of studies (SCI core requirements), the support area (elementary education or reading education) and, when applicable, in the cognate and elective areas. A dissertation of not less than 12 semester hours is required.

Research Design and Replication

Here are the specific course requirements.

FIEd 642

1. Supervision, Curriculum and Instruction Courses (30 sh)

5 511	LILG O I	research Besign and replication
3 sh	ElEd 651	Curricula and Instructional Design
3 sh	ElEd 652	Research on the Learner
3 sh	ElEd 653	Professional Writing
3 sh	ElEd 655	Evaluation of Learning in the Elementary School
3 sh	ElEd 657	Content Area Literacy
3 sh	ElEd 658	Process Writing in the Elementary School
6 or 9 sh	ElEd 690	(Topics will vary)
3 sh	ElEd 691	Mind, Brain, and Education

2. Reading Education Courses (18 sh)

3 sh	Rdg 640	Seminar in Reading Research
3 sh	Rdg 650	Creative Reading Experiences for Elementary School
3 sh	Rdg 667	Theories of the Reading Process
9 sh	Rdg 690	(Topics will vary)

3. Cognate and Elective Area (36 sh)

Masters degree may be approved to satisfy Cognitive and Elective area.

4. Dissertation (12 sh)

3 sh

12 sh ElEd 718 **Doctoral Dissertation** 5. University Research Tools (12 sh)

Level 1: 3 sh ElEd 695—Doctoral Research Seminar

Level 2: 3 sh Psy 612 or HiEd 617 Level 3: 3 sh Coun 613 or Psy 681

Level 4: 3 sh Psy 610 or Psy 670 or HiEd 696 or EdAd 698

Six semester hours of doctoral coursework is considered a full load by the department, thus, students enrolled in this department's doctoral program may enroll in only two doctoral courses per semester. An overload of three courses may be requested in special circumstances. Approval of the doctoral coordinator, major advisor, and course instructors must be attained before a course overload will be granted.

Any student wishing to take doctoral coursework in the department who has not been officially admitted into the doctoral program may get permission to take one course prior to admission. The student must get permission from the doctoral coordinator and course instructor prior to enrolling for the course.

Departmental Doctoral Residency Policy

Each student is required to complete residency after admission to the doctoral program and prior to completing qualifying exams. Residency provides students with more in-depth experiences than occurs when students are simply enrolled in doctoral classes. Students have opportunities to work with other doctoral students and faculty as colleagues in projects that provide experience and training toward independent application of skills commensurate with holders of doctoral degrees.

Documenting Residency

Information about the residency plan and how to maintain documentation will be initiated by the doctoral coordinator collaboratively with the student. Thereafter, during the first session of each doctoral course/seminar the instructor will distribute residency documentation sheets and explain how course requirements and projects can be incorporated into the completion of residency activities. The student is then responsible for turning in the signed sheet to the departmental office so that copies are filed in the student's official doctoral file. After a major adviser has been selected, the major adviser will review the residency plan collaboratively with the student to set specific goals and timelines.

Written documentation of two or more of the activities below must be completed prior to admission to doctoral candidacy. Also, the student is required to present the complete file of documentation to the major adviser and his/her committee prior to taking qualifying and oral exams. The major adviser and committee will be responsible for noting successful completion of the plan on the qualifying exam documentation sheet. Documentation will continue to remain on file in the departmental office for at least five years after the doctoral student has completed the doctoral degree.

A. Five Areas of Residency

Below are five areas the residency plan should include, plus examples of activities that would fulfill each area.

- Opportunities to become involved in events to broaden intellectual growth. For example:
 - Departmental Doctoral Email Network provides information on ongoing opportunities such as attendance at colloquiums, and opportunities for grant writing, opportunities to present at conferences, opportunities to write for professional journals.
 - Doctoral Seminar Assignments provide springboards to activities such as: conducting research projects, and writing and submitting manuscripts for publication, proposing presentations at national or international conferences.

- 2. Access to a range of academic support resources required for scholarship in that discipline. For example:
 - Specific courses require spending time in the library to provide an understanding of how to access various electronic, paper, and people resources so that students understand how to conduct literature reviews.
 - Specific courses require accessing and developing web-based resources.
- 3. Opportunities for faculty and student interactions that provide for the development of a mentoring-apprentice relationship and for a faculty evaluation of students. For example:
 - Doctoral Faculty and Student Social Events provide opportunities for expressing research/writing interests, explaining current research/writing activities, and generally networking on common research/writing interests.
 - Doctoral Faculty invite students to research, write, edit, and teach as assistants, interns, or full-fledged collaborators.
 - Doctoral Faculty invite students to consult or present as assistants, interns, or full-fledged collaborators.
- 4. Involvement with cognate disciplines and research scholars in those disciplines. For example:
 - Students select options such as reading, mathematics education, early childhood, or other cognates and electives within the TAMU System or Federation and connections with research scholars are facilitated by the doctoral coordinator, major advisor, and include doctoral faculty members.
 - Specific courses spend time on conference calls, web chats, and two-way interactive video to engage in discussion and network with a variety of scholars.
 - Doctoral faculty consistently encourage and facilitate student membership in a variety of professional and scholarly organizations.
 - Doctoral faculty consistently encourage/facilitate student attendance in a variety of professional and scholarly conferences.
- 5. Occasions for meaningful peer interactions among graduate students. For example:
 - The Doctoral List Serve provides opportunities to receive and post information and create special interest groups.
 - Chat rooms are created via the web for discussion related to particular courses and topics.
 - Students are encouraged via seminar assignments to co-research, co-present at national conferences, and co-author manuscripts for publication.
 - Buddy systems and study groups are formally and informally created.
- B. Activities and experiences expected of the doctoral student:

Continuous involvement in activities like the following are expected every semester regardless of enrollment in coursework. While these vary widely, the intent of these activities is to provide the student with a more in-depth experience than occurs when students are simply enrolled in doctoral classes.

- 1. Research projects
- 2. Submission of manuscript to state or national journals for publication consideration
- 3. Staff development consultancies as a collaborator or an independent contractor
- 4. Attending professional conferences and/or study tours
- 5. Conference presenter, state, regional, and/or national
- 6. Professional development presentations for schools and/or school districts
- 7. Teaching or Research Internship with a doctoral faculty member

- 8. Graduate assistant (GAT or GANT)
- 9. Ad-interim or adjunct instructor
- 10. Liaison in the field-based program
- 11. Webmaster of a home page
- Grant writing
- 13. Formal report writing
- 14. Attending Federation meetings and/or guest speaker events
- 15. Peer review for conference proposals, manuscripts and/or grants
- 16. Other, to be determined by doctoral adviser and student.
- C. Determination of successful completion of residency and maintenance of documentation: Information about the residency plan and how to maintain documentation will be initiated by the doctoral coordinator collaboratively with the student. Thereafter, during the first session of each doctoral course/seminar the instructor will distribute residency documentation sheets and explain how course requirements and/ or projects can be incorporated into the completion of residency activities and experiences to the course instructor for evaluation and approval. The student is then responsible for turning in the signed sheet to the departmental office so that copies are filed in the student's official doctoral file. After a major adviser has been selected, the major adviser will review the residency plan collaboratively with the student to set specific goals and timeliness. Written documentation of the above activities must be completed prior to admission to doctoral candidacy. The student is required to present the complete file of documentation to the major adviser and his/her committee prior to taking qualifying and oral exams. The major adviser and committee will be responsible for noting successful completion of the plan on the qualifying exam documentation sheet. Documentation will continue to remain on file in the departmental office for at least five years after the doctoral student has completed the doctoral degree.

Note: The Department reserves the right to suspend from the program any student who, in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

Bilingual Education (BlEd)

501. Theoretical Foundations of Bilingual/ESL (English as a Second Language) Education. Three semester hours.

A critical analysis of the rationale for bilingual, multicultural education focusing on history, philosophy, and theory. The study and analysis of educational programs designed for English Language Learners including the native language and the ESL (English as a Second Language) components as well as a critical review of research on the effective implementation of bilingual/ESL programs.

Social and Academic Language Development for Bilingual Learners. Three semester hours.

Analysis and application of research-based approaches to the development of oral and written language in English Language Learners that result in biliteracy and high academic achievement. Preparation and adaptation of holistic, thematically based materials and activities and critical evaluation of existing materials in Spanish. Offered in Spanish and English. Prerequisites: BIEd 501 and demonstrated proficiency in Spanish.

503. *Bilingual Content Instruction*. Three semester hours.

Analysis and application of methods, materials, and assessment instruments used

in the teaching of language arts, math, science and social studies to bilingual students. Creation, formal presentation, and evaluation of thematic units delivered primarily in Spanish and others using sheltered ESL techniques delivered primarily in English. Offered in Spanish and English. Prerequisites: BlEd 501 and demonstrated proficiency in Spanish.

512. Social and Academic Language Development in English for Bilingual Learners. Three semester hours.

Analysis and application of current approaches to oral and written language development in English that result in higher academic achievement for K-12 English Language Learners (ELLs). Students will assess the oral language and literacy skills of ELLs and design, evaluate, and modify/adapt commercial and research-based instructional materials to build on student strengths and meet identified needs.

513. Advanced Sheltered Content Area Instruction. Three semester hours.

Analysis and application of second language acquisition research, theory, and pedagogical approaches to the teaching of math, science, social studies, and language arts in English to ESL students in K-12. Content-based ESL and sheltered instructional approaches, methods, and materials that meet state and local standards will be among those explored and experienced.

Early Childhood Education (ECE)

529. Workshop in Early Childhood Education. Three to six semester hours. (Same as ElEd 529)

Content and credit hours vary. May be graded on a satisfactory (S) and unsatisfactory (U) basis.

535. Math Science and Social Studies Curriculum. Three semester hours.

A study of the content, methods, and theory appropriate for extending learnings in math, science and social studies. Emphasis is placed upon formulating programs which extend and integrate the learning experiences of young children. Pre-Kindergarten, Kindergarten, Grades 1, 2, and 3.

536. Literacy Development in the Early Years. Three semester hours.

The focus of this course is to examine the theories, research and practices that shape early childhood literacy development and instruction. Special emphasis will be devoted to language development, emergent literacy, family literacy and its relationship to children. Additional, participants will examine strategies for developing concepts about print, phonemic awareness, acquisition of work meaning, comprehension and connecting reading and writing. This course contributes to the development of the reflective practitioner in early childhood education.

537. Creative Expression in the Arts. Three semester hours.

Study of the theory, content, and practice of integrating the performing arts into the curriculum design and the learning environments. Emphasis is placed on aesthetic development of young children through play, movement, music, visual art and creative dramatics.

538. *Classroom Management for Teachers*. Three semester hours. (Same as EIEd 538) A study of current theories and practices of classroom management and discipline in early childhood, elementary, and middle school settings.

560. Early Childhood Curriculum Design. Three semester hours.

Overview of curriculum development in all subject matter areas in early childhood education-prekindergarten, kindergarten, grades 1, 2, and 3.

561. Foundations in Early Childhood Education. Three semester hours.

This course is designed to examine the relationships among development, experiences and practices in early childhood education. Emphasis is placed upon the investigation of theoretical influences on early childhood education—Pre-Kindergarten, Kindergarten, Grades 1, 2, and 3.

563. Early Childhood Development. Three semester hours.

A survey of research relating to theories of the development of cognitive function, the effects of attitudinal factors, and the implications of different curricular approaches on changes in child behavior and learning from birth through grade 3.

566. Early Childhood Environments. Three semester hours.

Develops a process of designing appropriate learning environments for young children. Investigates the relationship between curriculum and design through the exploration of organization, management, procedures, materials and equipment.

589. *Independent Study in Early Childhood Education*. One to four semester hours. (Same as EIEd 589)

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

597. Special Topic: Early Childhood Education. One to four semester hours. (Same as ElEd 597)

Organized Class. May be graded on a satisfactory (S) or unsatisfactory (U) basis. May be repeated when the topic varies.

634. History and Philosophy of Early Childhood Education. Three semester hours.

This course is the study of the history and philosophy of early childhood education and related movements. The focus will be on the impact of past and present early childhood educational philosophies on programs for young children. This course will examine the major theories of early childhood education and the writings of historical contributors whose works have influenced modern early childhood educational thought. Prerequisite: Doctoral Standing.

648. Leadership in Early Childhood Education. Three semester hours.

This seminar in organizational theory for professionals who work in early child-hood education will focus on program administration, child advocacy, and public policy. This is a study of the policy making processes and procedures that impact children, families, and communities. The course provides for the development of skills needed to be effective leaders in early childhood education. Prerequisite: Doctoral Standing.

659. Trends and Issues in Early Childhood Education. Three semester hours.

This course provides an opportunity to explore the critical trends and issues being debated within the field of early childhood education. Topics will be examined through historical and contemporary theory and practices with emphases on themes linked to policy and advocacy. This study will offer a better understanding of current trends and develop the skills needed to critique ideas and issues surrounding early education. Prerequisite: Doctoral Standing.

663. Seminar in Research in Early Childhood Education. Three semester hours.

This course provides students with an opportunity for an in-depth examination of research in early childhood education. They will review theoretical and empirical early childhood research literature. Students will critically examine a variety of relevant research topics in the field and share their finding in the seminar. Prerequisite: Doctoral Standing.

675. Parent Partnerships and Family Literacy. Three semester hours.

An emphasis on the needs, values and avenues for partnerships with families and an analysis of varied definitions of family literacy and research on family literacy including: examination of the ways literacy is used within families, programs that are designed to involve and inform parents about activities that will promote their children's

literacy, and intergenerational literacy initiatives. Programs designed to improve the literacy development of both adults and children will be connected to implications for reading instruction and the creation of reciprocal partnerships with parents. Prerequisite: Doctoral Standing.

682. Assessment in Early Childhood Education. Three semester hours.

This course provides a comprehensive and critical review of early childhood assessment practices and the research that supports these practices. Participants will determine the uses, characteristics, interpretation, and limitation of a variety of formal and informal measures. Participants will engage in a variety of activities to help them become knowledgeable consumers of assessment and screening measures used in early childhood programs to assist teachers in making sound instructional decisions. Prerequisite: Doctoral Standing.

689. Independent Study in Early Childhood Education. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

697. Special Topics Seminar in Early Childhood Education. One to four semester hours. An organized class delivered with a seminar format around a specialized topic or content area within the field of Early Childhood Education. May be repeated when topics vary. Prerequisite: Doctoral level standing or consent of the instructor.

Elementary Education (ElEd)

500. Issues in Education. Three semester hours.

This course focuses on major philosophical and ideological beliefs and their impact on the organization and structure of American education. Specific issues included will be the nature of learning, human development, current brain research and multiple intelligences, learning styles, curriculum design and evaluation, teaching strategies and alternative assessments, legal issues, educational technology, and conflict management. Field experiences will be required for post-baccalaureate students not on emergency certification. Prerequisite or co-rerequisite: Psy 300 or the equivalent unless on emergency certification. Cross-listed with SEd 500.

501. Language Acquisition and Development in Early Childhood. Three semester hours. A study of the acquisition and development of language in young children with a comprehensive examination of the major areas of language experiences.

512. Effective Teaching and Professional Growth. Three semester hours.

This course contains the professional body of knowledge necessary for effective teaching. This course emphasizes theories and issues of education that are directly related to teacher professional growth. The content of the course will include site-based management, professional ethics, school environment issues, communication issues, educational research, and political influences. Students will exhibit an understanding of the Texas teacher competencies as outlined on the Pedagogy and Professional Responsibility portion of the TExES test. Enrollment is limited to teachers on emergency certification. Prerequisites: ElEd 514, 515, 523.

514. Management and Curriculum Development for Diverse Learners. Three semester hours.

This course contains the professional body of knowledge necessary for effective teaching. This course emphasizes methods of organizing and managing a classroom based on an understanding of diverse environments. Teacher skills which have been proven to be effective in supporting diversity in the classroom will be developed. The content of this course will include classroom management strategies, curriculum and lesson planning, teaching models, assessment models, and certification issues. Students

will exhibit an understanding of the Texas teacher competencies as outlined on the Pedagogy and Professional Responsibility portion of the TEXES test. Enrollment is limited to teachers on an emergency permit. Co-requisite: ElEd 523.

515. Effective Teaching in a Diverse Environment. Three semester hours.

This course contains the professional body of knowledge necessary for effective teaching. This course focuses on understanding theories and strategies that address the needs of a diverse population. Included in this course will be diversity issues, refinement of classroom management and planning techniques, teaching strategies, and informal and formal assessment practices. Students will exhibit an understanding of the Texas Teacher competencies as outlined on the Pedagogy and Professional Responsibility portion of the TEXES test. Enrollment is limited to teachers on an emergency permit. Co-requisite ElEd 523. Prerequisites: ElEd 514.

518. Thesis. Six semester hours.

This conference course introduces the candidate for the Master of Arts degree to the theories and techniques of educational research and leads to the completion and acceptance of the thesis.

522. Induction Year Seminar for Elementary/Middle School Teachers. Three to six semester hours.

This course is designed to support the transition of new teachers during their induction year. Students actively work with instructor to develop the content of the course through analysis of needs assessment conducted during first class meeting. Weekly support group discussions enable students to become reflective practitioners while exploration, modeling, and implementation of effective teaching strategies encourages professional growth. Co-rerequisite EIEd 523.

523. Internship in Elementary/Middle Schools. Three semester hours.

This course will provide experiences in various environments that will be supervised by mentors and university liaisons. Regular seminar sessions may be held which will focus on concerns related to education and/or the workplace.

- 524. *Language Arts Curriculum for Grade One Through Eight.* Three semester hours. A consideration of techniques of teaching the communication skills and the role of linguistics in the language arts program.
- 529. Workshop in Elementary Education. Three to six semester hours. May be graded on a satisfactory (S) and unsatisfactory (U) basis.
- 530. Mathematics Curriculum for Grades One Through Eight. Three semester hours. This course identifies numerous movements toward a modernization of both content and method and relates these innovations to good teaching practices already in use. It includes the language of sets, number system, means for improving pupil performance in solving problems, and techniques for identifying areas of pupil accomplishment or of pupil difficulty.
- 535. Leadership and Supervision in the Elementary School. Three semester hours.

A study of the meaning and fundamental principles of leadership and supervision. Consideration is given to the development of teacher leaders and to the solution of administrative and pedagogical problems that supervisors and teacher leaders encounter in the elementary school.

- 538. *Classroom Management for Teachers*. Three semester hours. (Same as ECE 538) A study of current theories and practices of classroom management and discipline in early childhood, elementary, and middle school settings.
- 545. *Issues in the Development of the Elementary Curriculum.* Three semester hours. The purpose of this course is to note how various philosophies have influenced the development of the elementary curriculum in order to meet the changing social and economic trends. Research articles will be studied in order to evaluate selection of

procedures and materials. Practical experiences will be provided in the construction of course of study units for the elementary grades.

557. Social Studies Curriculum for Grades One Through Eight. Three semester hours. This course is designed to give inservice personnel an opportunity to work cooperatively in attacking classroom problems. In addition to the development of teaching units for use in the classroom, students will become acquainted with the most recent trends in the social studies including an acquaintance with the wide range of materials now available to the social studies teacher. The social studies as an integrating core for

558. Science Curriculum for Grades One Through Eight. Three semester hours.

An examination of current issues and trends in content and pedagogy with an emphasis on inquiry instruction and learning. Development and evaluation of curriculum will ascertain how changing needs in education are being addressed.

559. Diversity and Equity in Education. Three semester hours. (Same as SEd 559).

This course focuses on factors of diversity that impact decisions educators must make regarding design and implementation of curriculum, teaching strategies, and materials in order to provide equity and excellence for all learners.

566. Field-Based Professional Development Practicum in Elementary Education. Three semester hours.

Students develop conceptual and professional skills related to their practice in the field. This course is part of the field-based professional development minor. It provides for the continued development and practice of skills learned in field-based staff development sessions. For each semester hour of credit, one hour is spent in lecture/staff development sessions and one hour is spent applying what was learned in a field-based setting. May be repeated when topic varies. Graded on a satisfactory (S) or unsatisfactory (U) basis. Prerequisites: Consent of instructor.

589. *Independent Study*. One to four semester hours.

experience units will be evaluated.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

595. Research Literature and Techniques. Three semester hours.

This course provides a review of significant research studies produced by investigators in the student's major field with emphasis on the investigative and verification techniques employed. The student is required to demonstrate competence in using systematic research techniques through the investigation and formal reporting of a research problem.

597. Special Topics. One to four semester hours.

Organized class. May be graded on a satisfactory (S) or unsatisfactory (U) basis. May be repeated when topics vary.

642. Research: Design and Replication. Three semester hours.

Examination of design for research in literacy and other areas, including experimental, descriptive, and quasi-experimental approaches. Includes replication of research to provide experience and increased understanding of research. Prerequisite: Doctoral level standing or consent of the instructor.

651. Curricula and Instructional Design. Three semester hours.

This course provides an examination of research literature relative to the process of designing, implementing, and evaluating curricula and instructional strategies. Prerequisite: Doctoral level standing or consent of instructor.

652. Research on the Learner. Three semester hours.

A study of significant research in the cognitive and metacognitive learning pro-

cess of young children and implications for instructional strategies. Prerequisite: Doctoral level standing or consent of instructor.

653. Professional Writing. Three semester hours.

A focus on issues related to research, publication, and grant writing, especially at a level of higher education. Prerequisite: Doctoral level standing or consent of instructor.

655. Assessment of Learning and the Learner. Three semester hours.

A study in evaluating the total elementary school program. Attention is given to available evaluation tools, including measurement devices of all types. Particular attention is given to construction of appropriate classroom tests to insure accountability according to Texas' Essential Knowledge and Skills, and to the development of plans for school improvement.

657. Content Area Literacy. Three semester hours.

Examination of research on learning in the content curriculum areas of science, math, social studies and music; emphasis on strategies content area teachers may use to foster content area learning. Prerequisite: Doctoral level standing or consent of the instructor.

658. *Process Writing in the Elementary School*. Three semester hours.

An examination of process writing research, with an emphasis on implementation in public school programs. Prerequisite: Doctoral level standing or consent of the instructor. 689. *Independent Study*. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

690. Seminar in Elementary Education. Three semester hours.

Designed for the advanced student in elementary education. In-depth analysis of major topics of critical concern to the profession. Twelve semester hours may be applied toward a doctoral degree when topics vary. Prerequisite: Doctoral level standing or consent of the instructor.

691. Mind. Brain. and Education. Three semester hours.

This seminar is designed to be a collaborative exploration of significant research, researchers, and theories in neuroscience, cognitive science, and educational practice. With the new knowledge gained, students will examine the potential impact of the new knowledge gained on their work as educators by evaluating the usefulness of what they teach and how they teach as it relates to how learners learn. Participants will share their research, insights, understanding, and explore the powerful connections among the three disciplines. Prerequisite: Doctoral standing.

695. *Research Methods*. Three semester hours. (Same as Coun/EdAd/HPE/Psy/HiEd 695)

An overview of research methodology including basic concepts employed in quantitative and qualitative research methods. Includes computer applications for research. Meets requirements for a Level I research tool course. Prerequisite: Doctoral level standing or consent of the instructor.

697. Special Topics. One to four semester hours. (Same as Rdg 697)

Organized class. May be repeated when topics vary. Prerequisite: Doctoral level standing or consent of the instructor.

718. Doctoral Dissertation. One to six semester hours.

A candidate must present a dissertation acceptable to the student's advisory committee and the Dean of Graduate Studies and Research on a problem in the area of his/her specialization. To be acceptable the dissertation must give evidence that the candidate has pursued a program of research, the result of which reveals superior academic

competence and a significant contribution to knowledge. Graded on a (S) satisfactory or (U) unsatisfactory basis.

Reading (Rdg)

515. Reading and Learning in Content Areas. Three semester hours. (Same as TDev 517) This course is designed for graduate students in the emergency permit program seeking initial teacher certification. The focus is on reading comprehension, concept development and strategies for interacting with expository materials. The role of the teacher, the text, and the student are examined in the learning process. Text analysis methods, teacher directed strategies, reader-based strategies, and literature are discussed as appropriate for all elementary and secondary grade levels. Enrollment is limited to teachers on emergency certification.

516. Foundations of Reading Instruction. Three semester hours.

This course is designed for graduate students in the emergency permit or alternative certification program seeking initial teacher certification. The focus is on the reading process and the factors that condition its development. The importance of reading in school and in life serves as a background for critical evaluation of the methods and materials of reading instruction. Special consideration is given to the essential components of research-based programs and the features of classrooms that support effective beginning reading instruction.

520. Literacy and Instruction I. Three semester hours.

This course focuses on the application of knowledge of the interrelated components of reading across all developmental stages, including oral language, phonological and phonemic awareness, the alphabet principle, word analysis, fluency, comprehension, vocabulary, written language, concepts of print, and expertise in reading instruction at the primary, intermediate/middle, and high school levels. Prerequisite: Admission to the Master Reading Teacher Certification Program.

521. Literacy and Instruction II. Three semester hours.

This course explores research proven classroom strategies for student comprehension development and expression through writing, with a focus on the reader, the writer, texts, and the transaction. In addition, this course examines assessment of reading comprehension and writing, with attention on profiling class needs and individual needs and abilities, the selection of appropriate books and materials for grouping, and the teacher as a reading professional. Prerequisite: Admission to the Master Reading Teacher Certification Program; Rdg 520 or Dallas Reading Academy 1 and 2.

523. Promoting Literacy Through Language Acquisition and Development. Three semester hours.

Students in this course will gain knowledge and skills in primary and secondary language acquisition, including the relationship of these languages, to facilitate and promote literacy. Other skills include: conducting appropriate reading assessments on an ongoing basis; designing and implementing effective reading instruction that reflects state content and performance standards addressing the needs of all learners; applying knowledge of reading difficulties, dyslexia, and reading disabilities to facilitate and promote literacy; and using research-based reading instruction that is collaborative and consultative with colleagues, mentoring, coaching, and providing professional development when called upon. Prerequisites: Admission to the Master Reading Teacher Certification Program; Rdg 520, 521 or All-Level Texas Reading Certification.

525. Teaching Reading Comprehension. Three semester hours.

Factors affecting reading comprehension with emphasis on readers, texts, and instruction. Focus is on cognitive development of readers, affective influences, and readertext contexts. Instructional strategies discussed are appropriate for all grade levels.

529. Workshop in Reading. Three to six semester hours.

May be graded on a satisfactory (S) or unsatisfactory (U) basis.

540. Prescriptive Reading in Content Area Classroom. Three semester hours.

Diagnostic and prescriptive strategies teaching and learning strategies based on needs assessment. Instructional strategies discussed are appropriate for all grade levels and all content areas.

550. Language and Literacy Development. Three semester hours.

Examination of language and literacy development, with an emphasis on the development of word recognition skills and phonics within the context of language. Prerequisite: Rdg 525.

556. Developmental Reading. Three semester hours.

Designed to prepare teachers to direct developmental reading programs or an analysis of the developmental reading needs of all levels of students including methods and materials of instruction. Prerequisite: Rdg 525, 540.

560. Diagnosis and Treatment of Reading Problems. Three semester hours.

Designed to refine the diagnostic and remedial skills of the student through the study of clinical instruments, formal and informal measurements, and study of clinical cases. Prerequisite: Rdg 525, 540; Rdg 556 must be taken as a prerequisite or co-requisite.

566. Clinical Practicum in Reading. Three semester hours.

Clinical experience in developing competency in the diagnosis and correction of reading deficiencies. Prerequisite: Rdg 525, 540, 556, 560.

571. Reading Recovery I. Three semester hours.

This course introduces Reading Recovery theoretical foundations, purposes, and procedures for the teacher in training. The major goals of this course include the assessment of young children and the initial intervention based ongoing assessment. Classroom instruction is coordinated with the individual instruction of at-risk students with an integrated field experience. The teacher-in-training will explore the reading process while observing and teaching children daily. Prerequisite: Permission of instructor.

572. Reading Recovery II. Three semester hours.

Focus will be on the refinement of procedures used with at-risk beginning readers. This course provides further in-depth theoretical and procedural development of Reading Recovery for "at-risk" first graders. This course provides classroom instruction based on the reading theories developed by Dr. Marie Clay. Instruction is coordinated with the individual instruction of at-risk students in an integrated field experience. Attention will be directed to teacher decision making and the recording of observations made while working with children. All students enrolled in the course will be involved in teaching and observing children through a one-way glass. Prerequisites: Permission of instructor and Rdg 571.

573. Descubriendo La Lectura® I. Three semester hours.

This course contains the basic professional body of knowledge necessary for becoming a bilingual Reading Recovery® trained teacher. The course introduces Descubriendo La Lectura (Reading Recovery)® theoretical foundations. Purposes, and procedures for the teacher in training in Spanish. The major goals of this course will include the assessment of young Spanish speaking children and initial intervention strategies based on ongoing assessment of student use of graphophonic, semantic, and syntactic information. Classroom instruction is coordinated with individual instruction of at-risk Spanish speaking students in an integrated field experience. The teacher-in-training will explore the reading process while observing and teaching Spanish speaking children daily. Prerequisite: Permission of Instructor.

574. Descubriendo La Lectura® II. Three semester hours.

This course provides further in depth theoretical and procedural development of

Descubriendo La Lectura (Reading Recovery)® for "at-risk" first grade Spanish speakers. Focus will be on the refinement of procedures used with at-risk beginning readers of Spanish. This course provides classroom instruction based on the reading theories developed by Dr. Marie Clay. Instruction is coordinated with individual instruction of at-risk Spanish speaking students in an integrated field experience. Attention will be directed to teacher decision making and the recording of observations made while working with children in Spanish. All students enrolled in the course will be involved in teaching and observing children through a one-way glass. Prerequisites: Permission of instructor and Rdg 573.

589. *Independent Study*. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

597. Special Topics. One to four semester hours.

Organized class. May be graded on a satisfactory (S) or unsatisfactory (U) basis. May be repeated when topics vary.

640. Seminar in Research. Three semester hours.

A study of significant research in literacy and related areas. May be repeated once. Prerequisite: Doctoral level standing or consent of the instructor.

650. Reading Experiences for Elementary Students. Three semester hours.

Development of methods of using children's literature to develop skills in reading. Prerequisite: Rdg 525 and doctoral level standing or consent of instructor.

667. The Reading Process: Theories and Implications. Three semester hours.

An in-depth analysis of varied definitions and theories of reading including examination of implication for reading instruction. Prerequisite: Doctoral level standing or consent of the instructor.

689. Independent Study in Reading. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

690. Seminar in Reading Education. Three semester hours.

In depth analysis of major topics of critical concern to the profession. Nine semester hours may be applied to a doctoral degree when topics vary. Prerequisite: Doctoral level standing or consent of the instructor.

692. Learning to Read: From Research to Best Practice. Three semester hours.

The 21st century began with a renewed call to "leave no child behind" in learning to read. But how can this be accomplished? This course is designed to examine the major approaches to beginning reading that have been advocated and practiced over the past 50 years. Participants will answer the questions "Can all children learn to read?" and "What does the research say about beginning reading instruction?" Prerequisite: Doctoral level.

697. Special Topics. Three semester hours. (Same as ElEd 697)

Organized class. May be repeated when topics vary. Prerequisite: Doctoral level standing or consent of the instructor.

Secondary Education (SEd)

500. Issues in Education. Three semester hours.

Focuses on major philosophical and ideological beliefs and their impact on the organization and structure of American education. Specific issues may involve classroom management and discipline, parent involvement, the nature of learning, human development, current brain research, multiple intelligences, learning styles, curriculum design and evaluation, teaching strategies, alternative assessment, legal issues, educational technology, crisis management and conflict management.

501. *Induction Year Seminar for Secondary School Teachers*. Three to six semester hours

This course is designed to support the transition of new teachers during their induction year. Students actively work with the instructor to develop the content of the course through analysis of needs assessment conducted during first class meeting. Support group discussions enable students to become reflective practitioners while exploration, modeling, and implementation of effective teaching strategies encourage professional growth. Co-requisite: SEd 523.

502. Strategies for Teaching the At-Risk Student. Three semester hours.

Designed to provide specific strategies for enhancing learning for the at-risk student, to develop an increased awareness of students who may be potentially at risk, and to enable teachers to design workable plans for addressing the needs of this student.

506. The Nature and Needs of Gifted Students. Three semester hours.

A survey of the major facets of gifted education with particular emphasis placed on the nature and needs of gifted students. The historical development of gifted education, characteristics of the gifted students, identification of gifted students, the socioemotional needs of gifted students and curricular and instructional strategies appropriate for the gifted are examined.

507. Teaching Strategies and the Gifted/Talented. Three semester hours. (Same as EIEd 507)

Strategies, methods, and techniques of teaching the gifted student are explored. Opportunities are provided for development of strategies based on principles of gifted education. Special emphasis will be devoted to selection of strategies for the development of creativity.

508. Curriculum Development for the Gifted Student. Three semester hours. (Same as E1Ed 508)

An exploration of theory, research, and practices related to the selection and organization of curriculum for the gifted student. Emphasis will be placed on curricular models and selecting materials used in gifted education. Opportunities will be provided for the development of curriculum for the gifted student.

509. Seminar: Trends and Issues in Gifted Education. Three semester hours. (Same as EIEd 509)

Current problems, trends, and issues in gifted education are researched. Emphasis is placed on current research and literature relating to definition of giftedness, identification, programming, and counseling and guidance of the gifted student.

513. *The Secondary School Curriculum*. Three semester hours. (Same as HiEd 513)

Focuses on descriptions and analyses of models of curriculum theory and curriculum development. Specific emphasis will be placed on philosophical and social forces which affect the design, implementation, and assessment of the curriculum. Particular attention will be given to practical applications of curriculum design and evaluation and leadership efforts necessary for overcoming individual and organizational resistance to change.

514. Management and Curriculum Development for Diverse Learners. Three semester hours. (Same as EIEd 514)

Contains the professional body of knowledge necessary for effective teaching. This course emphasizes methods of organizing and managing a classroom based on an understanding of diverse environments. Teacher skills which have been proven to be effective in supporting diversity in the classroom will be developed. The content of this course will include classroom management strategies, curriculum and lesson planning,

teaching models, assessment models, and certification issues. Students will exhibit an understanding of the Texas teacher competencies as outlined on the Professional Development portion of the TExES test. Enrollment is limited to students accepted into the Alternative Certification Program (ACP). Co-requisite: SEd 422.

515. Effective Teaching in a Diverse Environment. Three semester hours. (Same as ElEd 515)

Contains the professional body of knowledge necessary for effective teaching. This course focuses on understanding theories and strategies that address the needs of a diverse population. Included in this course will be diversity issues, refinement of classroom management and planning techniques, teaching strategies, and informal and formal assessment practices. Students will exhibit an understanding of the Texas Teacher competencies as outlined on the Professional Development portion of the TExES test. Enrollment is limited to students accepted into the Alternative Certification Program (ACP). Co-requisite SHEd 422. Prerequisites: ElEd 514, 533.

516. Educational Research for Effective Teaching. Three semester hours.

Contains the professional body of knowledge necessary for effective teaching. This course emphasizes theories and issues of education that are directly related to teacher professional growth. The content of the course will include site based management, professional ethics, school environment issues. Communication issues, educational research, and political influences. Students will exhibit an understanding of the Texas teacher competencies as outlined on the Professional Development portion of the TExES test. Enrollment is limited to students accepted into the Alternative Certification Program (ACP). Prerequisites: SEd 514, 515.

517. Reading and Learning in Content Areas. Three semester hours. (Same as Rdg 515). This course is designed for graduate students in the alternative certification program seeking initial teacher certification. The focus is on reading comprehension, concept development, and strategies for interacting with expository materials. The role of the teacher, the text, and the student are examined in the learning process. Text analysis methods, teacher directed strategies, reader-based strategies, and literature are discussed as appropriate for the secondary level.

518. Thesis. Six semester hours. (Same as TVEd and ETec 518).

Introduces the candidate for the Master of Arts or Master of Science (Option I) degree to the theories and techniques of educational research and leads on to the completion and acceptance of the thesis. Graded on a (S) satisfactory or (U) unsatisfactory basis.

521. Models of Teaching in the Secondary School. Three semester hours. (Same as HiEd

Includes a study of the research, philosophy, and learning theory underlying current models of instruction. Practical alternative teaching strategies effective in accommodating students with diverse learning styles will be discussed as well as classroom management and the implications of whole-brain research and multiple intelligences for secondary/middle school teaching. Particular attention will be given to the teacher as an agent and manager of change.

528. Philosophy of Education. Three semester hours. (Same as HiEd 528)

Includes a study of systematic philosophies of education and their views of the learner, learning process, curriculum, instruction, and leadership. Particular attention will be given to the use of philosophical techniques and concepts for solving problems.

529. Workshop. Three semester hours.

Topics will be selected with reference to the needs of learners. Graded as A-F or (S) satisfactory or (U) unsatisfactory.

559. Diversity and Equity in Education. Three semester hours.

This course focuses on factors of diversity that impact decisions educators must

make regarding design and implementation of curriculum, teaching strategies, and materials in order to provide equity and excellence for all learners.

589. *Independent Study*. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when topic varies. Prerequisite: Consent of department head.

595. Research Methodologies. Three semester hours.

Provides a study of research methodologies with appropriate practical application in relevant problem solving. Specific research types, including action research, will be emphasized. The student is required to demonstrate his or her competence in the investigation and formal reporting of a problem.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

614. Supervision in Education. Three semester hours.

Provides a study of leadership skills and trends in instructional supervision. The course is designed for general and special supervision, deans, department heads, division chairs, superintendents, principals, and classroom teachers.

632. Secondary Curriculum Problems and Trends. Three semester hours.

Includes a study of the problems facing the nation's schools and efforts made to resolve them. Programs and curricula necessary for preparing students to function optimally in the 21st century will be discussed.

Educational Leadership

Madeline Justice, Interim Head Young Education Building; 903-886-5520 www.tamu-commerce.edu/edl

The Department of Educational Leadership offers programs that develop professionalism and educational leadership in practicing and prospective school administrators, technologists and higher education professionals.

Programs of Graduate Work in Educational Administration

The Department of Educational Leadership offers Master of Science, Master of Education, and Doctor of Education degrees in Educational Administration as well as professional certification programs for principals and superintendents. These differentiated programs prepare students for careers as elementary and secondary school principals, administrators of curriculum and instruction, school business administrators, school superintendents, personnel administrators, college administrators, and college teachers of educational administration, educational technologists, school librarians, and training and development professionals. Graduates of the doctoral program typically pursue careers as college teachers of educational administration or as administrators in public schools, community colleges, colleges and universities.

Professional Certification for Educational Administrators

Two professional certificates, the Principal and the Superintendent, may be obtained through the Department of Educational Leadership. All or part of these certifi-

cates might be included in a doctoral program, depending on circumstances of the student and his or her professional objectives.

Principal Certification Program

The Principal certification program is designed for principals, administrators of curriculum and instruction and all school administrators holding a position below that of superintendent. The certificate requires a minimum of 45 semester hours of graduate work beyond the bachelor's degree. In addition to completing the required coursework, to be eligible to receive the principal certificate, individuals must have passed the Principal TEXES, be a certified (fully qualified) teacher in Texas, and have two years of creditable teaching experience as a classroom teacher. To be eligible to receive the standard principal certificate, individuals holding the provisional principal certificate must hold a master's degree from an accredited institution of higher education and must have successfully completed the induction period specified in 19 TAC: 241.20 (b). Students may pursue a graduate degree while simultaneously working toward certification.

Superintendent Certification Program

The Superintendent Certification Program is an 18-hour program of coursework for candidates holding a Masters Degree and Standard Principal Certification. The candidate will complete courses designed to meet six national advanced leadership standards for visionary, ethical, political, collaborative, instructional and organizational school district leadership. This certification program is designed to develop candidates who will meet the ten competencies assessed by the State Board of Educator Certification TExES examination for the Standard Superintendent Certificate 064.

Admission

Master of Science in Educational Administration and Master of Education in Educational Administration

Those who apply to the Texas A&M-Commerce Graduate School for admission to one of the master's degree programs in educational administration must meet the general admission requirements.

General A&M-Commerce Graduate School admissions policies are described elsewhere in this catalog. Students who apply for admission have two admissions options available: (1) regular degree seeking admission or (2) admission as a non-degree seeking student. Beyond the university admissions requirements, the department requires the following for full admission to master's degree programs: Two letters of recommendation, score on the verbal, quantitative, and written portions of the Graduate Record Examination, and an undergraduate grade point average of 2.75 are required for full admission. Applicants without an acceptable GRE score will be considered for probationary admission based on an evaluation of their GPA, references, and other factors.

Doctor of Education in Educational Administration

First consideration for admission to the doctoral program will be given to applicants who score 1000 or above on the combined verbal and quantitative or verbal and analytical portions of the Graduate Record Examination (GRE) and other aspects of their admission packet. Application packets are reviewed once a year in October, for admission for the following spring or summer semesters.

Degree, Certificate, and Endorsement Requirements

Master of Science and Master of Education in Educational Administration

The M.S. and M.Ed. degree programs include 27 required hours in educational administration and 9 hours of electives. All 27 required hours apply to the department's principal certification program. Students who are seeking the master's degree and principal certification should select electives that align with departmental requirements for principal certification. Students who have not been fully admitted to the program may take up to 6 hours of electives under non-degree-seeking status while their admission status is pending.

Fully admitted students will progress through the program in the following sequence:

EdAd 615—Leading Effective Schools

EdAd 626—Using the Law in Educational Practice

EdAd 595—Using Research for Best Practice

EdAd 602—Communicating for Effective Learning

Students seeking a master's degree or principal certification must take these courses from the Texas A&M-Commerce Department of Educational Leadership. Students with probationary admission must achieve a grade point average of 3.5 in these four courses to continue in the program. Grade points earned from other courses or transferred courses may not be used to satisfy this grade point requirement.

The remaining 15 hours of required educational administration courses may be taken in any sequence:

EdAd 508—Facilitating Learning for Diverse Students

EdAd 623—Allocating Resources for Effective Learning

EdAd 554—Leading the Learning Community

EdAd 656—Building Capacity for Powerful Learning

EdAd 607—Using Data to Improve Learning

Students with objectives other than principal certification may be advised to substitute other courses in their degree plan, when appropriate.

In addition to coursework, the master's degree programs require satisfactory performance on the department's comprehensive examination. The comprehensive examination may be taken during the semester in which 36 hours are scheduled to be completed, including the 27 required EdAd hours noted above.

The department's residency requirement for the master's degree is fulfilled by completing a residency seminar on the Commerce campus, typically done in the initial semester of enrollment toward the master's degree.

Doctor of Education in Educational Administration

Students admitted to the doctoral program begin with classes as a cohort group in the semester following admission and are strongly encouraged to progress as a cohort group through a sequence of doctoral-only core courses and research tools courses. The cohort program is designed to provide students with the opportunity to progress through the program in a logical and sequential manner with a group of colleagues pursuing similar professional goals. Admitted students may enroll in minor, elective, or certification courses prior to the semester in which their cohort is scheduled to begin.

Students may choose either a 60-semester-hour post-master's degree plan or a 90-semester-hour post-bachelor's degree plan. These semester-hour requirements are typically over and above the research tool courses. For either degree plan, a minimum of 36 semester hours must be completed in the major field, 24 of which must be taken in prescribed doctoral-student-only courses not available to master's and certification programs.

For the 90-semester-hour post-bachelor's degree plan, students fulfill the requirement for a minor or minors by taking a minimum of 30 semester hours under one of the following three plans.

- 1. A comprehensive minor with all course work in one academic minor;
- 2. A split minor in two academic areas with either a 6-4 or 5-5 course format; or
- 3. An interdisciplinary studies minor in three academic areas with a 4-3-3 course format. For each of these options, committee members from each of the academic areas will determine courses to be taken and will be involved in the written and oral qualifying examinations, the dissertation, and the dissertation defense.

For the interdisciplinary minor, a minimum of 18 semester hours are selected from the interdisciplinary and educational foundations areas of sociology, economics, psychology, philosophy of education, history of education, comparative education, supervision, curriculum and instruction, and research tools.

For the 60-semester-hour post-master's degree plan, students must complete 12 semester hours of electives, at least 9 semester hours of which must be taken outside the Department of Educational Leadership.

Other requirements are as follows:

- 1. **Research proficiency.** The candidate must meet Graduate School research tools requirements for the Doctorate of Education degree (see page 54).
- 2. **Residency.** The doctoral residency requirement is designed to promote meaningful and continuous study in the field of scholarship, to provide for a diversity of experiences supporting intellectual growth, and to promote regular interaction between students and faculty members. This residency begins in the semester in which the student enters the doctoral program. Students in educational administration at Texas A&M-Commerce complete three consecutive semesters of continuous enrollment of at least six semester hours in required doctoral-only coursework (including research tools). Students also confer with the doctoral adviser to develop a personal residency plan identifying activities to be completed during these three semesters in each of the following five strands: research, professional development, service, cultural activities, and faculty interaction.
- 3. **Doctoral residence seminar.** All candidates are required to complete EdAd 699— Resident Doctoral Seminar.
- 4. **Dissertation.** A dissertation of at least 12 semester hours must be completed to the satisfaction of the major department.

Principal Certification Program

The 45-hour program includes the 27 hours required for the master's degree program, including the same requirements for program admission, matriculation, sequence, and progression beyond EdAd 554, EdAd 626, EdAd 615, EdAd 595, and EdAd 602 based on the 3.5 grade point average. Further matriculation depends on full admission to the program. In addition, students must complete these courses in: EdAd 574—Developing Quality Instruction Programs; EdAd 619, SEd 513/ElEd 545 (Curriculum); EdAd 610 and EdAd 614—Leading Learning Communities Internship; and six hours of Electives.

The Principal practicum/internship is a 6-hour block of instruction beginning in the fall semester (EdAd 610) and concluding in the following spring semester (EdAd 614). Students may enroll in EdAd 610 after successful completion of EdAd 626, EdAd 615, EdAd 602, EdAd 595, and EdAd 554. Students should consult the department for a list of approved electives for the principal certificate.

The instructional administration, curriculum, and elective courses specified above may be taken in any sequence and prior to full admission to the principal certification

program. Grade points earned in these courses may not be applied to the 3.5 grade point average needed to remove probationary status nor to any other grade point requirements required for admission into the program.

Students who have earned a master's degree from another institution, or in another major at the time they are admitted to the principal certificate program, may complete a 30-semester-hour program from Texas A&M-Commerce to obtain their certificate.

All courses must be completed at A&M-Commerce in a satisfactory manner. These include initially: EdAd 615, 626, 602, and 595. After these prerequisites are completed, the following courses must be completed: EdAd 508, 623, 554, 656, 607, 574, 610, and 614.

Note: Qualified students seeking Probationary Principal or Superintendent certification should contact the Department of Educational Leadership.

Requirements for Approval to take the Principal TEXES

The Texas Examination Educator Standards (TEXES) is required of all students seeking administrator certification. Senate Bill 50 requires that persons seeking educator certification in Texas perform satisfactorily on comprehensive examinations (Principal No. 68, Superintendent No. 64).

Students wishing to be approved for the Principal TEXES must meet all requirements specified in the TEXES registration bulletin. All principal certification students who are also pursuing a master's degree in educational administration must have successfully completed the department's comprehensive examination for the master's degree and should be enrolled in the final semester of their certification program. Principal certification only students must have an approved certification plan on file and be enrolled in the final semester of their certification program to receive approval to take the Principal TEXES.

Timeline for Completion

Students must complete all requirements for the principal certificate during the six years immediately preceding the department's recommendation for certification. Credit earned over six years prior to recommendation for certification will require written departmental approval to be counted toward certification. Students not completing the program in the six-year time period may not be approved to take the Principal TEXES and may be required to complete additional coursework or satisfy other requirements to receive such approval.

Renewal of Standard Principal Certificate and Assessment Process

Individuals who are issued the Standard Principal Certificate on or after September 1, 1999, are subject to Certificate Renewal and Continuing Professional Education requirements, which are elaborated in Title 19, Texas Administrative Code, Chapter 232. All individuals holding a valid Texas professional administrator certificate prior to September 1, 1999, and who are employed as principals or assistant principals must complete the assessment described in Title 19, Texas Administrative Code, 241.35.

Superintendent Certification Program

The Superintendent Certification Program requires an additional 18 semester hours of specific graduate work beyond the Principal's Certificate as follows:

- Fifteen semester hours of graduate work in areas of competency such as finance of
 public education, the superintendency, administration of curriculum and instructional programs, human resource administration, and facilities planning and management. These courses may not be used to fulfill elective requirements for the
 master's degree or principal's certification except as approved by the department's
 procedures in advance.
- 2. Internship program. Three semester hours (EdAd 611).

Timeline for Completion

The program is designed for students to progress through cohort groups and be completed within three calendar years after initial enrollment. Students not completing the program in this time period may not be approved to take the Superintendent TEXES and may be required to complete additional coursework prior to receiving approval.

Requirements for Continuing Education and the Renewal of the Standard Superintendent Certificate

Individuals who are issued the Standard Superintendent Certificate on or after September 1, 1999, and are employed as a superintendent by a Texas public school district are subject to Certificate Renewal and Continuing Professional Education requirements which are elaborated in Title 19, Texas Administrative Code, Chapter 232.

Programs of Graduate Work in Higher Education, Learning Technology and Information Systems, and Training and Development

The Master of Arts, Master of Science, and Master of Education degrees are offered in learning technology and information systems. In addition, Master of Science degrees are available in higher education and in training and development.

The Master of Science and Master of Education degrees required 12 courses (36 semester hours) including HIED 595. The Master of Arts degree requires 10 courses (30 semester hours) including 6 semester hours of SHEd 518 (Thesis). Also, students pursuing the Master of Arts degree must fulfill the foreign language requirements described earlier in the catalog.

A Doctor of Education degree in Supervision, Curriculum and Instruction—Higher Education is available as a 90-semester-hours program or a 60-semester-hour program. The 90-hour-program includes hours in the major, minor, electives, and research tools. The 60-semester-hour program does not include a minor, and requires that the student already holds a Master's Degree.

Admission

In addition to meeting the requirements for admission to the graduate school, all students pursuing master's degrees must have a degree plan on file in the departmental office either at or before the completion of 12 semester hours.

Applications for the doctoral degree may be completed online at www.tamucommerce.edu/gradschool or contact the Graduate School (903-886-5167). Individuals interested in pursing the doctoral degree must first gain admission to the Graduate School (see procedures outlined earlier in this catalog). Admission applications are forwarded to the Departmental Committee on Admissions. Applications are reviewed on a continous basis.

Degree and Program Requirements

Master of Science in Higher Education

Emphasis in Higher Education Administration (HEAD)

*HiEd 528—The Philosophy of Education

*HiEd 595—Research Methodologies

HiEd 540—The American Community College

HiEd 651—Curriculum Development in Higher Education or

HiEd 541—Community College Curriculum

HiEd 657—Finance and Governance in Higher Education

HiEd 658—Administration in Higher Education or

HiEd 653—Fundamental Theories in Community College Instructional Leadership

HiEd 656—Higher Education and the Law

HiEd 622—Internship

Plus four acceptable graduate-level courses in related areas, such as educational administration, management, or counseling, to be selected in consultation with adviser.

*Core Courses

Master of Science in Higher Education Emphasis in College Teaching (HETE)

*HiEd 528—The Philosophy of Education

*HiEd 595—Research Methodologies

HiEd 651—Curriculum Development in Higher Education or

HiEd 541—Community College Curriculum

HiEd 542—Analysis of Teaching in Higher Education

HiEd 621—Effective Teaching/Learning in Higher Education

HiEd 656—Higher Education and the Law

Plus six acceptable graduate-level courses in a teaching field(s) to be selected in consultation with adviser.

*Core Courses

Master of Science or Master of Education in Learning Technology and Information Systems

Emphasis in Media and Technology (LTMT)

*ETec 524—Introduction to Educational Technology

*ETec 561—Learning and Technology

*ETec 579—Administration of Educational Technology Programs

*HiEd 595—Research Methodologies

ETec 562—Applying Instructional Media and Technology

ETec 578—Instructional Design and Development

ETec 581—Digital Video and Audio Production and Applications for Instructional Settings

Plus 5 acceptable graduate-level electives to be selected in consultation with adviser.

*Core Courses

Master of Science or Master of Education in

Learning Technology and Information Systems Emphasis in Library and Information Science (LTLS)

LIS 512—Information, Reference and Mediographic Services

LIS 515—Cataloging and Classification

LIS 524—Developing General and Specialized Collections

LIS 527—Books and Related Materials for Children and Young Adults

LIS 550—Practicum in a Library Media Center

*ETec 524—Introduction to Educational Technology

*ETec 561—Learning and Technology

*ETec 579—Administration of Educational Technology Programs

ETec 562—Applying Instructional Media and Technology

*HiEd 595—Research Methodologies

HiEd 513—The Secondary School Curriculum

HiEd 559—Cultural Diversity in Today's Society

*Core Courses

Master of Science or Master of Education in **Learning Technology and Information Systems Emphasis in Educational Computing (LTEC)**

*ETec 524—Introduction to Educational Technology

*ETec 561—Learning and Technology

*ETec 579—Administration of Educational Technology Programs

*HiEd 595—Research Methodologies

ETec 578—Instructional Design and Development

ETec 544—Computer Operating Systems for Educators

ETec 525—Internet Applications for Education and Training

ETec 526—Computers in the Schools

ETec 527—Technologies for Instructional Delivery

ETec 557—Integrating Technology and Computer Applications into Content Area Plus two acceptable graduate-level electives to be selected in consultation with adviser.

*Core Courses

Master of Science in Training and Development (TDEV)

*TDev 504—Issues in Training and Development

*TDev 530—Management Development for Educators and Trainers

*HiEd 595—Research Methodologies

TDev 510—Utilizing Effective Instructional Techniques

TDev 511—Managing the Instructional Environment

TDev 525—Human Relations for Career and Technology Teachers and Business/ Industrial Trainers

TDev 527—Developing Instructional Resources

TDev 548—Designing and Evaluating Curriculum

TDev 562—Developing Leadership in the School and Workplace

Plus three acceptable graduate-level electives to be selected in consultation with adviser.

*Core courses

Doctor of Education in Supervision, Curriculum, and Instruction—Higher Education

For the Doctor of Education degree in Supervision, Curriculum, and Instruction— Higher Education (SCIH), the student may select one of two options: 60-semester-hour program or a 90-semester-hour program.

The 60-semester-hour program is designed specifically for persons who already have a master's degree. Building upon the master's degree, the program requires a major field of 39 semester hours (not including the dissertation), plus 12 semester hours of research tools and 9 semester hours of electives. The 90-semester-hour program requires everything from the 60-semester-hour program plus a minor—10 courses from outside the major—which can be comprehensive or split. A comprehensive minor requires that all 10 courses come from one field whereas a split minor (6-4 or 5-5) requires courses from two. An interdisciplinary minor (4-3-3) is also possible.

Doctoral advisement committees include (minimally) a major adviser and one from each of the minor areas. These individuals help determine the courses to be taken and are involved in evaluating written and oral qualifying examinations, the dissertation proposal, and the dissertation.

The research tools for both options are proficiency in educational statistics and in

quantitative and qualitative research methodologies. Students must also be proficient in the use of technology as some courses throughout the doctoral program are delivered on the Internet.

Residency

Each student is required to complete residency after admission to the doctoral program. Residency provides students with opportunities to work with other doctoral students and faculty as colleagues in projects that provide experience and training toward independent application of skills commensurate with holders of doctoral degrees. The student will plan the residency activities with the approval of the major adviser.

Certification and Endorsement Programs

A variety of certificates and endorsements can be completed in the department. Many of the courses required for these programs may be applied toward a master's and/or doctoral degree. Students may pursue endorsements/certificates in the following areas:

Career Investigation Talented and Gifted
Office Education Technology Applications
School Librarian Trades and Industry

Career Investigation

TDev 510, 511, 579, 531; Coun 512.

Office Education Certificate

TDev 530, 532, 579, and one approved elective.

School Librarian Certificate

LIS 512, 515, 524, 527, 550; ETec 561, 579; a passing score on the TExES exam, a Master's degree, and two years of classroom teaching experience. Interested students should consult an adviser to determine order of courses, as well as prerequisites.

Talented and Gifted

The following courses are required for the Talented and Gifted Endorsement: SEd 506, 507, 508, 509, and 650. If the individual pursuing the endorsement has taught talented and gifted students for a minimum of two years, then SEd 650 may be omitted.

Technology Applications Certificate (8-12, and All-Level)

ETec 525, 534, 557, 567, 581; prerequisites are ETec 524, 561, 562; a passing score on the TExEs exam. Interested students should consult an adviser at beginning of program to begin work on required program portfolio.

Trades and Industrial Certificate Pre-Employment Lab

TDev 510, 511, 525, 527, 560, 562, 514, 515; Rdg 515; ETec 557.

Note: The Department reserves the right to suspend from the program any student who, in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

Educational Administration (EdAd)

508. Facilitating Learning for Diverse Students. Three semester hours.

This course prepares prospective educational leaders to administer various school programs for diverse student populations. Programs addressed include special education, gifted education, bilingual education, early childhood, school safety, career and technology education, English language learners, counseling, and alternative education. The course emphasized leadership that will insure all students receive quality, flexible instructional services that meet individual student needs.

524. Law and Policy in Instruction. Three semester hours.

This course will provide new teachers/administrators with an opportunity to study laws and policies as they pertain to the classroom setting and their district.

554. Leading the Learning Community. Three semester hours.

One of four culminating courses that develop candidates for school leadership who have the knowledge, disposition and performance ability to promote the success of all students by exercising visionary, collaborative, instructional, organizational, and political leadership. The focus of the course is on facilitating the development articulation, implementation and stewardship of a school vision of learning that is shared by the school community by exercising highly integrated transformational and transactional leadership roles for transforming schools into learning communities.

574. Developing Quality Instructional Programs. Three semester hours.

The course explores the principles of administering instructional programs through development of a continuous improvement process utilizing a learning community. These principles are inclusive of the instructional Leadership Development Model required for administrative certification in Texas.

594. Navigating the Political Dynamics of Education. Three semester hours.

This is an elective educational leadership course to develop candidates who have the knowledge and ability to promote the success of all students by understanding, responding to, and influencing the larger political context of education. Emphasis will be placed on leading a learning community by navigating the political dynamics determining educational policy at the school and district levels of organization.

595. Using Research for Best Practices. Three semester hours.

This course provides a review of significant research designs used in the field of education in order to seek out "best practices" in the classroom, on the campus, and district wide. Emphasis is placed on the process and consumption of research. The student is required to demonstrate competence in developing and refining research techniques for "best practices" through the creation of a research proposal.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

601. Foundations of Educational Administration. Three semester hours.

This course will provide students an opportunity to study the philosophical, psychological and sociological dimensions of educational administration in a historical, as well as, contemporary contest. Prerequisites: Doctoral status.

602. Communicating for Effective Learning. Three semester hours.

This course is designed to provide prospective school leaders with the opportunity to assess and improve verbal, written, and oral communication skills. The course focuses on group dynamics, conflict management, team building, and overcoming communication obstacles to impact improved student learning.

607. Using Evaluation and Data to Improve Learning. Three semester hours.

This course provides school leaders with the skills and knowledge necessary to

analyze state, district, and local data for use in planning systemic improvement of instructional delivery, program effectiveness, and administrative processes. Acquisition, analysis, and interpretation of data are applied in educational settings to facilitate research based decisions in planning for instructional and organizational improvements. Prerequisite: EdAd 595.

610. Leading Learning Communities Reflective Practicum. Three semester hours.

One of four culminating courses that develop candidates for school leadership by providing opportunities to synthesize, practice, and apply knowledge from principal preparation coursework in real settings. Practice-based coursework assignments related to each standard of school building leadership are synthesized in a theory-based, reflective research paper that serves as a comprehensive program examination of preparedness for school building leadership.

611. School District CEO Leadership: The Internship. Three semester hours.

The internship is the process and product that results from applying the knowledge and skills defined by the six National Standards for School District Leadership and the State Competencies for the Standard Superintendent Certificate. Candidates for School District Leadership will participate in planned internship activities during the entire course of the Superintendency Program. Application of standards based knowledge and skills and research in real settings over time is the critical aspect of the internship. Prerequisite: Principal certification and admission into the superintendent certification program. Co-requisite: Concurrent enrollment in EdAd 627.

612. Examining Issues and Trends in School Leadership. Three semester hours.

The purpose of this elective course is to provide an opportunity to study a current and identified administrative or leadership issue in a specific school district or combination of districts. With departmental approval this course may be repeated when the issues or topics differ.

614. Leading Learning Communities Internship. Three semester hours.

One of four culminating courses that develop candidates for school leadership by providing opportunities to synthesize, practice and apply knowledge in actual school settings while collaboratively planning and being guided by a practicing school leader/mentor. Over two semesters of internship activities, students collect artifacts that are used to create a professional portfolio to demonstrate preparedness for leading learning communities.

615. Leading Effective Schools. Three semester hours.

The introductory course is designed to provide an overview of the organization and administration of the public school system in America with focused attention upon the systemic transformation of the public schools of Texas. The principles of effective leadership and organizational theory will be examined in order to transfer theory into practice.

618. Exploring Educational Issues Colloquium. Three semester hours.

In this elective course, students participate in seminars to explore current educational leadership issues and participate in group and self-study opportunities. Students explore literature centering on conference topics and study current educational research findings to expand their knowledge seminar themes.

619. Designing Curriculum. Three semester hours.

This course focuses on the development of a designing curriculum for facilitating continuous improvement in the instructional program. Sound research-based practices related to planning, supervision, curriculum development and delivery; program evaluation, and change management for diverse learners in multicultural serttings are incorporated.

620. School District Instructional Leadership: Human Resources. Three semester hours.

This is an integrated School District Instructional Leadership course to develop

candidates who have the knowledge and ability to promote the success of all students by promoting a positive school culture, providing an effective instructional program, applying best practice to student learning, and designing comprehensive professional growth plans for staff; and develop competencies for the Standard Superintendent Certificate in school district instructional leadership of human resources. Prerequisite: Principal certification and admission into the superintendent certification program or doctoral status. Co-requisite: concurrent enrollment in EdAd 619.

622. Leading and Managing Organizational Change for Improvement. Three semester hours.

This course examines the processes for successfully initiating and implementing improvements in organizations. Issues related to commitment, strategic development, dealing with resistance, creating new organizational cultures, and evaluating and predicting intended results are included. Application of theories and models of improving and changing individual and organizational behavior will be studied.

623. Allocating Resources for Effective Learning. Three semester hours.

This is a School Leadership course designed to develop candidates who have the knowledge and ability to apply effective leadership and management skills to the functions of resource acquisition, budgeting, accounting, and financial management. This course also provides students with the skills necessary to create and maintain a safe and secure learning environment through effective management of physical plant and other support systems.

626. *Using the Law in Educational Practice*. Three semester hours.

An examination of the legal framework for education including the United States constitution, federal and state statutes, and the body of case law affecting school lead-

627. School District Organizational Leadership: Finance. Three semester hours.

This is an integrated School District Organization Leadership course to develop candidates who have the knowledge and ability to promote the success of all students by managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment; and develop competencies for the Standard Superintendent Certificate in school district organizational leadership of finance. Prerequisite: Principal certification and admission into the superintendent certification program or doctoral status. Co-requisite: Concurrent enrollment in EdAd 651.

628. School District CEO Leadership: The Superintendency. Three semester hours.

This is a School District CEO Leadership course for the superintendency to develop candidates who have the knowledge and ability to promote the success of all students through visionary leadership, collaborative leadership, ethical leadership and political leadership; and develop the competencies for the Standard Superintendent Certificate in school district CEO leadership of the superintendency. Prerequisite: Principal certification and admission into the superintendent certification program. Co-requisite: Enrollment in EdAd 611.

634. Examining the Dynamics of Change and Conflict Resolution in Educational Systems. Three semester hours.

This course is an in-depth, advanced examination of the emerging body of contemporary literature in change theory and conflict management within education organizational systems. The course includes a culminating experience with students developing their own scholarly driven change model as it applies to their education organizational context. Prerequisite: Doctoral standing.

636. Economics of Education. Three semester hours.

An advanced study course is the exploration into the economics associated with public education. Each student will utilize a critical analysis of educational policies,

reforms and educational markets from an economic perspective by examining historical, contemporary and post-modern literature in human capital theory, demographics and societal trends and the economic impact of schools and schooling on the local, state, federal and international economic societal systems.

637. Advanced Organizational Behavior in Education. Three semester hours.

The application of theories of organizational behavior to the problems of educational institutions. Through the examination and application of theories including but not limited to leadership, decision-making, communication, motivation, power and influence, group dynamics, and change, this course is designed to develop diagnostic and problem-solving skills necessary for successful leadership of educational organizations. Prerequisite: Doctoral status.

639. Educational Program Evaluation for School Leaders. Three semester hours.

Theory and practice of evaluation including research methods and design strategies to measure program outcomes; skills to evaluate personnel and projects included as components of evaluation models and management of educational evaluation functions; skills in preparing and communicating evaluation findings.

641. School District Instructional Leadership: Curriculum Three semester hours.

This integrated School District Instructional Leadership course will develop candidates who have the knowledge and ability to promote the success of all students by promoting a positive school culture, providing an effective instructional program, applying best practice to student learning, and designing comprehensive professional growth plans for staff; and develop the competencies for the Standard Superintendent Certificate in school district instructional leadership of curriculum. Prerequisite: Admission into the superintendent certification or doctoral program. Co-requisite: Concurrent enrollment in EdAd 620 for those admitted into the superintendent certification program

647. Ethics and Philosophy of Educational Administration. Three semester hours.

This course will provide students an opportunity to apply the concepts of ethics and philosophy to the personal and professional aspects of school organization, operation, and leadership. Students will apply these concepts in fashioning reasoned decisions, thoughtful analyses, and problem solving events. Prerequisite: Doctoral status.

651. School District Organizational Leadership: Facilities. Three semester hours.

This is an integrated School District Organizational Leadership course to develop candidates who have the knowledge and ability to promote the success of all students by managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment; and develop competencies for the Standard Superintendent Certificate in school district organizational leadership facilities. Prerequisite: Principal certification and admission into the superintendent certification program or doctoral status. Co-requisite: Concurrent enrollment in EdAd 627.

652. Enhancing School Performance Through Effective Public and Community Relations. Three semester hours.

This course focuses on assisting district and campus leaders in creating and using effective public relations to achieve organizational goals and enhance professional success. Educational leaders plan and apply strategic ongoing internal and external communications to build and maintain key relationships that form meaningful partnerships to enhance school performance and student achievement.

653. Exploring the Role of Women and Minorities in Leadership. Three semester hours. Students explore leadership issues pertaining to women and minorities in administrative roles to develop and enhance personal leadership skills. Focus is placed on communication, leadership, personal and professional image, health, mentoring and networking for diverse populations.

656. Building Capacity for Powerful Learning. Three semester hours.

One of four culminating courses that develop candidates for school leadership who have the knowledge and ability to promote the success of all students through a positive school culture for teaching and learning. This is a human resource development course that focuses on personnel management and instructional supervision to develop powerful learning through professional growth and problem solving in real time through active learning and systems thinking.

658. School Crisis Leadership. Three semester hours.

This course will provide students with tools, communication techniques, and research-based methods to assist in the prevention of and recovery from school crises. Students will gain skills to establish safe learning environments and lead students, faculty, and other school stakeholders through potential crises.

662. Urban School Leadership. Three semester hours.

Urban School Leadership is designed to provide school leaders with opportunities to assess and augment their understanding of this complicated school environment. This course will review social, economical, and political issues school administrators face in the urban school environment, as well as review and develop strategies to address these issues.

671. Governance and Politics of Educational Organizations. Three semester hours.

This doctoral student only seminar is designed to provide students with the opportunity to create and/or refine their understanding of educational governance and politics of the environment. This understanding will be built as students acquire knowledge and skills from theories, research, and current practices related to governance and policy development in education. In addition, the course is structured to provide students with the opportunity to explore and understand current issues in school governance, policy formulation, and related legal issues. Students should be able to utilize this understanding of educational governance and policy in their formal and informal studies in the field of educational leadership.

689. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisites: Doctoral status.

695. Research Methodology. Three semester hours. (Same as Coun/ElEd/HPE/Psy/HiEd 695)

An overview of research methodology including basic concepts employed in quantitative and qualitative research methods. Includes computer applications for research. Meets requirements for a Level I research tool course. Prerequisite: Doctoral status or consent of the instructor.

697. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary. Prerequisite: Doctoral status. 698. Qualitative Research Methods. Three semester hours.

This is an approved Level IV research tools course. Using the foundation of the following qualitative research approaches: critical ethnography, phenomenology, case studies, grounded theory, and defining cultural themes and patterns, as a basis of all thick description, this course moves into the sociological/anthropological roots of qualitative research. It assists the student in understanding how the problem statement must be related to the methodology and the outcome of the research, assists students in selecting proper qualitative methods, and allows students to pursue those methods within the general framework of the class. Students are urged to develop solid conceptual frameworks from the social sciences and to formulate reasonable research questions based on those frameworks. The development of doctoral proposals within the qualitative

methodology is of major concern as is the development of qualitative methodology as a practical method of knowing and administering an educational organization. Prerequisites: Levels I. II. and III research tool courses.

699. Resident Doctoral Seminar. Three semester hours.

Only doctoral students fulfilling their residency requirement may register for this course. Students will be guided and assisted in the development of dissertation proposals, writing dissertation chapters, design, data analysis, preparing articles for publication, proposing of papers for conferences and professional meetings, etc. Emphasis will be placed on the student working with their chairs and committee members in these activities.

718. Doctoral Dissertation. Three to 12 semester hours.

A candidate must present a dissertation acceptable to the student's advisory committee and the Dean for Graduate Studies and Research on a problem in the area of specialization. To be acceptable the dissertation must give evidence that the candidate has pursued a program of research, the results of which reveal superior academic competence and a significant contribution to knowledge. Graded on a (S) satisfactory or (U) unsatisfactory basis.

Training and Development (TDEV)

510. *Utilizing Effective Instructional Techniques*. Three semster hours. (Previously VoEd 510)

Provides career and technology teachers and busienss/industrial trainers with knowledge and skills for selecting, applying, and evaluating basic instructional techniques and learning principles. Students will demonstrate competencies in presentations utilizing various instructional technologies and techniques. Students will be required to complete specialized resarch projects.

511. *Managing the Instructional Environment*. Three semster hours. (Previously VoEd 511)

Provides career and technology teachers and business/industrial trainers with knowledge and skills for implementing classroom management strategies. Students will conduct learner assessments to develop program performance standards which will be documented through career portfoloios. Budgeting procedures, safety practicies, legal issues, and instructor liability will be discussed. Students will be required to complete specialized research projects.

518. Thesis. Six semester hours (Same as TDev and ETec 518)

Introduces the candidate for the Master of Arts or Master of Science (Option I) degree to the theories and techniques of educational research and leads on to the completion and acceptance of the thesis. Graded on a (S) satisfactory or (U) unsatisfactory basis.

522. Career Technology. Three semester hours.

Includes a study of the various modes and uses of computer-assisted and computer-managed instruction. Emphasis is placed on the hardware for computer systems, integrated software packages, and DOS. Procedures for manipulating data files also will receive attention. Designed especially for students pursuing IPT endorsement and/or career and technology education.

523. *Internship*. Three semester hours.

Provides experiences in various environments which will be supervised by mentors and university liaisons. Regular seminar sessions may be held which will focus on concerns related to education and/or the workplace.

525. Human Relations for Career and Technology Teachers and Business/Industrial Trainers. Three semester hours.

Provides career and technology teachers and business/industrial trainers with

knowledge and concepts for developing effective working relationships within the school, community, and workplace. This course includes the development of skills related to problem solving, group dynamics, motivation, communication, and change theory. Students will be required to complete specialized research projects.

527. Developing Instructional Resources, Three semester hours. (Previously VoEd 527) Furnishes career and technology teachers and business/industrial trainers with knowledge and skills for developing and using effective instructional resources. Students will be required to complete specialized research projects.

531. Career Investigation. Three semester hours.

Students will analyze the career investigation instructional materials to develop daily lesson plans for a semester course; develop a classroom management plan; develop a community guest speaker and study tour file; and will acquire the competencies necessary to assist eighth-grade students in preparing individualized career/education plan.

532. Program Organization in Business Education. Three semester hours. (Previously

Addresses the techniques for evaluating the effectiveness of business education programs. The procedures for modifying existing programs or developing new programs will be examined.

548. Designing and Evaluating Curriculum. Three semester hours. (Previously VoEd

Provides career and technology teachers and business/industrial trainers with the knowledge and skills needed for designing, developing, and evaluating curricula. Emphasis will be placed on formulating course goals and objectives and on developing a variety of measurement instruments. Students will be required to complete specialized research projects.

552. Issues in Training and Development. Three semester hours.

This course includes topics related to the history of training and development, organization and management of training and development, diversity, training, and the law, adult learning, designing instructional systems, media and methods used in training and developing, training and development applications, and training and development resources.

553. Management Development for Educators and Trainers. Three semester hours.

This course includes topics related to the role of management in training and development. The focus of the course is directed toward the individual and the organization. Included are the broad areas of executive development, supervisor development and career development.

560. Organizing and Implementing Work-Based Learning. Three semester hours. (Previously VoEd 512)

Provides career and technology teachers with knowledge and skills for identifying, evaluating, and selecting work-based training stations. Emphasis will be placed on training opportunities, training agreements, legal issues, and criteria for work-based learning.

562. Developing Leadership in the School and Workplace. Three semester hours.

Provides career and technology teachers and business/industrial trainers with theories and strategies for developing effective leaders. Areas of emphasis will include leadership styles, organizational structures, community service, personal and professional ethics, and other career-enhancing techniques.

579. History and Principles of Career and Technology Education. Three semester hours. Traces the history and principles of career and technology education. In addition, emphasis will be placed on the administration of career and technology education as it relates to public education. Students will be required to complete specialized research projects. 589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisites: Consent of department head.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Higher Education (HiEd)

513. The Secondary School Curriculum. Three semester hours. (Same as SEd 513)

Focuses on descriptions and analyses of models of curriculum theory and curriculum development. Specific emphasis will be placed on philosophical and social forces which affect the design, implementation, and assessment of the curriculum. Particular attention will be given to practical applications of curriculum design and evaluation and leadership efforts necessary for overcoming individual and organizational resistance to change.

518. Thesis. Six semester hours. (Same as TDev and ETec 518).

Introduces the candidate for the Master of Arts or Master of Science (Option I) degree to the theories and techniques of educational research and leads on to the completion and acceptance of the thesis. Graded on a (S) satisfactory or (U) unsatisfactory basis.

521. Models of Teaching in the Secondary School. Three semester hours (Same as SEd 521)

Includes a study of the research, philosophy, and learning theory underlying current models of instruction. Practical alternative teaching strategies effective in accommodating students with diverse learning styles will be discussed as well as classroom management and the implications of whole-brain research and multiple intelligences for secondary/middle school teaching. Particular attention will be given to the teacher as an agent and manager of change.

528. Philosophy of Education. Three semester hours. (Same as SEd 528)

Includes a study of systematic philosophies of education and their views of the learner, learning process, curriculum, instruction, and leadership. Particular attention will be given to the use of philosophical techniques and concepts for solving problems.

540. The American Community College. Three semester hours.

Provides an overview of the community college with particular emphasis on the history, philosophy, and uniqueness of the institution. State and local governance and finance are also examined.

541. The Community College Curriculum. Three semester hours.

Furnishes an examination of trends and issues in the community college, and an evaluation of major community college curriculum areas. Changes in the community college curriculum will be analyzed to suggest future planning strategies.

542. Analysis of Teaching in Higher Education. Three semester hours.

Provides an analysis, comparison, and contrast of a range of teaching styles and models available to community college and university faculty. Particular emphasis will be directed toward teaching improvement models and assessment skills.

543. Issues in Adult and Continuing Education. Three semester hours.

Exploration of adult and continuing education including analysis of non-traditional learners in higher education. Emphasis is placed on history, social impact, current practices, and research in the areas of basic education, leisure learning, community services, and customized training.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisites: Consent of department head.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

617. Statistical Procedures for Education and Research. Three semester hours. (Same as Kine 617).

An introduction to statistical methods and their implications for educators and educational researchers. Appropriate computer applications will be integrated with classroom content relating to populations and samples; organizing, displaying, and summarizing data; probability; normal distribution; tests of significance; correlation and simple regression; Z and T tests; and the chi square test. Meets requirements for a Level II research tool course.

621. Effective Teaching and Learning in Higher Education. Three semester hours.

Consists of a study of diverse teaching strategies and the learning paradigms on which they are based. Also included will be an analysis of special problems encountered by the professoriate.

622. *Internship*. Three semester hours.

Provides supervised experiences in a setting appropriate to the student's projected career aspirations and areas of specialization. Prerequisite: Consent of instructor.

627. History of Education in the United States. Three semester hours.

A comprehensive survey of the development of American education and problems in American education with emphasis upon the relationships among schools, intellectual movements, and social institutions.

637. Institutional Effectiveness and Outcomes Assessment. Three semester hours.

Examines the application of a variety of institutional assessment processes to the development, or improvement, of the organization and to the measurement of accountability. Special attention will be devoted to strategic planning as a necessary foundation for both assessment and development.

639. Seminar in the Supervision of Instruction. Three semester hours.

Provides a study of various supervisory models utilized in the improvement of instruction. Particular attention will be devoted to classroom visits and observational strategies with emphasis on strengthening teacher performance.

640. Policymaking in Higher Education. Three semester hours.

Examines the development, implementation, and enforcement of policies by institutions of higher education, state higher education agencies, governing boards, and the government. Emphasis is placed on the impacts of policies on institutions and students.

650. Advanced Practicum in Supervision and Curriculum. Three semester hours.

Includes supervised practical experiences in supervision and curriculum in a wide variety of environments. Prerequisite: Consent of instructor.

651. Curriculum Development in Higher Education. Three semester hours.

Provides a study of the factors and influences which have affected the development of the curriculum in higher education. Procedures for designing, implementing, and evaluating curricula at the senior college level will be examined. In addition, trends, issues, problems, and variations in general education programs in colleges and universities are studied. The objectives of general education in all post-high school curricula are emphasized.

653. Fundamental Theories in Community College Instructional Leadership. Three semester hours.

Introduces prominent theories of administrative thought, including the theories of change, communication, role, and evaluation of personnel. Practical applications of these theories will be studied; and leadership strategies for the dean, division chair, and department chair will be emphasized.

654. Seminar in Instructional Leadership. Three semester hours.

Curriculum development, organizing for instruction, evaluation, and other community college leadership skills will be emphasized, particularly as they apply to strategies for faculty development to enhance teaching and learning.

655. Issues in Higher Education. Three to six semester hours.

Provides an in-depth analysis of prevalent issues unique to both community colleges and to senior institutions, as illustrated in the higher education literature. Emphasis is placed on the effects of these factors on the total institution.

656. Higher Education and the Law. Three to six semester hours.

Organic structure of the law, how to use legal resources, and significant issues and trends, past, present, and future, in higher education law.

657. Finance and Governance in Higher Education. Three semester hours.

Includes a study of higher education finance at both the community college and university level with emphasis on FTEs, contact hours, and credit hours. Consideration also will be given to governance structure in higher education at the community college and university level.

658. Administration in Higher Education. Three semester hours.

Provides study of the critical roles and responsibilities of the president, vice presidents, deans, department heads, and other general administrators in higher education institutions. Also included will be a discussion of different administrative organizations and practices within colleges and departments.

689. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisites: Consent of department head.

695. Research Methods. Three semester hours.

An overview of research methodology including basic concepts employed in quantitative and qualitative research methods. Includes computer applications for research. Meets requirements for a Level I research tool course. Prerequisite: Doctoral status or consent of the instructor.

696. Advanced Research Methodology: Interpretive Inquiry. Three semester hours.

This is a Level IV doctoral research tool course that provides a background and analysis of the interpretive act in all educational research. Designed to provide an indepth study of the process of conducting research in the naturalistic paradigm, the course focuses on an examination of the major methodological traditions of this approach. Also included is terminology and consideration of the distinctions between the naturalistic and rationalistic, or quantitative methods of inquiry. Prerequisites: Completion of Level I, II, and III research tool courses.

710. Research Colloquium. One to three semester hours.

This course is a forum for the search of knowledge and understanding of contemporary and historical issues concerning education. The student will demonstrate his/her competence in using systematic research procedures through preparation of a doctoral proposal. Prerequisites: SEd 595 and 695.

718. Doctoral Dissertation. Twelve semester hours.

A candidate must present a dissertation acceptable to the student's advisory committee and the Dean for Graduate Studies and Research on a problem in the area of his specialization. To be acceptable the dissertation must give evidence that the candidate has pursued a program of research, the results of which reveal superior academic competence and a significant contribution to knowledge. Graded on a (S) satisfactory or (U) unsatisfactory basis.

Educational Technology (ETec)

522. *Internship/Practicum*. Three semester hours.

Varied on-the-job experiences, on or off campus, applicable to student's professional preparation and goals are provided. Supervision by a member of the Graduate Faculty is required. Prerequisite: Permission from the instructor.

524. Introduction to Educational Technology. Three semester hours.

This course will introduce the student to the field of educational technology. History of computers and educational technology, basic computer hardware and software function, technology standards, current issues and future trends, and research in technology will be covered. Prerequisite: None.

525. Internet Applications for Education and Training. Three semester hours.

A study of Internet development applications for teaching and training, with an emphasis on on-line production, presentation, and research activities and the development of effective computer-mediated-communication methods to facilitate on-line learning communities. Methods of accessing, obtaining, managing and utilizing information from a variety of sources will be explored, as will the organization, deployment and evaluation of on-line materials. Prerequisite: One graduate ETec course, or permission from the instructor.

526. Computers in the Schools. Three semester hours.

Provides students with an opportunity to conduct in-depth explorations of how computers are being used to promote/enhance/support both administrative and instructional activities in K-12 education. Emphasis will be on how educational computing might contribute to school reform, as well as to the training of teachers (both preservice and inservice). Prerequisite: One graduate ETec course or permission from the instructor.

527. Technologies for Instructional Delivery. Three semester hours.

Investigates the current and emerging technologies available for instructional delivery. Included are components of courses (e.g. computer-assisted instruction, webquests, etc.) as well as methods of delivery in non-face-to-face environments. Emphasis will be on the appropriate selection of technologies for various instructional settings. Prerequisite: One graduate ETec course or permission from the instructor.

534. Desktop Publishing for Educators and Trainers. Three semester hours.

Includes an overview of desktop publishing and includes history, techniques, design, and implementation. Comparisons are made between desktop publishing and other methods of presentation and/or publications. Prerequisite: One graduate ETec course or permission from the instructor.

544. Computer Operating Systems for Educators. Three semester hours.

Examines similarities and differences between computer operating systems often used in educational settings. Experiences with DOS, Windows, Unix, and the Macintosh operating systems will be provided. Emphasis will be on hardware, software, and training issues related to these systems and to networking of computer resources. Prerequisites: One graduate ETec course or permission from the instructor.

557. Integrating Technology Throughout the Curriculum. Three semester hours. (Same

Includes an in-depth study of methods for integrating the emerging technologies into specific content areas. Research, as well as current and future implementation issues, will be investigated, and a program for action will be developed. Prerequisite: One graduate ETec course, or a teacher deficiency plan and one ETec or CSci course, or permission from the instructor.

561. Learning and Technology. Three semester hours.

Focuses on the theory and principles underlying the uses of technology in the learn-

ing process. Included will be the utilization of communication technologies applicable to teaching and learning. The student will develop competencies for selecting and evaluating media, equipment, and processes which support learning.

562. Applying Instructional Media and Technology. Three semester hours.

Introduces students to the selection and use of computer-based media, multimedia, and conventional media, in the preparation of materials for instructional purposes. Special attention is given to computer hardware and software involved in computer based media production, digital formatting technology, and multimedia processes. Prerequisite: Permission from the instructor.

567. Multi-Media Production. Three semester hours.

Concerned with the theory and practice of combining visual and audio components in instructional design. Production processes and techniques and recent developments in electronic presentation technologies are studied. Students will plan and produce multimedia presentations. Prerequisite: ETec 562; recommended ETec 578.

578. Instructional Design and Development. Three semester hours.

Utilizes a systems approach to design and develop instruction. The three phases of instructional design, analysis, design and development, and evaluation, are examined in order to produce a plan to facilitate learner performance. Prerequisite: ETec 561.

579. Administration of Media Technology Programs. Three semester hours.

An examination of the theories, practices and competencies required for effective administration of educational technology programs. Examines (supervision of organizational) media and equipment holdings. Covers management techniques as they apply to learning resources in educational, business, and industrial settings. Prerequisite: One graduate ETec course or permission of the instructor.

581. Digital Video and Audio Production and Applications for Instructional Settings.
Three semester hours.

Concerned with digitizing video and audio for use in multimedia and web applications. Emphasis is on knowledge and skills for digital video/audio production, compression, and digitizing from traditional media. Prerequisite: ETec 562.

587. Advanced Development of Web-based Materials for Education. Three semester hours.

Students will develop and produce web-based instructional materials that include the integration of text, graphics, animation, sound and video into a web-based format. The course will address interactivity, ethical, and security issues, among others. Prerequisite: ETec 525 or permission of the instructor.

588. Issues in Educational Technology. Three semester hours.

Provides an in-depth analysis of major issues in the field, with emphasis on examining the literature and developing implementation plans to develop and promote effective uses of educational technology. Areas to be addressed include, but are not limited to, mentoring for and with technology, assistive technology solutions, interactive instructional systems, applications of emerging technologies, and technology-assisted assessments. Prerequisites: ETec 567 and 578.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisites: Consent of department head.

591. Distance Education Design and Implementation. Three semester hours.

Examines theories and practice of distance education. Emphasis is on the design and implementation of effective instructional strategies and delivery in distance learning environments. Related hardware and software issues are also addressed. Prerequisites: One graduate ETec or permission of the instructor.

594. E-Research Issues and Strategies. Three semester hours.

Students will examine methodologies and implementation strategies in E-Research. Focus will be on investigating and experiencing the variety of ways in which researchers may use the Internet to enhance their professional activities, on exploring how the use of the Internet influences the research process and procedures for data collection and analysis, and on relating this to educational practice. Students will design and develop materials to promote the effective implementation of e-research skills within their classes and other relevant areas. Prerequisites: One graduate ETec class and either SHEd 595 or SHEd 695; or permission of instructor.

597. Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

Library and Information Science

The library and information science program is designed primarily to prepare students for professional learning resources positions in public and private elementary and secondary schools and in junior/community colleges. Emphasis is upon the basics of educational librarianship and the special preparations needed to meet requirements for certification as a learning resources specialist.

Graduate Courses

Library and Information Science (LIS)

- 512. *Information, Reference, and Mediographic Services*. Three semester hours. Includes a detailed study of the basic and most useful reference sources with strong emphasis on new computer technologies applicable to the school library situation.
- 515. Cataloging and Classification. Three semester hours.

Descriptive cataloging of print and non-print materials for the learning resources center. Emphasizes Anglo-America Cataloging Rules, Dewey Decimal Classification, and Sears Subject Heading.

- 524. Developing General and Specialized Collections. Three semester hours. Examines principles and practices in selecting print and non-print media for learning resources programs. Evaluates media for children and young adults.
- 527. Books and Related Materials for Children and Young Adults. Three semester hours. In-depth study of leading examples of media as they relate to the curriculum.
- 550. Practicum in a Library Media Center. Three semester hours.

Open only to graduate students applying for certification, this course is designed to give the student laboratory experiences in organization, administration, selection, classification, cataloging, and reference work in the elementary and secondary school under the direct supervision of a certified librarian or learning resources specialist. Prerequisite: Completion of all other required certification courses and permission of the instructor. Students should contact instructor the semester before enrollment.

557. Technology Integration for School Librarians. Three semester hours. (Same as ETec 557)

This course includes an in-depth study of methods for integrating the emerging technologies into specific content areas, with an emphasis on the role of school librarians. Research, as well as current and future implementation issues, will be investigated, and a program for action will be developed. Prerequisite: ETec 524 or permission of the instructor.

Health and Human Performance

Ken Alford, Head

Field House; 903-886-5549

Graduate programs offered in the Department of Health and Human Performance include courses designed to prepare specialized personnel for positions with public and private agencies and master teachers in the area of health and human performance at the secondary and college levels. These graduate degree programs are planned to provide graduate students with:

- 1. Knowledge and skills necessary to organize and administer programs of health and human performance;
- 2. The ability to interpret, analyze, critique, and produce research within health and human performance;
- Knowledge related to the current challenges and trends underlying programs of health and human performance;

Programs of Graduate Work

The Department of Health and Human Performance offers the following graduate degrees:

Master of Science in Health, Kinesiology, and Sports Studies—Health and Kinesiology Track

Master of Science in Health, Kinesiology, and Sports Studies—Sports Studies Track Master of Science in Health, Kinesiology and Sports Studies—Exercise and Physiology Track

Master of Education in Health and Kinesiology

For each of these degrees, a minimum of 18 to 24-hours must be completed in the major field. The Department also offers a minor for students in the doctoral program in Supervision, Curriculum, and Instruction—Higher Education.

Admission

In addition to the general requirements for admission to Graduate Studies, all students must have an undergraduate degree or equivalent in health or kinesiology, human performance, or closely related field. Any student not having such a degree must consult the Health and Human Performance Department's Coordinator of Graduate Studies for special provisions which may include the completion of selected undergraduate courses.

Degree Requirements

All students must complete a departmental advisement guide before attaining 12 semester hours of graduate credit. To complete the advisement guide, the student should consult with the department's Coordinator of Graduate Studies. Students must attain a grade point average of 3.00 on graduate courses taken in the Department of Health and Human Performance. In addition, all students must have a passing score on the departmental comprehensive exams if following a non-thesis option.

Note: Programs for the M.S. and M.Ed. are currently under revision and requirements are subject to change. Please see the Health and Human Performance Department's webpage for the most current information.

Master of Science in Health, Kinesiology, and Sports Studies (Option I) Exercise Physiology Track

This program requires 10 courses, including a six-hour thesis, for a total of 30 hours:

HHPK 518 (6 sh)

HiEd 617 (3 sh)

HHPK 519 (3 sh)

HHPK 532 (3 sh)

HHPK 535 (4 sh)

HHPK 591 (2 sh)

HHPK 593 (4 sh)

Three courses from: HHPK 533, HHPK 531, HHPK 534, HHPK 537, HHPK 538 or BSc 431*, Chem 414*.

*Must be taken for graduate credit and only one undergraduate course may be used to satisfy this requirement.

Master of Science in Health, Kinesiology, and Sport Studies (Option I) Health and Kinesiology Track

This program requires 10 courses, including a six-hour thesis, for a total of 30 hours:

HHPH/HHPK 516

HHPH/HHPK 518 (6 sh)

HHPH/HHPK 510 or HHPK 536 or HHPK 560 or HHPH/HHPK 590

HHPH 512 or HHPH 531 or HHPH 587 or HHPH 660

HHPK 520 or HHPK 535 or HHPK 593 or HHPK 664

Plus nine semester hours of graduate-level electives

Required Support Course: HiEd 617 (prerequisite to HHPH/HHPK 518)

Master of Science in Health, Kinesiology, and Sports Studies (Option II) Health and Kinesiology Track

This program requires 12 courses, for a total of 36 hours:

HHPH/HHPK 516

HHPH/HHPK 531

HHPH/HHPK 595

HHPH/HHPK 510 or HHPK 536 or HHPK 560 or HHPH/HHPK 590

HHPH 512 or HHPH 587 or HHPH 660

HHPK 520 or HHPK 535 or HHPK 593 or HHPK 664

Plus 18 semester hours of approved graduate-level electives

Master of Science in Health, Kinesiology, and Sports Studies (Option II) Sports Studies Track

This program requires 12 courses, for a total of 36 hours:

HHPH/HHPK 516

HHPH/HHPK 531

HHPH/HHPK 595

Three courses from: HHPK 530 or HHPK 546 or HHPK 547 or HHPK 564 Two courses from: HHPK 520 or HHPK 535 or HHPK 593 or HHPK 664

Plus 12 semester hours of approved graduate-level electives

Master of Education in Health and Kinesiology

This program requires 12 courses, for a total of 36 hours:

HHPH/HHPK 510, 590 HHPH/HHPK 595

One course from: HHPK 536 or HHPK 560 or HHPK 531 One course from: HHPK 520 or HHPK 535 or HHPK 593

Three graduate HHPK/HHPH electives

Four approved graduate Education courses designated as a minor

Master of Education in Health, Kinesiology and Sports Studies (Option II) Health and Kinesiology Track

This program requires 12 courses, for a total of 36 hours:

HHPH/HHPK 510, 590 HHPH/HHPK 595

One course from HHPK 536 or HHPK 560 or HHPH 531

One course from HHPK 520 or HHPK 535 or HHPK 593

Three graduate HHPK/HHPH electives

Four graduate education courss designated as a minor

Minor in Health and Kinesiology for the Doctoral Degree in Supervision, Curriculum and Instruction—Higher Education

Students seeking a doctoral degree (Ed.D.) in Supervision, Curriculum, and Instruction—Higher Education may select a comprehensive minor (39 semester hours) in Health and Kinesiology. Students should contact the Coordinator of Graduate Studies with the Department of Health and Human Performance or the Head of the Department of Curriculum and Instruction for more information.

Note: The Department reserves the right to suspend any student from the program who, in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses Kinesiology (HHPK)

510. Curriculum Construction in Health and Kinesiology. Three semester hours (Same as HHPH 510).

A course with particular emphasis upon trends and current practices in curriculum construction and revision in programs of health and kinesiology in secondary and collegiate settings. The total program, as well as grade placement and units of instruction, is studied. Provision is made for the inclusion of knowledge and skills necessary for educating exceptional learners.

514. Organization of the Elementary School Physical Education Program. Three semester hours.

A study of current trends and developments in activity programs and curriculum for elementary physical education including a study of such programs and curriculum with emphasis upon grade placement, personnel, facilities, and state and national standards and requirements.

516. Current Problems and Trends in Health and Kinesiology. Three semester hours (Same as HHPH 516).

A study of current problems and trends in health and physical education. Local, regional, state and national issues will be included in this course.

518. Thesis. Six semester hours.

519. Research Methods in Human Performance. Three semester hours.

Examination of the nature and role of applying, interpreting, and utilizing quantitative research methods and appropriate statistical procedures to analyze, measure, and assess human performance. Use and proficiency of statistical and scientific graphing software will be thoroughly addressed in this course.

520. Psychology of Motor Learning. Three semester hours.

This course is designed to provide an understanding of physiological principles involved in motor performance. Particular attention will be given to the application of these principles in teaching game and sport skills and in the coaching of athletics.

529. Workshop. Three or six semester hours. (Same as HHPH 529)

Workshops may be held in kinesiology, health education, recreation, or sports

530. Sports Conditioning. Three semester hours.

A study of the scientific basis of conditioning athletes. Focus will be on cardiovascular and resistance conditioning in the off-season, pre-season, and in-season. An introduction and utilization of appropriate equipment for cardiovascular conditioning and resistance training will be examined.

532. Cardiopulmonary Physiology. Three semester hours.

This course emphasizes normal physiological mechanisms during rest and during physical work and exercise. The focus of this course is on the mechanisms that affect the heart, systemic circulation, kidney, thermoregulation, blood vessels, internal and external respiration, and the biochemistry and cardiopulmonary system.

533. Stress Testing and Electrocardiography. Four semester hours.

Theoretical and practical experiences to assist in analysis and recognizing of normal and abnormal electrocardiography at rest and exercise (ECG). Understanding and interpretation of ECG tracings, exercise prescription, and the mechanisms of cardiac activation in health and exercise. Prerequisite: HHPK 532.

534. Pathophysiology and Exercise. Three semester hours.

The analysis of mechanisms responsible for reduction of functional capacity as result of biological aging and/or loss of health. Use of preventive exercise programs to diminish reduction and/or deterioration of physiological mechanisms as a function of age, health, and disease. Prerequisite: HHPK 532 and 535.

535. Advanced Exercise Physiology. Four semester hours.

In-depth study of acute and chronic responses to cardiopulmonary, metabolic, biochemical, and cellular adaptions to exercise and training with special reference to hydration, thermoregulation, renal and muscular function. Prerequisite: HHPK 532.

536. Adapted Kinesiology. Three semester hours.

Principles of adapting physical activities to individual needs will be studied. Instructional strategies, screening and testing procedures, and modification of equipment will be emphasized. Patterns of organization and administration of programs will also be addressed.

537. Internship in Exercise Physiology. Three semester hours.

Practical experience in a health clinic, hospital, cardiopulmonary rehabilitation clinic or center, chronic disease prevention clinic under direct supervision of a clinical exercise physiologist, a physician or a cardiac or respiratory trained nurse at an approved site. 180 to 360 contact hours. Prerequisites: HHPK 532, 533, 534, 535.

538. Exercise Metabolism. Three semester hours.

The focus of this course is on metabolic processes, metabolic responses to exercise, regulatory mechanisms, sources, role, and regulation of carbohydrate, lipid, and protein metabolism and potential metabolic bases of central and peripheral fatigue. Prerequisites: HHPK 532 and 535.

540. *Supervision in Health and Kinesiology*. Three semester hours. (Same as HHPH 540). Philosophy, history, principles, organization, and techniques of supervision and their application to the supervision of health and kinesiology.

546. Ethics, Governance, and Legalities in Sports. Three semester hours.

A study focusing on ethical problems in the contemporary sport industry and the theoretical models available for analyzing these problems. Various governing agencies, primarily the UIL and NCAA, in sport will also be studied emphasizing investigation of the legal ramifications, organizational structure, authority, membership, and influence of these sport governing bodies. Legal aspects of teaching, coaching, and administering athletic programs in secondary and post-secondary education and community settings will also be included.

547. Economics, Marketing and Public Relations in Sports. Three semester hours.

A study of revenue sources available to sport organizations such as tax support, municipal and corporate bonds, ticket sales, concessions, fund raising, sponsorship, licensing and PSL's. Further study will include sport-marketing plans utilizing the concepts of product, price, promotion, sales and advertising. The course will further examine aspects of external and internal communication in sport pertaining to community, customer, employee and media relations.

560. Motor Development Issues. Three semester hours.

This course addresses the influences of heredity and environment upon motor skill development. Theories of motor learning and motor control will be explored as they affect motor skill acquisition, retention, and transfer of motor skills. Techniques for appraising motor development are also studied.

564. Facilities and Equipment in Kinesiology and Sport. Three semester hours.

A study of acquisition, planning, and construction of physical education and sport facilities. Additionally, studies will be made of appropriate selection and use of physical education and sport equipment.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

590. Health and Kinesiology: Teaching Design, Strategies, and Assessment. Three semester hours (Same as HHPH 590).

This course provides an analysis, comparison, and contrast of various teaching strategies and designs appropriate for the health and kinesiology teaching environment. Additional study will include pedagogical assessment techniques for health and kinesiology.

591. Graduate Seminar in Exercise Science. Two semester hours.

This course is designed to provide the student with the opportunity to critically analyze, discuss, present, and synthesize selected topics in human performance. Prerequisite: 20 or more credit hours of graduate work.

593. Mechanical Analysis of Motor Skills. Three semester hours.

A study of the basic mechanical principles and physical laws which govern human movement. Intensive study will be devoted to analysis of fundamental motor skills and to the use of these skills in dance and sports activities.

595. Critiquing and Conducting Research. Three semester hours. (Same as HHPH 595)

A study of research methods and designs appropriate for proposing, conducting, reading, reporting and critiquing research in health, kinesiology, and sports studies. A major emphasis will be on conducting meta-analysis of research literature. Each stu-

dent is required to demonstrate systematic research techniques through the investigation and formal reporting of an independent research project using meta-analysis, descriptive or experimental research design.

617. Statistical Procedures for Education and Research. Three semester hours. (Same as HiED 617)

An introductory study of statistical methods and their implications for education and research. Populations and samples; organizing, displaying, and summarizing data; probability; normal distribution; tests of significance; correlation and simple regression; Z and T tests; and the chi square test will be the focus of this course. Appropriate computer applications will be integrated into the course. Meets requirements for a Level II research tool course.

664. Health-Related Fitness Testing and Exercise Prescriptions. Three semester hours.

A study of field-based fitness testing and exercise prescriptions. The course will focus on the American College of Sports Medicine guidelines for fitness testing and exercise prescriptions. The health-related fitness parameters of cardio respiratory endurance, joint flexibility, muscular strength, muscular endurance and body fatness will be studied in the course. Students will be given opportunity to participate in both classroom and laboratory experiences related to health-related physical fitness.

- 675. Internship and Colloquium. Three semester hours.
- 676. *Internship and Colloquium*. Three semester hours.

Health Education (HHPH)

510. Curriculum Construction in Health and Kinesiology. Three semester hours (Same as HHPK 510).

A course with particular emphasis upon trends and current practices in curriculum construction and revision in programs of health and kinesiology in secondary and collegiate settings. The total program, as well as grade placement and units of instruction is studied. Provision is made for the inclusion of knowledge and skills necessary for educating exceptional learners.

512. Health Protection. Three semester hours.

The course focuses on major health topics that deal with environmental safety as well as intentional and unintentional injuries. Emphasis will be placed on acquiring knowledge related to causes and prevention strategies which will allow the consumer to have the greatest protection.

516. Current Problems and Trends in Health and Kinesiology. Three semester hours (Same as HHPK 516).

A study of current problems and trends in health and physical education. Local, regional, state and national issues will be included in this course.

- 518. *Thesis*. Six semester hours. (Same as HHPK 518).
- 529. Workshop. Three or six semester hours. (Same as HHPK 529).

Workshops may be held in kinesiology, health education, recreation or sports studies.

531. Nutrition and Optimal Performance. Three semester hours.

A study of nutrition as it relates to optimum performance and health. Nutrient need, sources, functions and interactions are reviewed according to the latest scientific findings. Principles of body conditioning are emphasized with attention to diet and lifestyle practices that promote health and decrease risks of nutrition related diseases.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

590. Health and Kinesiology: Teaching Design, Strategies, and Assessment. Three semester hours (Same as HHPK 590).

This course provides an analysis, comparison, and contrast of various teaching strategies and designs appropriate for the health and kinesiology teaching environment. Additional study will include pedagogical assessment techniques for health and kinesiology.

595. Critiquing & Conducting Research. Three semester hours (Same as HHPK 595).

A study of research methods and designs appropriate for proposing, conducting, reading, reporting, and critiquing research in health, kinesiology and sports studies. A major emphasis will be on conducting meta-analysis of research literature. Each student is required to demonstrate systematic research techniques through the investigation and formal reporting of an independent research project using either a meta-analysis, descriptive, or experimental research design.

597. Special Topics in Health Education. One to four semester hours.

660. Global Health Issues. Three semester hours.

This course focuses on current health issues facing the world community. An epidemiological approach will be used in studying the causes and distribution of health related states and events in specified populations and the application of this information to the prevention and/or control of health problems.

Sports and Recreation Management (HHPS)

541. Outdoor Education for Teachers in Secondary Schools. Three semester hours.

Organization for school camping and outdoor education. Topics include water safety, scouting, gunmanship, crafts, campfire activities, and other camp recreational activities.

589. Independent Study. One to four semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

594. Recreational Leadership. Three semester hours.

A study of the recreational programs for youth organizations, institutions, industry, and public agencies.

Psychology and Special Education

Tracy B. Henley, Head

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Harry L. Fullwood, Special Education Advisor

Shulan Lu, Coordinator of Doctoral Programs in Educational Psychology

Gail Johnson, Applied Psychology Advisor Jennifer Schroeder, School Psychology Adviser

Website: http://www.tamu-commerce.edu/psychology/

The Department of Psychology and Special Education offers degree programs for majors and minors in Psychology and Special Education leading to masters and doctoral degrees. In addition, courses in Psychology and Special Education are also provided for students desiring licensure in school psychology, licensure as a psychological associate, and professional certification as an educational diagnostician. Provisional teaching certification endorsement is offered in the area of generic special education

and support courses are provided for students desiring teacher, counselor, supervisor and administrator certifications.

All students and faculty are expected to act in accordance with the ethical standards for the profession of psychology and will be expected to exhibit:

- 1. an attitude that respects the worth, uniqueness, and potential for growth and development of all individuals;
- 2. personal stability, ethical behavior, and respect for the confidentiality of privileged information;
- 3. a personal manner in which responsibilities are fulfilled in a cooperative and conscientious fashion:
- 4. productive and cooperative work relationships that display motivation, independence, and adaptability; and
- 5. a commitment to continuing personal and professional growth characterized both by participation in professional organizations and by production and presentation of scholarly papers and publications.

The Department reserves the right to suspend or remove from the program any student who, in the judgment of a duly constituted departmental committee, does not meet these ethical and professional standards.

Programs of Graduate Work in Psychology Master of Science and Master of Arts in Psychology

The Department of Psychology and Special Education offers the Master of Science and Master of Arts degrees in Psychology. These programs prepare students for careers in mental health and school settings; psychology and training in business, government, and education; or further graduate work.

The 36-hour M.A. and M.S. programs focus on courses in human cognition and research methodology, i.e. educational and experimental psychology. Most of the coursework completed for the master's degrees may be transferred to the Ph.D. program in Educational Psychology. A thesis option for the M.S. and M.A. is available and encouraged, but not required.

Psychological Associate Licensure

Licensure as a psychological associate by the Texas State Board of Examiners of Psychologists requires a minimum of 27 semester hours of appropriate psychology courses, 9 semester hours of practicum and a total of 54 semester hours of graduate work in the degree program. Contact the applied psychology adviser for further information. The applied master's program is accredited by the Masters in Psychology Accreditation Council (MPAC), formerly the Interorganizational Board for Accreditation of Master's in Psychology Program (IBAMPP).

Credential Program for School Psychologists

Students may complete coursework as a step toward obtaining a credential in school psychology. This is structured on a master's degree in psychology, which includes coursework in the following areas: psychological foundations, educational foundations, assessment, interventions (direct and indirect), statistics and research design, professional school psychology, practica, and internship. Individuals may use this program as a step to obtain a Texas license as a Licensed Specialist in School Psychology. Those interested in this program should contact the school psychology adviser for further information.

Doctor of Philosophy in Educational Psychology

The Department of Psychology and Special Education offers a Doctor of Philosophy (Ph.D.) in Educational Psychology. This program has an interdisciplinary perspective, with a strong foundation in methodology. The focus of the program is human cognition and instruction. Students will acquire an in-depth knowledge of human learning and cognition, instructional strategies, research, and evaluation. This emphasis will prepare students to integrate knowledge of human cognition and instructional practice across a variety of occupational, educational, and content-matter domains, with emphasis on applications of learning technologies.

Career opportunities for educational psychologists exist with federal and state educational agencies, national and state legislative groups, regional educational laboratories and research centers, higher education, public and private schools, professional organizations, high technology companies, military, publishers, private funding agencies, medical organizations, and private consulting. Increasing opportunities for educational psychologists are expected in all settings where job training and retraining is required and where technology-assisted learning (including distance education) is employed.

Currently, the Department of Psychology and Special Education offers a limited number of courses online, although Texas A&M-Commerce is not an online University and the Ph.D. program is not available as distance education. Still, the combination of online and summer courses available may make the doctoral program a viable option for non-traditional students.

Time to complete the degree program depends upon many factors, including: (1) how many courses a student completes per semester; (2) whether courses are offered during the semester that they are needed by the student; (3) successful completion of comprehensive exams; and (4) how persistent a student is in completing the thesis and dissertation requirements. Some full-time students have completed the degree program within four years, but, of course, part-time students require more time.

Graduate Minors in Psychology

Minors in psychology are available for students in all other master's and doctoral degree programs.

Admission

Master of Science and Master of Arts in Psychology

In addition to meeting the general university requirements for admission to Graduate Studies, applicants to the master's degree programs in Psychology must:

- 1. Have a grade point average of at least "B" (3.00) in the bachelor's degree program and/or B+ (3.50) in completed graduate course;
- Submit scores for the quantitative, verbal, and analytical/writing sections of the GRE:
- 3. Submit three letters of recommendation; and
- 4. Submit a brief essay stating their professional goals.

Psychological Associate Licensure

For students pursuing licensure as a psychological associate, modifications to the master's program requirements include that the bachelor's degree either be in psychology or include a course in statistics.

Doctor of Philosophy in Educational Psychology

Before being admitted to the doctoral program, the prospective student must first meet the general requirements for admission to Graduate Studies.

In all cases, admission to graduate degree programs in psychology is competitive, since available facilities and faculty do not permit admission of all qualified applicants. Application packets are reviewed twice a year, in May and December. The components of an application to the doctoral program are as follows:

- 1. Graduate Record Examination. Applicants must submit scores for the quantitative, verbal, and analytical/written sections of the GRE.
- 2. Transcript(s) showing academic prerequisites.
 - a. Applicants holding the master's degree must have an overall grade point average of at least 3.50 on graduate work, exclusive of practicum and thesis grades.
 - b. For students applying with a completed non-thesis master's degree, completion of the thesis will be required prior to admission to doctoral candidacy.
- 3. Recommendations, references, and requirements. The doctoral applicant is required to submit four satisfactory recommendations on forms provided by The Graduate School, including one from the last employer, if it was a professional experience, and one from the last institution attended. In all cases, the Department of Psychology and Special Education maintains the right to deny admission to an applicant who, in its judgment, fails to meet personal or academic admission standards.
- 4. Statement of goals. All prospective students must submit a brief statement to the graduate admissions committee stating their goals in psychology and how the Department of Psychology and Special Education at Texas A&M University-Commerce can help them attain those goals. The department reserves the right to deny entrance to an applicant who, in the judgment of a duly constituted departmental committee, appears unlikely to succeed professionally, or whose goals are inconsistent with the orientation of the degree program, regardless of any other qualifications.

Degree Requirements

Doctor of Philosophy in Educational Psychology

The Ph.D. in Educational Psychology program requires 90 hours. Completion of the Ph.D. degree includes a thesis and a dissertation. Students are required to enroll in on-site courses in Commerce during at least four different summer school (or long semester) sessions. The doctoral program in Educational Psychology is delineated into five major components, as follows:

Program Core, 21 hours

Program Electives, up to 9 hours

Statistics and Research Methodology, 18-27 hours

Supplementary Coursework (a minor), selected with advisement, 18 hours

Thesis and Dissertation, 18 hours

Graduate Courses

Psychology (Psy)

500. Cognition, Learning, and Development. Three semester hours.

A course designed for teacher education students to provide a thorough understanding of the dynamic relationship between cognition, learning, and development for schoolaged children and adolescents. Formative and summative assessment and evaluation procedures will also be presented. This course is required as a part of the initial certification program in teacher education.

506. *Professional School Psychology*. Three semester hours.

This course deals with pertinent issues in school psychology, such as ethics, emergent technologies, history and foundations of school psychology, legal issues, professional issues and standards, alternative models for the delivery of school psychological services, as well as roles and functions of the school psychologist. Prerequisite: Consent of instructor.

502. *Theories of Personality*. Three semester hours.

This is a study of the historically influential personality theories as they relate to contemporary psychology. Prerequisite: Psy 317 or equivalent, or consent of instructor.

503. Abnormal Psychology and Developmental Psychopathology. Three semester hours. The course is oriented to the social-biological origins and dynamics of psychopathology in adults and children including developmental disorders.

505. Introduction to Educational Psychology. Three semester hours.

This class is designed to introduce the student to the basic principles of educational psychology with an emphasis on the cognitive aspects of modern pedagogy. Topics that will be covered include a historical introduction to theory, research, and issues in educational psychology through both classic and contemporary readings in the areas of instructional psychology, motivation, measurement, learning, technology, and socialization.

508. Theory and Techniques of Applied Psychology. Three semester hours.

An introduction to theoretical models and their applications which are useful across a range of practical human situations. These include educational contexts, individual and group consultation, and organizations. Both assessment and intervention models will be presented, with an emphasis on their relationship. Active practitioners will discuss and demonstrate selected intervention techniques. Prerequisite: Graduate standing.

509. *History and Systems of Psychology*. Three semester hours.

A comparative and critical study is made of a number of viewpoints in psychology from early experimental psychology to the contemporary field and organismic theories.

515. Neuromechanisms/Biological Bases of Behavior. Three semester hours.

Designed for psychology or counseling students, this course is concerned with biological bases of developmental neuropsychology, peripheral nervous systems, psychophysiology, behavioral pharmacology, and their relations to central nervous system arousal, motivational, emotional, and memory structures. Prerequisite: Psy 315 or consent of instructor.

518. Thesis. Six semester hours.

This conference course introduces the candidate for the Master of Arts or Master of Science Option I degree to the theories and techniques of educational and psychological research and leads to the completion and acceptance of the thesis. Graded on a (S) satisfactory or (U) unsatisfactory basis.

521. Research Design. Three semester hours.

The focus on this course is on the design, analysis, and interpretation of experimental research. Emphasis will be given to designs which can be analyzed by ANOVA or MANOVA. Statistical software will be employed to assist with the analysis of data. Prerequisite: Psy 612 or equivalent or permission of instructor.

527. Social and Cultural Bases of Behavior. Three semester hours.

This course is designed to cover principles and research related to social and cultural bases of behavior, motivation, attitude, value, leadership, propaganda, groups, morale, industrial conflict, roles, ethnic attitudes, and status.

535. Applied Behavior Analysis. Three semester hours.

A study of operant conditioning and reinforcement principles as they apply to describing, explaining, predicting, and developing human behavior in socially desirable ways, so that benefits occur in individuals in family, school, work, and community settings.

536. Hypnosis Applications. Three semester hours.

This course introduces the advanced student to hypnosis and trance as they may be used in counseling and psychotherapy, as well as in behavior therapy, habit management, and behavioral medicine. Traditional induction and trance management techniques, indirect hypnosis, and a number of related therapeutic techniques drawn from a variety of therapeutic models are taught and practiced. Prerequisite: Consent of instructor.

545. Developmental Psychology. Three semester hours.

Study of the lifespan of humans. Emphasizes both experimental and theoretical approaches to the study of cognitive, personality, social, perceptual and physical development from conception to death.

572. Psychological Assessment and Measurement. Three semester hours. (Same as SpEd

This course is the first required course in the sequence of assessment courses and is planned to provide a framework for the development of assessment practices. Attention will be given to issues of measurement, identifying appropriate sources of diagnostic information, reliability, validity, identifying and selecting test instruments, conducting the assessment process in an ethical and considerate manner, interpreting norm referenced and criterion-referenced tests. Prerequisite: Graduate standing.

573. Intellectual Assessment I. Three semester hours. (Same as SpEd 573)

The course will provide both a theoretical background and practical experience with the use of instruments measuring cognitive/intellectual abilities from early childhood to adulthood. The student will receive both classroom instruction and supervision in the selection, administration, scoring, and interpretation of these instruments. Computerized scoring and assessment will also be used as a part of the assessment process. Prerequisites: Prior enrollment in Psy/SpEd 572 or consent of instructor.

575. Personality Assessment II. Three semester hours.

The course will examine the socio-emotional, behavioral and cultural aspects of personality and informal assessments for children and adults as part of the diagnostic process. Psychometric and ethical considerations with the use of these techniques will be considered. Computerized testing and scoring of personality tests and techniques will also be covered. Prerequisites: Concurrent or prior enrollment in Psy 572 and 503. 589. Independent Study. One to three semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

594. Ethical Issues in Organizations. Three semester hours.

Ethical issues applied to individuals in an organizational setting. Included are theories of moral philosophy and the development and application of professional and business codes.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

601. Perception. Three semester hours.

This course is a survey of classical and current theory and research on human perception. It includes the relations of sensation and perception, stimulus and receptor correlates, physiological bases for perception, and the study of the visual, auditory, cutaneous, and chemical senses.

610. Nonparametric Statistics. Three semester hours.

This course, a Graduate School approved level IV research tool course, concentrates on the logic and application of distribution-free statistics with emphasis on psychological and educational data and research. Prerequisites: Level I-III research tool courses or equivalent or permission of instructor.

612. Psychological and Educational Statistics. Three semester hours.

This course, a Graduate School approved level II research tools course, is an introductory level course that concentrates on statistical methods applicable to educational and psychological research procedures and interpretations.

615. Psychological Principles of Consultation. Three semester hours.

This course will examine the psychological principles and knowledge base underlying the major models and theories of individual and organizational consultation. Scientific information derived from the study of learning, cognition, development, and personality theory will be examined in relation to the common consultative practices and models employed in business, government, and education.

618. Group Dynamics: Understanding and Working in Groups. Three semester hours.

This course will provide both a theoretical background and practical knowledge for understanding and working in a group environment. Basic principles of group membership, identity, and interaction will be identified. The ultimate goal of the class is to make the student a more productive group member. To achieve this goal, some topics that will be discussed include leadership, communication skills and patterns, conflict styles and resolutions, viewing diversity as a strength, needs for and uses of power, and team development and training. The student will develop these skills through active participation in numerous group activities and environments.

620. Human Learning and Cognition. Three semester hours.

This course is a study of human learning and cognitive organization and process. The content will provide an overview of the development of learning theory and cognitive models since the beginning of the scientific study of human learning and mental processes. Topics will include behavioral and association models of learning, information processing and parallel distributed cognitive models, and consideration of the developmental models of Piaget and Vygotsky.

621. Advanced Cognition. Three semester hours.

This seminar course will examine the disciplines of cognitive science and cognitive psychology, with primary attention to the three predominant metaphors and models of the mind: the mind as a computer, the mind as a neural network, and the mind as a brain. Prerequisite: Psy 620 or comparable course or permission of instructor.

622. Research and Design. Three semester hours.

The focus on this course is on the design, analysis, and interpretation of experimental research. Emphasis will be given to designs which can be analyzed by ANOVA or MANOVA. Statistical software will be employed to assist with the analysis of data. Prerequisite: Psy 612 or equivalent or permission of instructor.

625. Cognition and Instruction I. Three semester hours.

This course will examine the psychological principles and scientific knowledge base underlying the major instructional theories. Content will include an evaluation of how current theories and knowledge of human cognition relate to the principles and practices of instructional design and development.

626. Cognition and Instruction II. Three semester hours.

This course will require students to apply knowledge and theory derived from cognitive psychology to the design and development of instructional systems and products. Students will be expected to integrate cognitive models and knowledge of human

cognition within the process of developing and designing instructional systems and products. Prerequisite: Psy 625 or consent of instructor.

627. Social Cognition. Three semester hours.

This course will investigate the research on the cognitive mediators of interpersonal behavior. This course is predicated on the belief that our social interactions are determined by what we believe we know about ourselves, other people, and the situations in which we encounter them. Topics to be covered include: Attribution, person perception, stereotyping, attitudes, the self, and social memory.

630. Rorschach and Projectives. Three semester hours.

Students learn to administer and interpret the Rorschach, using the Comprehensive System. Projective procedures involving drawing, storytelling, sentence completion, etc., are also reviewed.

635. Advanced Behavioral Assessment and Intervention. Three semester hours.

Founded on a decision-making and accountability model, this course provides training in varied methods of assessment for the purpose of obtaining behavioral information for identification and understanding problem behaviors, evaluating intervention models and for the measurement of progress. Emphasis is placed on a systematic process to collect data to translate assessment results into decisions regarding service delivery and to evaluate the outcomes of the services provided.

661. Organizational Change and Improvement. Three semester hours. (Cross-listed with Mgt 594)

This course will examine the principles of organizational change and the scientific knowledge base underlying the major models and theories of organizational change and improvement. Particular attention will be given to models and practices of continuous organizational improvement and how such models relate to current knowledge and theory.

670. Multivariate Statistics. Three semester hours.

This course, a Graduate School approved level IV research tools course, provides a conceptual introduction, as well as computational and computer competence, in modern multivariate procedures. Topics include multiple regression, discriminant function analysis, analysis of covariance, multiple analysis of variance, item analysis, cluster analysis, factor analysis, and canonical correlation. Applications to measurement and test construction are emphasized. Prerequisite: Level I-III research tools courses or equivalent or permission of instructor.

671. Advanced Tests and Measurements. Three semester hours.

This course is designed to: (1) introduce students to modern and classical test theories, the concepts and the techniques, including test construct, scaling, modern and classical reliability theories, validity, modern and classical item analysis techniques, equating and test score interpretation; (2) provide students with knowledge about how a psychological or educational test is developed; (3) provide students with knowledge about strengths and limitations of psychological and educational tests; (4) provide students opportunities to discuss technical issues in test development and to practice their knowledge through projects.

675. Seminar in Advanced Topics in Educational Psychology. Three semester hours.

This course will provide students with the opportunity to discuss the structure of the discipline of educational psychology and understand professional and career issues and trends in a seminar format.

679. Program Evaluation. Three semester hours.

This course will emphasize both the practical and theoretical issues involved in the planning, execution, and interpretation of program evaluations. Prerequisites: Psy 612 or 572 or equivalent or permission of instructor.

680. Apprenticeship. Three to six semester hours.

This course is intended for students who have completed most of their coursework in the educational psychology doctoral program. Students will be placed in supervised work settings which provide an opportunity for students to apply knowledge and learn new skills. Apprenticeship sites may be on-campus or off-campus, paid or unpaid. Off-campus sites include government agencies, industry, higher education, public education, or other appropriate settings. A written agreement between the student, academic supervisor, on-site supervisor, and the sponsoring agency specifying the requirements for the apprenticeship will be required. Apprenticeship students will be expected to complete at least 150 hours on-site during the semester, although this requirement may be increased, depending upon the site and the student. Prerequisite: Psy 625 and Psy 626 or consent of instructor.

681. Intermediate Statistics. Three semester hours.

This course, a Level III research tools course, will emphasize the understanding of intermediate level statistical concepts and their application to the social sciences and education. Content will include one-way, factorial, and repeated measures analysis of variance, simple analysis of covariance, and advanced correlational methods, bivariate regression and an introduction to multiple regression, selected nonparametric methods, and introduction to multivariate analysis of variance. Students will be required to use computational software to assist in the analysis and interruption of data. Prerequisites: Level I and Level II research tools or equivalent or permission of instructor.

689. Independent Study. One to three semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisites: Consent of department head.

691. Clinic Practicum in Psychology. Three semester hours.

This course consists of supervised experience in psychological settings under the supervision of a licensed psychologist. Graded on a (S) satisfactory or (U) unsatisfactory basis. Prerequisite: Consent of instructor.

695. Research Methodology. Three semester hours. (Same as Coun/EdAd/ElEd/HPE/HiEd 695)

An overview of research methodology including basic concepts employed in quantitative and qualitative research methods. Includes computer applications for research. Meets requirements for a Level I research tool course. Prerequisite: Doctoral status or consent of the instructor.

718. Doctoral Dissertation. Twelve semester hours.

Doctoral dissertations must be acceptable to the student's advisory committee and the Dean for Graduate Studies and Research on a problem in the area of his specialization. To be acceptable, the dissertation must give evidence that the candidate has pursued a program of research, the results of which reveal superior academic competency and significant contribution to knowledge. Graded on a (S) satisfactory or (U) unsatisfactory basis.

790. *Internship in School Psychology*. Three to six semester hours.

This course consists of supervised experience in psychological settings under the supervision of a licensed or certified school psychologist. Graded on a (S) satisfactory or (U) unsatisfactory basis. Prerequisite: Consent of instructor.

791. *Internship in Psychology*. One to twelve semester hours.

This course consists of supervised experience in psychological settings under the supervision of a licensed psychologist. Graded on a (S) satisfactory or (U) unsatisfactory basis. Prerequisite: Consent of instructor.

Programs of Graduate Work in Special Education Master of Arts, Master of Science, and Master of Education in Special Education

The Department of Psychology and Special Education offers three graduate degrees in Special Education: the Master of Arts in Special Education, Master of Science in Special Education, and Master of Education in Special Education. Programs of graduate work may be planned according to the interests of the student and to meet the degree requirements.

Graduate Minor in Special Education

Minors in special education on the master's degree are available. A minor consists of a minimum of 12 hours in the area of special education. Comprehensive minors in special education are available for doctoral degree students majoring in supervision, curriculum and instruction, educational administration, counseling, psychology, and related areas.

Admission

In addition to meeting the general university requirements for admission to Graduate Studies, applicants to the master's degree program in special education must:

- 1. Have a grade point average of at least "B" (3.00) in all advanced or graduate special education courses taken;
- 2. Have a satisfactory background in education, psychology, or related areas;
- 3. Have all deficiencies removed prior to admission to the program;
- 4. Submit three letters of recommendation;
- 5. Submit a statement of goals; and
- 6. Submit scores for the quantitative, verbal, and writing sections of the GRE. (Undergraduate seniors who plan to apply for graduate training should arrange to take the GRE during their senior year.)

In addition, applicants may submit for departmental review additional materials or a portfolio to support their application, including items such as awards, certificates of merit, examples of innovative program/curriculum development, publications, and a resume. Students seeking admission will be required to have approval of the department's graduate faculty.

Degree Requirements

For the master's degree programs in Special Education, both thesis and nonthesis options are available. The following are examples of typical tracks:

Master of Education and Master of Science in Special Education (with standard generic certification)

Required special education course: SpEd 595

Core courses: SpEd 520, 553, 580, and Psy/SpEd 535

Methods: SpEd 582 and 584

Electives: Two from remaining special education courses.

Three electives from outside the major.

Master of Education and Master of Science in Special Education (without certification)

Required special education course: SpEd 595

Core courses: SpEd 520, 553, 580, and Psy/SpEd 535 Three other graduate-level special education courses.

Four electives from outside the major.

Master of Education and Master of Science in Special Education (educational diagnostician professional certification)

Required special education courses: SpEd 574 and 595

Core courses: SpEd 520, 553, 580 and Psy/SpEd 535 Two graduate-level courses: SpEd 586 and Psy/SpEd 697

Two graduate-level special education courses from: SpEd 524, 526, 540

Four courses from outside the major: Psy 691, 572, 573, and 635

Master of Arts in Special Education (without certification)

Four core courses: SpEd 520, 553, 580 and Psy/SpEd 535

Two from characteristics: SpEd 524, 526, 540

Three courses from outside major

Nine hours of resarch (Psy/SpEd 697 and SpEd 518—6 semester hours)

Master of Science in Special Education (with standard generic certification)

Core courses: SpEd 520, 553, 580, and Psy/SpEd 535

Two from characteristics: SpEd 524, 526, 540

Two from methods courses: SpEd 582, 584, 586

One elective from Psy/SpEd

Nine hours of research (Psy/SpEd 697 and SpEd 518—6 semester hours)

Master of Arts in Special Education (educational diagnostician professional certification)

Core courses: SpEd 520, 553, 580 and Psy/SpEd 535 Two from characteristics: SpEd 524, 526, 540

Four courses of assessment and evaluation: Psy/SpEd 572 and 573; SpEd 574; Psy 635

One methods course SpEd 586

Practicum: Psy 691

Nine hours of research: (Psy/SpEd 697 and SpEd 518—6 semester hours)

In addition to the course requirements, students must satisfactorily complete a comprehensive examination prior to graduation. Application to take the comprehensive examination should be submitted upon completion of 18 hours in Special Education. Comprehensive examinations are scheduled once each fall and spring semester through the special education secretary.

Students will be approved for graduation and the degree after they have completed all degree requirements satisfactorily and been approved by The Graduate Committee of the department and The Graduate School.

Professional Certificate

- 1. General Requirements
 - a. Admission to Graduate School
 - b. Admission to the Teacher Education Program
 - c. Two years teaching experience
- 2. Preparation Requirements for Educational Diagnostician
 - a. Research SpEd 595 or SpEd 518

- b. Knowledge of Students with Disabilities SpEd 520, SpEd 524 or 526; 540
- c. Knowledge of Psychoeducational and other Diagnostic Procedures

SpEd/Psy 572

SpEd/Psy 573

SpEd/Psy 574

Psy 635

- d. Knowledge of Learning Theory SpEd 553 and Psy 535/SpEd 535
- e. Knowledge of Instructional Modification (Remediation, Techniques, and Ma-

SpEd 580 and one from: SpEd 582, 584, 586

- f. Practicum Psy 691
- g. Research Psy/SpEd 697

Standard Certificate

- 1. General Requirements
 - a. Admission to Graduate School
 - b. Admission to the Teacher Education Program
- 2. Preparation requirements in the area of Generic Special Education: SpEd 520, Psy/ SpEd 535, SpEd 553, 580, 582 and 584.
- 3. Preparation requirements in the area of Severely and Profoundly Handicapped:
 - a. Valid Teaching Certificate
 - b. SpEd 520 and SpEd 580 plus two years teaching experience with S/PH.
- 4. Preparation requirements as Supervisor of Special Education:
 - a. Hold a regular Professional Certificate
 - b. Hold a minimum of one provisional certificate in special education.

Note: The Department reserves the right to suspend from the program any student who, in the judgment of a duly constituted departmental committee, does not meet the professional expectations of the field.

Graduate Courses

Special Education (SpEd)

518. Thesis. Six semester hours.

This conference course introduces the candidate for the Master of Arts or Master of Science (Option I) degree to the theories and techniques of educational and psychological research and leads to the completion and acceptance of the thesis. Graded on a (S) satisfactory or (U) unsatisfactory basis.

520. Introduction to Exceptional Children. Three semester hours.

The purpose of this course is to orient teachers to the characteristics and learning differences of pupils with disabilities. It includes training in skills of informal assessment and a survey of instructional techniques for pupils with disabilities. It is designed to train students in the policies and procedures of placing students in special programs, developing individualized educational programs in these programs, as well as placement within the least restrictive alternatives.

524. Characteristics of Students with Mild Disabilities. Three semester hours.

The course examines the characteristics of students identified as having emotional/ behavior disorders, learning disabilities, and mild mental retardation.

526. Characteristics of Students with Moderate Disabilities. Three semester hours.

The course examines the characteristics of students identified as having autism spectrum, clinical mental retardation, and other disabling conditions.

529. *Workshop*. Three to six semester hours.

This course affords the opportunity to examine basic concepts, issues, problems, and information in psychology and special education. Graded on a (S) satisfactory or (U) unsatisfactory basis.

535. Applied Behavior Analysis. Three semester hours.

A study of operant conditioning and reinforcement principles as they apply to describing, explaining, predicting, and developing human behavior in socially desirable ways, so that benefits occur in individuals in family, school, work, and community settings.

540. Autism: Assessment and Intervention. Three semester hours.

This is an introductory course of school-aged students with pervasive developmental disorders. The course will examine assessment, characteristics and school training for individuals with suspected pervasive developmental disorders.

553. Cognition, Learning and Development. Three semester hours.

This course is designed for professionals, providing learning and transition services to students with special needs. Consideration is given to cognitive abilities, cognitive styles, information processing, memory, and development. Prerequisites: SpEd 520.

563. Clinical Teaching of Emotionally Disturbed. Three semester hours.

This course is designed to explore various psycho-educational techniques of teaching children and adolescents with emotional/behavioral disorders, interpersonal interaction between teachers and disturbed students, the use of group factors in the teaching-learning process, and selection of appropriate teaching methods and materials for use with disturbed students.

564. Psycho-Education Techniques of Managing Behaviors. Three semester hours.

This course explores strategies for managing maladaptive behaviors. Specifically, the course addresses crisis intervention strategies and methods for the prevention and amelioration of maladaptive behavior.

572. Psychological Assessment and Measurement. Three semester hours. (Same as Psy 572)

This course is the first required course in the sequence of assessment courses and is planned to provide a framework for the development of assessment practices. Attention will be given to issues of measurement, identifying appropriate sources of diagnostic information, reliability, validity, identifying and selecting test instruments, conducting the assessment process in an ethical and considerate manner, interpreting norm-references and criterion-referenced test scores. Prerequisite: Graduate standing or SpEd 520.

573. Assessment I. Three semester hours. (Same as Psy 573)

The course will provide both a theoretical background and practical experience with the use of instruments measuring cognitive/intellectual abilities from early child-hood to adulthood. The student will receive both classroom instruction and supervision in the selection, administration, scoring, and interpretation of these instruments. Computerized scoring and assessment will also be used as a part of the assessment process. Prerequisites: Prior enrollment in Psy/SpEd 572 or consent of instructor.

574. Appraisal of Exceptional Children. Three semester hours.

Explores a variety of tests designed to assess the learning abilities of students. Tests designed for measuring achievement, language, behavioral/emotional, sociological and vocational functioning will be examined. Prerequisites: SpEd 520, Psy/SpEd 572, SpEd 524 and SpEd 526.

580. Adaptive Behavior in Exceptional Children. Three semester hours.

This course is designed to provide students with principles of infant/child development, assessment and methods in the areas of perceptual-motor, self-help and social behavior. The role of parents will be examined and strategies for parent-professional involvement will be prescribed. Prerequisite: SpEd 520, 524 and 526.

582. Methods of Teaching the Mildly Handicapped: Oral and Written Expression. Three semester hours.

This course will provide students with methods of assessment and remediation in oral language, handwriting, spelling and conceptual writing. Approaches to remediation will be presented and students will be enabled to provide appropriate strategies to meet a wide range of individual differences at different age levels. Prerequisites: SpEd 520 or one from SpEd 547, 561, or 566.

584. Methods of Teaching the Mildly Handicapped: Reading and Math. Three semester hours.

This course will provide students with an understanding of the nature of reading and arithmetic and of the problems faced by children and adolescents with a wide array of disabling conditions. Major approaches to remediation in reading and math will be reviewed enabling students to develop diagnostic-prescriptive programs. Prerequisites: SpEd 520 or one from SpEd 547, 561, or 566.

586. Inclusion: Strategies and Accommodations. Three semester hours.

Characteristics of students with mild and moderate disabilities are examined. Collaboration models and accommodation strategies are presented for use from early childhood through middle school grades. Prerequisites SpEd 520, 524, and 526.

595. Research Literature and Techniques. Three semester hours.

This course will provide a study of the research literature in the student's field of major interest and develop an understanding of research techniques used in this field.

597. Special Topics. One to four semester hours.

Organized class. May be repeated when topics vary.

Social Work

Brenda Moore, Interim Head Hugh Clark, MSW Program Director Henderson Hall; 903-468-8100

Program of Graduate Work Master of Social Work

The Master of Social Work program at Texas A&M-Commerce is designed to meet the educational needs of social workers in northeast Texas. The program is fully accredited with the Council on Social Work Education (CSWE). All MSW graduates are eligible to sit for the State of Texas LMSW licensure testing. The program follows an advanced generalist practice model with an emphasis on providing skills needed to work in rural and increasingly urban communities. Courses in the MSW program are offered evenings and weekends to accommodate working students.

Admission

In addition to the general requirements for admission to the Graduate School, those seeking admission to the MSW Program must submit a packet of admissions materials, available either by contacting the Social Work Department at 903-468-8100 or by going online to the department's website at www.tamu-commerce.edu/socialwork/programs-master.htm to download it directly. The completed documents may be submitted to the Graduate School at the address above or to the Department of Social Work at P.O. Box 3011, Commerce, TX 75429-3011. Components of the admissions materials include:

- 1. An autobiographical statement. A description of what would be contained in such a statement is included in the admissions packet.
- 2. A resume or vita of educational and occupational experiences.
- 3. Three references using the forms included in the admissions packet, preferrably including one reference from an undergraduate professor or a former supervisor from a paid or volunteer social services agency.

Depending on their undergraduate degree, students admitted to the MSW program will receive either Foundation Admission or Advanced Standing Admission. Advanced Standing is reserved for those who hold a Bachelor of Social Work (BSW) undergraduate degree from a CSWE-accredited institution. Fewer hours are required of students who receive advanced standing admission.

The MSW program will admit students who show the greatest capacity to complete graduate-level work and become effective social work practitioners. The program is committed to recruiting and instructing students who represent a diverse population.

Degree Requirements

- 1. A 3.0 graduate GPA (including a B or better in core social work courses).
- 2. An acceptable score on the Social Work comprehensive examination.
- 3. Submission of a Graduation Application to the Registrar's Office by the deadline published each semester in the *Schedule of Classes*.

Program Scope and Sequence

The Master of Social Work program requires 37 to 62 hours of coursework. Thirty seven-hours are required for advanced-standing students and sixty-two hours are required for foundation program students.

Foundation Courses

SWK 501—Generalist Practice with Individuals, Families and Small Groups

SWK 503—Generalist Practice with Groups, Organizations and Communities

SWK 511—Human Behavior in the Social Environment I

SWK 513—Human Behavior in the Social Environment II

SWK 521—Foundations of Social Welfare Policy

SWK 531—Research for Practice

SWK 541—Social Justice for Oppressed Populations

*SWK 553—Field Foundations Practicum (a total of 4 hours is required)

Concentration Courses

SWK 505—Advanced Generalist Practice (AGP) with Individuals

SWK 506—Advanced Generalist Practice with Families

SWK 507—Organizations, Communities and Social Policy

SWK 508—Social Work Supervision and Administration

SWK 509—Advanced Generalist Practice with Groups

SWK 510—Clinical Practice in Mental Health

*SWK 555—Advanced Generalist Practice Field Practicum I (a total of 4 hours is required)

**SWK 557—Advanced Generalist Practice Field Practicum II (a total of 2 hours is required)

*SWK 559—Advanced Gernalist Practice Field Practicum III (a total of 4 hours is required)

SWK 595—Research Literature and Techniques

SWK 590—Integrative Seminar in Advanced Generalist Practice

SWK 597—Elective

*Includes a one hour weekly seminar and 240 hours at a field agency.

**Includes a one hour weekly seminar and 160 hours at a field agency.

Graduate Courses

Social Work (SWK)

501. Generalist Practice with Individuals, Families and Small Groups. Three semester

This practice theory course provides students with an understanding of and experience with social work practice skills and knowledge within the context of a strengths perspective. Students will learn problem-solving skills, empowerment-based practice skills, relationship building and data gathering skills as they relate to all client systems, but particularly regarding individuals, families and small groups. Content on diversity and working in rural environments with populations at risk will be presented throughout the course. Role-play, videotapes, and written assignments will be used. Prerequisites: Admission to the MSW program.

503. Generalist Practice with Groups, Organizations and Communities. Three semester hours.

This practice theory course builds on the Generalist Practice with individuals and families extending the concepts of empowerment based practice and the strengths perspective to client systems such as organizations and communities. Practice skills will be obtained through written assignments, role-plays, and videotapes. The relationships between communities, organizations and at risk populations are infused throughout the course.

505. Advanced Generalist Practice with Individuals. Three semester hours.

This direct practice theory course provides students with advanced theories and models in working with individuals with special emphasis on rural issues as these affect the individual.

506. Advanced Generalist Practice with Families. Three semester hours.

This direct practice theory course provides students with advanced theories and models in working with family systems. Special emphasis is placed on rural issues as these affect the family.

507. Organizations, Communities and Social Policy. Three semester hours.

This theory course provides students with those advanced theory and practice skills necessary for independent practice and intervention with organizations and communities. Content relative to rural communities and organizations is emphasized.

508. Social Work Supervision and Administration. Three semester hours.

This practice course provides students with theories and skills needed for direct supervision of line workers, and middle and upper management skills in human service organizations. The course addresses relevant theories and models of supervision and administration. The course identifies key skills needed to perform the functions of supervision and administration in complex organizations. Special attention is given to resource development in underserved rural areas.

509. Advanced Generalist Practice with Small Groups. Three semester hours.

This direct practice theory course provides students with advanced group work theory and skills necessary to carry out social work interventions with small groups. The focus is on social group work with rural populations.

510. Clinical Practice in Mental Health. Three semester hours.

This course presents the Diagnostic and Statistical Manual (DSM) of Mental Disorders as a knowledge base for enhancing social worker's; understanding of individual biopsycholosocial functioning and (2) expands social worker's ability to use the DSM to work with at risk populations, across diverse settings, and with diverse mental health professionals. Specifically, the course is critical for social workers to learn how to perform comprehensive assessments and to devise effective interventions for clinically impaired populations. Additionally, the nomenclature is applicable across diverse contexts and multi-theoretical orientations. Ethical dilemmas inherent in categorizing and labeling with be highlighted along with cultural concerns in using a homogenous system of diagnostic classes. Prerequisites: All foundation curriculum requirements.

511. Human Behavior in the Social Environment I. Three semester hours.

This course is designed to provide first semester foundation students with an understanding of the biophysical, psychological, and social systems aspects of human development. Content in this course in human behavior covers interactions between individuals and their environments and between families and their environments. It covers the life span from conception through adolescence. Systems theory is the underlying context used to underpin all other major theories of individual and family development. In addition, the course addresses issues of diversity including ethnocentrism, racism, and physical/intellectual ability. Prerequisites: Introduction to Psychology and Introduction to Sociology.

513. Human Behavior in the Social Environment II. Three semester hours.

This course continues the same themes reflected in *Human Behavior I* i.e., it is also designed to provide foundation students with an understanding of the biophysical, psychological, and social systems aspects of human development. Content in this course covers the life span from young adulthood through the end of life. In addition, it addresses other issues of diversity including gender roles, sexism, and sexual orientation. Prerequisites: Introduction to Psychology and Introduction to Sociology.

521. Foundation of Social Welfare Policy. Three semester hours.

This foundation course in social welfare policy introduces students to social policy development, social welfare institutions, and the historical and existing policies underpinning the development of social policy. Course content is designed to emphasize the effect of social policies on client systems at the micro, mezzo, and macro levels. Specific attention will be given to the interaction between social welfare policies and at risk populations. No prerequisites.

531. *Research for Practice*. Three semester hours.

The scientific method in social work practice is presented. The methods of empirical research for knowledge building, the role of research in theory construction, research designs and data analysis, and methods of practice and program evaluation are introduced. Students learn to apply qualitative and quantitative research methods to the problems of social work practice.

541. Social Justice for Oppressed Populations. Three semester hours.

This course provides students with knowledge about social work with diverse populations, mechanisms of social oppression, and social work's efforts to bring about social and economic justice. No prerequisites.

553. Foundation Field Practicum. Four semester hours

This field practicum provides students with experiential opportunities designed to

integrate theory of advanced generalist practice with client systems in an agency setting. Students are required to complete a minimum of 260 clock hours and attend a weekly field seminar. Prerequisites: SWk 501, 511, 521, 541.

555. Advanced Generalist Practice Field Practicum I. Four semester hours.

This field practicum provides students with experiential opportunities designed to integrate theory and advanced generalist practice with client systems in an agency setting. Students are required to complete a minimum of 240 clock hours and attend a weekly field seminar

557. Advanced Generalist Practice Field Practicum II. Two semester hours.

This concurrent field practicum provides students with experiential opportunities designed to integrate theory and advanced generalist practice with client systems in an agency setting. Students are required to complete a minimum of 160 clock hours and attend a weekly field seminar. Prerequisite: All foundation curriculum requirements.

559. Advanced Generalist Practice Field III. Four semester hours.

This concurrent advanced field practicum provides students the opportunity apply theories, knowledge, and skills learned within the classroom within an agency setting with individuals, families, groups, organizations, and communities. A total of 240 clock hours are required as well as attendance at a weekly field seminar. Prerequisites: All foundation curriculum requirements.

590. Integrative Seminar in Advanced Generalist Practice. Three semester hours.

This seminar provides the student with the opportunity to integrate content from all graduate course work. The student applies the knowledge, values and skills gained in the graduate program to a specific practice intervention undertaken in the concurrent field practicum placement. Critical thinking skills, self-assessment, and practice valuation requirements are developed in a major case study paper.

595. Research Literature and Techniques. Three semester hours.

This course provides students with information on advanced techniques of practice and program assessment. Both qualitative and quantitative research designs are taught. Evaluation research design, instrument selection and development and techniques of data analysis are addressed. Ethical and behavioral issues in evaluation research are presented. Development of an evaluation research design based on a practicum assignment is required. Prerequisites: SWk 531 or admission to the advanced standing program or a basic research course.

597. Special Topics. Three semester hours.

Topics vary and have included the following: Rural Social Work with the Elderly, Progressive Practices in Developmental Disabilities, Spirituality and Social Work, Child Welfare and Issues in Addiction.

589. Independent Study. One to three semester hours.

Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite: Consent of department curriculum committee and department head.

Officers and Faculty

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Graduate Council

The Graduate Council consists of four elected members from each of the three colleges: Arts and Sciences, Business and Technology and Education and Human Services. In addition, one faculty member from each college is appointed by the Dean of Graduate Studies and Research in consultation with the dean of the respective college and two graduate students are elected by the graduate student body.

The Dean of Graduate Studies and Research is an ex officio member and serves as chairman of the Graduate Council. The Assistant Dean is an ex officio member and serves as vice chair.

The Graduate Council formulates procedures related to all graduate programs subject to the policies, rules and regulations of the Texas A&M University System.

Graduate Council Members

Name	Term Expires
College of Arts and Sciences	
Elected	
Dr. Hasan Coskun	2008
Dr. Derek Royal	2009
Dr. John Hanners	2007
Dr. Ben Jang	2008
Appointed	
Dr. Jeff Kopachena	2007
College of Business and Technology	
Elected	
Dr. Chris Myers	2008
Dr. Janet Walker	2008
Dr. Dayle Yeager	2009
Appointed	
Dr. Steven Shwiff	2008
College of Education and Human Services	
Elected	
Dr. Cynthia Harr	2007
Dr. Chester Robinson	2009
Dr. Sue Espinoza	2007
Dr. Mary Beth Sampson	2008
Appointed	
Dr. Harry Fullwod	2009

Graduate School

Dr. Allan Headley, Dean of Graduate Studies and Research Dr. Jon Travis, Assistant Dean of Graduate Studies and Research Doctoral Student Representative

Master's Student Representative

College of Arts and Sciences

Graduate Faculty

Agricultural Sciences

C. Pat Bagley, Ph.D.

Professor and Head of Agricultural Sciences

B.S., M.S., Louisiana State University; Ph.D., Virginia Tech University. Senior Member.

Joseph Bouton, Ph.D.

University of Georgia Professor Emeritus

B.S., Mississippi State University, M.S., Ph.D., University of Florida. Senior Visiting Scholar

David Crenshaw, Ph.D.

Professor of Agricultural Sciences (AnS)

B.S., M.S., Ph.D., University of Missouri. Associate Member.

Gerald Evers, Ph.D.

Texas A&M University Agricultural Research and Extension Center B.S., M.S., Ph.D., Texas A&M University. Visiting Associate Scholar.

Arthur Goetsch, Ph.D.

Langston University, Research Leader

B.S., Illinois State University; M.S., University of Missouri; Ph.D., New Mexico State University. Senior Visiting Scholar.

Steven P. Hart, Ph.D.

Langston University, Research Scientist

B.S., M.S., Texas A&M University; Ph.D., Virginia Polytechnic. Visiting Associate Scholar.

James J. Heitholt, Ph.D.

Texas A&M University Agricultural Research and Extension Center

B.S., Western Illinois University; M.S., University of Missouri; Ph.D., University of Kentucky. Visiting Associate Scholar.

Bryon Clark Housewright, Ph.D.

Assistant Professor of Agricultural Sciences

B.S., Texas Tech University; M.S., Ph.D., University of Tennessee. Associate Member.

Galen Morgan, Ph.D.

Assistant Professor, Texas A&M University

B.S., M.S., Texas A&M University; Ph.D., University of Wisconsin. Associate Visiting Scholar.

Lloyd Nelson, Ph.D.

Texas A&M University Research and Extension Center

B.S., Wisconsin State University at River Falls; M.S., North Dakota State University; Ph.D., Mississippi State University. Visiting Associate Scholar.

James C. Read, Ph.D.

Texas A&M University Research and Extension Center

B.S., M.S., Ph.D., Texas A&M University. Visiting Associate Scholar.

James A. Reinert, Ph.D.

Texas A&M University Research and Extension Center

B.S., Oklahoma State University; M.S., Ph.D. Clemson University. Visiting Associate Scholar.

John J. Sloan, Ph.D.

Texas A&M University Research and Extension Center

B.S., University of Illinois; M.S., Texas A&M University; Ph.D., Oklahoma State University. Visiting Associate Scholar.

Robert Williams, Ph.D.

Assistant Professor of Agricultural Sciences

B.S., M.S., Texas A&M University-Commerce; Ph.D., Texas Tech University. Associate Member.

Art

Barbara Frey, M.F.A.

Professor of Art

B.F.A., Indiana University; M.F.A., Syracuse University. Associate Member.

Gerard D. Huber, M.F.A.

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Mayo Professors

Dr. Ann K. Moseley, Professor, Literature and Languages Dr. Richard Fulkerson, Professor, Literature and Languages 2000 2005

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1995	Dr. Dev R. Chopra, Professor, Physics	
1995 & 1997	Dr. James A. Grimshaw, Professor, Literature and Languages	
2000	Dr. Augustine Arize, Professor, Business Administration and	
Management Information Systems		
2003	Dr. Kenneth Ashley, Professor, Chemistry	
2006	Dr. Wayne Linek, Professor, Elementary Education	

Professors Emeriti

1070	
1978 1979	Dr. Otha Spencer, Professor, Journalism and Graphic Arts
1979	Dr. Beatrice Murphy, Professor, Educational Media and Technology Dr. Arthur M. Pullen, Professor, Biology
1983	Dr. Bradley Stuart Chilton, Professor, Educational Administration
1984	Dr. Paul H. Roosevelt, Professor, Speech and Hearing
1987	Dr. William L. Dorries, Professor, Economics
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1991	Dr. John P. McQuary, Professor, Counseling and Guidance
	Dr. Harold D. Murphy, Professor, Counseling and Guidance
1994	Dr. Dorys Grover, Professor, Literature and Languages
1994	Dr. Johnye C. Sturcken, Professor, Literature and Languages
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	Dr. R. Paul Johnson, Professor, Counseling and Guidance
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1995	Dr. Kenton E. Ross, Professor, Accounting
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1998	Dr. Ralph Goodwin, Professor, History
1998	Dr. Frank Lutz, Professor, Educational Administration
1999	Dr. Suzanne McCall, Professor, Marketing and Management
1999	Dr. Donald Reynolds, Professor, History
1999	Dr. Donald Hakala, Professor, Economics and Finance
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2000	Dr. A. Lynn Turner, Professor, Educational Administration
2000	Dr. Max E. Jobe, Professor, Educational Administration
2000	Dr. Harry E. Wade, Professor, History
2000	Mr. Joe Fred Cox, Assistant Professor, History
2001	Dr. Maximino Plata, Professor, Psychology and Special Education
2001	Dr. Billy R. Webb, Professor, Sociology
2003	Dr. Anthony J. Buckley, Professor, Theatre

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2004	Dr. Fred Tarpley, Professor, Literature and Languages
2004	Dr. Jerry B. Hutton, Professor, Psychology and Special Education
2004	Dr. Edward Seifert, Professor, Educational Administration
2004	Dr. Ruth Ann Stevens, Professor, Educational Administration
2005	Dr. Morag Harris, Associate Professor, Counseling
2006	Ms. Georgia Anne Bomar, Associate Professor, Theatre

Other Emerti

1982	Mr. F.H. McDowell, President Emeritus
1995	Dr. Trezzie A. Pressley, Dean Emeritus, College of Business and Technology
1997	Dr. Jerry D. Morris, President Emeritus
2002	Dr. Donald Coker, Provost Emeritus

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