## The University of Louisiana at Monroe (USPS 395-480) Monroe, Louisiana

## Catalog of Graduate and Professional Programs 2007-2008

EFFECTIVE WITH THE 2007 FIRST SUMMER SESSION THROUGH THE 2008 SPRING SEMESTER

The University of Louisiana at Monroe Bulletin Volume LXXII, Number 1, April 2007

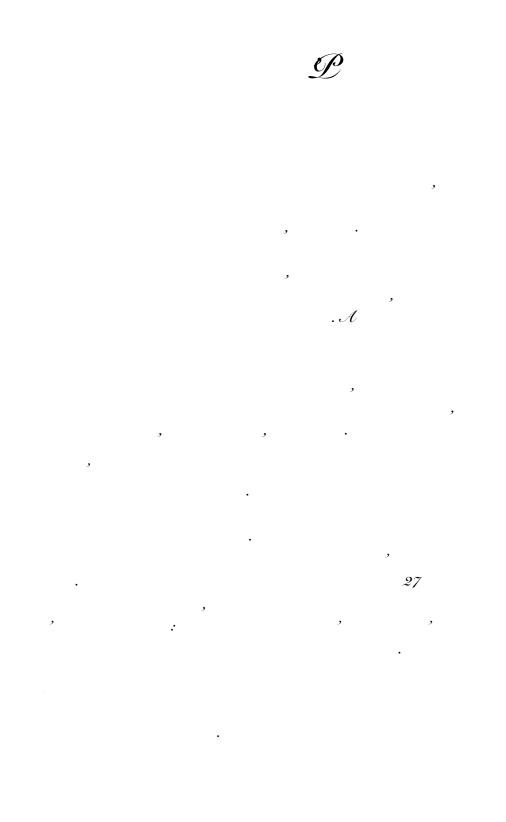
Published by The University of Louisiana at Monroe 700 University Avenue, Monroe, Louisiana 71209, Second Class postage paid at Monroe, Louisiana

The provisions of this catalog do not constitute an offer for a contract which may be accepted by students through registration and enrollment in the University. The University reserves the right to change any provision or requirement, including fees, at any time with or without notice. The University further reserves the right to require a student to withdraw from the University for cause at any time.

Failure to read this catalog does not excuse students from the requirements and regulations described herein.

The University of Louisiana at Monroe adheres to the principle of equal educational and employment opportunity without regard to race, color, creed or religion, national origin, sex, marital or parental status, age, disability, veteran status, or political belief. This policy extends to all programs and activities supported by the University.

The University of Louisiana at Monroe, an institution of higher learning, maintains compliance with the requirements and regulations set forth by the Family Educational Rights and Privacy Act, as amended June 17, 1976. The Family Educational Rights and Privacy Act Compliance Guidelines are available to parents and students in the Office of Student Affairs, Division of Information Services, Registrar, and Student Government Association.



Fields of Study	.47
Agriculture	
Biology	.50
Chemistry	.50
Communication	51
Criminal Justice	51
English	.52
Family and Consumer Sciences	
Foreign Languages	.53
Geosciences	.54
Gerontology, Sociology and Political Science	.54
History	
Mathematics and Physics	
Social Work	.57
School of Visual and Performing Arts	.57
Art	.57
Music	57
Theatre	.59
Aviation	62
Business Administration	62
Computer Science	63
Curriculum and Instruction	
Doctor of Education	.7

## **UNIVERSITY CALENDAR**

r

7 11.668 0 TD

# 2008

								-			-	-											
January	6 13 20	14 21	1 8 15 22	2	3 10 17 24	F 4 11 18 25	S 5 12 19 26	February	3 10 17	4 11 18	19	6 13 20	7 14	F 1 15 22 29	S 2 9 16 23	March		3 10 17	4 11 18	5 12 19	6 13 20	F 7 14 21 28	1 8 15 22
April	6 13 20	21	1 8 15 22	2 9 16	17 24	F 4 11 18 25	S 5 12 19 26	May	4 11 18		6 13 20		1 8 15 22	F 2 9 16 23 30		June	S 1 8 15 22	M 2 9 16	T 3 10 17 24	W 4 11 18 25		F 6 13 20 27	7 14 21
July	6 13 20	14 21	1 8 15 22	2 9 16	17 24		S 5 12 19 26	August	3 10 17	4 11 18	19	6 13 20	7 14 21	F 1 15 22 29		September	7 14 21	M 1 15 22 29	2 9 16 23		T 4 11 18 25		S 6 13 20 27
October	5 12 19	13 20	7 14 21	W 1 15 22 29		24	S 4 11 18 25	November	S 9 16 23 30	3 10 17	4 11 18	5 12 19	6 13 20	F 7 14 21 28	1 8 15 22	December		1 8 15				F 5 12 19 26	

# THE ACADEMIC YEAR, 2007-2008 SUMMER TERM, 2007

## FIRST SUMMER SESSION, 2007

<b>MAY</b> 28 30	Mon Wed	Memorial Day Holiday Residence halls open for students
JUNE		
4	Mon	Classes begin, 7:30 A.M.
5	Tue	Final date for adding courses for credit or making course changes
5	Tue	Final date for making application for comprehensive examination and application for degree for August commencement
11-15	M-F	Preliminary examinations for doctoral students
14	Thu	Final date for removing "I" grades
15	Fri	Final date for filing field study, thesis, or dissertation with Graduate Advisory Committee
19	Tue	Final date for dropping a course or resigning from the University; a "W" grade is issued
28	Thu	Final Examinations
JULY		
2	Mon	Final date for filing field study, thesis or dissertation with Graduate Studies and Research
2	Mon	Grades due on-line before 10:00 a.m., Term ends 12:00 noon
4	Wed	Independence Day Holiday

## **SECOND SUMMER SESSION, 2007**

JULY		
9	Mon	Classes begin, 7:30 A.M.
10	Tue	Final date for adding courses for credit or making course changes
11-17	W-T	Comprehensive examinations for graduate students
19	Thu	Final date for removing "I" grades
24	Tue	Final date for dropping courses or resigning from the University; a "W" grade is issued

#### AUGUST

2	Thu	Final Examinations
6	Mon	Grades due on-line before 10:00 A.M.
11	Sat	Commencement, 2:00 P.M.
		Term ends, 12:00 Midnight

NOTE: The cafeterias, dining halls, and residence halls will be closed during the Labor Day, Thanksgiving, Mardi Gras, Spring, and Fourth of July holidays and other periods when classes are not in session.

## FALL SEMESTER, 2007

#### AUGUST

13-17 17 20 22	M-F Fri Mon Wed	Faculty Development Activities Residence halls open for students Classes begin
22	vved	Final date for adding courses for credit or making course changes
SEPTEME	BER	
3 4	Mon Tue	Labor Day Holiday Final date for making application for comprehensive examination and
14	Fri	application for degree for December commencement Final date for removing "I" grades
OCTOBER	र	
3-5	W-F	Mid-Term Grading
9	Tue	Final date for filing field study, thesis, or dissertation with Graduate Advisory Committee
11,12	Th,F	Fall Holiday
15-19	M-F	Preliminary examinations for doctoral students
25	Thu	Final date for filing field study, thesis, or dissertation with Graduate Studies and Research
29	Thu	Final date for dropping courses or resigning from the University; a "W" grades issued
29-31	M-W	Comprehensive examination for graduate students
NOVEMB	ER	
1-2	Th,F	Comprehensive examination for graduate students
21-23	W-F	Thanksgiving holidays, Classes close at 1:00 p.m. on Wednesday
26	Mon	Classes resume, 8:00 A.M.
DECEMBI	ER	
3,4	M,Tu	Final Examinations
5	Wed	Student Study Day
6,7	Th, F	Final Examinations

- 11 Tue Grades due on-line before 8:00 a.m.
- 15 Sat Commencement, 2:00 p.m., Semester ends, 12:00 midnight
- 17 Mon University Offices closed

## **WINTERSESSION, 2007-2008**

#### DECEMBER

10	Mon	Classes begin
11	Tue	Final date for adding courses for credit or making course changes
21	Fri	Final date for dropping courses or resigning from the University; a "W"
		grades issued
24-31	M-M	Wintersession break (no classes)

#### JANUARY

1	Tue	New Year's Day (observed)
2	Wed	Classes resume
11	Fri	Final Examinations
15	Tue	Grades due on-line before 8:00 A.M.

NOTE: The cafeterias, dining halls, and residence halls will be closed during the Labor Day, Thanksgiving, Mardi Gras, Spring, and Fourth of July holidays and other periods when classes are not in session.

## **SPRING SEMESTER, 2008**

#### JANUARY

2 7-11 11 21 14 16 29	Wed M-F Fri Mon Mon Wed Tue	University Offices Open Faculty Development Activities Residence halls open for students Martin Luther King Day holiday Classes begin Final date for adding courses for credit or making course changes Final date for making application for comprehensive examination and application for degree for May commencement
FEBRUARY		
4-6	M-W	Mardi Gras holidays
7	Thu	Classes resume, 8:00 A.M.
8	Mon	Final date for removing "I" grades
MARCH		
3-5	M-W	Mid-term Grading
3-7	M-F	Preliminary examinations for doctoral students
7	Fri	Final date for filing field study, thesis or dissertation with Graduate Advisory Committee
21-28	F-F	Spring holiday
31	Mon	Final date for filing field study, thesis, or dissertation with Graduate Studies and Research
31	Mon	Classes resume, 8:00 A.M.
31	Mon	Comprehensive examinations for graduate students
APRIL		
1-4	T-F	Comprehensive examinations for graduate students
2	Wed	Final date for dropping courses or resigning from the University; a "W" grade is issued
MAY		
5,6	M,Tu	Final Examinations
7	Wed	Student Study Day
8,9	Th,F	Final Examinations
13	Tue	Grades due on-line before 8:00 A.M.
17	Sat	Commencement, 2:00 P.M. Semester ends, 12:00 Midnight

# SUMMER INTERSESSION, 2008

#### MAY 12 Mon Classes begin 13 Tue Final date for adding courses for credit or making course changes 19 Mon Final date for dropping courses or resigning from the University; a "W" grade is issued 27 Tue Final examinations 28 Wed Grades due on-line before 2:00 P.M.

NOTE: The cafeterias, dining halls, and residence halls will be closed during the Labor Day, Thanksgiving, Mardi Gras, Spring, and Fourth of July holidays and other periods when classes are not in session.

# SUMMER TERM, 2008

## **FIRST SUMMER SESSION, 2008**

MAY 26 27 28 29 30	Mon Wed Wed Thu Fri	Memorial Day Holiday Residence Halls open for students-1st session Classes begin-1st session Final date for adding courses for credit or making course changes Final date for making application for comprehensive examination and application for degree for August commencement
JUNE		
9-12	M-Th	Preliminary examinations for doctoral students
10	Thu	Final date for removing "I" grades-1st session
11	Wed	Final date for filing field study, thesis, or dissertation with Graduate Advisory Committee-1st session
12	Tue	Final date for dropping a course or resigning from the University; a "W" grade is issued
26	Thu	Final date for filing field study, thesis or dissertation with Graduate Studies and Research-1st session
26	Thu	Final Examinations
30	Mon	Grades due in on-line before 8:00 A.M. Term ends 12:00 Noon-1st session

## **SECOND SUMMER SESSION, 2008**

#### JULY

1 Tue Residence Halls open for students-2nd f -10 -11.5 Tce.75 0 TD (T)Tj 4.5 0 TD (ue)Tj 30 14 TD 49 **PreDr**(Mon}ive examination an49 0 Tguate Students

# **GENERAL INFORMATION**

PURPOSE/MISSION OF THE UNIVERSITY

of Trustees for State Colleges and Universities effective May, 1975. This Board's name was again changed on June 8, 1995 to the University of Louisiana Board of Trustees and in 1998 to the University of Louisiana System Board of Supervisors.

The Graduate School was established in 1961 to offer master's degrees. In the Fall of 1967 the Education Specialist degree was first offered and in 1983 the Specialist in School Psychology degree was added. The Graduate School established the Doctor of Philosophy degree in Pharmacy in December of 1967. In 1993 the Office of Research and Projects and the Graduate School were merged forming the Office of Graduate Studies and Research. This reorganization was implemented to more effectively support scholarly activities of faculty and students. In 1994, Northeast Louisiana University, in cooperation with Louisiana Tech University and Grambling State University, formed the Louisiana Education Consortium, to offer the Doctor of Education degree at each campus. In the Fall of 1996, the Doctor of Philosophy in Marriage and Family Therapy was first offered. On August 27 of 1999, the University officially changed its name to the University of Louisiana at Monroe.

ULM has students enrolled from every parish in Louisiana, along with many from other states and foreign countries.

### LOCATION

The University of Louisiana at Monroe's campus, one of the State's most attractive, is located in the eastern part of Monroe, a city whose metropolitan area population exceeds 100,000. Beautiful Bayou DeSiard flows through the 238-acre, tree-shaded site.

The city of Monroe is located mid-way between Shreveport, Louisiana and Vicksburg, Mississippi. It is readily accessible from all sections of Louisiana and neighboring states. The University is located on U.S. Highway 80, within four blocks of U.S. Highway 165 North and two miles of Interstate 20. Monroe Regional Airport, three miles east of the University, is served by Continental Airlines, and Northwest Airline/Northwest Airlink. Monroe city bus lines serve the University area.

Monroe's Civic Center, Strauss Playhouse, Masur Museum, West Monroe's Convention Center, and the local parks offer cultural and popular programs, including sports events of all kinds. The beautiful Ouachita River, Bayou DeSiard,

on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of the University.

As the Southern Association for Colleges and Schools' Principles of Accreditation requires, the University of Louisiana at Monroe annually assesses its programs of graduate study. The University is committed to the ongoing development of student learning assessment plans and the analysis and use of results.

Many of the departments and schools which offer graduate degrees are also accredited by specialized or professional accrediting agencies, including the **TECHNOLOGY FEE -** The Student Technology Fee shall be five dollars (\$5) per credit hour for up to 12 credit hours per semester. This fee is dedicated to the acquisition, installation, maintenance, and intelligent use of state-of-the-art technology solely for the purpose of supporting and enhancing student life and learning.

**ID FEE -** All students are required to obtain a permanent ULM Identification Card. A validation fee of \$10 each regular semester and a \$5 fee for each summer term will be charged. Students who resign from the University are expected to keep their ID cards for use upon returning. A \$10 fee will be assessed for a replacement card.

## COSTS

The University of Louisiana System Board of Supervisors may adjust tuition, fees, costs for dining plans and/or housing at any time without providing notice to students.

	Residents	Nonresidents							
	Tuition &	Tuition &	Nonresident						
	Required Fees	Required Fees	Fee	Total					
9 hours	\$1,679.70*	\$1,679.70	\$2,979.00	\$4,658.70					
8 hours	\$1,517.45	\$1,517.45	\$2,648.00	\$4,165.45					
7 hours	\$1,368.20	\$1,318.20	\$2,317.00	\$3,685.20					
6 hours	\$1,218.95	\$1,218.95	\$1,986.00	\$3,204.95					
5 hours	\$1,069.70	\$1,069.70	\$1,655.00	\$2,724.70					
4 hours	\$ 920.45	\$ 920.45	\$1,324.00	\$2,244.45					
3 hours	\$ 622.75	\$ 622.75	\$ 0.00	\$ 622.75					
2 hours	\$ 438.50	\$ 438.50	\$ 0.00	\$ 438.50					
1 hour	\$ 289.25	\$ 289.25	\$ 0.00	\$ 289.25					

## 2007 FALL AND SPRING SEMESTERS - GRADUATE STUDENTS

ADD  $5.00\ {\rm PER}\ {\rm CREDIT}\ {\rm HOUR}\ {\rm UP}\ {\rm TO}\ 560.00\ {\rm TOTAL}\ {\rm IF}\ {\rm TAKING}\ {\rm MORE}\ {\rm THAN}\ 9\ {\rm SEMESTER}\ {\rm HOURS}$ 

\*Full time graduate assistants will be granted a tuition waiver in the amount of \$1,115.00.

NOTE: The fees above do not include the parking decal fee of \$10

## 2008 SUMMER I AND II SESSIONS FEES - GRADUATE STUDENTS

Other tuition rates and fees may apply to some professional programs.

Tuition and out-of-state fee will be charged on the following schedule for each summer session.

	Residents		Nonresidents	
	Tuition & Required Fees	Tuition & Required Fees	Nonresident Fee	Total
9 hours	\$1,467.82	\$1,467.82	\$2,979.00	\$4,446.82
8 hours	\$1,319.57	\$1,294.57	\$2,648.00	\$3,967.57
7 hours	\$1,170.32	\$1,170.32	\$2,317.00	\$3,487.32
6 hours	\$1,021.07	\$1,021.07	\$1,986.00	\$3,007.07
5 hours	\$ 871.82	\$ 871.82	\$1,655.00	\$2,526.82
4 hours	\$ 722.57	\$ 722.57	\$1,324.00	\$2,046.57
3 hours	\$ 525.25*	\$ 525.25	\$ 0.00	\$ 525.25
2 hours	\$ 376.00	\$ 376.00	\$ 0.00	\$ 376.00
1 hour	\$ 226.75	\$ 226.75	\$ 0.00	\$ 226.75

ADD \$5.00 PER CREDIT HOUR UP TO \$60.00 TOTAL IF TAKING MORE THAN 9 SEMESTER HOURS

\*Full time graduate assistants will be granted a tuition waiver in the amount of \$372.00. NOTE: The fees above do not include the parking decal fee of \$10

The fees for tuition above are subject to change by action of the state legislation and approval from the University of Louisiana Board of Supervisors.ent

LATE REGISTRATION FEE - Any student registering for four or more hours after the close of the regular registration period will be charged an additional registration fee of \$50.

MILITARY SCIENCE ACTIVITY FEE - Textbooks, equipment and military uniforms are furnished without deposit; however, each cadet is assessed a \$10 non-refundable activity fee to support cadet activities.

CLASS FEES - Refer to the applicable semester Schedule of Classes for various class fee charges.

### OTHER EXPENSES

TEXTBOOKS. All textbooks used at the University are available at the University Bookstore located in Sandel Hall on campus. Estimated cost for fall and spring terms with a 12-hour schedule is \$350-\$400 while summer costs are estimated at \$170-\$200 with a 6-hour schedule. The Bookstore operates a buyback system at the end of the semester when up to 50% of the original cost may be received for the book, providing there is need for that book. Visit the Bookstore website (http://ulmbookstore.com) to buy or reserve your books online. A good selection of other merchandise is also available through the site.

FIELD TRIP FEES. Certain courses require trips away from the campus. Specific fees for these courses will be announced at the beginning of the a 6-hour e

#### 16 THE UNIVERSITY OF LOUISIANA AT MONROE

Delinquent student debts are subject to being assigned to the ULM Collections Department. However, if it becomes necessary to refer debts to an outside collection agency an additional collection fee will be added and collected with the original debt. Federal student loans which are delinquent beyond 180 days will be assigned to the Louisiana Department of Justice for collection and will carry the collection fee as specified in the promissory note or \$100, whichever is larger.

## **REFUND POLICY\***

A student who resigns from the University under the conditions listed below may receive a partial reduction of **regular tuition**, **out-of-state tuition and student activity fees.** The student must officially resign through the Office of the Registrar not later than the fifteenth (15) day of classes in a regular semester or the seventh (7) day of classes in a summer session to be eligible for a reduction of fees. Refunds will be computed as follows:

- 1. A 100% refund will be made when a student completes resignation prior the first day of classes as listed in the University calendar.
- 2. A 90% refund will be made when a student completes resignation during the period of the first through the eighth day of classes in a regular semester or the first through the fourth day of classes in a summer session.
- 3. A 50% refund will be made when a student completes resignation during the period of the ninth through the fifteenth day of classes in a regular semester or the fifth through the seventh day of classes in a summer session.

Students resigning with disciplinary action pending or those suspended for disciplinary reasons are not eligible for refunds.

Refunds will be applied to any existing indebtedness to the University prior to disbursement to a student.

## WARHAWK EXPRESS

Warhawk Express is a voluntary debit card system using the ULM ID to provide fast, safe, and convenient way to make purchases all over campus. It is safer than cash and more convenient than checks or credit cards. Using the ULM photo ID reduces the risk of theft.

W accounts may be closed at any time by spending the balance down to zero; otherwise, accounts roll over from semester to semester until the student graduates or resigns. Cash withdrawals cannot be made from the accounts.

After funds are deposited into the W account, the funds can be used at numerous locations on campus: Bookstore, Concession Stands, Athletic Events, Convenience Store, Cafeterias, Coffee Shop, Union Board Events, Library, Washers/Dryers, Vending Machines. When purchases are made, the remaining balance will be electronically displayed so students will always know how much money remains in their account.

# PHYSICAL FACILITIES

## THE UNIVERSITY LIBRARY AND CONFERENCE CENTER

The purpose of the University Library, as adopted by the Library Faculty, is to support the teaching, research, and service programs of the University. This shall be accomplished through instruction, networking, and access using the appropriate technology, acquisition, organization and maintenance of necessary information resources. The University Library shall also provide the optimum learning environment for its diverse users.

The Library is centrally located on the University campus beside the bayou. It is readily accessible from all campus housing and classroom buildings.

The resources of the library include 645,612 print volumes, including 197,363 state and federal documents, 225 journal and newspaper subscriptions, and 618,857 volumes in microformat. The Library is a member of AMIGOS, which enables cataloging and bibliographic verification and interlibrary loan via computer terminals connected on-line to the system headquarters. NEON, the Library's electronic catalog, is part of LOUIS, the Louisiana Library network. Being part of LOUIS, the library has access to EBSCOhost which provides access to over 30,000 full-text electronic journals. In addition, LOUIS provides access to other bibliographic and abstracting sources via the Web. We also provide access to more than 29,500 electronic books via netLibrary.

All are welcome to use the resources of the Library. To borrow library materials, one must have a valid ID card, be enrolled in a cooperative program offered by other institutions, become a member of the Friends of the Library organization, or acquire an Alumni Honorary Card.

Housed on open shelves, the Library's resources are located on 5 floors.

The general book collection and bound serials are interfiled by Library of Congress Call Number and housed on floors 2 - 5.

The first floor houses the reference materials and unbound serials. Also on this floor are the following service areas: Reference, Circulation, Interlibrary Loan, and Serials.

On the second floor are the uncataloged federal and state government publications, Government Publications and Media Services Departments.

The third floor houses Computer Services which maintains a 60 station personal lab.

On the fourth floor are library administration offices, Technical Services, and the Friends Bell Tower Books.

The fifth floor houses the Special Collections Department and the Monroe Garden Study League Book Room.

Thirty-eight group study rooms are available for groups of from four to eight people.

During the academic year, the Library is open from 7:30 a.m. until 12:00 midnight, Monday through Thursday; from 7:30 a.m. to 1:00 p.m. Friday; closed on Saturday and from 2:00 p.m. to 12:00 Midnight on Sunday. Holiday schedules are announced.

The Library staff includes 13 professionals and 14 paraprofessionals.

Housed on the seventh floor of the University Library is the University Conference Center which is used by the faculty, staff, students, and community to conduct seminars, conferences, lectures, and other meetings. The University Conference Center hosts important academic gatherings for the University community throughout the academic year. The facility is designed to provide comfortable and functional meeting areas primarily for the University academy. The Conference Center seats up to 500 people for a presentation and can accommodate a maximum of 250 for formal dining. The facility also features a full-service catering support center. Overlooking the beautiful Bayou DeSiard, the University Conference Center provides a unique addition to the facilities available

Center will also custom design specialized training classes to meet exact application needs for a specific business.

College of Business Administration Dean's Office (318) 342-1100 The Col. William T. Hemphill Airway & Computer Science Building 308

#### **Dental Hygiene Clinics**

The unit provides clinical experience for dental hygiene students. Emphasis is placed on improvement of instrumentation, radiographic skills, total patient care, and practice management skills.

Ms. Sharon Chaney, Clinical Coordinator (318) 342-1627 Caldwell Hall 124

#### **Digital Media Studio**

The Digital Medial Studio is a highly specialized multimedia studio for College of Education and Human Development students. It houses ten I-Mac GS computers, scanners, digital still and video cameras, and presentation equipment. The studio, staffed by graduate students from the college, enables students to create and develop digital portfolios and multimedia presentations as well as working on Taskstream.

Dr. Thilla Sivakumaran, Director (318) 342-1270 Strauss Hall 266

#### **Doctoral Research Center**

The center provides a technology-rich environment for group and individual research, video conferencing, and media-based presentations. The area is also used for seminar and doctoral level committee meetings and consultations.

Dr. Bob N. Cage, Coordinator (318) 342-1288 Strauss 154-B

#### Family Resource Center (Family Life Center)

experience related to career choices is provided to students in the areas of teaching, coaching, wellness, cardiac rehabilitation, and other sports medicine fields. of referral telephone numbers to call for drug-related suicide attempts or other calls for help.

The Center is a resource for health professionals and citizens requiring information on health effects related to occupational exposures, handling of hazardous materials, chemical spills, or any emergency chemical exposure.

The Drug Information Service provides professional consultation to pharmacists, physicians, consumers, and others throughout the state. Answers are provided for a variety of questions including those related to drug therapy, disease and general health information, and drug policy management. The Drug Information Service coordinator participates in several classes in the College of Pharmacy and provides a Drug Information Rotation for senior pharmacy students. The Drug Information Service is open Monday through Friday from 8 AM to 4:30 PM, and the Coordinator is on-call at other times.

The Emergency Poison Line for Louisiana is 1-800-256-9822.

#### Louisiana Institute of Toxicology

The Institute of Toxicology was established on the campus of ULM by the Louisiana Board of Regents as a state resource for information on the adverse health effects of drugs and environmental chemicals. The Institute provides comprehensive educational programs in toxicology, conducts nationally recognized toxicology research, and sponsors public forums addressing environmental issues relevant to the region and nation.

Dr. H. M. Mehendale, Director, (318) 342-1691 Sugar Hall 306

#### Marriage and Family Therapy Clinic

The Clinic provides therapy services in the areas of family issues which include child focused problems, marital conflicts, spousal abuse, substance abuse, mental illness, marital issues, individual issues, and divorce mediation. The Clinic serves northeast Louisiana, Arkansas and Mississippi.

Dr. Lamar Woodham, Director, (318) 362-3008 3404 Bon Aire Drive

#### ULM Community Counseling Center

The Center

#### 22 THE UNIVERSITY OF LOUISIANA AT MONROE

#### Northeast/Central Louisiana Regional Tumor Registry

The Northeast/Central Louisiana Regional Tumor Registry is responsible for abstracting every newly diagnosed cancer in the twelve parishes in northeast Louisiana and the eight parishes in central Louisiana. The Registry participates in cancer research with the state organization, and is a clinical site for Medical Information students from Louisiana Tech University.

Ms. Mary Melanie Byargeon, Director, (318) 342-1840 Chemistry and Natural Sciences Building 221

#### The Lynn Rowe Moore Hearing Evaluation Center

The Center serves in identifying children with hearing impairments and provides audiological testing and monitoring of hearing for medical clearance for children with external or middle ear infections.

Mrs. Norma O. Johnson, Director of Clinical Services (318) 342-1395 Brown Hall 126

#### Pharmaceutical Research and Technical Services Center

The Center helps identify expertise in the College of Pharmacy to assist various agencies in acquiring information and services that can be provided by the College. It assists researchers in the College with funding agencies and the University, identifies and informs the facci0IE9ao5.S36

sources and assists the facci0lEin preparing, submitting, and administering grants and contracts.

Dr. Lamar Pritchard, Dean, College of Pharmacy, (318) 342-1600 Sugar Hall 151

#### Small Business Entrepreneurship Studies Center (ESC)

The ESC has the mission of encouraging and sueporting entrepreneurship and small business in northeast Louisiana. This is accomplished through academic curriccia for ULM students,o5.S36

ULM facci0l, and outreaTj programs for potential and existing businesses in Louisiana.

ACADEMIC. The ESC sponsors undergraduate and graduate programs in entrepreneurship and small business administration. Undergraduate students can pursue a BBA in Entrepreneurship or a minor in entrepreneurship. Graduate students have the /eportunity to acquire a focus in entrepreneurship as a part of their graduate studies.

RESEARCH. The ESC encourages and sueports facci0lEdevelopment, 5.S36

OUTREACH. The ESC sponsors two major outreaTj programs, the ULM Small Business Development Center and the ULM Small Business Institute.

#### Small Business Development Center (SBDC)

The SBDC provides management and technical assistance to entrepreneurs and owners of existing businesses in northeast Louisiana through continuing education, one-on-one counseling and technical assistance. Additionally, the Center serves as an information 5.Source center. Workshops and seminars keep small businesses informed on current events and changing trends in the business world. The Center houses business publications, statistical data, census figures, and start-up manuals. A computerized information base with a national networking capacity is also maintained.

#### Small Business Institute (SBI)

The SBI provides small business owners with volunteer consulting services from ULM graduate students and seniors under the direction of qualified ULM staff and faculty. The primary objectives are to provide high quality management and technical assistance as well as provide to students an opportunity to apply knowledge gained in the classroom. Consultants are available in the areas of financial strategy development, advertising strategy development, valuing going concerns, marketing research, marketing strategy development, production management, bookkeeping systems, and logo development.

Dr. Paul Dunn, Director, (318) 342-1224 Administration Building 2-123

#### Soil-Plant Analysis Laboratory

The Laboratory provides soil, plant, and water analysis. Tests can be run for pesticide and herbicide residues, soil fertility, nutrients in plant tissue samples, seed germination and vigor, lime content, and fertilizer analysis. The Laboratory also performs grain and forage analysis, microbiological testing, and wastewater testing.

Environmental analysis includes work done for the oil and gas industry, including work on field pit closures, leaks in underground gasoline storage tanks, and Environmental Protection Agency Priority Pollutants Testing.

The unit serves the industrial and agricultural communities in northeast Louisiana and is the only soil and plant analysis lab located on a university campus in north Louisiana to offer a full range of such services.

Ms. Debbie Brotherton, Director, (318) 342-1948 Chemistry and Natural Sciences Building 117

#### **Speech and Hearing Clinic**

The Clinic provides quality speech, language, and hearing services to children and adults throughout northeast Louisiana. It allows students to conduct applied clinical research and complements academic instruction which prepares students to enter practice in diagnosis and management as speech-language pathologists. The students' clinical experience is supervised by ASUA certified personnel. Interested individuals may contact the clinic for additional information.

### **MUSEUMS AND GALLERIES**

#### **Bry Art Gallery**

Art exhibits change monthly and feature all types of studio media including paints, drawings, prints, sculpture, photography, and ceramics. Exhibits are primarily by professional artists with some students shows throughout the year. The Gallery features an art show by area children each May. Open weekdays 8:00 a.m. to 4:30 p.m. Closed weekends and holidays. Admission is free.

Mr. Robert G. Ward, Director, (318) 342-1375 First Floor, Bry Hall Ouachita Hall for women students is located on the west side of Bayou DeSiard. Madison Hall for male students is also located on the west side of Bayou DeSiard. Masur Hall, our co-ed hall, is located on the east side of Bayou DeSiard.

Two dining facilities are located on campus. Schulze Cafeteria is located on the east side of Bayou DeSiard. The Food Court is located in the Student Union Building on the west side of the bayou.

### SERVICES FOR STUDENTS WITH SPECIAL NEEDS

The University Counseling Center offers a number of opportunities to students with special needs. Whether a physical limitation or a learning disability, the Center works with the student to eliminate or lessen these obstacles to their education. Services of the Center include the provision of support to students with permanent or temporary exceptionalities, individual counseling, assistance with academic accommodation recommendations to students and faculty, in addition to heightening the awareness of the issues associated with special needs obstacles to name but a few. Housing accommodations as well as designated parking for these students are facilitated by this and other departments on the campus.

## PARKING PROCEDURES FOR STUDENTS WITH SPECIAL NEEDS

Students with special needs are provided accommodated parking on the university campus. The student, upon documentation of the special need, is assigned a Special Needs Parking Pass by the University Police Department. Procedures to secure a Special Needs Pass can be obtained at the University Counseling Center.

## NON-DISCRIMINATION POLICY

The University of Louisiana at Monroe recognizes that members of the University community represent different groups according to sex, color, creed, national origin, and physical or mental disability. The University further recognizes that, in a pluralistic society such as ours, these differences must be recognized and respected by all who intend to be a part of the University community.

It is not the intent of the University to dictate feelings or to mandate how individuals should personally interact with others. It is, however, the intent of the University that awareness of individual and group rights according to sex, race, color, creed, national origin, and physical or mental disability be regarded as important to the education of its students. Our ability to work in a pluralistic society demands no less.

It is with this in mind that the University does not permit any actions, including verbal or written statements, that discriminate against an individual or group on the basis of sex, race, color, creed, national origin, or physical or mental disability. Any action is a violation of the Student Code of Conduct. Complaints of discrimination should be made orally and in writing to the appropriate University Administrator.

## 26 THE UNIVERSITY OF LOUISIANA AT MONROE

# **GRADUATE DEGREE PROGRAMS**

# **GRADUATE SCHOOL REGULATIONS**

## POLICIES AND PURPOSES

The Graduate School was established to provide opportunities for improving professional competency through advanced study and research, for promoting the welfare of the society in general by developing a broader, deeper understanding of human knowledge, and for preparing for further graduate study. To implement such opportunities, the University offers the student the daily use of its library and laboratories and interaction with experienced scholars. Graduate students assume significant responsibility in selecting a specialized program that will best meet their particular needs.

## ADMINISTRATION

## The Graduate Council

The Graduate Council was formed to enable a cadre of faculty with significant experience and achievement in graduate education to assist in the review and implementation of campus graduate studies issues. Working with the Director of Graduate Studies and Research, the Graduate Council serves to assess and implement initiatives that foster successful graduate education involving faculty and students.

## Members of the Graduate Council

College of Arts & Sciences Dr. Ruth Smith Dr. Gordon Harvey, Council Chair Dr. Kim Marie Tolson College of Business Administration Dr. Donna Luse Dr. Carl Kogut Dr. Melissa Melancon College of Education and Human Development Dr. Glenda Holland Dr. Charles Prvor Dr. Lisa Colvin College of Health Sciences Dr. Judy Fellows College of Pharmacy Dr. Sharon Meyer Dr. Paul Sylvester

Dr. Virginia J. Eaton (ex-officio), Director, Graduate Studies and Research

### The Research Council

The Research Council was formed to enable a cadre of faculty with significant research experience and achievement to assist in the review and implementation of campus research issues. Working with the Director of Graduate Studies and Research, the Research Council serves to assess and implement initiatives which foster successful faculty and student research endeavors.

### Members of the Research Council

College of Arts & Sciences

Dr. Tom Sasek Dr. John Carr Dr. Jay Bulot, Council Chair Dr. Harold Williamson

College of Business Administration Dr. Tammy Parker Dr. Ken Clow

College of Education and Human Development Dr. Jean Low Dr. Joe McGahan

College of Health Sciences Dr. Florencetta Gibson Dr. Linda Bryan

College of Pharmacy

Dr. Hari Mehendale

Dr. Girish Shah

Dr. Virginia J. Eaton (ex-officio), Director, Graduate Studies and Research

### **GRADUATE FACULTY**

Graduate faculty status is awarded to those members of the faculty who have been nominated by the appropriate academic department head or director and approved by the Graduate Council, the Director of Graduate Studies and Research, and the Vice President for Academic Affairs.

Initial appointment to the Graduate Faculty shall be for a five-year period, with subsequent periodic review thereafter.

There are two types of membership: Member and Associate Member. Qualifications for graduate faculty status are as follows:

**Member**—(a) earned terminal degree in field of specialization, (b) evidence of scholarly and professional activities, and appropriate graduate teaching and advising experience.

A Member is permitted to teach graduate courses, serve as a member of graduate advisory committees, act as major professor, and direct field studies, theses, and dissertations.

**Associate**—(a) appropriate graduate teaching and advising experience; (b) adjunct or visiting professor, who has a record of distinguished service; or faculty member who meets a special departmental or school need, and who is judged by

#### 30 THE UNIVERSITY OF LOUISIANA AT MONROE

the Graduate Council, the Director of Graduate Studies and Research, and the Vice President for Academic Affairs to be qualified for a specific function.

An Associate Member may teach graduate level courses and/or may serve as a member of graduate committees. An Associate Member may not direct field studies, theses, or dissertations, and may not serve as major professor on a graduate advisory committee.

Graduate faculty members are listed in this document along with additional graduate faculty information. Associate Members are identified in their respective department with an asterisk preceding their name.

### DEGREES

Degrees may be earned in the majors listed below. Information on each program can be found in the **Fields of Study** section beginning on page 47.

Master of Arts (M.A.) Communication Criminal Justice English Concentrations: Literary Studies Creative Writing Gerontology Concentrations: Long-Term Care Administration Program Administration Aging Studies History Marriage and Family Therapy Substance Abuse Counseling Master of Arts in Teaching (M.A.T. [Alternative Certification]) Elementary Education Grades 1-5 Multiple Levels GR K-12 Secondary Education Grades 6-12 Special Education Mild/Moderate Grades 1-12 Master of Business Administration (M.B.A.) **Business Administration** Master of Education (M.Ed.) Counseling Curriculum and Instruction Concentrations: Early Childhood Elementary Education Instructional Technology Facilitator Middle School Education Reading Secondary Education Special Education, Academically Gifted Special Education, Early Intervention Special Education, Educational Diagnostics Special Education, Mild/Moderate Disabilities

Educational Leadership Educational Technology Leadership Master of Music (M.M.) Music Concentrations: Conducting Music Education Performance Theory/Composition Master of Science (M.S.) Biology **Communicative Disorders** Exercise Science Concentrations: **Clinical Exercise Physiology** Applied Exercise Physiology Pharmaceutical Sciences Concentrations: Hospital Pharmacy **Pharmaceutics** Pharmacology/Toxicology Toxicology Pharmacy Administration Pharmacognosy Medicinal Čhemistry Psychology Concentrations: School Psychology **Psychometrics** Experimental Specialist in School Psychology (S.S.P.) School Psychology Doctor of Education (Ed.D.) Curriculum and Instruction **Educational Leadership** Doctor of Philosophy (Ph.D.) Marriage and Fanpg

Bsy@Bmetrocs10.75 TD (Marri ion )Tj 0 -10.75 TD 0 Tw (Educational Leadership )Tstry Experimental

A Certificate in Gerontological Studies is offered through the Department of Gerontology, Sociology and Political Science. Program requirements may be found in the **Fields of Study** section for that department.

### STUDENT RESPONSIBILITY

All universities establish certain requirements, which must be met before a degree is granted. These requirements concern courses, majors and minors, and residence. Major professors, department heads/directors, and deans will help a student meet these requirements, **but the student is responsible for fulfilling them.** Upon completion of the course work, personnel of the University will determine whether or not the student receives a degree. If the requirements have not been met, the degree will not be awarded until such time as they have been met. For this reason it is important for each student to be acquainted with the degree requirements and to keep informed while enrolled at the University.

Also, it is necessary in the general administration of the University to establish broad policies and to lay down certain regulations and procedures by which they may be carried out. It is important that a student understand the policies and know the regulations and procedures one is expected to follow.

The catalog is presented, therefore, not only to enable prospective students and others to learn about the University of Louisiana at Monroe, but also to state policies, requirements, regulations, and procedures in such form as will help the student progress through school. Graduate students are expected to assume responsibility for becoming fully acquainted with and abiding by the regulations and requirements of the Graduate School. The GRE and TOEFL tests, administered by the Educational Testing Service, are scheduled at the University of Louisiana at Monroe and various centers throughout the United States as well as internationally on regularly established dates. Applications may be obtained from the Educational Testing Service, Princeton, New Jersey, from the Director of Testing, or from the Office of Graduate Studies and Research at the University of Louisiana at Monroe and must be returned to Princeton according to the calendar published by Educational Testing Service.

New international students are tested for English language proficiency before classes begin. An international student may apply for exemption from the ULM English proficiency test if the student has attended four academic years and graduated from a U.S. regionally accredited college or university, or has submitted an official minimum TOEFL score of 500, or has submitted a satisfactory passing score in English language on the University of Cambridge/London G.C.E. examination, or a score of 85 on the Michigan Test.

The application for admission to Graduate School and all supporting documents should be on file 30 days prior to registration. Any student submitting credentials less than 30 days in advance of registration should contact the Office of Graduate Studies and Research concerning appropriate action taken on the application for admission. Provisional status to some programs may be granted applicants who are in the process of obtaining official transcripts or Graduate Record Examination(GRE)/Graduate Management Admission Test (GMAT) scores.

An applicant who does not enroll in the term for which he/she is submitting an application will be permitted registration for no more than six terms (first and second summer sessions considered one term). After six terms of no enrollment, applicant will be required to reapply and submit recent credentials.

Applicants who enroll and maintain academic eligibility will remain eligible for registration until there is a lapse of enrollment for six consecutive terms or until graduation, whichever occurs first.

# GENERAL REQUIREMENTS FOR ADMISSION

to regular status because of their GPA and/or GRE/GMAT scores. In the latter case, the minimum requirements for conditional status are ALL of the following:

- Minimum cumulative GPA of 2.2 (based on a 4.0 scale)
  Minimum formula score of 1650 (cumulative GPA \* GRE) or 1050 (GPA [see page 62] \* 200 + GMAT)

Monroe. Should a student fail to inform ULM of ineligibility and earn graduate

## ELIGIBILITY TO REMAIN IN THE GRADUATE SCHOOL

The Director of Graduate Studies and Research will deny further continuance

### **GRADING SYSTEM**

Grades and the grading process are major components of a university's academic standards. An important professional obligation of university faculty is the determination of grades. Grades accomplish two essential purposes: (1) they communicate to the academic community and to the community at large a certified level of academic achievement, and (2) they provide realistic and reliable feedback for students to use in evaluating individual progress and making decisions about future behavior.

Prerequisites to effective grading are (1) appropriate scope, depth, and degree of difficulty for each course; (2) controls to ensure that students have proper academic qualifications for enrolling in each course; and (3) adequate measures of performance. Taking into account all students who would properly and typically enroll in a given course (not just those in one course), faculty members assign grades according to the following general guidelines:

A — EXCELLENT B — AVERAGE C — BELOW AVERAGE D & F — FAILURE

The grades A (Excellent), B (Average), C (Below Average), D & F (Failure), AU (Audit does not imply class attendance), R (Repeated), W (Withdrew), I (Incomplete), IP (In Progress), CR (Credit), and NC (No Credit) are given to indicate the quality or status of a student's work.

Each semester hour with the grade of D carries one quality point; each semester hour with the grade of C, two quality points; each semester hour with the grade of B, three quality points; and each semester hour with the grade of A, four quality points. Grades of F and I carry no quality points. Therefore, a C average is a 2.00 average. An I grade is computed as an F grade unless changed to a final passing grade. Also, + and - grade designations are not recognized.

NOTE: Only grades of A, B, or C are considered acceptable at the graduate level. To remain eligible for graduate school, a graduate student must maintain a 3.0 graduate GPA and no grade lower than C.

Courses for graduate credit may not be repeated without prior approval of the Director of Graduate Studies and Research. When a course is repeated, both grades will be counted in determining the grade point average.

Work which is of satisfactory quality but which, because of circumstances beyond the student's control, is not complete, may be marked I (Incomplete). The deficiency must be met within the first month of the next regular semester or within the first two weeks of either summer term of attendance (whichever comes first). If the work cannot be completed within the stated time frame, a time extension may not be granted without prior approval of the Director of Graduate Studies and Research. Instructors should not allow graduate students to complete work for a graduate course to remove an overdue I grade without prior approval of the Director of Graduate Studies and Research. I grades are removed only by completion of the course work, not by repeating the course. I grades are computed as F grades, unless changed to a final passing grade. If the student does not resume studies either at the University or elsewhere within a calendar year following the semester or summer session for which the I grade was recorded, the I grade cannot be removed. This requirement does not apply for field study, thesis, dissertation, directed study, independent research, or recital courses.

Grades (other than I grades and IP) that have been submitted to the Registrar's Office can be changed only by a letter of explanation certifying that an error has been made by the instructor. This certification of error will not be valid unless approved by the instructor's department head and the instructor's academic dean. A request for a final grade change must be initiated by the instructor within 30 days after the end of the semester or term in which the grade was earned.

Instructors are encouraged to abide by the University Calendar by offering courses within the established enrollment period dates to avoid the issuance of IP grades. Instructors must discuss in advance with the Registrar the reasons for the award of IP grades. Valid reasons for considering the issuance of IP grades may be when an instructor anticipates that either the nature of a specific graduate or undergraduate course or the expectations of all students (not an individual student) cannot be completed within the established enrollment period dates. Letter grades must be awarded by an agreed upon deadline between the instructor and the Registrar in the event that IP grades are issued.

# **GRADE REPORTS**

End-of-the-semester grades are generally available after the end of the fourth working day of each enrollment period. Students should visit the ARROW

# **DROPPING AND ADDING COURSES**

Students will not be admitted to any class unless the instructor has received a roster or notice indicating proper registration from the Registrar.

Students will not be permitted to drop or add courses or make section changes after their registration is complete except on the advice and consent of the student's major professor, the head of the department in which the student is registered, and the head of the department in which the course or courses affected are offered.

A schedule change slip must be used, and the proposed change is not official until the slip is completed with the proper approvals indicated and filed with the Registrar's Office. A grade of F will be assigned to a student who withdraws from a course at any time without following this procedure. With permission, a student may drop any subject with a notation of W (withdrawn from class) within the time limit specified in the University calendar. Withdrawals during that period carry no penalties.

# COURSE DROP AND RESIGNATION POLICY

Students may drop courses or may resign (when class load drops to zero hours) from the institution with grades of W prior to a date specified in the official University Calendar. After that specified date, students may not drop a course or resign. Students who have extraordinary cases with extenuating circumstances may submit a letter of appeal, along with documentation to substantiate the case to the Director of Graduate Studies and Research. Extraordinary cases do not include dissatisfaction with an anticipated grade or the decision to change a major.

Approval of an appeal for dropping a course or resigning after the published date may be granted by the Director of Graduate Studies and Research for reasons stated below and only if the reason can be officially documented to show direct due cause. If approval to drop a course is granted, the student must also have been passing the course immediately prior to the hardship, and must have applied for the approval immediately after the hardship or illness ended. The grade assigned shall be a W. If the Director allows the student to resign, a W grade shall be assigned in all courses. If the appeal is approved, the Director will notify the instructor and the registrar. Examples of appealable cases are as follows:

- 1. Illness/Injury—The student must provide a letter on official stationery from the attending physician stating that the illness or injury will render the student unable to complete the course, or will cause the student to miss a significant number of days so as to make it difficult to complete the course. A hospital bill may also be used.
- 2. Death of an immediate family member which caused undue hardship and renders the student incapable of completing the course—The student must provide a copy of the death certificate, obituary stating relationship to the deceased, or letter from the attending clergy.
- 3. Natural disaster or exceptional traumatic event (documentation will be required)—The student must provide a written explanation of extenuating circumstances providing this event causes the student undue hardships.
- National Defense—The student must provide a copy of official military orders.

Grades of F will be assigned to students who do not complete the enrollment period and who have not officially dropped their courses or resigned.

An appeal for a change in official academic records must be made no later than 30 days after the end of the semester or term in which the alleged error in academic records occurred.

# SEQUENCE AND PROGRAM OF STUDY FOR GRADUATE DEGREES

Observing the following numbered sequence will assure a measured progression of events, designed to maintain proper advisory and administrative

However, and with departmental approval, the Graduate Catalog in effect during the semester in which degree requirements are completed may be used.

All students seeking an advanced degree must adhere to the regulations discussed in this section. Departments may have additional specific degree requirements that students must meet to receive an advanced degree.

Each student who expects to take comprehensive examinations and/or graduate must file an application to take the comprehensive examination and/or to graduate with the Director of Graduate Studies and Research by the date indicated in the University Calendar for the semester or summer term in which the degree is to be awarded.

To fulfill the course requirements for a master's degree, the candidate shall present an average of not less than B on all graduate work pursued and all work in the major field, with no grade lower than C and not more than six semester hours of credit with a grade of C.

The candidate must pass a comprehensive final examination in both the major and related areas or minor. This examination may be written or both oral and written. Comprehensive examinations are not required of candidates for the Master of Business Administration degree.

A candidate for the Master of Education or Master of Music degree with a specialty area in Music Education must hold a valid teacher's certificate issued by the Louisiana State Department of Education or its equivalent. The only exceptions to this regulation are the candidates for the Master of Education degree with majors in Counseling and Non-School Emphasis in Educational Technology Leadership.

Regulations governing degree requirements for doctoral programs are detailed within program descriptions for individual doctoral programs of study.

All candidates who are to receive degrees are required to be present at commencement exercises for the conferring of the degree unless the Director of Graduate Studies and Research is notified, in writing, to the contrary.

# TRANSFER OF CREDIT AND RESIDENCE REQUIREMENTS

#### **MASTER'S DEGREES**

Students must complete at least two-thirds of the hours required for a master's degree through courses offered by the University of Louisiana at Monroe. Transfer credit may not total more than one-third of the master's degree program. With the approval of the student's graduate advisory committee and the Director of Graduate Studies and Research, a maximum of six semester hours of C grades earned at ULM may be transferred from one program to another or from non-degree status to a degree program. Transfer credit must meet the following requirements:

- 1. Credit must be earned in residence at a regionally accredited college or university.
- 2. Credit must be accepted as applicable to the student's degree program.
- 3. Grade of B or better must be earned.
- 4. Credit must meet six-year time limit for master's degree program.

Transfer credit must be presented and accepted during the first semester or summer term upon entering or re-entering the University of Louisiana at Monroe. Final authorization of transferred credit will be made by the Director of Graduate Studies and Research upon recommendation of the student's advisory committee. After enrollment at ULM, a student may earn and transfer graduate credit from other institutions, provided prior approval of the course or courses is obtained from the student's major professor and the Director of Graduate Studies and Research. Transfer credit shall not reduce the minimum residence requirements.

Transfer credit for students in the Master of Business Administration program is ordinarily limited to six semester hours earned at another AACSB accredited school provided that such transfer credit is appropriate and that a letter grade of B or better has been earned.

A student enrolled in the Master of Arts degree program in Marriage and Family Therapy must enroll as a full time student for two consecutive semesters, excluding summer terms.

#### DOCTORAL DEGREES

Regulations governing transfer credit and residence requirements for doctoral programs are detailed within program descriptions for individual doctoral programs of study.

# TIME LIMITS FOR GRADUATE DEGREES

All work applied toward the master's degree must have been earned within the six years immediately preceding the completion of the graduate program. Regulations governing time limits for doctoral programs are detailed within program descriptions for individual doctoral programs of study.

# **REQUESTS FOR TIME EXTENSIONS**

To utilize graduate credit taken prior to the six-year time limit for master's degrees, the student may request a time extension. These requests should be submitted before or during the semester in which the time limit expires. For further information please contact the Major Professor, the Office of Graduate Studies and Research, or the Coordinator of Graduate Studies for the particular major and college involved. Regulations governing time extensions for doctoral programs are detailed within program descriptions for individual doctoral programs of study.

# FOREIGN LANGUAGE REQUIREMENT

A reading knowledge of one or more foreign languages is required of candidates for advanced degrees in specified degree programs.

# COMPREHENSIVE EXAMINATIONS

A written comprehensive examination will be required of all candidates for master's degrees except candidates for the Master of Business Administration degree, the M.A.T., and the M.Ed. in Educational Leadership. Regulations governing comprehensive examinations for doctoral programs are detailed

Graduate Studies and Research according to the semester/term deadlines. The student must have completed all courses shown on the approved degree plan or be enrolled in them. All grades of I, excluding graduate recital, graduate research, thesis, field study, and dissertation, must be completed at the time the candidate takes the written comprehensive examination. The written and oral comprehensive examinations should be scheduled within the testing dates given in the University Calendar. These dates do not apply to the oral examination given as the field study, thesis, or dissertation defense. The Director of Graduate Studies and Research must be notified in writing of any exceptions.

The written comprehensive examination for all candidates will be constructed and administered by the candidate's graduate advisory committee or the departmental/school committee as determined by individual departments/schools. After all examinations have been scored and recorded, the questions and answers are to remain in the academic unit office. The major professor will report to the Director of Graduate Studies and Research, in writing, the candidate's performance on the comprehensive examination as satisfactory or unsatisfactory. This report must contain the specific parts of the examination covered, e.g., major only, minor or related areas only, major and minor, and oral. The major professor will notify the candidate, as soon as possible, of the results of the comprehensive examination. At the conclusion of each semester, the respective department or school may forward to the University Library copies of their examination for deposit in the reference section. A candidate majoring in education whose minor area is in related areas will have the comprehensive examination assembled from appropriate sources. constructed, and administered by the appropriate department/school. When nine or more hours in the minor areas, including related areas, are from a single college, the Graduate Coordinator in that college is responsible for coordinating that portion of the examination and reporting the results to the Graduate Coordinator of the College of Education and Human Development and the Director of Graduate Studies and Research.

When the candidate is majoring in a subject matter field and minoring in education, it is the responsibility of the Graduate Coordinator of the college representing the major field to coordinate that portion of the examination and report the results to the Graduate Coordinator in the College of Education and Human Development and the Director of Graduate Studies and Research.

The candidate must pass both the major area portion and the minor or related areas portion of the written comprehensive examination. If the candidate passes one portion and fails the other, only that portion which was failed must be repeated. No one will be permitted to take any portion of the comprehensive examination more than three times without revisions to the Student Plan of Study. Before a third examination can be administered, the candidate must complete a revised program of study outlined by the graduate advisory committee and approved by the Director of Graduate Studies and Research.

An oral examination will be required of all candidates for advanced degrees who submit a field study, thesis, or dissertation. An oral examination may be required of other candidates for advanced degrees as determined by each department or school. The oral examination will be taken only after the candidate has satisfactorily completed the written comprehensive examination. Copies of the field study, thesis, or dissertation must be submitted to the candidate's graduate advisory committee at least five (5) days before the oral examination. The oral examination is the responsibility of the candidate's graduate advisory committee and the examining committee, who may invite other faculty members and administrators to participate in an ex officio capacity. The candidate's performance on the oral examination must be reported, in writing, by the major professor to the Director of Graduate Studies and Research as satisfactory or unsatisfactory. When the oral examination is the thesis, field study, or dissertation defense, this reporting requirement will be satisfied by the graduate advisory committee's approval of the field study, thesis, or dissertation.

If the candidate's performance on the major area, the minor or related areas, or the oral examination is judged to be unsatisfactory, the candidate must wait until the next comprehensive examination period to reapply to take any part or all of the comprehensive examination.

The candidate is advised to confer with the graduate advisory committee and the appropriate Graduate Coordinator regarding procedures and structure of the comprehensive examination.

# THE FIELD STUDY, THESIS, OR DISSERTATION

The field study, thesis or dissertation topic must be selected by the student in consultation with the major professor and must be approved by the student's graduate advisory committee prior to the beginning of the research process by the student. A student who has satisfied all academic course-related requirements with the exception of the field study, thesis or dissertation, must register for at least one to three semester hours of 599 or 699 during any semester/term in which an Application for Graduate Degree has been completed. Additionally, candidates who are participating in a directed study, clinical placement, internship, thesis, or dissertation activities are required to enroll for the

dissertations will be microfilmed by the University Microfilms, Inc., and the student

All graduate assistants are encouraged to register for classes during the regularly scheduled telephone registration period.

Reappointment is contingent, in part, upon continued eligibility for graduate enrollment, satisfactory progress toward meeting degree requirements, and satisfactory performance of duties. Graduate assistants are expected to complete their degree programs in a timely fashion in general, two years for a master's degree and four years for a doctoral degree.

## **GRADUATE WORK-STUDY**

The University provides a number of laboratory, non-teaching, and research graduate work-study positions. To be eligible for graduate work-study the applicant must be eligible for Graduate School enrollment and is required to be in or eligible for admission to a specific graduate degree program. Applicants admitted conditionally are also eligible, but provisional and non-degree students are not eligible for graduate work-study.

Applications for graduate work-study may be obtained from the Office of Graduate Studies and Research, the University of Louisiana at Monroe, Monroe, Louisiana 71209-0600. Completed application forms for graduate work-study are to be filed with the Head of the Department to which the applicant desires assignment. Transcripts and three letters of recommendation are required. International students seeking graduate work-study positions must be able to demonstrate adequate commu,dt he

# FIELDS OF STUDY

# **COLLEGE OF ARTS & SCIENCES**

### AGRICULTURE Chemistry and Natural Science Building 310 (318) 342-1766

**DEGREES:** No degree is offered. Graduate courses are available for students working toward degrees in other disciplines.

**MINOR REQUIREMENTS:** A minor in Agriculture may be earned by students pursuing a Master of Education degree. Undergraduate course prerequisites for a graduate minor: 24 semester hours of agricultural courses.

Graduate course requirements for a graduate minor: 12 semester hours of agriculture and agronomy courses.

### BIOLOGY Garrett Hall 101 (318) 342-1805

#### **DEGREES:** M.S. in Biology

Areas of study include Botany, Microbiology, Physiology, Conservation Biology and Management, and Zoology.

**MINOR REQUIREMENTS:** A minor in Biology may be earned by students pursuing a Master of Education degree. Undergraduate course prerequisites for a graduate minor: 20 semester hours of biology

Graduate course requirements for a graduate minor: 12 semester hours of biology.

**PROGRAM ADMISSION:** In addition to the University requirements for admission to the Graduate School at ULM, applicants for regular admission to the Master of Science in Biology degree program will meet one of the following criteria:

- 1. A minimum score of 900 on the GRE General Test (Verbal plus Quantitative).
- 2. A minimum of 2400 points, determined by multiplying the total undergraduate gradepoint average by the combined GRE General Test Scores (Verbal plus Quantitative).

Applicants who fail to meet the above standard may be admitted on conditional status as recommended by the Biology Committee on Graduate Studies to the department head in concert with the Director of Graduate Studies and Research.

PROGRAM REQUIREMENTS: Undergraduate requirements: B.S. or B.A. in a biological estempe idingipling or a biology is a biology of the second state **MINOR REQUIREMENTS:** A minor in Chemistry may be earned by students pursuing a Master of Education degree. Undergraduate course prerequisites for a graduate minor: 20 semester hours of chemistry.

Graduate course requirements for a graduate minor: 12 semester hours of chemistry.

admission to the Master of Arts in Criminal Justice degree program must meet one of the following criteria:

- An overall grade point average of at least 2.5 on all undergraduate work pursued and a formula score of at least 2000 using the following formula: the combined total of the Verbal and Quantitative scores on the Graduate Record Examination multiplied by the student's grade point average on all undergraduate work pursued.
- 2. A minimum grade point average of 2.2 on all undergraduate work and a formula score of at least 2200.

If an applicant does not meet one of the criteria for regular admission to the degree program but has at least a 2.2 grade-point average on all undergraduate work pursued and a formula score of at least 1650; he or she may be admitted conditionally upon recommendation of the Criminal Justice Committee on Graduate Admissions and Policy.

Students who are admitted conditionally may not earn more than one grade lower than B and no grade lower than C during the first twelve semester hours of graduate course work. Any graduate student in the Criminal Justice degree program who earns more than two grades less than B or any grade less than C on graduate work will not be allowed to continue in the Criminal Justice graduate program. Any student who pursues approved course work at another university must present a transcript at the end of the semester in which the student initially enrolls in the transfer course work. Students who do not present transcripts as required will not be allowed to continue in the Criminal justice graduate courses until such time as the transcript is received.

All applicants for entry into the Criminal Justice graduate program must present scores on the Graduate Record Examination prior to admission. Students who do not have undergraduate degrees in criminal justice may be required to complete specified undergraduate deficiency courses prior to enrolling in graduate criminal justice course work.

**PROGRAM REQUIREMENTS (M.A. in Criminal Justice):** Undergraduate requirements: Applicants must complete the bachelor's degree from an accredited institution with a major in the field of Criminal Justice. Other bachelor's degrees will be considered on an individual basis; selected undergraduate background courses may be required to remove undergraduate deficiencies.

Basic core requirements for the Master of Arts in Criminal Justice: Criminal Justice 501, 505, 510, 514, 573, and 576.

Additional requirements (Thesis): 9 semester hours of criminal justice electives, and 6 semester hours of 599—total of 33 semester hours for the degree.

Additional requirement (Non-thesis): 12 semester hours of criminal justice electives, and 6 semester hours in an approved supporting area—total of 36 semester hours for the degree.

#### ENGLISH Administration Building 3-125 (318) 342-1485

DEGREES: M.A. in English

**MINOR REQUIREMENTS:** A minor in English may be earned by students pursuing a Master of Education degree. Undergraduate course prerequisites for a graduate minor: 12 semester hours of English.

Graduate course requirements for a graduate minor: 12 semester hours of English. (Students minoring in English must be proficient in four separate areas of English.)

**PROGRAM ADMISSION:** In addition to the University requirements for admission to the Graduate School at ULM, all applicants for admission to the Master of Arts degree program in English must meet one of the following criteria:

- 1. A minimum undergraduate grade-point average of 3.0 in upper-level English courses;
- 2. A minimum combined score of 900 on the GRE (Verbal and Quantitative) with special emphasis on the Verbal score.

For regular admission to the Master of Arts in English degree program, international students must submit a minimum score of 500 on the TOEFLor a minimum score of 85 on the Michigan Test.

Applicants who fail to meet the above standards may be admitted on conditional status as recommended by the Graduate Admissions Committee of the Department of English and the Head of English in concert with the Director of Graduate Studies and Research.

**PROGRAM REQUIREMENTS:** Undergraduate requirements: 30 semester hours of English; credit in six semester hours on the sophomore level or a reading knowledge of a foreign language.

Requirements for a major (Thesis): 36 semester hours of English including English 507 or 508, 527 or 528, and 599. Requirements for a major (Non-thesis): 36 semester hours of English including English 507 or 508, and 527 or 528.

Additional requirements: English 514 for students concentrating in literary studies; English 532 for students concentrating in creative writing; English 519 for graduate teaching assistants. Our collaboration agreement with the English graduate program at Louisiana Tech University requires that during their graduate program and according to the agreement, students in traditional literary studies take three courses offered through the agreement to both universities. Students with a creative writing concentration must take only two of the courses offered through the collaboration agreement.

With their major professor's guidance and approval, students may take up to one-half of study of topics under the direction of a senior faculty member. Prerequisites: 21 graduate hours of English and approval of the student's adviser and of the department head.

#### FAMILY AND CONSUMER SCIENCES Filhiol Hall 103 (318) 342-1903

**DEGREES:** No degree is offered. Graduate courses are available for students working toward degrees in other disciplines.

**ACCREDITATION:** The Family and Consumer Sciences Department is accredited by the Council for Accreditation of the American Family and Consumer Science Association and is also approved as a Vocational Teacher Training department.

**MINOR REQUIREMENTS:** A minor in Family and Consumer Sciences may be earned by students pursuing a Master of Education degree. Undergraduate course prerequisites for a graduate minor: 30 semester hours of family and consumer sciences.

GraduaREIGN L or a 3

Filh5 0 TD TNOOdegree (\$3056 ever D Grada) are/ to was a feed a standard of the second stan

**MINOR REQUIREMENTS:** A minor in Foreign Languages may be earned by students pursuing a Master of Education degree.

Graduate course requirements for a graduate minor: 12 semester hours of French and/or Spanish chosen from graduate courses numbered 400 or higher.

#### GEOSCIENCES Hanna Hall 314 (318) 342-1878

**DEGREES:** No degree is offered. Graduate courses are available for students working toward degree in other disciplines.

#### GERONTOLOGY, SOCIOLOGY AND POLITICAL SCIENCE Stubbs Hall 103 (318) 342-1432

DEGREES: M.A. in Gerontology Certificate in Gerontological Studies

Areas of concentration for the M.A. in Gerontology include Long-Term Care Administration, Program Administration, and Aging Studies.

Areas of concentration for the Certificate in Gerontological Studies include Nursing and Generalist.

**PROGRAM ADMISSION (M.A. in Gerontology):** In addition to the University requirements for admission to the Graduate School at ULM, all applicants for regular admission to the Master of Arts in Gerontology degree program must meet one of the following criteria:

- 1. A minimum cumulative undergraduate grade-point average of 2.75 or 3.00 on the last 60 hours of undergraduate or combined undergraduate and graduate course work.
- 2. A minimum combined score of 900 on the Graduate Record Examination General Test (Verbal plus Quantitative).
- 3. A total of at least 1900 points determined by multiplying the cumulative overall undergraduate grade point average by the Graduate Record Examination General Test score (Verbal plus Quantitative).

In addition, all students must take the Graduate Record Exam prior to or within the first semester of graduate enrollment.

Applicants who fail to meet the above standards may be admitted on conditional status as recommended by the Gerontology Admission Committee and approved by the Director of Graduate Studies and Research.

**PROGRAM REQUIREMENTS (M.A. in Gerontology):** Requirements for a degree in Gerontology with an concentration in Long-Term Care Administration: Gerontology or Biology 510, Gerontology 512, 565, 567, 587, 588, 590, FCSC 436, Management 507, three hours of gerontology electives, and six hours of gerontology or free electives for a total of 39 hours for the degree. Students in this concentration must complete the state required Administrator in Training (AIT) for their Gerontology 590 Internship. Six hours of gerontology electives will be substituted for Gerontology 590 if a student already possesses the Nursing Home Administrator's license.

Requirements for the degree in Gerontology with an concentration in Program Administration: Gerontology or Biology 510, Gerontology 512, 567, 540, 545, 568, Gerontology or Speech 526 or Counseling 650A, six hours of Gerontology electives, six hours of gerontology or free electives, and Gerontology 590 or 599 for a total of 39 hours for the degree. Students in this concentration may complete Gerontology 590 (an internship of 32 hours per week for 15 weeks) or Gerontology 599 (Thesis). Persons already employed full-time in an agency providing services to seniors may appeal for a

waiver of the internship/thesis requirement and take six additional hours of gerontology electives.

Requirements for the degree in Gerontology with a concentration in Aging Studies: Gerontology or Biology 510, Gerontology 512, 567,452, 575, 599, Sociology 451 or Psychology 439, nine hours of gerontology electives, and six hours of gerontology or free electives for a total of 39 hours for the degree. Students in this concentration must write a thesis unless an internship is approved by the student's committee and department head. Persons who are already employed full-time in an agency providing services to seniors may appeal to the department head for a waiver of the internship/thesis requirement and take six additional hours of gerontology electives.

#### **CERTIFICATE IN GERONTOLOGICAL STUDIES**

**PROGRAM ADMISSION:** In addition to the University requirements for admission to the Graduate School at ULM, all applicants for regular admission to the Certificate Program must meet one of the following criteria:

- 1. A minimum undergraduate grade-point average of 2.75 or a minimum 3.0 on the last sixty semester hours of undergraduate or combined undergraduate and graduate course work.
- 2. A minimum combined score of 900 on the GRE General Test (Verbal plus Quantitative).
- 3. A combined score of 1900 determined by multiplying the cumulative undergraduate grade point average by the Graduate Record Examination General Test score (Verbal plus Quantitative).

In addition, students must take the Graduate Record Examination prior to or within their first semester of graduate enrollment.

Applicants who fail to meet the above standards may be admitted on conditional status as recommended by the Gerontology Admission Committee and approved by the Director of Graduate Studies and Research.

**PROGRAM REQUIREMENTS:** Undergraduate requirements: Bachelor's degree from an accredited University. Students may be required to make up undergraduate deficiencies in the Generalist and Nursing areas before taking the basic core requirements (9 semester hours) depending on the student's prior academic preparation and/or work experience.

Basic core requirements for the Certificate in Gerontological Studies: Gerontology 510, 512, and Speech/Gerontology 526 or Counselor Education 650A.

Additional requirements, Generalist: 9 semester hours of Gerontology electives. Each student's credentials will be evaluated by the Head of the Program at the time of admission.

Additional requirements, Nursing: 9 semester hours from the following: Nursing 433, 435, and 436; Sociology 425. Nursing 436 will be required for persons without prior experience in a gerontology setting. Each student's credentials will be evaluated by the Head of the Program at the time of admission.

#### HISTORY Brown craduate reg student's prioeC.(i2ned )3ach studeA8den381's p10.25 TD314.5

Graduate course requirements for a graduate minor: 12 semester hours of social sciences or history, including 6 semester hours in one of the social sciences or history.

**PROGRAM ADMISSION:** In addition to the University requirements for admission to the Graduate School at ULM, all applicants for regular admission to the Master of Arts in History degree program must meet the following criterium:

A minimum combined score of 900 on the GRE General Test (Verbal plus Quantitative).

Applicants who fail to meet the above standards may be admitted on conditional status as recommended by the Graduate History Admission and Curriculum Committee in concert with the Director of Graduate Studies and Research.

**PROGRAM REQUIREMENTS:** Undergraduate requirements: 18 semester hours of social sciences and 18 semester hours of history.

Basic core requirements for the Master of Arts in History: History 530 and 535.

Additional requirements: 18 semester hours of history electives and 6 semester hours of History 599. Total of 30 semester hours. Students who do not wish to write a thesis are required to take 30 hours of history electives and the 6 hours of basic core requirements for a total of 36 semester hours for the degree.

# MATHEMATICS AND PHYSICS

# MATHEMATICS

**DEGREES:** No degree is offered. Graduate courses are available for students working toward degrees in other disciplines.

**MINOR REQUIREMENTS:** A minor in Mathematics may be earned by students pursuing a Master of Education degree. Undergraduate course prerequisites for a graduate minor: 18 semester hours of mathematics, including differential and integral calculus.

Graduate course requirements for a graduate minor: 12 semester hours of mathematics.

# PHYSICS

**DEGREES:** No degree is offered. Graduate courses are available for students working toward degrees in other disciplines.

**MINOR REQUIREMENTS:** A minor in Physics may be earned by students pursuing a Master of Education degree. Undergraduate course prerequisites for a graduate minor: 20 semester hours of physics.

Graduate course requirements for a graduate minor: 12 semester hours of physics.

**MINOR REQUIREMENTS:** A minor in Science may be earned by students pursuing a Master of Education degree. Undergraduate course prerequisites for a graduate minor: 12 semester hours in one of the biological, physical, or earth sciences.

Graduate course requirements for a graduate minor: 12 semester hours in one or more of the areas of biology, chemistry, geosciences, or physics.

#### SOCIAL WORK Stubbs Hall 217 (318) 342-1456

**DEGREES:** No degree is offered. Graduate courses are available for students working toward degrees in other disciplines.

# SCHOOL

In addition, a performance audition is required. Those living so distant from the university as to make a personal performance audition a hardship may submit a cassette recording instead.

**PROGRAM REQUIREMENTS:** The Division of Music offers the Master of Music degree with specialty areas in Conducting, Music Education, Performance, and Theory/Composition. Requirements for a major: 32 semester hours in Music and Music Education courses. There will be written and oral comprehensive examinations during the final session of study.

Entrance auditions and placement examinations: Auditions and placement examinations will be given in theory, music history and literature, piano proficiency, conducting, and performance prior to the student's first registration as a means of providing sufficient information for proper advisement. Applicants for the Theory/Composition specialty area must submit a portfolio of original compositions. Upon evaluation of

#### THEATRE AND DANCE Brown Annex 146 (318) 342-1413

**DEGREES:** No degree is offered. Graduate courses are available for students working toward degrees in other disciplines.

# **COLLEGE OF BUSINESS ADMINISTRATION**

#### AVIATION The Col. William T. Hemphill Airway & Computer Science Building (318) 342-1780

**DEGREES:** No degree is offered. Graduate courses are available for students working toward degrees in other disciplines.

**MINOR REQUIREMENTS:** A minor in Aviation may be earned by students pursuing a Master of Education degree. Undergraduate course prerequisites for a graduate minor: 24 semester hours of aviation.

Graduate course requirements for a graduate minor: 12 semester hours of aviation.

#### BUSINESS ADMINISTRATION Administration Building 2-37 (318) 342-1100

DEGREES: M.B.A. in Business Administration

#### **ACCREDITATION STATUS**

The Master of Business Administration program is accredited by AACSB International - The Association to Advance Collegiate Schools of Business.

**PROGRAM ADMISSION:** Admission to the Master of Business Administration Degree program is at the discretion of the Graduate Admission's Committee of the College of Business Administration and the Director of Graduate Studies and Research. Applicants must (1) meet all of the general requirements for admission to the Graduate School, (2) submit a satisfactory Graduate Management Admission Test (GMAT) score (minimum of 450), and (3) demonstrate high promise of success in postgraduate business study. Evidence of high promise may include submission of three letters of recommendation, a summary of work experience, and academic achievement in the form of a resume. Additionally, international students must submit a satisfactory score on the Test of English as a Foreign Language (TOEFL) examination. Decisions by the Graduate Admissions Committee are based on a broad range of criteria, and no particular level of academic performance or test scores will guarantee acceptance.

For conditional admission for the MBAprogram, GPA is calculated on the last 60 hours of coursework applied towards the undergraduate degree. A minimum GMAT of 450 is required.

BECO GRAMM TREOLHREMENT)845 Beoruinemeets (agubpatitiessThomologooguade nonlinessCoyage ( C of Business Adnal seln acPha.25 cylntern6-F2 e of

## COLLEGE OF BUSINESS ADMINISTRATION 63

(Note: Unless all three pharmacy courses or all three gerontology courses are taken, none of them may be used to satisfy the elective course requirements for the MBAdegree.)

# **COMPUTER SCIENCE**

# **COMPUTER SCIENCE**

**DEGREES:** No degree is offered. Graduate courses are available for students working toward degrees in other disciplines.

**ACCREDITATION:** The computer science program in the College of Business Administration is accredited by the Computer Science Commission of the Computing Sciences Accreditation Board.

**MINOR REQUIREMENTS:** A minor in Computer Science may be earned by students pursuing a Master of Education degree.

Graduate course requirements for a graduate minor: 12 semester hours of computer science courses taken from the 400 level courses approved for graduate level or from 500 level courses.

# COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT

#### CURRICULUM AND INSTRUCTION Strauss Hall 208 (318) 342-1266

DEGREES: M.Ed. in Curriculum and Instruction

Ed.D. in Curriculum and Instruction (see Doctor of Education)

M.A.T. in Elementary Education Grades 1-5 (Alternative Certification)

M.A.T. in Multiple Levels Grades K-12 (Alternative Certification)

- M.A.T. in Secondary Education Grades 6-12 (Alternative Certification)
- M.A.T. in Special Education Mild/Moderate Grades 1-12 (Alternative Certification)

**MINOR REQUIREMENTS:** A minor in Business may be earned by students pursuing a Master of Education degree. Undergraduate course prerequisites for a graduate minor: 27 semester hours of business administration, including

12 hours of Educational Instructional

Department of Education or its equivalent. A total of 36 semester hours must be earned for the degree. Successful candidates in this program also earn their endorsement for Teacher Leader. The requirements include 18 hours of Special Education (SPED 550, 574, 575, 576, 577, and 578), 12 hours of Curriculum and Instruction (CURR 518, 523, 545, and 573), and 6 hours of Educational Leadership (EDLE 500 and 505).

**PROGRAM REQUIREMENTS: M.Ed. in Curriculum and Instruction (Special Education, Early Intervention):** A candidate for the degree in Curriculum and Instruction (Special Education, Early Intervention) must hold a valid teacher's certificate in a field complementary to graduate specialization issued by the Louisiana State Department of Education or its equivalent. A total of 36 semester hours must be earned for the degree. Successful candidates in this program also earn their endorsement for Teacher Leader. The requirements include 18 hours of Special Education (SPED 453, 504, 525, 527, 531, and 526), 12 hours of Curriculum and Instruction (CURR 518, 523, 545, and 573), and 6 hours of Educational Leadership (EDLE 500 and 505).

**PROGRAM REQUIREMENTS: M.Ed. in Curriculum and Instruction (Special Education, Educational Diagnostics):** A candidate for the degree in Curriculum and Instruction (Special Education, Educational Diagnostics) must hold a valid teacher's certificate in a field complementary to graduate specialization issued by the Louisiana State Department of Education or its equivalent. A total of 36 semester hours must be earned for the degree. Successful candidates in this program also earn their endorsement for Teacher Leader. The requirements include 15 hours of Special Education (SPED 501, 502, 550, 561, and 572), 12 hours of Curriculum and Instruction (CURR 518, 523, 545, and 573), 6 hours of Educational Leadership (EDLE 500 and 505), and 3 hours of Psychology (PSYC 507).

**PROGRAM REQUIREMENTS: M.Ed. in Curriculum and Instruction (Special Education, Mild/Moderate Disabilities):** A candidate for the degree in Curriculum and Instruction (Special Education, Mild/Moderate Disabilities) must hold a valid teacher's certificate in a field complementary to graduate specialization issued by the Louisiana State Department of Education or its equivalent. A total of 36 semester hours must be earned for the degree. Successful candidates in this program also earn their endorsement for Teacher Leader. The requirements include 18 hours of Special Education (SPED 501, 505, 506, 507, 561, and 566), 12 hours of Curriculum and Instruction (CURR 518, 523, 545, and 573), and 6 hours of Educational Leadership (EDLE 500 and 505).

NOTE: THE FOLLOWING M.A.T. PROGRAMS ARE FOR ALTERNATIVE CERTIFICATION ONLY.

#### PROGRAM ADMISSION FOR:

ELEMENTARY EDUCATION GRADES 1-5 (M.A.T. [Alternative Certification])

In addition to the University requirements for admission, all applicants must present a combined score of 1875 on a scale which is found by multiplying their total undergraduate grade-point average by the combined Graduate Record Examination General Test score (Verbal plus Quantitative) in order to qualify for "Regular Status." Students scoring between 1650 and 1875 (GRE X GPA) may be admitted on "Conditional Status."

Other admission requirements include meeting:

1. Eligibility requirements for admission to Teacher Education (minimum of 2.5 grade-point average on undergraduate studies and passing scores on PRAXIS I: Reading, Writing, Math); and

- 2. Content knowledge requirements for Louisiana which includesa) Possess a baccalaureate degree from a regionally accredited university either with a major in a certifiable teaching area or with coursework equivalent to a primary focus area (30 hours) and
  - b) Present passing scores on state-designated PRAXIS content test in teaching area; and
- 3. TeachNortheast screening assessment requirements.

#### **PROGRAM REQUIREMENTS**

#### Eligibility to Remain in the Doctor of Education Degree Program

Students enrolled in the doctoral program must maintain a minimum grade point average of 3.0 during each term of enrollment. Failure of the student to maintain an overall graduate grade point average of 3.0 or receipt of any grade lower than C in graduate coursework, may result in termination from the program. The student must successfully complete all coursework with a minimum grade point average of 3.25 and all experiential and examination requirements.

A graduate student who is denied admission to or further continuance in the Doctor of Education degree program may appeal for admission or readmission. All appeals must be approved by the appropriate committee on the student's campus of enrollment and by the Consortium Governing Board.

#### Program of Study for the Doctor of Education Degree

**Coursework.** The approved degree program for each doctoral student must include a minimum of 66 hours beyond the master's degree of which at least one half must be in coursework open only to doctoral students. Individuals possessing the Education Specialist Degree in the area in which they are pursuing the doctorate must complete a minimum of 51 additional semester hours of credit for the doctorate.

The consortium program for the Doctor of Education degree consists of the following components:

I.Education Foundations/Research/Statistics18 semester hrs.II.Core Courses for Specific Degree21 semester hrs.III.Cognate (C & I degree only)9 semester hrs.IV.Elective (9 hours for Ed. Leadership)3 semester hrs.V.Internship6 semester hrs.VI.Dissertation9 semester hrs.

Minimum Total hrs.

66 semester hrs.

Initial campus enrollment may not be changed during the student's matriculation in the doctoral program. Each student pursuing the doctorate through the Louisiana Education Consortium will be required to enroll in classes on the campus of each participating institution. A minimum of fifteen semester hours of the minimum sixty six hours required for the doctorate must be taken on the campuses of participating institutions other than the host campus. At least two courses must be taken on each campus.

**Preliminary Examination.** Upon completion of a minimum of fifteen semester hours and not more than 27 semester hours of doctoral coursework, each student will be required to take a Preliminary Examination. The Preliminary Examination is designed to measure student competence in 1) educational foundations, 2) research, 3) statistics and 4) general professional knowledge. This common six-hour written examination will be constructed by the three campus program directors. Following the evaluation of the written Preliminary Examination, an oral examination may be conducted by the program directors. Student performance on one or both components of this examination will form the basis for any revisions of the program of study. Failure to pass this examination after two attempts will result in termination of the student from the program.

**Comprehensive Examination.** The second doctoral examination, the Comprehensive Examination, is administered upon completion of all program coursework. This examination consists of a six-hour written component and a two-hour oral examination. Failure to satisfactorily complete this examination will result in a revision of the program of study and an additional examination. Failure to pass this examination after two attempts will result in termination of the student from the program. After satisfactory completion of the Comprehensive Examination, the student is admitted to candidacy.

Internship. The Louisiana Education Consortium is unique in preparing students to become practitioner-scholars. These individuals will apply the knowledge acquired in program components to practical settings. To achieve this goal, six semester hours of

## COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT 73

internship will be required. Students are eligible to apply for internship only after successful completion of the Comprehensive Examination. The internship must be completed at a site other than the student's place of employment. The student's Doctoral Committee will assist the student in internship placement.

**Dissertation.** In addition to the research requirements associated with each course, all doctoral students are required to complete a dissertation. The dissertation should be directed toward the degree specialization and must include field-based research. Students are encouraged to pursue the identification of a dissertation topic and the review of the literature prior to the Comprehensive Examination. The dissertation prospectus must be approved by the student's Doctoral Committee after the Comprehensive Examination has been successfully completed. Other research requirements, for example, the use of human subjects, must be approved on the campus on which the student is enrolled.

The student will be expected to enroll for a minimum of three semester hours of dissertation credit for each semester/quarter in which the student is working with faculty on the dissertation. The student must be enrolled in a minimum of three semester hours of dissertation credit during the semester/quarter in which the degree is conferred. No less than nine semester hours of credit shall be earned for successful completion of the dissertation.

Following completion of the dissertation, the student will be expected to defend this scholarly work during a Dissertation Defense.

**Doctoral Committee**. The student's Doctoral Committee shall consist of the Major Professor and a minimum of three additional faculty. The Major Professor is the committee chair and must be selected from the institution in which the student is enrolled. Each institution shall have at least one representative on each doctoral committee. Each committee will include a professor from the cognate area. Additional committee members may be added to address specific student program or research needs. The student's Doctoral Committee is selected by the student, appointed by the appropriate administrator on each campus, and approved by the Consortium Board.

#### **Residence Requirements for the Doctor of Education Degree**

Students pursuing the Doctor of Education degree will be required to spend at least two consecutive semesters/quarters in residence on the campus from which the degree is to be awarded. Students must be enrolled as full-time students during the time in which the residence requirement is being met.

#### Transfer of Credit for the Doctor of Education Degree

A maximum of 15 semester hours of post-master's graduate credit appropriate to the student's degree program may be transferred from other institutions offering regionally accredited graduate programs if earned in residence at that institution. No credits for which a grade of less than B has been earned may be transferred. Neither internship nor dissertation credit may be transferred into consortium programs.

#### Time Limit for the Doctor of Education Degree

All coursework, internships and the dissertation must be completed within a six year time period from date of candidacy in the program. Courses transferred into the doctoral program must be within a seven year time limit for completion. Any appeal for extension must be approved by the institution's Graduate Council and the Consortium Governing Board.

#### **Requests for Time Extensions**

To utilize graduate credit taken prior to the seven-year time limit, the student may request a time extension. These requests should be submitted before or during the semester in which the time limit expires. For further information please contact the Major Professor or the Office of Graduate Studies and Research.

### **Policies and Procedures**

Policies and procedures for the Louisiana Education Consortium Ed.D. are detailed in *The Louisiana Education Consortium Handbook.* 

# EDUCATIONAL LEADERSHIP AND COUNSELING (Counseling Programs)

Strauss Hall 306 (318) 342-1246 Marriage and Family Therapy Center 3404 Bon Aire Drive (318) 362-3008

DEGREES: M.Ed. in Counseling M.A. in Substance Abuse Counseling M.A. and Ph.D. in Marriage and Family Therapy

**ACCREDITATION:** The School Counseling program (M.Ed.), the Community Counseling program (M.Ed.), and the Marriage and Family Therapy program (M.A.) are accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). The Marriage and Family Therapy Program (M.A.) is also accredited by the Commission On Accreditation for Marriage and Family Therapy Education (COAMFTE). The Substance Abuse Counseling program (M.A.) meets the standards for, and is accredited as a Community Counseling program by CACREP.

CREDENTIALS DEADLINES: Individuals interested in applying for admission should

Requirements for a major: Counseling 505, 522, 560, 562, 581, 663, 667; Marriage and Family Therapy 502, 510, 520, 521, 608, 610, 620, 662, 665, 666; 9 semester hours of Marriage and Family Therapy 670; for a total of 60 semester hours. A total of 500 client contact hours must be approved and documented by the Clinical Director of the Marriage and Family Therapy program.

the requirements of the Graduate School and the College of Education and Human Development.

**Program Requirements:** At the time of admission, the student shall consult with his/her advisory committee to determine what "leveling" course work from their Master's curriculum (if any) will need to be completed prior to pursuing advanced marriage and family therapy studies.

The core curriculum (required post master's degree courses) for the Ph.D. in Marriage and Family Therapy includes MAFT700, 702, 710, 712, 714, 720, 722, 724, 730, 740, 742, 746, 750 (1-3 cr. per term of enrollment, minimum of 6 cr. required), 752 (6), 799 (12), Educational Foundations 691, and 6 semester hours of MAFT electives at the 600 level approved by the Major Professor.

**Residence Requirements:** Students must enroll full time in the program. Beginning with the initial semester of enrollment, students must be in continuous full-time residency for a minimum of 21 months (completing the first 6 terms of study as defined above).

**Preliminary Examination:** Upon completion of twelve semester hours of study, each student will be required to take a Preliminary Examination. The examination is designed to measure student competency in the subject matter of the first 12 hours of course work. Following the evaluation of the written Preliminary Examination, an oral examination will be conducted by the Marriage and Family Therapy faculty. Student performance on both components of this examination will form the basis for any revisions of their program of study. Failure to pass this examination after two attempts will result in termination of the student from the program.

**Comprehensive Examination:** The Comprehensive Examination is administered upon the completion of all required course work. This examination consists of a written as well as an oral examination. Failure to successfully complete any part of this examination will result in a revision of the program of study and an additional examination. Failure to pass all sections of this examination after two attempts will result in termination of the student from the program. After satisfactory completion of this examination, the student may then apply for candidacy status.

**The Clinical Experience:** The clinical experience shall consist of a minimum of twelve semester hours. These shall be designated as follows:

· Six semester hours of practicum minimum. These one credit hour experiences shall

## 78 THE UNIVERSITY

pursue the identification of a dissertation topic and the review of the literature prior to the Comprehensive Examination (typically this can be done while taking MAFT 746). The dissertation proposal may be approved by the student's Dissertation Committee after the Comprehensive Examination has been successfully completed.

The student is expected to enroll continuously for a minimum of three semester hours of dissertation credit each semester until completion of the dissertation. The student must register for a minimum of twelve semester hours of dissertation credit during his/her program. Following satisfactory completion of the dissertation as determined by the dissertation committee, an oral defense is required. The dissertation, with recommended changes, will then be submitted to the Office of Graduate Studies and Research for final approval.

**Dissertation Committee:** The student's Dissertation Committee shall consist of the Dissertation Chair and a minimum of three additional members who are representative of the general field of study in which the student expects to perform his/her work. The Dissertation Committee Chair must be selected from the ULM Marriage and Family Therapy graduate faculty and hold the credential of "full member" status on the graduate faculty. The student's Dissertation Committee is selected by the student in collaboration with the Dissertation Chair, and must be approved by the College of Education and Human Development Graduate Studies Committee, the Dean of the College of Education and Human Development, and the Director of Graduate Studies and Research. Each member must hold credentials as a member or associate member of the graduate faculty.

**Transfer of Credit:** A maximum of nine semester hours of graduate credit appropriate to the student's degree program may be transferred from other institutions offering regionally accredited graduate programs. Courses transferred into the ULM doctoral program must have been completed within three years prior to admission. No credits for which a grade of less than a B has been earned may be transferred. Neither internship nor dissertation credit may be transferred into the ULM program.

**Time Limit for the Ph.D. in Marriage and Family Therapy:** All course work, internships, and the dissertation must be completed within a six-year time period from the date of the first registration in the program. Any appeal for extension beyond the six year requirement must be approved by the Office of Graduate Studies and Research and by the Marriage and Family Therapy Doctoral Faculty.

**Policies and Procedures:** Policies and procedures for the ULM Marriage and Family Therapy Ph.D. Program are detailed in the program handbook.

# EDUCATIONAL LEADERSHIP AND COUNSELING (Educational Leadership Programs)

### Strauss Hall 306 (318) 342-1246

**DEGREES:** M.Ed. in Educational Leadership, M.Ed. in Educational Technology Leadership and Ed.D. in Educational Leadership (see Doctor of Education)

**CREDENTIALS DEADLINES:** Individuals interested in applying for admission should contact the Department of Educational Leadership and Counseling for an application packet for the degree and area of interest.

**PROGRAM ADMISSION (M.Ed. in Educational Leadership):** In addition to the University requirements for admission to the Graduate School at ULM, applicants for admission to the Master of Education in Educational Leadership program must present a

combined score of 1875 on a scale computed by multiplying the undergraduate gradepoint average by the combined Graduate Record Examination Test score (Verbal plus hours from each of the following areas: exercise physiology, anatomical/biomechanical kinesiology, athletic injuries, biology/zoology, and chemistry. The student may not enroll in more than 12 graduate hours until all undergraduate prerequisites are met.

**CONCENTRATION AREAS AND DEGREE REQUIREMENTS:** Concentration areas in Exercise Science are Clinical Exercise Physiology and Applied Exercise Physiology. A student's plan of study must be approved by the major professor and graduate advisory committee.

Requirements for the Master of Science in Exercise Science (Clinical Exercise

3. A total of at least 1900 points based upon the formula—400 times the overall undergraduate grade-point average plus the GRE General Test score (Verbal plus Quantitative).

Applicants who fail to meet the above standards may be admitted on conditional status by the recommendation of the Committee on Admissions of the Psychology Department in concert with the Director of Graduate Studies and Research.

**PROGRAM REQUIREMENTS (M.S.):** Undergraduate requirements: 18 semester hours of psychology, including at least 3 semester hours from each of the following areas: experimental psychology, statistics, and tests and measurements. The student will not be allowed to take more than 12 graduate hours until all undergraduate prerequisites are completed.

The Master of Science in Psychology offers concentrations or specialized tracks in School Psychology, Psychometrics, and Experimental Psychology. Basic core requirements common to all tracks are PSYC 522(3), 523(3), 534(3), and 599(6). An additional required course common to both the Experimental and Psychometric track is PSYC 561(3). The Experimental track requires the addition of PSYC 502(3), 531(3), and 12 hrs. of electives for a total of 36 hours. Required courses common to both the School and Psychometric track include PSYC 509(3), 511(3), 515(3), 552(3), and 571(3). Two additional course, of PSYC 503(3) and PSYC 588A, are required in the School Psychology track for a total of 36 hours. Courses required for the Psychometric Psychology track in addition to those listed in basic core requirements and those common to other tracks include PSYC 508(3), 518(3), and 592(6) for a total of 45 hours.

**PROGRAM ADMISSION (S.S.P.):** In addition to meeting the general requirements for admission to the Graduate School, the applicant must have completed at least 18 hours of psychology courses including experimental psychology, statistics, tests and measurements, exceptional children, and theories of personality. Additional courses in history and systems, and physiological psychology are highly recommended. The student must also meet **two** of the following criteria:

- 1. A minimum cumulative undergraduate grade-point average of 3.00.
- A minimum combined score of 900 on the Graduate Record Examination General Test (Verbal plus Quantitative);
- 3. A total of at least 2000 points based upon the formula—400 times the overall undergraduate grade-point average plus the Graduate Record Examination General Test score (Verbal plus Quantitative).

Post-master's degree applicants must present a minimum grade-point average of 3.25 on previous graduate work. Students having previously earned master's degrees in psychology or a related field and those with post-master's practical experiences will be evaluated individually to determine suitability for admissions to the specialist in school psychology program and to develop a degree plan appropriate to the student's background. Applicants who fail to meet the above standards may be admitted by the recommendation of the Committee on Admissions of the Psychology Department and with the approval of the Director of Graduate Studies and Research.

**PROGRAM REQUIREMENTS (S.S.P.):** Degree candidates must complete a minimum program of 54 semester hours of graduate course work, and in addition, complete an internship (12 semester hours), and a thesis (6 semester hours). A Master of Science degree in Psychology is conferred during the program following the completion of at least 36 semester hours, the

When a student is admitted to the Specialist in School Psychology degree program, the Director of Graduate Studies and Research, upon the recommendation of the Department Head, will appoint a major professor. Upon recommendation of the major professor, the Director of Graduate Studies and Research will appoint a graduate advisory committee composed of the student's major professor and two other faculty members. The graduate advisory committee will prepare a formal degree program subject to the approval of the Director of Graduate Studies and Research.

### **Requirements for the Specialist in School Psychology Degree**

A student must earn a minimum grade-point average of 3.0 based on a 4.0 system on all work pursued for the degree, with no grade lower than a C, and no more than six semester hours credit with a grade of C. The student must pass written and oral

## **COLLEGE OF HEALTH SCIENCES**

## ALLIED HEALTH SCIENCES Caldwell Hall 210 (318) 342-1622

**DEGREES:** No degree is offered. Graduate courses are available for students working toward degrees in other disciplines.

## COMMUNICATIVE DISORDERS Brown Hall 138 (318) 342-1392

**DEGREES:** M.S. in Communicative Disorders

**ACCREDITATION:** The graduate program is accredited by the Council of Academic Accreditation of the American Speech-Language-Hearing Association in speech-language pathology.

**CREDENTIALS DEADLINES:** All official transcripts, GRE scores, and three recommendations are required. Departmental receipt deadlines are February 25 for Fall admission and September 25 for Spring admission.

**PROGRAM ADMISSION:** In addition to the University requirements for admission to the Graduate School at ULM, applicants for admission to the Master of Science in Communicative Disorders degree program must meet at least two of the following criteria:

- 1. A minimum cumulative grade-point average of 2.5.
- 2. A minimum combined score of 800 on the GRE General Test (Verbal plus Quantitative).
- 3. A combined score of 1875, determined by multiplying the total undergraduate gradepoint average by the combined GRE General Test Scores (Verbal plus Quantitative).

Admission is selective and competitive. Applicants who fail to meet the above standards may be admitted on conditional status as recommended by the Graduate Admission and Retention Committee of the Department of Communicative Disorders in concert with the Director of Graduate Studies and Research.

**PROGRAM REQUIREMENTS:** Undergraduate requirements: 51 semester hours in the area of communicative disorders.

Requirements for a major (Non-thesis): 37 semester hours of coursework within the area of communicative disorders, including Communicative Disorders 505 and excluding clinic and internship.

Requirements for a major (Thesis): 45 semester hours in the area of communicative disorders, including Communicative Disorders 505 and 6 semester hours of 599 (Thesis).

A student's plan of study is to be determined with the guidance of a major professor. Students seeking the Certificate of Clinical Competence from the American Speech-Language-Hearing Association must meet the academic coursework and clinical practicum requirements established for such certification prior to graduation.

### NURSING School of Nursing Nursing Building 131 (318) 342-1644

**DEGREES:** No degree is offered. Graduate courses are available for students working toward degrees in other disciplines.

## COLLEGE OF HEALTH SCIENCES 87

**ACCREDITATION:** The School of Nursing is accredited by the Commission on Collegiate Nursing Education (CCNE), One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120.

## **COLLEGE OF PHARMACY**

## PHARMACY College of Pharmacy Sugar Hall 151 (318) 342-1600

DEGREES: M.S. in Pharmaceutical Sciences Ph.D. in Pharmacy

Areas of concentration available for the master's degree include Hospital Pharmacy, Medicinal Chemistry, Pharmaceutics, Pharmacognosy, Pharmacology, Pharmacology/Toxicology, Pharmacy Administration, and Toxicology.

Areas of concentration available for the doctoral degree include Medicinal Chemistry, Pharmaceutics, Pharmacognosy, Pharmacology, Pharmacology/Toxicology, Pharmacy Administration, and Toxicology.

**ACCREDITATION:** The College of Pharmacy is accredited by The American Council on Pharmaceutical Education.

**PROGRAM ADMISSION (M.S.):** Graduate programs in the pharmaceutical sciences are offered in the areas of Hospital Pharmacy, Medicinal Chemistry, Pharmaceutics, Pharmacognosy, Pharmacology, Pharmacology/Toxicology, Pharmacy Administration, and Toxicology. Students seeking admission to the program of study in Hospital Pharmacy must have an undergraduate degree in pharmacy.

An applicant must meet the requirements for admission to the University and the Graduate School and should submit a minimum score of 2500 on a scale determined by multiplying the undergraduate grade-point average (4.0 system) by the combined quantitative and verbal scores on the Graduate Record Examination (GRE) General Test. The results of the Graduate Management Admission Test (GMAT) multiplied by a factor of 2.2 may be utilized in lieu of the combined GRE score in the foregoing scale computation to determine the eligibility of applicants for admission in the area of Pharmacy Administration. Achievement of the minimum score of 2500 does not guarantee admission. All applicants must apply for regular degree status for admission and be reviewed and recommended for admission by the Graduate Studies Committee.

Upon the recommendation of the Graduate Studies Committee and the Dean, applicants may enroll in a Non-thesis Master of Science degree program in the areas of hospital pharmacy, pharmacy administration, or toxicology.

program

Tby

The program leading to the degree normally shall be the equivalent of not less than three years of graduate study beyond the baccalaureate degree.

The applicant should have a Master's degree from an accredited institution; however, exceptional students with a baccalaureate degree may be admitted.

Full-time faculty members on continuing appointment at The University of Louisiana at Monroe Louisiana University will not be admitted to doctoral programs offered through their department at the University.

#### General Requirements for the Doctor of Philosophy Degree

An applicant must meet the requirements for admission to the University and the Graduate School and should submit a minimum score of 3000 on a scale determined by multiplying the undergraduate grade-point average (4.0 system) by the combined verbal and quantitative scores on the Graduate Record Examination General Test (GRE). The results of the Graduate Management Admission Test (GMAT) multiplied by a factor of 2.2 may be utilized in lieu of the combined GRE score in the foregoing scale computation to determine the eligibility of applicants for admission in the area of Pharmacy Administration. Achievement of the minimum score of 3000 does not guarantee admission. All applicants must apply for regular degree status for admission and be reviewed and recommended for admission by the College of Pharmacy Graduate Studies Committee.

After admission to the degree program by the Graduate School, the student is referred to the Department Head in his area of interest. The Department Head may assist the student in the selection of course work for the first semester or assign the student to a temporary major professor for initial advising.

During the first semester of residence, the student should select a faculty member who shall act as the major professor of his graduate advisory committee and direct the student's research. Original research is an integral part of the Doctor of Philosophy program. As soon as possible, but not later than the second regular semester of enrollment, the student with his advisory committee must file an approved dissertation topic with the department head. The graduate advisory committee shall consist of not less than four approved members of the graduate faculty and be mutually acceptable to the student and the committee members, including the major professor. The committee members must be representative of the general field of study in which the student expects to perform his work. The major professor and the graduate advisory committee, the Dean and the Director of Graduate Studies and Research.

Although there are specified course requirements which must be completed for the Doctor of Philosophy degree, the degree is not awarded on the basis of time spent in the program or following the completion of any specific number of formal courses. The Doctor of Philosophy degree is not granted on the basis of miscellaneous course studies and research effort, but the program must be competency based and research oriented to produce a dissertation of literary and scholarly merit denoting the student's capacity for original, independent research in a particular field of specialization pertaining to one of the pharmaceutical sciences.

#### Program of Study for the Doctor of Philosophy Degree

The program and courses of study for the Doctor of Philosophy degree will be organized to meet the student's special needs as determined by the student and his graduate advisory committee. The graduate advisory committee is composed of faculty members who work closely with their students.

Under the direction of the major professor, a degree plan for the Doctor of Philosophy degree must be prepared by the student with the graduate advisory committee no later than the second semester after enrollment into the degree program. It will involve a minimum of 30 semester hours of structured coursework, excluding seminars, dissertation

research and directed study. Of the minimum 30 hours, 80 percent must be in 500 level courses.

The degree plan must have the approval of the student's graduate advisory committee, the College of Pharmacy Graduate Studies Committee, and be reviewed by the department head. Final approval is granted by the Director of Graduate Studies and Research. The forms for filing the degree plan are obtained from the office of the Dean of the College of Pharmacy.

Any changes in the original degree plan, including the dissertation title, are to be submitted in the same procedure as the original plan.

To fulfill the course requirement for the Doctor of Philosophy degree, the candidate shall present an average of not less than B on all graduate work pursued and all work in the major field, with no grade lower than C and not more than six semester hours of credit with a grade of C.

After approximately 80 percent of the degree plan has been completed, the student must complete the general examinations, oral and written, administered by the student's advisory committee. The results of these written and oral examinations are reported to the Office of Graduate Studies and Research by the student's graduate advisory committee with one of the following recommendations: 1) the student's admission to candidacy; 2) continued study with or without additional course work included in the degree plan followed by re-examination; or 3) dismissal from the program. If the student does not pass the general examinations but is continued in graduate work, one semester or one summer term must elapse before another examination is administered. Only one re-examination is permitted.

Therefore, a candidate for the Doctor of Philosophy must meet the following requirements for the degree:

- 1. Maintain a B average or better on all course work where final grades have been awarded and receive no grade less than C.
- 2. Successfully complete the general examinations.
- 3. Successfully complete and defend the doctoral dissertation.

#### **Residence Requirements for the Doctor of Philosophy Degree**

A student must earn a minimum of 30 semester hours of graduate credit (exclusive of dissertation, seminar, and special problem credit) in continuous full time residence including not less than two consecutive regular semesters. The 30 semester hours of credit will consist of not less than 80 percent in 500 level courses.

#### Transfer of Credit for the Doctor of Philosophy Degree

A maximum of 15 semester hours of residence graduate credit beyond the master's degree, earned prior to admission to the doctoral program, may be accepted by transfer from accredited institutions which offer the doctor's degree, provided that each course grade is B or better. Such credit must be acceptable in meeting requirements for the doctor's degree at the institution where the credit was earned, and must be applicable to the student's advanced degree program. Transferred credit cannot be used to reduce the minimum residence requirements. A portion of the general examination will be devoted to the testing of the student's knowledge of the courses involved in transfer credit.

#### Time Limit for the Doctor of Philosophy Degree

After admission to the program leading to the Doctor of Philosophy degree, a student will be permitted six calendar years in which to complete all remaining requirements for the degree. All work applied to degree requirements, including transferred credit and prior the credit w in thesplied subix caled, partcourses ents for the'

### **Requests for Time Extensions**

To utilize graduate credit taken prior to the nine-year time limit, the student may request a time extension. These requests should be submitted before or during the semester in which the time limit expires. For further information please contact the Major Professor or the Office of Graduate Studies and Research.

## **GRADUATE COURSES**

To receive graduate credit for a course designated "For Undergraduate and Graduates," a student must be in graduate admission status at the time credit is earned in the course. Credit earned in undergraduate admission status cannot be changed to graduate credit.

## ACCOUNTING (ACCT)

#### For Undergraduates and Graduates

- 421. ADVANCED AUDITING. 3 cr. Auditing procedures and practices with special emphasis on the CPA examination. Prerequisite: Minimum grade of C in 420 or permission of department head.
- **430. THEORY. 3 cr.** Accounting principles and procedures and the theoretical framework on which they rest; selected specialized topics; emphasis on publications of the AICPA and AAA. Prerequisite: Minimum grade of C 311 or permission of department head.
- 431. ADVANCED INCOME TAX. 3 cr. Income tax applicable to partnerships and corporations; various other taxes; research of tax problems. Prerequisite: Minimum grade of C in 330 or permission of department head. Sp.
- **432. GOVERNMENTAL. 3 Cr.** Accounting, reporting, and auditing as related to governmental and other not-for profit organizations. Prerequisite: Minimum grade of C in 310; credit or registration in 311. F.

#### For Graduates Only

- 501. ADVANCED THEOR Y. 3 cr. Development of accounting thought; critical analysis of current accounting theory and practices; selected readings on special topics; study of AICPA and AAA publications. Prerequisites: 311.
- **502.** ACCOUNTING FOR ADMINISTRATORS. 3 cr. Use of accounting information for decision making in business and governmental organizations. Intended for graduate students having no previous credit in accounting courses. Not applicable as an elective toward the MBA.
- 503. TAX CONCEPTS FOR DECISION MAKING. 3 cr. Research and presentation of topics in Taxation. Study will focus on the importance of tax considerations in business planning and decision making. Prerequisites: 211 or 213 or 502.
- 591. DIRECTED STUDY. 3 cr. Individual study of advanced accounting topics, under the direction of a Senior Faculty Member. Prerequisites: Twelve semester hours of BMBA courses and a minimum graduate GPA of 3.5.

## ADULT EDUCATION (ADED)

#### For Undergraduates and Graduates

- 402. FOUNDATIONS OF ADULT EDUCATION. 3 cr. A comprehensive study of Adult Education with emphasis on historical background and current developments, Adult Education and Literacy Acts, teacher certification, extent and consequences of illiteracy, characteristics of adult learners, special-needs groups, and resources. Prerequisite: For graduate credit, a valid Louisiana teaching certificate or permission of the department head.
- **410. METHODS AND MATERIALS IN ADULT EDUCATION. 3 cr.** The course will aid teachers in developing skills, techniques and strategies for teaching basic skills to the adult learner. There will also be a focus on organizing instructional materials to promote effective learning. Prerequisite: For graduate credit, a valid Louisiana teaching certificate or permission of the department head. (Formerly Curriculum and Instruction 410.)
- 488. PRACTICUM IN ADULT EDUCATION. 3 cr. Program to give supervised teaching experience in a variety of Adult Education settings. Must meet all other eligibility requirements for Louisiana Teaching Certificate in field of study to earn graduate credit and grade. Prerequisites: 402, 410.

## AGRICULTURE (AGRI)

#### For Undergraduates and Graduates

- **403. PLANT PATHOLOGY. 3 cr.** A study of signs, symptoms, and syndromes as they relate to the causal agents and control of plant diseases. Prerequisites: Biology 120, 121; Microbiology 201; credit or registration in 402. (Same as Botany 401.) F, odd
- 404. PLANT PATHOLOGY LABORATORY. 1 cr. A laboratory course to accompany 403. Three hours laboratory. Field trip fee required. Prerequisites: Credit or registration in 403; Microbiology 203. (Same as Botany 402.)
- 491. DIRECTED STUDY. 1-6 cr. Maximum, 6 cr. Individualized work on special problems in: A. Soil Science; B. Plant Science; C. Animal Science; D. Agriculture Business; E. Equine Science; F. Agriculture Biometrics. Prerequisite: Approval of Department Head.

#### For Graduates Only

501.

## ANTHROPOLOGY (ANTS or ANTG)

#### For Undergraduates and Graduates

- **411. THE ARCHEOLOGY OF NORTH AMERICA. 3 cr.** The archeological background of North America from Mexico to the Arctic Circle; progressive states of development of prehistoric North American cultures. (Same as Geography 411.)
- 414. THE INDIANS OF NORTH AMERICA. 3 cr. Survey of the distribution and principal regional

- **408. ART APPLICATIONS IN TEACHING. 3 cr.** Mixed media; drawing multi-image processes, enlargement techniques, and three-dimensional poster material are utilized in visual aid techniques.
- **409. TECHNIQUES IN THE FINE ARTS. 3 cr.** A study, analysis, and participation in the productions of various media in the fine arts such as drawing, painting, printing, and sculpture. For non-art majors. Additional course fee \$50.
- **411. ART EDUCATION FOR THE ELEMENTARY SCHOOL. 3 cr.** This course is designed to present art education students with concepts, methods, and experiences used in creating art activities with children at the elementary level. Additional course fee \$50.
- **412. ART EDUCATION. 3 cr.** Lecture/discussion/experience course designed to present art education students with theories, strategies, and experiences in designing and teaching art activities. Additional course fee \$50.
- **418. INCLUSIVE ART INSTRUCTION. 3 cr.** Objectives, methods, and materials used in teaching gifted, talented, and other diverse learners. For juniors, seniors, and graduates only.
- **425. ŘENAISSANCE. 3 cr.** The visual arts in Italy from the early Renaissance through Mannerism. Prerequisite: 201, 202.
- **426. NINETEENTH CENTURY. 3 cr.** Nineteenth Century European and American Rococo through Post-Impressionism periods. Prerequisites: 201, 202, or Approval of the Department Head.
- **429. CONTEMPORARY. 3 cr.** Twentieth century European and American Art. A study of the major achievements in painting, sculpture, and architecture since 1900. Prerequisite: 201, 202.
- **431. WATERCOLOR. 3 cr.** Painting in watercolor. Prerequisites: 101, 103, or Approval of Department Head.
- **440. METALCRAFT AND JEWELRYMAKING. 3 cr.** The designing and fabrication of jewelry and small metal products. One hour lecture and five hours studio. Prerequisite: 102 or Approval of Department Head.
- **441.** SPECIAL PROBLEMS. 3 cr. per area. Any area may be repeated. A maximum of 12 hours allowed toward the degree. A. Graphic Design; B. Ceramics; C. Painting; D. Photography; E. Drawing; F. Printing; G. Sculpture. Additional course fee \$50.
- 443. SEMINAR IN ART HISTORY. 3 cr. Maximum, 12 cr. The study of various eras and developments in world art. A. Expressionism. B. Baroque. C. Far Eastern. D. Theory. Prerequisites: 201, 202, or Approval of Department Head.
- 451. ADVANCED PRINTMAKING. 3 cr. Maximum, 12 cr. Research problems in printmaking; choice of media. One hour lecture and five hours studio. Additional course fee \$50.
- **455. ADVANCED PHOTOGRAPHY. 3 cr. Maximum, 12 cr.** Individual instruction in planning and executing a personal response to the visual elements and creative composition. One hour lecture and five hours studio. Prerequisite: 246.
- 461. ART THEORY/PORTFOLIO. 1-2 cr. Individual directed study on specific problems related to art theory or studio. May be repeated for a maximum of 2 semester hours. For art majors and nonart majors.
- **471. ADVANCED PAINTING. 3 cr. Maximum, 12 cr.** Independent problems in choice of media; emphasis upon personal solutions. One hour lecture and five hours studio. Prerequisites: 271 or 272.
- **481. ADVANCED SCULPTURE. 3 cr. Maximum, 12 cr.** Advanced problems in sculptural processes and techniques. Emphasis upon individual creative expression. One hour lecture and five hours studio. Prerequisite: 381. Additional course fee \$50.
- **495. RESEARCH PROBLEMS. 3 cr. Maximum, 12 cr.** Individual and group study with Approval of Department Head. Research, discussion, and criticism. Additional course fee \$50.

#### For Graduates Only

- 501. PAINTING. 3 cr. Maximum, 12 cr. Individual instructions in developing student capabilities as a creative artist.
- **511. ART EDUCATION SEMINAR. 3 cr.** A critical study of current literature in contemporary art education. An investigation of materials, methods organization and administration of art programs in level of interest.
- **512. PROCESSES IN ART EDUCATION. 3 cr.** Developments in content, materials, and trends in teaching art in the elementary and secondary schools.
- 521. ART THEORY. 3 cr. Maximum, 6 cr. Research and criticism of art works.
- 531. CERAMICS. 3 cr. Maximum, 12 cr. Personal research in the techniques and processes of the ceramics artist.
- 546. SELECTED PHOTOGRAPHY. 3 cr. Maximum, 12 cr. Problems assigned as independent research in black and white or color photography. Prerequisite: Approval of the Department Head.

- 551. PRINTMAKING. 3 cr. Maximum, 12 cr. Exploration and research in the print media.
- 571. DRAWING STUDIO. 3 cr. Maximum, 6 cr. Exploration and research of drawings as personal and creative expression.
- **581. SCULPTURE. 3 cr. Maximum, 12 cr.** Independent research and exploration of sculptural processes and techniques as a means of individual creative expression.
- 591. DIRECTED STUDIES. 3 cr. Maximum, 12 cr. Investigative study and selected problems for advanced graduate students.

## ATMOSPHERIC SCIENCES (ATMS)

#### For Undergraduates and Graduates

- **450. ATMOSPHERIC POLLUTION. 3 cr.** A study of elements, effects and meteorology of air pollution including the "Greenhouse" effect, acid rain, and ozone depletion problems. Air pollution modeling and prediction is also covered. Prerequisites: Completion of freshman mathematics requirements and Chemistry 107.
- **460-461. METEOROLOGYFOR TEACHERS. 3 cr. each.** A introduction to meteorology designed for elementary and secondary school science teachers. The courses are a blend of lecture, demonstrations, and hands-on work and are designed to be taken in sequence. The courses cannot be used to satisfy degree requirements in Atmospheric Science. Prerequisite: MATH 110 or 111. ATMS 460 is a prerequisite for ATMS 461.

### AVIATION (AVIA)

#### For Undergraduates and Graduates

- **403. AEROSPACE EDUCATION. 3 cr.** A course designed to provide teachers, counselors, and administrators with a basic understanding of the scientific and technological fundamentals involved in flight. Utilizing the airplane as the tool of classroom instruction, the earth, physical and biological sciences are taught as they relate to the aerospace age. The material covered will encompass the equivalence of a Federal Aviation Administration private pilot written examination.
- **404. ADVANCED AEROSPACE EDUCATION. 3 cr.** A course designed to provide teachers, counselors, and administrators with an advanced technological orientation, as well as a solid foundation in the aerospace career fields. This course includes an advanced academic program in the classroom and an optional flight training program through solo flight.
- **451. ADVANCED AEROSPACE SEMINAR. 1-3 cr.** Individual and limited group problems in aerospace development, history, organizational relationships and management. Designed primarily for individual and small group studies, and for extended field trips to significant aerospace centers of research, development, and operations. Prerequisite: Approval of Department Head.

## BIOLOGY (BIOL)

#### For Undergraduates and Graduates

403. perpeter 5015 (Magit.es.81/0.45) TODre20npeter 20/04 ended (desovinder of det Sin 1/3/21740 assr 15) Sec bleed ited og a

- **409. CELLULAR PHYSIOLOGYLABORATORY. 1 cr.** A laboratory course to accompany 408. Three hours laboratory. Prerequisite: Credit or registration in 408.
- **412. PLANT PHYSIOLOGY. 4 cr.** An introduction to the chemical and physical processes occurring in plants. Three hours lecture and three hours laboratory. Prerequisites: 204; Chemistry 108, 110; Math 116. (Formerly Botany 409)
- **414. ANIMALPHYSIOLOGY. 4 cr.** An introduction to the processes by which animals function in their environment. Three hours lecture and three hours laboratory. Prerequisites: 208; Math 116. (Formerly Zoology 412)
- **416. PHYSIOLOGY OF REPRODUCTION. 3 cr.** Study of the physiological and environmental processes involved in mammalian reproduction. Sp. odd (Formerly Zoology 429)
- **417. DEVELOPMENTAL BIOLOGY. 3 cr.** An introduction to the mechanisms and evolution of developmental processes of plants and animals. Topics include pattern formation, cell differentiation, and organogenesis. An emphasis is placed on experimental aspects of developmental biology. Prerequisite: BIOL 305.
- 418. DEVELOPMENTAL BIOLOGY LABORATORY. 1 cr. A laboratory course to accompany BIOL 417. Lab topics include experimental investigations of fertilization, embryogenesis, gene expression, and patterns of vertebrate organogenesis. Prerequisite: Credit or registration in BIOL 417
- **419. ADVANCED CONCEPTS IN GENETICS AND MOLECULAR BIOLOGY. 3 cr.** An advanced level course in genetics with a focus on DNA structure and function, gene expression, protein function, human genetics, and biotechnology. An emphasis is placed on current topics and emerging biomedical technologies. Prerequisite: BIOL 305
- **422. HISTOLOGY. 4 cr.** Microscopic structure of the cell; cellular organizations; tissues; the relationship of structure to function. Three hours lecture and three hours laboratory. Prerequisite: 208. (Formerly Zoology 415, 417)
- **424. EMBRYOLOGY. 4 cr.** The structure and maturation of germ cells, the fertilization and early development of vertebrates. Three hours lecture and three hours laboratory. Prerequisite: 208. (Formerly Zoology 419, 420)
- **425. NEUROLOGY. 3 cr.** Study of the anatomy, physiology and pathology of the human nervous system. (Formerly Zoology 425)
- **426. NEUROLOGY LABORATORY. 1 cr.** A laboratory course to accompany 425. Three hours laboratory. Prerequisite: Credit or registration in 425. (Formerly Zoology 426)
- 432. AQUATIC PLANTS.4 cr. A study of the plants that grow in aquatic and wetland sites. Emphasis placed on identification, distribution, and field characteristics. Two hours lecture and four hours laboratory including frequent field trips. Prerequisite: 2041T/wSt.987 quisite:j 9a75 0 9v1ite:j 9a75 0 9v1ite

- 447. ECONOMIC BOTANYLABORATORY. 1 cr. A laboratory course to accompany 446. Two hours laboratory. Prerequisite: Credit or registration in 446. (Formerly Botany 482)
- **451. FIELD BIOLOGY. 6 cr.** Field studies of the flora and fauna native to selected habitats. Field trip fee required. Prerequisites: Approval of Department Head. Sum.
- **456. INTRODUCTION TO ENTOMOLOGY. 4 cr.** The anatomy, physiology, and classification of insects. Three hours lecture and three hours laboratory. Prerequisite: 208. (Formerly Zoology 450, 451)
- **460. PATHOGENIC BACTERIOLOGY. 4 cr.** The morphology, physiology, and immunogenecity of disease-causing bacteria; methods of isolation, identification and control of pathogenic bacteria and diseases. Three hours lecture and three hours laboratory. Prerequisites: 214, 215. (Formerly Micro 417, 418)
- **462. FOOD AND DAIRY MICROBIOLOGY. 3 cr.** The role of microorganisms in the preservation, spoilage and poisoning in food and dairy products. Also, their role in the manufacture of products of agricultural origin. Prerequisite: 214; credit or registration in 463. (Formerly Micro 423)
- **463.** FOOD AND DAIRY MICRO LABORATORY.1 cr. A laboratory course to accompany 462. Three hours laboratory. Prerequisite: Credit or registration in 462. (Formerly Micro 424)
- **464.** WATER MANAGEMENT. 3 cr. A survey of water distribution and uses, including water purification and sewage treatment, industrial and agricultural; irrigation scheduling. (Formerly Micro 421)
- **466. ADVANCED MICROBIOLOGY. 3 cr.** Advanced microbiological techniques; a study of the morphological, physiological, and genetic characteristics of important groups of microorganisms; introduction to biotechnology. Two hours lecture and two hours laboratory. Prerequisites: 214, 215 and 8 semester hours of chemistry. (Formerly Micro 415, 416)
- **468. GENERAL VIROLOGY. 3 cr.** A study of representative bacterial, animal and plant viruses. Prerequisites: 214; credit or registration in 469. (Formerly Micro 425)
- **469. GENERAL VIROLOGY LABORATORY. 1 cr.** A laboratory to accompany 468. Three hours laboratory. Prerequisite: Credit or registration in 468. (Formerly Micro 426)
- **470. IMMUNOLOGY CONCEPTS AND PRINCIPLES. 3 cr.** Detailed discussion of the cellular and humoral components of the immune system and their interrelationships in the production and control, at both the genetic and cellular levels, of immune responses. Prerequisites: 214; 115 or 312 or consent of instructor. (Formerly Micro 430)
- **472. INTRODUCTORY PARASITOLOGY. 3 cr.** The taxonomy, life history, and economic importance of protozoa, helminths, and arthropods which are parasites of man. Prerequisites: 208; credit or registration in 473. (Formerly Zoology 401)
- **473. INTRODUCTORY PARASITOLOGY LABORATORY. 1 cr.** A laboratory course to accompany 472 three hours laboratory. Prerequisite: Credit or registration in 472. (Formerly Zoology 402)
- **476. FRESHWATER ECOLOGY. 4 cr.** The biological, chemical, and physical characteristics of freshwater habitats. Three hours lecture and three hours laboratory. Field trip fee required. Prerequisites: 204; 208. (Formerly 406, 407)
- **478. ICHTHYOLOGY. 4 cr.** Evolution, systematics and ecology of fishes with an emphasis on North American freshwater fishes. Two hours lecture and six hours laboratory with field trips. Prerequisites: 122, 123. F odd. (Formerly Zoology 405,406)
- 480. HERPETOLOGY. 4 cr. Morphology, taxonomy, and life history of amphibians and reptiles with emphasis on the taxonomy of the amphibians and reptiles of Louisiana. Three hours lecture and three hours laboratory with field trips required. Prerequisite: 208. (Formerly Zoology 427, 428)
- **482. MAMMALOGY. 4 cr.** The morphology, taxonomy, and life history of mammals. Three hours lecture and three hours laboratory with field trips. Prerequisite: 208. F. odd (Formerly Zoology 423, 424)
- **484. ORNITHOLOGY. 3 cr.** Morphology, taxonomy, behavior, and natural history of birds. Two hours lecture and three hours laboratory with field trips required. Prerequisite: 208. Sp. even (Formerly Zoology 431, 432)
- **486. GAME BIRDS. 4 cr.** Recognition, life histories, predators, economics and management practices of North American game birds. Three hours lecture and three hours laboratory with field trips. Prerequisite: 208. Sp. odd (Formerly Zoology 433, 434)
- **488.** GAME MAMMALS AND FUR BEARERS. 4 cr. Recognition, life histories, predators, economics and management practices of game mammals and fur bearers with special emphasis on regional fauna. Three hours lecture and three hours laboratory with field trips. Prerequisite: 208. F. even (Formerly Zoology 473, 474)
- 490. ESTUARINE ZOOLOGY. 4 cr. An introduction to basic estuarine ecology with a focus on the ecology and systematics of major aquatic invertebrates and fishes native to estuaries of the

northern Gulf of Mexico. Three hours lecture and three hours laboratory. Field trip fee required. Prerequisite: 208. Sp. odd (Formerly Zoology 435)

- **492. ANIMAL ECOLOGY. 3 cr.** A study of animal populations, communities and their interactions. Two hours lecture and two hours laboratory. Prerequisites: 303, 304 or equivalent. F even. (Formerly Zoology 440)
- **496. COOPERATIVE INTERNSHIPS. 1-3 cr.** Closely supervised practical experience working in agencies/businesses that employ biologists. Only junior and senior majors and graduate students are eligible. Students will receive grades or CR (credit) or NC (no credit). Students may repeat this course for a total of 3 credits; not to exceed 6 credits total in combination with 403. The course may not be used by graduate students to fulfill major requirements. (Formerly 410)
- **499. SENIOR SEMINAR. 1 cr.** A seminar course to acquaint students with recent primary literature in Biology. Class format will include discussions and written papers. Prerequisite: 40 hours of credit. (Formerly 420)

#### For Graduates Only

- 503. ORGANIC EVOLUTION. 3 cr. The history, theories, and mechanisms of evolution.
- **505. RESEARCH METHODS. 2 cr.** Principles underlying biological research. Emphasis on the scientific method and its application in biological investigation. Prerequisite: Credit or registration in 506.
- **506. RESEARCH METHODS LABORATORY. 1 cr.** A laboratory course to accompany 505. Two hours laboratory. Prerequisite: Credit or registration in 505.
- 507. SEMINAR. 1 cr. Maximum, 2 cr.
- 510. BIOLOGYOF AGING. 3 cr. A 505.

southeastern United States. Three hours lecture and three hours laboratory. Prerequisites: 303, 304, 476. (Formerly 521, 522)

- **534. PLANT SYSTEMATICS AND PHYLOGENY. 3 cr.** Theory and practice of identifying, naming, classifying, and understanding relationships between vascular plants with emphasis on families and their phylogeny. Two hours of lecture and two hours of laboratory. Prerequisites: A 400-level plant taxonomy course. (Formerly Botany 510)
- **536.** SYSTEMATIC BIOLOGY. 3 cr. Major theses include speciation, species, concepts, character analysis, phylogeny reconstruction, and historical biogeography. Theoretical aspects of these topics and their relationship to taxon recognition, description, and classification will be emphasized. Prerequisite: 405 or approval of Department Head. (Formerly Zoology 510)
- **540. COMPARATIVE PHYSIOLOGY. 3 cr.** Physiological processes in a wide range of invertebrates as well as vertebrate animals; different adaptations by which diverse organisms perform basic life functions; comparisons designed to demonstrate physiological homologies and analogies. (Formerly Zoology 511)
- **542. ENDOCRINOLOGY. 3 cr.** The study of endocrine glands and their hormones. Consideration of the role of hormones in growth, development, metabolism, homeostasis, and reproduction. Prerequisite: One semester of physiology. (Formerly Zoology 501)
- **591. DIRECTED STUDY. 1-6 cr. Maximum, 6 cr.** Directed study in selected areas of Biology. Prerequisite: Approval of the Department Head.
- 593. SPECIAL TOPICS IN BIOLOGY. 3-4 cr. Advanced study of topics not covered in regular courses. Topic areas: A. Zoology; B. Botany; C. Cell and Molecular Biology; D. Physiology. All

and quotas. Prerequisites: Quantitative Methods 210, Economics 201 and 202, or 502; and the permission of the graduate coordinator.
512. ACCOUNTING ANALYSIS FOR DECISION MAKING. 3 cr. Use of accounting information

- 512. ACCOUNTING ANALYSIS FOR DECISION MAKING. 3 cr. Use of accounting information systems for profit planning, cost control, and capital budgeting. Study of cost terminology and behavior with emphasis on relevant costs for decision making. Management use and analysis of financial statements. Prerequisites: Accounting 212 and 213, or 502; and the permission of the graduate coordinator.
- 520. FINANCIALANALYSIS. 3 cr. Examination of the key aspects of investment and financial decision-making including capital budgeting, financial statement analysis, financial planning, risk management, international financial markets, and the selection of financial instruments and policies. Prerequisites: Accounting 212 and 213, or 502; Economics 201 and 202, or 502; Finance 315; and the permission of the graduate coordinator.
- **521. MARKETING STRATEGY. 3 cr.** Planning, implementing, and evaluating marketing strategies within the context of a dynamic and global environment. Identifying, understanding, and selecting target markets and developing appropriate marketing programs to satisfy chosen segments. Prerequisites: Marketing 301; and the permission of the graduate coordinator.
- **522. ORGANIZATIONAL THEORY AND BEHAVIOR. 3 cr.** The study of the development and structure of organizations with emphasis given to behavior within organizations. Consideration is devoted to the environment in which the organization exists and the climate within the organization. In-depth attention to topics such as global issues, workforce diversity, group dynamics, and management roles and responsibilities. Prerequisites: Management 301; and the permission of the graduate coordinator.
- **530. INTERNATIONAL BUSINESS. 3 cr.** Examination of the global scope of today's competitive environment to include cultural, economic, social, political, legal and financial ramifications. Topics include: strategic planning, production and distribution logistics, technology, transfer pricing, and risk analysis. Traditional business functional areas such as finance, marketing, information systems and human resources will be examined from a global perspective. Prerequisites: Economics 201 and 202, or 502; Management 301; Marketing 301; and the permission of the graduate coordinator.
- 539. STRATEGIC MANAGEMENT. 3 cr. Comprehensive analysis, integration of business core, and decision making at top management level relative to organizational goal-setting; strategy formulation and implementation; resource accumulation and allocation; and development of appropriate organization structures, information systems, and motivating and control systems. Prerequisites: Credit for at least four of the following six courses: Business Administration 509, 511, 512, 520, 521, and 522 and official admission to the MBAprogram. Course should be taken in the final semester of coursework.

## CHEMISTRY (CHEM)

#### For Undergraduates and Graduates

- **420.** ADVANCED PHYSICAL CHEMISTRY. 3 cr. An introduction to group theory including molecular symmetry, molecular orbital theory, electronic spectroscopy, and vibrational spectroscopy. Three hours of lecture per week. Prerequisite: C or better in 322. F, even years
- 422. DIRECTED STUDY. 1-6 cr. Maximum, 6 cr. A directed study for undergraduates and graduates. May include laboratory and/or library work in the areas of A. Analytical; B. Biochemistry; C. Inorganic; D. Organic; E. Physical. Four to six hours per week for each credit hour earned. Prerequisite: Approval of Department Head. F, Sp, Sum I and II
- **430.** ADVANCED ORGANIC CHEMISTRY. 3 cr. A mechanistic study of prevailing organic reactions via structural and electronic effects. Three hours of lecture per week. Prerequisite: C or better in 232 and 322. Sp, odd years

#### For Graduates Only

- 511-512. INORGANIC CHEMISTRY. 3 cr. each. The theoretical foundations of modern inorganic chemistry. Topics will vary to reflect trends in inorganic chemistry and needs of the students. Recently, 511 has dealt with group theory; 512 with chemical kinetics. Three hours of lecture per week. Prerequisite: 413 or equivalent. F, even years; Sp, odd years
- 521-522. PHYSICAL CHEMISTRY. 3 cr. each. A review of selected topics in physical chemistry. Topics will vary to reflect trends in physical chemistry and needs of the students. Recently, these courses have dealt with quantum chemistry, atomic and molecular structure, and spectroscopy. Three hours of lecture per week. Prerequisite: 322 or equivalent. F, odd years; Sp, even years

- **531. ORGANIC SYNTHESES. 3 cr.** In depth discussion of organic synthesis including carbon-carbon bond formation and functional group transformations. Prerequisites: A C or better in 232 or equivalent. Fall, odd years.
- 532. ORGANIC SPECTROSCOPY. 3 cr. Advanced presentations of identification techniques for organic compounds. Analytical procedures include infrared spectroscopy, nuclear magnetic resonance, mass spectrometry, and ultraviolet-visible spectroscopy. Prerequisites: A C or better in 232 or equivalent. Spring, even years
- **541-542. ANALYTICAL CHEMISTRY. 3 cr. each.** Theory and practice of analytical chemistry. Topics will vary to reflect trends in analytical chemistry and needs of the students. Recently, these courses have dealt with spectrochemical analysis and with chromatographic methods. Three hours of lecture per week. Prerequisite: 407 or equivalent. F, even years; Sp, odd years
- 551. INTERMEDIARY METABOLISM. 3 cr. A study of metabolism of carbohydrates, proteins, nucleic acids, and lipids. Three hours of lecture per week. Prerequisite: C or better in 350. F, odd years
- **552. PHYSICAL BIOCHEMISTRY. 3 cr.** Advanced study of the physical techniques, structure, function, conformation and behavior of biological macromolecules. Three hours of lecture per week. Prerequisite: C or better in 350. (Formerly Intermediary Metabolism.) Sp, even years

### CLASSICS (CLAS)

### For Graduates Only

**501. SEMINAR IN CLASSICAL STUDIES. 3 cr. Maximum, 6 cr.** Topics in Greek and Roman civilization, culture, etymology, language, literature, and religion.

## COMMUNICATION /F1 8 Tf 0 -17.25 TD (For GradVE DISORDERates Only)Tj 0 -15.20DID (500.)Tj (COMM)

#### For Graduates Only

500. PROSEMINAR IN COMMUNICATION STUDIES. 0 cr. Orientation to the graduate program STUDIES (CALLALER, 222()Dic), Dic), Dic),

- **427. DIAGNOSIS AND APPRAISAL OF COMMUNICATION DISORDERS LABORATORY. 2 cr.** A practicum developing the skills to administer, score, and interpret tests of articulation and language. Credit or registration in 426 or Approval of Department Head.
- **428.** ARTICULATION DISORDERS. 3 cr. Types, causes, symptoms, and therapy for articulatory defects in speech. Credit or registration in 417.
- **429.** VOICE AND FLUENCYDISORDERS. 3 cr. Types, causes, symptoms and therapy for voice and fluency disorders
- **431. STUTTERING. 3 cr.** Review of modern theories and therapies of stuttering, nature, causes, diagnosis, and treatment of stuttering.
- 433. LANGUAGE PATHOLOGY. 3 cr. Language acquisition, language disorders of reception and expression, and habilitation methodologies in learning. Prerequisite: 152 or Consent of Instructor.
- 435. CLINICAL PROCEDURES AND OBSERVATIONS. 3 cr. Provides students with principles of managing communicatively disordered clients with supervised observation of diagnostic and therapy sessions.
- **436.** MANUAL COMMUNICATION. 3 cr. An introductory course in manual communication of the hearing impaired. Emphasis on drills and exercises to help students acquire a sign vocabulary fluency.
- **445. CLINICAL COUNSELING. 3 cr.** Issues related to counseling culturally diverse persons with communication disorders and their families. Prerequisite: Permission of Instructor.
- **480.** AUDIOLOGY. 3 cr. Principles and techniques of auditory testing and the interpretation of hearing tests.
- **485.** AURAL REHABILITATION. 3 cr. Professional services and procedures facilitating adequate receptive and expressive communication in persons with hearing impairments.
- **490. NEUROPHYSIOLOGICAL BASES FOR COMMUNICATION. 3 cr.** Provides students with principles of anatomy and physiology of the normal neurological system as related to language and speech systems. Prerequisite: 240.

#### For Graduates Only

- **505. RESEARCH IN COMMUNICATIVE DISORDERS. 3 cr.** A quantitative and qualitative study of research which prepares graduate students majoring in communicative disorders to critically read, evaluate and generate research in communicative disorders, including historical, descriptive and experimental processes, statistical and research designs, sampling procedures, collecting and processing research data, and disseminating research.
- **520. SEMINAR IN ARTICULATION. 3 cr.** A study and comparison of contemporary theories of Distinctive Feature Analyses, Phonological Rule Systems, and Traditional Articulation Developments. Emphasis is on the theories as related to articulation remediation
- 525. CURRENT TOPICS IN STUTTERING RESEARCH AND REMEDIATION. 3 cr. Intensive study of research related to theories of disfluent speech and current management of stuttering behaviors.
- 528. SEMINAR IN COMMUNICATIVE LANGUAGE DISORDERS IN CHILDREN. 3 cr. Intensive study of research literature in childhood language disorders. Emphasis is on student readings, discussions, analyses, and practical therapeutic application of current language theories.
- 530. SEMINAR IN SPEECH/LANGUAGE PATHOLOGY: DIAGNOSTICS. 3 cr. Selected topics and evaluative instruments pertaining to the diagnosis of communicative disorders.
- 542. SEMINAR IN VOICE DISORDERS. 3 cr. An advanced study of voice disorders associated with organic laryngeal pathologies, neurologic, disease, and psychogenic disorders including their perceptual/instrumental identification and management.
- 550. NEUROLOGICAL DISORDERS I-INTRODUCTION AND IDENTIFICATION. 3 cr. The study of the neuropathologies and communication disorders associated with neurological impairments such as aphasia, apraxia, closed head injury, dysarthria, right hemisphere impairment, and degenerative diseases.
- **552. NEUROLOGICAL DISORDERS II-EVALUATION AND MANAGEMENT. 3 cr.** The study of evaluation and management strategies for neurological disorders such as aphasia, apraxia, closed head injury, dysarthria, right hemisphere impairment, and degenerative diseases. These disorders are introduced in Neurological Disorders I (CODI 550). Prerequisite: 550.
- 560. SEMINAR IN AUGMENTATIVE/ALTERNATIVE COMMUNICATION FOR PERSONS WITH SEVERE EXPRESSIVE DISORDERS. 3 cr. Emphasis is upon research applications and clinical demonstrations of augmentative and alternative strategies and techniques for cerebral and neurological disorders as they affect speech production for speaking and non-speaking individuals.
- 561. SEMINAR IN OROPHARYNGEAL INVOLVEMENT. 3 cr. Emphasis is upon evaluation/diagnosis and management of oropharyngeal dysphagia in pediatric to geriatric populations as well as

research and clinical applications for cleft involved persons. (Formerly Seminar in Speech Habilitation for Persons with Cleft Palate.)

- **570. SEMINAR IN THE PROFESSION. 3 cr.** Education related to employment in different professional settings including ethics, policies, and procedural safeguards. Prerequisite: Permission of Instructor.
- 576. PRACTICUM—SITE I. 1-6 cr. Clinical practicum with individuals with communicative disorders in on-campus clinic. Students must accumulate the clinical clock hours required by the American

For Graduates Only

- **501. RHETORICAL THEORY. 3 cr.** Analysis of significant developments in rhetorical theory from classical to modern times.
- **502.** NONVERBAL COMMUNICATION. 3 cr. An examination of central principles of nonverbal communication, a theoretical application of how these principles can be used, and a description of how knowledge of nonverbal cues can increase communication effectiveness. Prerequisite: 101, 118, or 260 or consent of instructor.
- **503.** RHETORICAL CRITICISM. 3 cr. Analysis of significant developments in methodologies for performing rhetorical criticism.
- **504. INTERCULTURAL COMMUNICATION. 3 cr.** The study of recent research and theory of intercultural communication examining cross-cultural perspectives on such research issues as language, training, intercultural communication competence, and related issues. Prerequisite: 101 or 118 or consent of instructor.
- 510. COMMUNICATION THEORY. 3 cr.

- **510. ELECTRONIC COMMERCE INFORMATION SYSTEMS. 3 cr.** Introduction to e-commerce business solutions; e-commerce architecture, e-commerce technology; Internet services; security; Utilizes case studies dealing with technical, societal, and legal issues/problems related to e-commerce information systems. Prerequisites: CINS 350 or BMBA 509.
- 530. SYSTEMS ANALYSIS. 3 cr. Systems development methodologies with focus on structured tools and techniques for modeling data flows, data structures, and process specifications; principles of project management; special consideration given to approaches for development of electronic commerce information systems. Introduction to design techniques. Prerequisites: CINS 510 and CINS 505 (or CINS 220, CINS 306, CINS 340 or proficiency in programming, networking, and database.)
- 535. ELECTRONIC COMMERCE APPLICATIONS DEVELOPMENT. 3 cr. Development and implementation of electronic commerce applications; strategies and techniques for designing and implementing multi-tier distributed applications for use on the Internet. Prerequisites: CINS 530.
- 591. DIRECTED STUDY. 3 cr. Individual study of topics in advanced computer information systems under the direction of a senior faculty member. Prerequisites: Twelve semester hours of BMBA courses and a minimum graduate GPA of 3.5.

# COMPUTER SCIENCE (CSCI)

#### For Undergraduates and Graduates

- **411. OPERATING SYSTEMS. 3 cr.** Theory and implementation of operating systems including process management, device management, memory management, and file system management. Security, networking, and distributed operating systems. Prerequisites: 264, 265, 305, and 310.
- 412. ARCHITECTURE. 3 cr. Computer hardware architectures including microcomputers, minicomputers, mainframes and supercomputers; memory organization including cache and virtual memory; pipelining; RISC architecture; parallel processing architectures; comparison of representative architectures. Prerequisites: CSCI 264, 265, and 305.
- **435.** LINEAR PROGRAMMING. 3 cr. Development of the simplex algorithm, revised simplex, duality, and application. Prerequisite: Mathematics 202.
- **436. INTRODUCTION TO MATHEMATICAL CONCEPTS IN OPERATIONS RESEARCH. 3 cr.** A mathematical approach to concepts in advanced linear and nonlinear programming, dynamic programming, game theories, queueing theory and other standard topics in operations research. Prerequisites: 435 and Mathematics 303. (Same as Mathematics 436.)
- **442. SIMULATION AND MODELING. 3 cr.** General principles of stochastic simulation. Model development, analysis, and validation. Comparison of alternative models. Use of special-purpose simulation languages. Prerequisites: CSCI 305 and Mathematics 303.
- **455. THEORY OF DATABASE MANAGEMENT SYSTEMS. 3 cr.** Logical and physical data and file organization; hierarchical, network, and relational data models; data normalization; query facilities; current literature in the database area. Prerequisite: Grade of C or better in 273.
- 475. KNOWLEDGE DISCOVERY IN DATABASES. 3 cr. An introduction to the field of Knowledge Discovery in Databases, KDD. Topics to be included are: data selection, cleaning, coding, pattern recognition, the discovery of hidden knowledge, learning rules, and data mining algorithms for large databases. Prerequisites: 455 and Mathematics 303.
- **481. EXPERT SYSTEMS. 3 cr.** A course in Applied Artificial Intelligence for non-programmers who are interested in the use and development of expert systems within their own fields of study. Not applicable toward a degree in computer science. Prerequisite: Senior or graduate standing.
- **483. ARTIFICIAL INTELLIGENCE. 3 cr.** Study of the computer in context with human thought processes. Heuristic programming; search strategies; knowledge representation; perception; learning; natural language understanding; user interfaces; intelligent systems. Prerequisites: 305 and 310.

- **503. COMPUTER SCIENCE FOR PROFESSIONALS. 3 cr.** Presentation of computer science fundamentals from the perspective of professional usage.
- 504-506. ADVANCED COMPUTER SCIENCE FOR PROFESSIONALS. 3 cr. each. Continuation of Computer Science 503, including advanced programming, data structures, and applications. Prerequisite: 503.
- **505. COMPUTER APPLICATIONS FOR PROFESSIONALS. 3 cr.** Extensive work with software utilization and applications. Prerequisite: 503.

- 507-508. COMPUTER SCIENCE FOR THE SECONDARY COMPUTER SCIENCE TEACHER. 3 cr. each. Current topics for the high school classroom are presented at an elementary level and reinforced with advanced material. Prerequisite: Advanced programming skills and Approval of the Department Head.
- **509. PROGRAMMING IN LOGOWRITER. 3 cr.** Standard programming topics such as sequence, iteration, selection, procedures, text processing, graphics, and recursion will be implemented in the LogoWriter language. Prerequisite: 503.
- 510. FUNDAMENTALS OF SOFTWARE DEVELOPMENT. 3 cr. An introduction to the process of algorithmic development using modern programming languages, machine organization as it relates to data representation and portability, validation and verification, and the social and ethical problems related to software. Prerequisite: 504 or Consent of Department Head.
- 511. SOFTWARE METHODOLOGY. 3 cr.

### GRADUATE COURSES 111

For Graduates Only 501.

- 666. ADVANCED THEORY. 3 cr. An in-depth study of counseling and systems theories and supportive research including practical application of techniques used in individual and family
- therapy. (Same as Marriage and Family Therapy 666.) 667. GROUP COUNSELING. 3 cr. An examination of the theories, processes, and evaluative methods of group counseling. Group supervision and group participation required. Grades of CR (Credit) or NC (No Credit) will be awarded. Prerequisites: 505, Counseling/Marriage and Family Therapy 510. (Counseling, Marriage and Family Therapy, and Substance Abuse Counseling majors only or permission of department head.)
- 668. SEMINAR. 3 cr. Maximum, 9 cr. Advanced study of selected topics.
- 670. INTERNSHIP. 3-12 cr. Supervised work experience in clinics, schools, colleges, or other agencies engaged in professional counseling and therapy services. Grades of CR (Credit) or NC (No Credit) will be awarded. This course, when offered in the summer, will be offered as a ten-week course. Prerequisite: Approval of department head. (Counseling majors only or permission of department head.) 687. SUPERVISION. 3 cr. In-depth examination of the major models of clinical supervision, review of
- the supervisory relationship process, and the procedural, ethical, and legal responsibilities associated with supervision.

### CRIMINAL JUSTICE (CJUS)

#### For Undergraduates and Graduates

- 400. CORRECTIONAL TREATMENT. 3 cr. An overview and an examination of the basics of classification and counseling approaches, emphasizing interpersonal skills development, data collection, interviewing, assessment techniques, and counseling. Prerequisites: 101, 270, and Junior standing or Approval of Program Director.
- 405. THEORIES OF CRIME AND DELINQUENCY. 3 cr. An analysis of the extent of crime and delinquency; impact of crime and delinquency on society; physical, social, and psychological causation of crime and delinquency; and current issues in criminology. (Same as Sociology 405.) (Formerly Criminology.)
- 415. JUVENILE DELINQUENCY AND JUSTICE. 3 cr. The nature, extent, and causes of juvenile delinquency; factors in its treatment and prevention, including community and agency programs; and analysis of the legal system as it applies to juveniles. (Same as Sociology 415.) (Formerly Juvenile Delinguency.)
- 416. CONTEMPORARY ISSUES IN CRIMINAL JUSTICE. 3 cr. Examination of the literature and analysis of current issues relevant to criminal justice. Prerequisite: Junior. Senior. or Graduate standing.
- 418. CONSTITUTIONAL LAW AND CRIMINAL JUSTICE. 3 cr. Study of constitutional law and its applicability in the criminal justice system. Prerequisite: Political Science 201. (Same as Political Science 418.)
- 429. MANAGEMENT OF CRIMINAL JUSTICE AGENCIES. 3 Cr. The application of supervisory and administrative principles to the management of correctional and police agencies in the United States. Students with prior credit for CJUS413 and/or 414 are not eligible to receive credit in CJUS 429. Prerequisite: Junior or Senior standing or Permission of the Department Head.
- 491. DIRECTED STUDY. 1-3 cr. Individual examination of relevant literature in student's area of interest as approved and directed by the major professor. May not be repeated for more than 3 hours credit. Prerequisite: Prior Approval of Supervising Instructor.

- 501. PROSEMINAR IN CRIMINAL JUSTICE. 3 cr. An in-depth examination of recent literature related to the social, political, and legal issues affecting the criminal justice system.
- 505. An an22 -253.D (expla13.25 son socie 0.20behavi -10RS 4175ctioll-182.75editD 00.20workia6.7543 T

## GRADUATE COURSES 113

### 114 THE UNIVERSITY OF LOUISIANA A

junior high pupils; trends and instructional patterns. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.

- 523. RESEARCH-BASED INSTRUCTION. 3 cr. This course is designed to prepare candidates to incorporate methods, content, materials, and research in their instructional areas of expertise with emphasis upon classroom integration of research-based methodology. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.
- 542. SECONDARY SCHOOL CURRICULUM. 3 cr. A survey of present and past factors which affect the secondary school curriculum; an analysis of existing patterns in secondary schools in order to plan for effective curriculum improvement. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.
- 545. EDUCATIONALTECHNIQUES FOR DIVERSE LEARNERS IN INCLUSIVE CLASSROOMS. 3 cr. Analysis of the instructional needs of exceptional children and the application of instructional strategies and curricular modifications within regular classroom. A. Elementary; B. Secondary. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator. (Formerly ELED/SPED 545).
- 555. INSTRUCTIONAL DESIGN AND PROGRAM DEVELOPMENT. 3 cr. Application of instructional design principles to solve performance and instructional problems in school and non-school environments by providing experiences in instructional program development, curriculum design, analysis of state and national school technology standards and planning, design, implementation, and evaluation of technology staff development activities as well as related experiences in non-school environments. (Same as EDFN 555).
- **556.** INDIVIDUALIZING INSTRUCTION IN SECONDARY SCHOOLS. 3 cr. An investigation of individual differences significant to learning and how teachers may arrange learning opportunities based on individual abilities and needs. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator. (Formerly Individualizing Instruction.)
- 557. THEORIES AND PRACTICES OF HUMANISTIC EDUCATION. 3 cr. Analysis of the interpersonal processes which exist in the classroom with emphasis on open communication and interaction between students and teachers.
- **558. INTERPRETING EDUCATIONAL RESEARCH. 3 cr.** Critical review of research literature and methods with emphasis on understanding and evaluating results. Designed for the student whose professional duties are unlikely to include conducting sophisticated research studies.
- **559. CAREER EDUCATION. 3 cr.** Curriculum strategies, methods, and techniques of career education with emphasis on student development, vocational information, decision making, and vocational maturity.
- **572. STRATEGIES IN VALUES CLARIFICATION. 3 cr.** Strategies to help learn how to make honest and considered choices; to help clarify one's values on a broad spectrum of issues; to learn how to apply the process in the classroom. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.
- 573. ASSESSMENT AND ACCOUNTABILITY. 3 cr. Designed for evaluating learning systems with emphasis on constructing measures to evaluate progress and outcomes in social, affective, and cognitive areas.
- 583. INSTRUCTIONAL EFFECTIVENESS. 3 cr. Identification of characteristics of effective teaching and strategies for appraising teacher effectiveness. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator. (Formerly Effective Teaching.)
- **591. DIRECTED STUDY. 1-6 cr.** Investigative study in selected problems for advanced graduate students.
- 599. THESIS. 1-6 cr. Grades of CR (Credit) or NC (No Credit) will be awarded.
- 604. SEMINAR IN SECONDARY EDUCATION. 3 cr. Maximum, 9 cr. Seminars designed to meet the needs of advanced graduate students. A. Issues and Trends in Secondary Education; B. Classroom Management and Discipline; C. Content Methodologies; D. Selected Topics.
- **652. PROBLEMS IN CURRICULUM DEVELOPMENT. 3 cr.** Techniques in organizing, conducting, and developing curriculum improvement. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.
- **683. INTERNSHIP.3-6 cr.** Supervised experience in instruction, supervision, or administration in public schools or higher education. Prerequisite: Approval of Director of Field Experiences. Must meet all other eligibility requirements for Louisiana Teaching Certificate in field of study to earn credit and grade.
- 684. BEST PRĂCTICES IN MIDDLE/SECONDARY EDUCATION. 3 cr. This course is designed to build requisite knowledge and skills for selecting and implementing best practices teaching models congruent with specific teaching and learning needs at the middle and/or secondary level.

DANCE (DANC)

#### For Undergraduates and Graduates

- **405. ORGANIZATION AND ADMINISTRATION OF DANCE IN SCHOOLS. 3 cr.** The organization and administration of dance in schools with emphasis on dance productions, festivals, and dance functions in schools.
- 424. DANCE WORKSHOP. 1-3 cr. A study of the art of dance including dance history, vocabulary, technique, composition and various elements of movement.
- 491. DIRECTED STUDY. 1-3 cr. Maximum, 6 cr. Directed study and/or research in selected areas of Dance: D. Dance, E. Selected Topics. Prerequisite: Approval of Department Head.

### ECONOMICS (ECON)

#### For Undergraduates and Graduates

- 410. ECONOMICS OF AGING. 3 cr. An examination of issues related to the economic status of persons as they grow older. Attention will be given to problems and policies which relate to income maintenance, planned and unplanned expenditures, inflation, reduced income, post-retirement employment, public and private pensions, health insurance, pre-retirement counseling and legislative reforms. Prerequisite: 201 or Sociology 101 or permission of instructor. (Formerly 510, Same as Gerontology 410.)
- **420.** ECONOMETRICS. 3 cr. Econometric theory and modeling stressing time-series forecasting of macroeconomic variables. Applied analysis using regression techniques with some cross-section estimation. Prerequisites: 305 or 312, Quantitative Methods 210.

#### For Graduates Only

- **501. SEMINAR. 3 cr.** Selected current problems in economics; coordinated individual studies will be pursued, with group analysis and discussion at regular class meetings. Prerequisites: 201, 202.
- **502. SURVEY AND ANALYSIS. 3 cr.** Fundamental theories of macro- and micro- economics and their application in the development of economic policies to achieve public and private economics goals. (Not applicable as an elective for MBAstudents.)
- 506. HEALTH ECONOMICS. 3 cr. Analysis of the health care industry and markets. Incentives of market participants; patients, physicians, hospitals, and third-party payers as well as market outcomes are discussed.
- **591. DIRECTED STUDY. 3 cr.** Individual study of topics in advanced economics under the direction of a senior faculty member. Prerequisites: Twelve semester hours of BMBA courses and a minimum graduate GPA of 3.5.

### EDUCATIONAL ADMINISTRATION AND SUPERVISION (EDAS)

#### For Undergraduates and Graduates

**481. CONTINUING STUDIES IN EDUCATIONAL ADMINISTRATION AND SUPERVISION. 1-3 cr.** Various topics in educational administration and supervision. Credit may not be applied toward a degree. May be repeated. Grade of CR (Credit) or NC (No Credit) will be awarded.

- **501. FOUNDATIONS OF EDUCATIONAL ADMINISTRATION. 3 cr.** Introduction to the field of educational administration including study of the administrative process, administrative behavior, social systems and systems analysis. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission of the department head. F, Sum
- 514. SCHOOL LAW. 3 cr. Local, state, and federal statutory, constitutional and case laws, rulings, and opinions affecting education; legal rights and responsibilities of school personnel. Prerequisites: 501 and Educational Foundations 581. Valid Louisiana teaching certificate or equivalent or written permission of the department head. F, Sum

- **515. SCHOOL FINANCE AND TAXATION. 3 cr.** Principles of taxation; local state, and federal financing of public education; equalization of educational opportunity, budget making. Prerequisites: 501 and Educational Foundations 581. Valid Louisiana teaching certificate or equivalent or written permission of the department head. Sp
- **521. SUPERVISION IN ELEMENTARY AND SECONDARY SCHOOLS. 3 cr.** Introduction to principles and techniques of instructional supervision in elementary and secondary schools. Prerequisites: 501 and Educational Foundations 581. Valid Louisiana teaching certificate or equivalent or written permission of the department head. F, Sp, Sum
- 523. SUPERVISION OF STUDENT TEACHING. 3 cr. For teachers preparing to become supervising teachers; emphasis on developing students into effective, elementary and secondary teachers. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission of the department head. Sp, Sum
- 591. DIRECTED STUDY. 1-6 cr.

**430. SPECIAL TOPICS. 1-6 cr. Maximum, 6 cr.** A. Study of International Education on Location; B. Study of United States School Systems on Location; C. Comparative Education; D. Evaluation in Education; E. Educational Technology and Media.

436. EDUCATIONALDATAPROCESSING. 3 cr. Principles of electronic data processing in education.

439. FUNDAMENTALS OF STATISTICS IN EDUCATION. 3 cr. Tools necessary for competence in

connectivity planning, and purchasing practices. Prerequisite: Six hours in instructional media and technology services, including 426. (Formerly Administration of Educational Media Programs.)

- **628.** ADVANCED TELECOMMUNICATIONS AND DISTANCE EDUCATION. 3 cr. This course includes experiences in development of Internet/Web-based learning materials and resources, overview of distance technologies for learning, national curriculum standards, advanced Internet applications, research on the applications of telecommunications and other distance technologies in education, emerging telecommunications and distance learning technologies, and methodologies for distance/on-line instruction and student support. Prerequisites: Educational Instructional Technology 525
- **680. INSTRUCTIONAL TECHNOLOGY RESEARCH, EVALUATION, AND ASSESSMENT. 3 cr.** Identification and application of instructional and technology-related research, the psychology of learning, and instructional design principles guiding the use of computers and related technologies in instructional settings. Prerequisites: Educational Instructional Technology 555
- 683. EDUCATIONAL TECHNOLOGY INTERNSHIP. 3 cr. This course provides 120 clock hours of supervised field-based experience in instructional technology application or administration. Placement in P-12, higher education, or business settings will be determined by student's degree focus.

### EDUCATIONAL LEADERSHIP (EDLE)

#### For Graduates Only

- 500. TEACHER LEADER I: USING DATA FOR SCHOOL IMPROVEMENT. 3 cr. Emphasizes application of evaluation research principles for school/classroom assessment, collection and assessment of diagnostic data for student achievement, and the study of existing research and instructional strategies. F, Sp
- **505. TEACHER LEADER II: IMPROVING SCHOOL PERFORMANCE 3 cr.** Performance-based course to develop teacher leaders to enhance student achievement. Issues and performances emphasize the practice of leadership in the school culture, instructional settings, curriculum, team activities, decision-making, communication, and learning communities. F, Sp
- **510. BEST PRACTICES IN LEADERSHIP, TEACHING AND LEARNING. 3 cr.** Introductory course in Tier 2 of Educational Leadership preparation. Includes study of the administrative process, administrative behavior, social systems, systems analysis, and the development and implementation of collaborative visions designed to enhance student learning at all levels. F, Sum I
- **515. LEGAL, ETHICAL AND REGULATORY ISSUES. 3 cr.** A requirement for Teacher Leader certification providing a basis for further study for Educational Leadership and other programs. Local, state, and federal statutory, constitutional and case laws, rulings, and opinions affecting

515. 5280 CHESA (DIFLEGB Shike In the Disson of the Difleg Design of the

- 545. MANAGING SCHOOL AND DISTRICT RESOURCES. 3 cr. Applies to school leaders at all levels. Administrative and supervisory responsibilities as they relate to finance, buildings and facilities, transportation and other auxiliary programs are explored and practiced. Major emphasis is on finance. Candidates will apply financial knowledge and skills. Sum II, Sp
   550. PRACTICE OF SCHOOL AND DISTRICT LEADERSHIP. 3 cr. Applies to school leaders at all
- 550. PRACTICE OF SCHOOL AND DISTRICT LÉADERSHIP. 3 cr. Applies to school leaders at all level. Administrative and supervisory responsibilities are explored with major emphasis on clinical and field-based activities. Candidates will effectively apply content knowledge in problem-based situations. Sum II, Sp
- 555. EDUCATIONAL LEADERSHIP INTERNSHIP I. 3 cr. Capstone experience for all candidates

philosophical and curricular issues. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.

- 518. LITERATURE FOR CHILDREN AND YOUNG ADULTS. 3 cr. Investigation in writings for children and young adults with emphasis on broad application in teaching. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator. (Same as Reading 518.)
- 520. SPECIALIZED INSTRÚCTIONAL PRACTICES IN THE ELEMENTARY SCHOOL. 3 cr. Analysis and application of effective teaching skills for the elementary teacher. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.
- 521. EXPANDING COMPETENCIES IN CLASSROOM MANAGEMENT. 3 cr. Analysis of classroom management and motivation techniques, ways to cope with disruptive behavior, promoting moral reasoning, and dealing with parents in a pluralistic society. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.
- 522. HUMAN GROWTH AND DEVELOPMENT. 3 cr. The influence of developmental characteristics on learning experiences throughout the life span.
- **533. PRIORITIZING AND MAPPING THE CURRICULUM. 3 cr.** Development and function of elementary school curricular patterns. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.
- 541. TRENDS IN CURRENT AND EMERGING ELEMENTARY SCHOOLS. 3 cr. Contemporary problems and pertinent research in elementary education. Intensive reading and writing in areas of interest and need.
- **543. LITERACY THROUGH LITERATURE-BASED INSTRUCTION. 3 cr.** This course will develop an understanding of using literature as a basis for teaching content subjects at the elementary level. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.
- 545. EDUCATIONAL TECHNIQUES FOR EXCEPTIONAL CHILDREN IN REGULAR CLASS-ROOMS. 3 cr. Analysis of the instructional needs of exceptional children and the application of instructional strategies and curricular modifications within regular classroom. A. Elementary; B. Secondary. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator. (Same as Special Education 545).
- 546. COGNITIVE LEARNING: CHILDREN AND THEIR WORLD. 3 cr. This course is designed provide candidates with standards-based teaching and learning experiences that emphasize cognitive learning within the context of family, community, and collegial collaborative aspects associated with teaching. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.
- 591. DIRECTED STUDY. 1-6 cr. entrestingationer/Biz8otudpadutEcealed 0.021 Tw (vide crmissij 0 isti0 -8.25 TD (

416. MODERN EUROPEAN FICTION. 3 cr.

- 519. PRACTICUM IN COLLEGE COMPOSITION. 3 cr. Supervised teaching of composition.
- 521. WRITING PROJECT SEMINAR FOR TEACHERS. 3 cr. Research in and practice of the teaching of writing for teachers.
- 522. SPECIAL TOPICS IN ENGLISH. 3 cr. Training in Advanced Placement English certification.
- 526. COMPRESSED VIDEO SEMINAR. 3 cr. Maximum, 9 cr. Graduate courses with variable content offered each semester through the Collaborative Agreement.
- 527. AMERICAN PROSE. 3 cr. Maximum, 6 cr. Selected American authors. Subject matter varies. May be repeated for credit.
- **528.** AMERICAN POETRY. 3 cr. Maximum, 6 cr. Selected American authors. Subject matter varies. May be repeated for credit.
- **530. POETRY WRITING SEMINAR. 3 cr. Maximum, 6 cr.** A workshop in writing poetry emphasizing the control of language and line, the art of revising, and the shaping of a manuscript.
- 531. FICTION WRITING SEMINAR. 3 cr. Maximum, 6 cr. A workshop in writing fiction, emphasizing

510. EXERCISE PRESCRIPTION AND LEADERSHIP. 3 cr. A

- **474. SECOND LANGUAGE ACQUISITION. 3 cr.** The application of second language acquisition theory in the classroom.
- **475.** LANGUAGE, CULTURE, & CLASSROOM. 3 cr. The application of second language acquisition theory in the elementary or secondary classroom (same as Spanish 475). Prerequisite: French 474.

#### For Graduates Only

- **501. LINGUISTICS—PROBLEMS IN PHONOLOGY AND MORPHOLOGY. 3 cr.** Phonological and morphological structure of modern French. Special reference to morphophonemic processes. Prerequisite: 312 or equivalent or permission of department head.
- **502.** LINGUISTICS—PROBLEMS IN GRAMMAR AND SYNTAX. 3 cr. Syntactic and semantic structure of modern standard French. Special reference to: native language transference and interference, competence and performance, and style.

### GEOGRAPHY (GEOG)

#### For Undergraduates and Graduates

- **401.** NORTH AMERICA. 3 cr. A regional study, with attention to the influence of climate, topography, and natural resources on industry and trade.
- **403. LATIN AMERICA. 3 cr.** A regional study of the configuration, climates, natural resources, cultural patterns, and peoples.
- 405. AFRICA. 3 cr. The geographical features, with particular reference to economic, social and

### For Graduates Only

501. DEVELOPMENT OF GEOGRAPHIC THOUGHT. 3 cr. Familiarization with leading geographers

- **425. SEDIMENTATION. 2 cr.** The genesis, transportation, deposition, and classification of sediments; tectonic and environmental factors influencing deposition and sedimentary structure. Prerequisites: 211, 213.
- 426. SEDIMENTATION LABORATORY. 1 cr. Three hours laboratory to accompany 425.
- 429. MICROPALEONTOLOGY LABORATORY. 2 cr. Six hours laboratory to accompany 419.
- **430.** COAL. 3 cr. A study of the physical and chemical properties of the various ranks of coal, distribution, origin, microscopic analysis, utilization, evaluation, methods of extraction, and land reclamation. Prerequisites: 327, 329.

- **501. ADVANCED MICROPALEONTOLOGY. 1 cr.** Systematic research into foraminifers or ostracodes, their ecology, stratigraphy, evolution and classification.
- 502. SPECIAL TOPICS. 1-6 cr. Maximum, 6 cr. Topics not covered in regularly scheduled courses. Arrangement must be made with the appropriate staff member and the approval of the department head must be obtained before registration. Topics: A. Paleontology/Stratigraphy; B. Sedimentary/Geomorphology; C. Hydrology/Environmental Geology; D. Petrology/Geochemistry; E. Structural Geology/Tectonics; F. Planetary Geology.
- **507. ADVANCED PALEONTOLOGY (PALEOECOLOGY). 2 cr.** Principles of Paleoecology for marine to brackish water invertebrates. Prerequisite: 211.
- **509. ADVANCED SEDIMENTATION. 2 cr.** Analysis of the processes of physical sedimentation; introduction to the hydrodynamics of sediment transport. Principles of sedimentary basin analysis; models of sedimentary environments.
- **511.** ADVANCED STRATIGRAPHY. 3 cr. A seminar devoted to oral presentations and discussions of typical stratigraphic problems and methodologies. A written report is also required.
- **513. IGNEOUS AND METAMORPHIC PETROLOGY. 2 cr.** The origin, composition, textures, occurrence, classification, and distribution of rocks.
- **515.** ADVANCED VERTEBRATE PALEONTOLOGY. 2 cr. Comparative osteology of the vertebrates, evolutionary trends, collection and preparation of fossil material, selected readings, and individual projects.
- 521. ADVANCED MICROPALEONTOLOGY LABORATORY. 2 cr. Six hours laboratory to accompany 501.
- 527. ADVANCED PALEONTOLOGY LABORATORY (PALEOECOLOGY). 1 cr. Three hours laboratory to accompany 507.
- **529.** ADVANCED SEDIMENTATION LABORATORY. 1 cr. Three hours laboratory to accompany 509.
- 533. IGNEOUS AND METAMORPHIC PETROLOGYLABORATORY. 1 cr. Three hours laboratory to accompany 513.
- 535. ADVANCED VERTEBRATE PALEONTOLOGY LABORATORY. 1 cr. Three hours laboratory to accompany 515.
- 540. CLAY MINERALOGY. 2 cr. Origin and occurrence of layer silicate minerals. Prerequisites: 423, 424.
- 542. CLAY MINERALOGY LABORATORY. 1 cr. Three hours laboratory to accompany 540.
- 545. ADVANCED GROUNDWATER HYDROGEOLOGY. 3 cr. Advanced study of the flow of water and contaminants in upper layers of the earth, including: physics of fluid flow through porous media; vadose zone; capillary fringer; fractured rock; multi-phase flow; diffusion of dissolved species; contaminant migration; numerical modelling. Prerequisite: 417.
- **551. PETROLOGY OF SANDSTONES. 2 cr.** Origin and interpretation of sandstone clans, with emphasis on thin-section description and deduction of source, environment, and diagenesis. Prerequisites: 423, 424, or Approval of Department Head.
- **552. PETROLOGY OF CARBONATES. 2 cr.** Origin and interpretation of carbonate clans, with emphasis on geochemistry, facies, thin-section description and diagenesis. Prerequisites: 423, 424, or Approval of Department Head.
- 553. SANDSTONE PETROLOGY LABORATORY. 1 cr. Three hours laboratory to accompany 551.
- 554. CARBONATE PETROLOGY LABORATORY. 1 cr. Three hours laboratory to accompany 552.

### GEOSCIENCES (GEOS)

#### For Undergraduates and Graduates

- **402. PRINCIPLES OF EARTH SCIENCE. 3 cr.** Earth's place in the solar system; nature of material composing the earth; processes which have shaped and are shaping the earth; rocks, minerals, soils, topographic features and their origin; rock structures; topographic; geologic, and weather maps, and aerial photographs.
- 404. EARTH SCIENCE LABORATORY. 1 cr. Two hours laboratory to accompany 402.
- **415. SOILS FOR THE ENVIRONMENTAL GEOSCIENTIST. 2 cr.** Fundamentals of pedology aimed at environmental geoscientists, including: soil terminology, soil genesis, the 7th Approximation soil classification system, the use of parish and county soil surveys, soil descriptions, soil toxicity, national and worldwide soil type distribution. Prerequisite: Geology 101 or Geography 213 or Permission of the Instructor.
- **416. SEMINAR. 1 cr. Maximum, 3 cr.** Presentation of oral and written reports on current geology literature and problems of special interest.
- **420. HUMAN IMPACT ON THE ENVIRONMENT. 3 cr.** This course will assess the environmental changes caused by human activity. Specifically, attention will be focused on human impacts on vegetation, animals, soil, hydrology, geomorphology, and climate. Prerequisite: Geography 213 or GEOS 330 or Permission of the Instructor.
- **430. SURFACE HYDROLOGY. 3 cr.** Fundamentals of surface hydrology including: components of the hydrologic cycle; hydrographs; flood frequency analysis; and flood routing through rivers, reservoirs, and watersheds. Includes practical exercises and the use of personal computers. Prerequisites: Geology 101 or Permission of the Instructor.
- **435. PRINCIPLES OF GEOGRAPHIC INFORMATION SYSTEMS (GIS). 3 cr.** Techniques for analyzing, displaying and managing geographic data topics including: structure of geographic data bases, principles of digital cartography, basic spatial statistics, and analysis of spatial relationships using GIS. Prerequisite: Junior or senior standing.
- **440. ENVIRONMENTAL EARTH SCIENCE. 3 cr.** A survey of the interactions between people and the physical environment, including hazardous earth processes, hydrology and pollution, waste disposal, environmental health, mineral resources, energy, and land use. Prerequisites: Any of the following Geosciences 101, 402, Geology 101, 206, Geography 213.
- 441. GEOENVIRONMENTAL SEMINAR. 1 cr. Maximum, 3 cr. Geoenvironmental topics are examined in depth through library research, audiovisual materials analysis, and interactive software. Investigations are presented and critiqued during round table discussions. Assigned topics vary each semester. Prerequisite: Any pertinent basic science course or Permission of the Instructor.
- 445. ADVANCED GEOGRAPHIC INFORMATION SYSTEMS (GIS). 3 cr. A project-oriented course intended to demonstrate how principles learned in Geosciences 435 can be applied to solving complex real-world problems. Prerequisite: Geosciences 435 or Permission of Instructor.
- **450. REMOTE SENSING OF THE ENVIRONMENT. 3 cr.** This course will cover the basics and the interpretation of remote sensing data that will include aerial **g**hotography, U.S. and French satellite imagery, thermal infrared, Sideways Looking Radar, Synthetic Aperture Radar, and other airborne platforms such as the Daedalus Multispectral Scanner used by NASA.
- **460. ARCHEOLOGY AND GEOLOGY OF NATURAL DISASTERS. 3 cr.** Case studies of the archeological and geologic evidence for the history, causes, and effects of historical and prehistoric natural disasters. Use of archeological and geologic data to develop realistic supportable scenarios for the natural disasters will be stressed. Prerequisites: Anthropology 201; Geology 101, 102.

### **GRADUATE COURSES** 131

**510. REGIONAL GEOMORPHOLOGY. 3 cr.** Evolution of landforms and surficial geologic systems within a specific region. Particular emphasis will be placed on processes active in the river and wetland systems, and development of characteristic landforms. A. Lower Mississippi River V

- 512. SOCIAL GERONTOLOGY. 3 cr. An examination of social aspects of adjustment to aging, attitudes toward aging, social-psychological and sociological theories of aging, successful aging, family patterns, intergenerational relationships, leisure, and retirement. Attention will be given to demographic changes, middle age, minority aged, and adult socialization. (Same as Sociology 512. Formerly Sociology 510 Sociology of Aging.)
- **515. MINORITYAGING. 3 cr.** This course will examine the current state of gerontological knowledge about each of the federally designated minority group populations: African Americans, American Indians, Asian/Pacific Islanders, and Hispanics. Each student will have the opportunity to explore the state of knowledge about a particular group or a research issue across populations. Prerequisite: Permission of Instructor.
- **520. MINORITY HEALTH AND AGING. 3 cr.** An examination of ethnic and cultural variations in physical and mental health status among minority aged individuals. Topics include morality, morbidity, social and environmental influences oh health status, individual risk factors, functional impairment, and the relation of these issues to the use of health care services.
- 526. COMMUNICATION IN GERONTOLOGY. 3 cr. The study of communication processes among gerontological professionals, staff, patients, healthcare providers and administrators. Emphasis on research strategies and practical learning experiences as tools for facilitating interaction. (Same as Communication Studies 526.)
- 540. ASSESSMENT AND CASE-MANAGEMENT. 3 cr. An investigation of these techniques in different healthcare and social program settings. Details are given on the social significance of human resources and skill building for conducting assessment and case management of senior clients for achievement of goals. Prerequisite: Permission of Department Head.
- 545. ETHNIC AND CULTURAL VARIATIONS IN SERVICE DELIVERY. 3 cr. An examination of ethnic and cultural factors influencing the planning and delivery of health and social services to the aged and handicapped. Topics include important service delivery issues such as estimating service needs; theoretical models of service utilization; barriers, outreach and targeting; diverse cultural values, culturally appropriate service modalities; and impact of cultural values on planning, policy, and practice.
- 565. COMMUNITY-BASED AND LONG-TERM CARE. 3 cr. A review of the various types of community based care with attention to the types of environments and services offered, the process of entry into care systems, physical and socio-emotional care, relations between residents and staff members, and social relationships inside and outside of care facilities. Health and quality of care, medical ethics, environmental health, and the delivery of services are addressed. (Same as Sociology 565. Formerly Introduction to Long-Term Care.)
- **566. CAREGIVING. 3 cr.** This seminar will take a comprehensive look at what is known about informal, family caregiving in the U.S. Assignments will identify who assumes care, the types of problems caregivers confront, caregiving tasks, caregiver appraisal of the situation, caregiver burden, and the psychological, social, work, and health consequences of caregiving. Attitudes towards and use of services will also be addressed. To the extent possible, the seminar will cover what is known about caregiving in each of the major populations: African American, American Indian, Asian & Pacific Islander, Latino, and non-Hispanic whites.
- **567. PROGRAMS AND PUBLIC POLICY. 3 cr.** Analysis of the Older American's Act, national and state programs on aging, and other legislative/congressional acts: their effects on research, training, and grant development in the field of gerontology. (Same as Sociology 567. Formerly

Classic statements and formulations are complimented by more recent theoretical discussions and empirical tests of each theory. Prerequisite: Permission of instructor.

- **587.** LONG-TERM CARE ADMINISTRATION I. 3 cr. An overview of the departments and their functions, personnel issues, fiscal resources, ethics, facility maintenance, nutrition, and medical/social service terminology, and relations with families, volunteers, and residents.
- 588. LONG-TERM CARE ADMINISTRATION II. 3 cr. In-depth examination of Federal, state, and local regulatory agencies, their mandated policies and procedures, and enforcement. Prerequisite: Gerontology 587.
- 590. INTERNSHIP IN GERONTOLOGY. 3-6 cr. A field experience for those graduate students interested in research experience or applied aspects of gerontology. Students will be assigned to a program involving research activities, service provision, or administration of programs related to the aging and aged populations. Prerequisite: Consent of Instructor. (Formerly Sociology 590.)
- 599. THESIS. 1-6 cr. Grades of CR (Credit) or NC (No Credit) will be awarded.

### HISTORY (HIST)

#### For Undergraduates and Graduates

**408. CONTEMPORARY HISTORY. 3 cr.** A survey of the major developments in the world over the last few decades. This course will concentrate on the problems and developments of the Gulf War, the computer revolution, the former Soviet Union and the end of the Cold War, the rise of communist China, the former Yugosl 0 .irmeformer

- **477. THE MIDDLE AGES. 3 cr.** The social, cultural, religious, political, and economic history of Europe from the end of the Roman Empire to the Renaissance. Particular attention is devoted to the Church, feudalism, manorialism, political institutions, and the rise of towns and capitalism. Prerequisite: 111.
- **478. RENAISSANCE AND REFORMATION. 3 cr.** The transition in Western civilization from the medieval to the modern era, 1300 to 1648; cultural, economic, social, religious, and political developments of the era. Prerequisite: 111.
- **479. ABSOLUTISM AND REVOLUTION, 1610-1815. 3 cr.** This course surveys the political, social, economic and cultural history of Europe from the birth of Absolutism to the downfall of Napoleon Bonaparte. In addition to addressing the cultural and intellectual changes of the 17th and 18th centuries, this course will focus on the social and economic developments of the period, changes that ultimately shaped the modern world. Particular emphasis will be given to the emerging nation-state, the new scientific world-view, Enlightenment ideology, and the evolutionary turmoil of the late 18th century. Prerequisite: 112. (Formerly Absolutism and Revolution, 1648-1815.)
- **480. EUROPE, 1815-1890. 3 cr.** This course surveys the political, social, economic and cultural history of Europe from the downfall of Napoleon to the golden age of imperial Europe at the end of the 19th century. Topics considered include the effects of industrialization, the impact of widespread revolution, the unification of Bismarckian Germany, and the spread of European Imperialism. Prerequisite: 112. (Formerly Europe, 1815-1914.)
- **481. EUROPE, 1890-1945. 3 cr.** This course surveys European history from the close of the 19th century to the end of World War II. The focus is primarily upon national and international politics, but with careful attention to economic, social and cultural developments in their relationship to political change. Prerequisite: 112. (Formerly Europe Since 1914.)
- **483. TUDOR AND STUART ENGLAND, 1485-1714. 3 cr.** The principal political, economic, social, religious, and cultural developments from the beginning of the Tudor dynasty to the Hanoverians. The New Monarchy and conciliar government; the experiment and failure of the Stuarts in Divine Right Monarchy; the beginnings of party and cabinet government. Prerequisites: 111, 112.
- **487. FRENCH HISTORY. 3 cr.** A survey of French political institutions, cultural developments, and social structure from approximately 800 to the present time. Topics will include Charlemagne, the French Revolution and Napoleon, and France's position in the modern world. Prerequisites: 111, 112.
- **488. REVOLUTIONARY FRANCE, 1789-1871. 3 cr.** A survey of the political, social, economic and cultural history of France from the origins of the French Revolution to the collapse of the radical Paris Commune in 1871. The course will explore the vast changes in France that transformed it from a pre-industrial state of peasants and aristocrats to a world of modern industry and technology. Prerequisite: 112.
- **490. EAST CENTRAL EUROPE SINCE 1400. 3 cr.** This course will examine the social, political, economic, and cultural development of the lands traditionally known as Poland, Hungary, Bohemia, and Ukraine from the late Middle Ages to the present. This course will introduce the main forces and personalities that shaped Eastern European history in the past and continue to shape it today.
- **492. RUSSIA TO 1917. 3 cr.** Founding of the nation, tsarist institutions, conditions leading to the revolutions of 1917. Prerequisite: 112.
- **493. SOVIET UNION AND COMMONWEALTH OF INDEPENDENT STATES. 3 cr.** The revolutions of 1917 and the development of the Soviet system. Political, social, and economic developments in the U.S.S.R. with special attention to the role of the Soviet Union in world affairs. The collapse of the U.S.S.R. and the emergence of the Commonwealth of Independent States. Prerequisite: 112.
- **495. TOPICS IN HISTORY. 1-6 cr. each. Maximum, 6 cr.** Specialized study of topical events in history. Content varies. A. Canada (3 cr.); B. Local and Family History (3 cr.).

- 504. THE RISE OF SOUTHERN NATIONALISM, 1846-1861. 3 cr. The developing split between the northern and southern sections during and after the War with Mexico over slavery and its expansion, the tariff, states rights, transcontinental railroads and other issues gave rise to the South seeing itself as a distinctive minority section, which should develop its own nationhood. Other topics to be reviewed will include politics, economics, religion, education, society, and culture.
- 506. CIVIL WAR MILITARY HISTORY. 3 cr. The Civil War is considered to have been the first modern war. This course will examine how the war transformed warfare in general, the strategy pursued

by both the Union and Confederate forces, major campaigns and battles, and the personalities of the opposing leaders.

- **508.** LOUISIANA IN THE CIVIL WAR AND RECONSTRUCTION. 3 cr. A detailed study of the Civil War and Reconstruction in Louisiana and the role the state and its people played in those events. Special emphasis will be placed on military activity during the war and politics and race relations during Reconstruction.
- **510. SEMINAR IN AMERICAN POLITICAL HISTORY. 3 cr.** A seminar in American political history from the nation's early years through the present.
- **512. HISTORY OF WARFARE. 3 cr.** A seminar exploring the conduct of warfare throughout history, emphasizing how it shapes and is shaped by culture.
- **513. THE AMERICAN HERITAGE. 3 cr.** A social and intellectual history of the United States from colonial times to the present with emphasis on ideas and social forces which have shaped the American mind and society.
- 516. THE MAKERS OF AMERICA. 3 cr. each. Maximum, 6 cr. Biographical studies of prominent Americans: A. 1607-1800; B. 1800-1865; C. 1865-1914; D. 1914-Present; E. Latin America.
- **517. THE AMERICAN REVOLUTION. 3 cr.** This course will investigate the causes, development and impact of the American Revolution upon both domestic and western European societies. An emphasis will be placed upon the evolution of republican thought as well as the T

### INSURANCE (INSU)

#### For Undergraduates and Graduates

**423. INSURANCE SEMINAR. 3 cr.** A study of the application of various insurance coverage to fulfillment of personal, business, and social needs. Students are assigned special projects in the field of their interests. Prerequisite: Finance 305 or 307 or 309 or 311 or permission of instructor. (Formerly Finance 423.)

### KINESIOLOGY (KINS)

#### For Undergraduates and Graduates

- 406. ADVANCED DRIVER EDUCATION. 4 cr. Curriculum innovations and instructional devices (with lab). In-depth study of curriculum materials and instructional devices and techniques including simulation, multi-media, driving range, on-street instruction, and motorcycle. Instruction in the use of all forms supplied by the State Department of Education. Prerequisites: 325 and junior standing.
- **408.** ADAPTED PHYSICAL EDUCATION FOR STUDENTS WITH SPECIAL NEEDS. 3 cr. The study of specially adapted programs of physical education and recreation designed to enhance the development of the student with special needs. Basic knowledge, skills, and competencies in adapted physical education are covered with emphasis in program modification of activities.
- **413. MANAGEMENT OF HEALTH, PHYSICAL EDUCATION, AND RECREATION. 3 cr.** The purpose and functions of the management process in the instructional and related area programs in today's classroom as well as experiences in those areas outside the normal classroom setting. Federal and state regulations in education, alternative programs, discipline and other current problems are discussed. Ten (10) hours of classroom observation will be completed during this course. Prerequisite: 211 and junior standing. (Formerly Administration of Health, Physical Education, and Recreation.)
- 417. SCHOOL HEALTH PROBLEMSs are assign(/h TfSs are ashr 307 or 3017.)Tj 20 0 TD0bse- h 417.the ded dut, aundapted physical educas in pro Tc (in thf)Tj 0 -9.5 TD 0.222elmanag 417.

417.

LATIN (LATN)

#### For Undergraduates and Graduates

401. ADVANCED READINGS IN LATIN. 3 cr. Maximum, 6 cr. Study in Latin of a specific author or literary genre. Prerequisite: 202 or equivalent.

# LOUISIANA EDUCATION CONSORTIUM (LEC)

- **700. INTRODUCTION TO DOCTORAL RESEARCH DESIGN. 3 cr.** This course is designed to extend the student's knowledge and expertise in research design, styles, and format for writing a dissertation and the use of graduate electronic resources and statistical analysis.
- **701. UTILIZING TECHNOLOGY FOR STATISTICAL ANALYSIS IN EDUCATION. 3 cr.** This course surveys procedures for using the computer in text editing, data management, and statistical processing of research data. Laboratory sessions are required. Prerequisite: LEC 700
- **702. EVALUATION THEORY AND PRACTICE. 3 cr.** This course investigates the theories and practices associated with performance evaluation, focusing on individual, instrument, and program evaluation and the decision-making processes associated with each.
- **703. QUALITATIVE RESEARCH IN EDUCATION. 3 cr.** This course examines theories and methods of qualitative educational research, including ethnography, case studies, interview studies, and document analysis. Prerequisite: LEC 700.
- **704. SOCIOCULTURAL ISSUES IN EDUCATION. 3 cr.** This course examines and analyzes sociocultural issues relating to the delivery of educational services in school districts with diverse student populations.
- **705. PROBLEM-SOLVING AND DECISION-MAKING PROCESSES. 3 cr.** Applied strategies and techniques involved in problem-solving behaviors are presented. Models of decision-making are explored with emphasis on methods and involvement in decision-making.
- **706. INTERPERSONAL COMMUNICATION AND CONFLICT RESOLUTION. 3 cr.** Methods and styles of positive interpersonal communication and techniques and methods of conflict resolution utilized by administrators and faculty are presented.
- **707. CURRICULUM THEORY AND DESIGN. 3 cr.** This course focuses on school curriculum theory, design, revision, reform and critical issues.
- **708. MODELS OF TEACHING; THEORIES AND APPLICATION. 3 cr.** This course builds the requisite knowledge and skills for selecting and implementing various teaching models congruent with specific teaching and learning needs.
- 709. RESEARCH ON EFFECTIVE TEACHING AND LEARNING. 3 cr. This course examines utilized byF1 8 variUEdcpblepred w

### **GRADUATE COURSES** 139

- **715. ADVANCED CONTENT METHODOLOGYAND TECHNIQUES. 3 cr.** This course analyzes and evaluates content-specific methods, techniques, and trends for early childhood, elementary, middle, and secondary education.
- 716. PROBLNA and seconV4cmwL1S

analysis research reports, and actual bargaining. Prerequisite: 301 and senior standing or approval of department head.

- **414. QUALITY MANAGEMENT. 3 cr.** Management of the continuous quality improvement process. Emphasis is on service and manufacturing industries. Covers a variety of methods and procedures for quality analysis and improvement. Prerequisite: 309 or permission of instructor.
- **481. CONTINUING STUDIES IN MANAGEMENT. 3 cr.** Applied general management for students not pursuing a degree. May be repeated. Credit may not be applied toward a degree in the College of Business Administration. Grades of CR (Credit) or NC (No Credit) will be awarded.

#### For Graduates Only

- **505. SEMINAR IN MANAGEMENT. 3 cr.** Emphasis upon the study of macro-organizational issues including managerial responsibilities for planning, goal-setting, communicating, and controlling in organizations. Prerequisite: 301.
- 507. SEMINAR IN HUMAN RESOURCE MANAGEMENT. 3 cr. Advanced study of selected administrative and technical policies and practices in employee relations; emphasis on personnel department activities and functions. Prerequisite: 301. (Formerly Seminar in Personnel Management.)
- **519. OPERATIONS AND QUALITY MANAGEMENT. 3 cr.** Current developments/trends in business operations and techniques for continuous improvement of operations. Focus on the application of business practices (planning and controlling operations; forecasting, capacity management; scheduling and resource management.) Prerequisite: 309 or permission of instructor. (Formerly Production and Operations Management.)
- **591. DIRECTED STUDY. 3 cr.** Individual study of advanced management topics under the direction of a Senior faculty member. Prerequisites: Twelve semester hours of BMBA courses and a minimum graduate GPA of 3.5.

### MARINE SCIENCE (MNSC)

#### For Undergraduates and Graduates

- **401. MARINE BOTANY. 4 cr.** Study of marine and coastal algae and vascular plants, including classification, morphology, life cycles, and ecology; emphasis on field and laboratory studies. Prerequisites: 12 hours botany including BIOL 438; Permission of Instructor. Offered summer only. Five weeks at a Louisiana Universities Marine Consortium coastal laboratory.
- **410. MARINE ECOLOGY. 4 cr.** Relationships of marine and estuarine organisms to environmental factors; interactions among organisms; ecological processes of energy and materials flow; field studies of communities and ecosystems of the Louisiana coastal zone. Prerequisite: 204, 205, 330, 332; CHEM 107, 109; Permission of the Instructor. Offered summer only. Five weeks at a Louisiana Universities Marine Consortium coastal laboratory.
- **420. MARINE MICROBIOLOGY. 4 cr.** Introduction to the estuarine and marine microbes, especially bacteria and fungi; classification, methodology, role in marine ecosystems, biogeochemical cycles, and diseases of marine animals. Prerequisites: 12 hours of biology, including 214, 215; Permission of Instructor. Offered summer only. Five weeks at a Louisiana Universities Marine Consortium coastal laboratory.
- **450. MARINE INVERTEBRATE ZOOLOGY. 4 cr.** General study of the classification, structure, function, and ecology of marine and estuarine invertebrates; emphasis on field studies of invertebrates of the Louisiana Gulf Coast. Prerequisites: 8 semester hours of zoology and Permission of Instructor. Offered summer only. Five weeks at a Louisiana Marine Consortium coastal laboratory.
- 455. MARINE VERTEBRATE ZOOLOGY. 4 cr

G20hecologgy 38; Permission of Instructor.

- 470. MARINE ENVIRONMENTALCHEMISTRY. 4 cr. Chemical composition of the oceans; chemical, biological, and geological interactions. Prerequisites: 16 semester hours of chemistry and Permission of Instructor. Offered summer only. Five weeks at a Louisiana Universities Marine Consortium coastal laboratory.
- 480. MARINE SCIENCE FOR TEACHERS. 4 cr. Survey of the marine sciences; field and classroom techniques for the teaching of marine science at the elementary and secondary school levels. Credit can be applied only to degrees in education. Offered summer only. Five weeks at a Louisiana Universities Marine Consortium coastal laboratory or participating state university.

#### For Graduates Only

- **501. TOPICS IN MARINE SCIENCE. 1-6 cr. Maximum, 6 cr.** Advanced lecture, laboratory, and field work on a selected topic in the marine sciences at a coastal laboratory of the Louisiana Universities Marine Consortium. By arrangement.
- 591. SPECIAL PROBLEMS IN MARINE SCIENCE. 1-6 cr. Maximum, 6 cr. Directed research and study at a coastal laboratory of the Louisiana Universities Marine Consortium. By arrangement.

### MARKETING (MRKT)

#### For Undergraduates and Graduates

- **401. INTERNATIONAL. 3 cr.** All phases of marketing as applied in an international operation: research, marketing channels, promotion, financing, pricing, licensing, organization requirements, and methods of coordination. Prerequisite: 301.
- **403. SERVICES MARKETING. 3 cr.** Study of the special characteristics of service enterprises and the development of marketing strategies for such organization. Prerequisite: 301.
- 406. BUSINESS-TO-BUSINESS MARKETING. 3 cr. Strategies and tactics used in marketing complex technologies and services to industrial firms. Emphasis is given to value and vendor analysis as key elements in marketing. Prerequisite: 301.

- 599. THESIS. 1-6 cr. Grades of CR (Credit) or NC (No Credit) will be awarded.
- **608. PROFESSIONAL ISSUES IN MARRIAGE AND FAMILY THERAPY. 3 cr.** A survey of current issues relating to professional identity and practice in the field of Marriage and Family Therapy. Students will be introduced to the certification and licensure requirements, professional practice models, and the utilization of these models in developmental and therapeutic practice.
- **610. INTRODUCTION TO MARRIAGE AND FAMILY THERAPY. 3 cr.** A survey of current theories and practices of marriage and family therapy, including the historical development and principal conceptualizations of relationship therapy. Prerequisite: Approval of department head.
- **620.** ADVANCED THERAPYSTRATEGIES FOR PARENT-CHILD RELATIONSHIPS. 3 cr. A course in didactic therapy involving specialized training in the techniques and strategies used specifically in parent-child therapy procedures. Prerequisite: 610.
- **662. HUMAN SEXUALITY. 3 cr.** A study of the biological, psychosocial, clinical, and cultural aspects of human sexuality. Prerequisite: 610 or permission of instructor. (Same as Counseling 662.)
- 664. FAMILY CONSULTATION. 3 cr. A study of the models and process of family consultation used in marriage and family therapy.
- 665. ADVANCED PROCEDURES. 3 cr. The study of specialized processes and techniques involved in individual and family systems approaches and practices. Designed as a post-practicum experience, the course involves laboratory activity and practice to refine specialized procedures. Prerequisite: 510 or permission of instructor. (Same as Counseling 665.)
- **666. ADVANCED THEORY. 3 cr.** An in-depth study of counseling and systems theories and supportive research including practical application of techniques used in individual and family therapy. (Same as Counseling 666.)
- 668. SEMINAR. 3 cr. Maximum, 9 cr. Advanced study of selected topics.
- **670. INTERNSHIP. 3-12 cr.** Supervised work experience in clinics, schools, colleges, or other agencies engaged in professional therapy services. Grades of CR (Credit) or NC (No Credit) will be awarded. Prerequisite: 510. (Marriage and Family Therapy majors only or permission of department head.)
- **687.** SUPERVISION. 3 cr. In-depth examination of the major models of clinical supervision, review of the supervisory relationship process, and the procedural, ethical, and legal responsibilities associated with supervision.
- 700. FAMILY SYSTEMS I: EPISTEMOLOGICAL ISSUES IN MARRIAGE AND FAMILY THERAPY. 3 cr. Study of the paradigm shift represented by the systems/cybernetics/ecological perspective, the constructivist, social constructionist, narrative perspectives, and the implications of these perspectives for society, social policy, assessment, research, and mental health practice.
- **702.** FAMILY SYSTEMS II: FOUNDATIONS OF MARRIAGE AND FAMILY THERAPY. 3 cr. A study of the historical roots, foundation ideas, and philosophical evolution of systemic, cybernetic, and ecological perspectives in individual, marriage and family therapy.
- **710. FAMILY THERAPY I. 3 cr.** Building on the philosophical perspectives of modernism/structuralism and postmodernism/poststructuralism, this course involves intensive study of brief models of marriage and family therapy, including Communications/MRI, Strategic (Haley & Madanes), Systemic (Milan), constructivist, social constructionist, and narrative/language (Andersen, Goolishian & Anderson, deShazer, O'Hanlon, White and Epston).
- **712. FAMILY THERAPY II. 3 cr.** Building on the philosophical perspectives of modernism/structuralism and postmodernism/poststructuralism, this course involves intensive study modernist models of marriage and family therapy. Models to be studied include communications (Satir), experiential (Kempler and Whitaker), family of origin: psychodynamic (Bowen, Boszormenyi-Nagy, & object relations), structural (Minuchin), and behavioral.
- **714. COUPLE AND MARITAL THERAPY. 3 cr.** Study of current theory and practice in couple and marital therapy. Related topics include a perspective on the contemporary social context for couples and marriages, parenting, step-parenting, and single-parent families.
- **720.** ADVANCED FAMILY STUDIES AND HUMAN DEVELOPMENT. 3 cr. This course focuses on the major theories used in the study, assessment, and understanding of family interaction. Particular emphasis is placed on the application of theory to a variety of family issues, weighing special considerations and implications of the rural/semi-rural context in such applications.
- 722. SOCIAL ECOLOGY: THE SOCIAL CONTEXT OF THE FAMILY. 3 cr. Macrosystemic study of the interface between families and work, religion, education, medical, social service, and mental health systems. Skill development includes a focus on systemic approaches to consultation and collaboration with members of other social systems as an adjunct to marriage and family therapy.
- 724. PSYCHOPATHOLOGY AND ASSESSMENT. 3 cr. An examination of the psychopathology nomenclature, on identifying individual and family strengths, and on viewing behavior in context.

### GRADUATE COURSES 143

Particular emphasis is placed on understanding the individual/family and environment interaction by means of a systems perspective.

730.

- 445. BROADCAST MANAGEMENT. 3 cr. Organization and administration of broadcast stations and other electronic media systems, with attention to operations, community relations, and financial management.
- **451.** ADVANCED PHOTOCOMMUNICATION. 3 cr. Theory and techniques of photocommunication for print media, emphasizing use of still photography for in-depth investigating and reporting. Prerequisite: MCOM 351.
- **452.** ADVANCED VIDEO PRODUCTION. 3 cr. Theory and techniques of video production from conception to completion, for a variety of mass communications applications. A \$15 fee is charged each student to help defray expenses related to this course. Prerequisite: MCOM 352.
- **454. ADVANCED ELECTRONIC MEDIA DESIGN. 3 cr.** Theory and principles of electronic media design from conception to completion, for a variety of mass communications applications emphasizing multimedia. Prerequisite: MCOM 354.
- **460. PUBLIC RELATIONS CAMPAIGNS. 3 cr.** Use of research to identify problems and development of strategies to meet public relations needs for actual clients. Prerequisites: MCOM 361 and 370.
- **471. VISUALCOMMUNICATIONS. 3 cr.** Theories of perception, methods of analysis of visual media, and principles and strategies of visual communication, emphasizing critical thinking about the role and function of media in society.
- **472. MEDIAANALYSIS AND CRITICISM. 3 cr.** Critical methodologies and analysis of media content and programming, emphasizing aesthetic, historical, social, cultural, and industrial factors affecting audience response. Prerequisite: Junior Standing.
- **481. MASS COMMUNICATIONS LAW. 3 cr.** Legal limitations and privileges affecting publishing, advertising, broadcasting, telecasting; consideration of legal philosophy bearing on mass communications media.
- **482. BROADCAST REGULATION. 3 cr.** The study of electronic media law and the Federal Communications Commission's rules and procedures, including an examination of current trends of the Commission and their possible effects on the industry and society. Prerequisite: MCOM 481.
- **490. INTERNSHIP. 2 cr.** Field experience under the general supervision of a faculty member and the direct supervision of an industry professional, with academic components including a final paper and presentation. Prerequisites: Completion of 15 hours of Mass Communications coursework including approval of major professor, faculty internship supervisor and site supervisor.

- **501. MASS COMMUNICATIONS SEMINAR (repeatable 6 cr. maximum). 3 cr.** Scholarly, in-depth research in contemporary topics in mass communications. Content varies.
- 560. PUBLIC RELATIONS PRACTICES. 3 cr. Study of the professional practices of public relations, emphasizing theories of excellence in public relations functions, processes and ethics in multicultural society. Includes group work with actual client. Prerequisite: 3 credit hours of undergraduate coursework in the field.
- **570. MASS COMMUNICATIONS THEORIES. 3 cr.** Survey and evaluation of current theories of mass communication, including the nature of meaning, diffusion of information, differentiated responses, attitude change and persuasion, and social functions of mass media.
- 580. ISSUES IN LAW AND ETHICS. 3 cr. Legal, ethical and regulatory constraints on mass media. Studies of the regulatory environment, lobbying, social consciousness and corporate responsibility. Analysis of current trends including the effects of deregulation and changes in the regulatory structure.
- 581. LITERATURE OF MASS COMMUNICATIONS. 3 cr. Intensive reading in selected areas of mass communications, including histories, biographies, philosophies, ethics, criticism, and effects.
- **583. PUBLIC OPINION AND PROPAGANDA. 3 cr.** The study of propaganda theory and methods. Opinion-making processes in government, political parties, pressure groups and various societal institutions. The role of mass media in public opinion formation.
- **584. COMPARATIVE BROADCASTING. 3 cr.** A study of world media systems, philosophies, methodologies, and their comparative strengths and weaknesses, including their sociological, political and economic contexts and effects.
- 585. EMERGING TECHNOLOGIES. 3 cr. Exploration of electronic communication technologies as they develop.
- **590. INTERNSHIP. 1-3 cr.** Field experience in print or electronic media, as proposed by the student to meet appropriate educational goals. Prerequisite: Completion of 9 credit hours of graduate coursework; approval of major professor and site supervisor.
- **591. DIRECTED STUDY. 1-3 cr.** Individualized study of selected topics in mass communications. Prerequisite: Approval of major professor and directed study supervisor.

**599. THESIS. 1-6 cr.** Individualized study and research toward Master's thesis in communication with an emphasis in some area of mass communications. Prerequisite: 18 credit hours of graduate coursework.

### MATHEMATICS (MATH)

#### For Undergraduates and Graduates

- **401. DIFFERENTIAL EQUATIONS. 3 cr.** Series solutions to ordinary differential equations, Laplace transforms, systems of differential equations, numerical methods and applications which arise in geometry, chemistry, and physics. Prerequisite: 301.
- **402.** LINEAR SPACES. 3 cr. A study of abstract vector spaces including function spaces, linear transformations, operators, functionals and duality, bilinear and quadratic forms. Prerequisites: 202, 132.
- **403-404. MATHEMATICAL STATISTICS. 3 cr. each.** Probability, discrete and continuous random variables, expected values and moments, special continuous distributions, sampling, point estimation, multivariate normal, interval estimation, tests of hypothesis, regression and linear hypothesis, experimental design models, sequential tests, and nonparametric methods. Prerequisite: 303.
- **405. PARTIAL DIFFERENTIAL EQUATIONS. 3 cr.** Fourier series, boundary value problems, partial differential equations, special functions, with an emphasis on applications. Prerequisite: 301.
- 406. THEORY OF FUNCTIONS OF A

- **508. INTRODUCTION TO MODERN ALGEBRA FOR SECONDARY TEACHERS. 3 cr.** The logical structure of mathematics presented through the development of the properties of rings and fields. Intensive investigation of the real and complex number systems. Prerequisite: 113 or advanced standing.
- **509. STATISTICS FOR SECONDARY TEACHERS. 3 cr.** Course topics include the interpretation of data, graphical displays of data, distribution of data, methods of data collection, random sampling, probability, random variables, confidence intervals, tests of significance, and study of normally distributed data.
- 520-521. STATISTICAL METHODS FOR THE EXPERIMENTER. 3 cr. each. Data description, probability and probability distributions, estimation and tests of hypothesis, linear regression and correlation, multiple comparisons, multiple regression; analysis of variance for completely randomized, randomized block, Latin square, factorial and k-way classification, and unbalanced designs; expected mean squares, analysis of covariance. The use of SAS and Minitab statistical computer packages. Emphasis is on methodology and only a high school background in mathematics and no prior knowledge of statistics is assumed. Credit cannot be earned in both 437-438 and 520-521. (Same as Computer Science 520-521.)
- **522. MULTIVARIATESTATISTICALMETHODS FOR RESEARCHERS. 3 cr.** An introductory course in applied multivariate statistical methods for the researcher. Emphasis is on concepts and the application of procedure. Topics to be covered include multivariate normal distribution theory, statistical distance, hypothesis testing, multivariate structure, graphics, and exploratory techniques. (Same as Computer Science 522.)
- **591. DIRECTED STUDY. 1-6 cr. Maximum, 6 cr.** Directed study in A. Algebra; B. Analysis; C. Topology; D. Statistics. Prerequisite: Approval of Department

### MUSIC (MUSC)

#### For Undergraduates and Graduates

- **401. OPERA PERFORMANCE AND PRODUCTION. 3 cr.** Musical and dramatic preparation of opera roles, and basic techniques of staging and presentation. Participation in opera performances. May be repeated for credit.
- 402. SPECIAL PROBLEMS. 1-3 cr. Investigative study of special problems by students with particular needs in music. A. Performance and Ensemble; B. History and Literature; C. Theory and Composition; D. Piano Pedagogy and Literature; E. Vocal Diction, Pedagogy, and Literature; F. Music Theatre. Prerequisite: Approval of the Head of the Division of Music. May be repeated.
- **423. ORCHESTRA. 1 cr. per semester. May be repeated for credit.** Total hours allowed vary with each degree program. Prerequisite: Approval of the Division Head. (Formerly 323.)
- **426.** WIND ENSEMBLE. 1 cr. per semester. May be repeated for credit. Total hours allowed vary with each degree program. Prerequisite: Approval of the Division Head. (Formerly 326.)
- **427.** SYMPHONIC BAND. 1 cr. per semester. May be repeated for credit. Total hours allowed vary with each degree program. Prerequisite: Approval of the Division Head. (Formerly 327.)
- **429. CONCERT CHOIR. 1 cr. per semester. May be repeated for credit.** Total hours allowed vary with each degree program. Prerequisite: Approval of the Division Head.
- **433. MADRIGALIANS. 1 cr. per semester. May be repeated for credit.** Total hours allowed vary with each degree program. Prerequisite: Approval of the Division Head.
- **434.** CHAMBER MUSIC. 1 cr. per semester. May be repeated for credit. Total hours allowed vary with each degree program. The study and performance of chamber music for various combinations of instruments. Prerequisite: Approval of the Division Head.
- **435. PIANO ACCOMPANYING. 1 cr. per semester. May be repeated for credit.** Total hours allowed vary with each degree program. Applied studio accompanying in the vocal and instrumental applied areas. Prerequisite: Approval of the Division Head.
- **437. PIANO PEDAGOGY III. 3 cr.** A survey of music for the piano from the Baroque and Classical periods suitable for students at the intermediate level.
- **438. PIANO PEDAGOGY IV. 3 cr.** A survey of music for the piano from the Romantic and Contemporary periods suitable for students at the intermediate level.
- 461. KEYBOARD HARMONYAND CREATIVE MUSICIANSHIP FOR THE PIANO TEACHER. 1 cr. Maximum, 2 cr. A functional approach to keyboard skills for piano instructors. A combination of

lab and lecture to include harmonization, chord voicing, transposition, modulation, improvisation, sight reading, and score reading. Development of proficiency in these skills, as well as an understanding of how they can be taught at different levels.

- **464. THE BAROQUE ERA. 3 cr.** Music of the Baroque period up to and including Bach. Prerequisite: 492 or Approval of Head of the Division of Music.
- **465. PIANO HISTORY AND LITERATURE. 3 cr.** A survey of pianos and their predecessors, and piano literature from the early English school to the present. Prerequisite: 193.
- 467. SURVEY

**499. THE CLASSIC ERA. 3 cr.** Music of the Classic era and its place in the general culture of the period. Prerequisite: 492 or Approval of Head of the Division of Music.

#### For Graduates Only

The following courses carry 2 or 4 semester hours of credit and may be repeated for a maximum of 16 semester hours of credit. Prerequisite: Successful completion of the prior course at The University of Louisiana at Monroe and/or an audition.

Valaa	E 4 4
Voice	-
Piano	542
Organ	543
Violin	544
Viola	
Cello	
String Bass	547
Clarinet	
Saxophone	
Flute	550
Oboe	
Bassoon	552
Trumpet	553
Tuba	
French Horn	
Trombone	
Euphonium	557
Percussion	

**561. MUSIC HISTORY I. 2 cr.** A study of music of the Middle Ages and the Renaissance; the history of music from ca. 800-1600.

562. MUSIC HISTORY II. 2 cr. A study of music of the Baroque and Classical eras; the history of music from ca. 1600-1815.

**563. MUSIC HISTORY III. 2 cr.** A study of music of the Romantic and Modern eras; the history of music from ca. 1815 to the present.

572-573. ADVANCED COMPOSITION. 3 cr. each.

575. ADVANCED COUNTERPOINT. 3 cr. Larger polyphonic forms in sixteenth, eighteenth and twentieth century styles.

579. SEMINAR IN MÚSIC THEORY. 3 cr. A comprehensive course in music theory, from fundamental to advanced contemporary techniques. Written and aural work.

582. ADVANCED CHORAL CONDUCTING. 3 cr. Techniques of advanced choral conducting. Score analysis and problems of preparation and performance. Study of major choral works.

583. ADVANCED BAND CONDUCTING. 3 cr. T

582.

music forchestral veanctoiry oPrerequ .. Corks.;horal 2825 TD 0Two(572e5734B25 at

# MUSIC EDUCATION (MSED)

For Undergraduates and Graduates

- 401. SPECIAL PROBLEMS. 1-3 cr.
- **403. INSTRUMENT REPAIR. 3 cr.** Practical methods of maintenance, adjustment, and repairs of musical instruments.
- **405. BAND DIRECTORS WORKSHOP. 3 cr. Maximum, 9 cr.** A "refresher" course for instrumental music education teachers emphasizing the basic concepts of the marching band. New concepts and teaching techniques in marching band will be discussed. Also, related areas such as administration, arranging, new music, charting, auxiliary units, and marching percussion will be covered. Films and video tapes will be used extensively.
- 407. PIANO TEACHERS WORKSHOP. 3 cr. Maximum, 9 cr. A course for piano teachers, including instructional procedures, methods and materials, and teaching demonstrations.
- **409. CHORAL DIRECTORS WORKSHOP. 3 cr. Maximum, 9 cr.** A course designed for choral directors including vocal techniques, choral literature and interpretation, rehearsal methods, and teaching techniques.
- **411. MUSIC EDUCATION WORKSHOP. 3 cr.** A course designed to instruct teachers and supervisors of elementary music in singing, playing instruments, moving, creating, arranging, and selecting music for A. Basic; B. Intermediate; C. Advanced.
- **417. GENERAL MUSIC PROGRAM IN ELEMENTARY AND SECONDARY SCHOOLS. 3 cr.** Detailed consideration of the general music program, with special attention given to materials and methods of teaching.
- **419. THE MARCHING BAND. 3 cr.** Fundamentals, organization, precision drill and pageantry; charting and rehearsal procedures and musical problems.
- **420. DRILL DESIGN TECHNIQUES. 3 cr.** A course designed to provide advanced drill design techniques including music analysis, interpretive writing, horn placement, drill teaching techniques, and element correlation. Prerequisite: 419 or equivalent.
- **490.** CHORALREPERTOIRE. 3 cr. A survey of the choral octavo literature at the high school through collegiate level; in conjunction with selection of materials and programming.
- **491. INTRODUCTORY WORKSHOP IN ORFF-SCHULWERK. 3 cr.** Basic Orff-Schulwerk techniques, including body movement, soprano recorder, percussion, vocal performance, improvisation, and arranging.
- **492. INTERMEDIATE WORKSHOPIN ORFF-SCHULWERK. 3 cr.** Intermediate level Orff-Schulwerk techniques, including modal harmonization, irregular rhythms, alto recorder performances, and more extensive improvisation and arranging. Prerequisite: 491 or equivalent.
- 493. ADVANCED WORKSHOPIN ORFF-SCHULWERK. 3 cr. Advanced Orff-Schulwerk techniques including original composition, complex form, movement, and instrumental arrangements, tenor and bass recorder performances, and advanced improvisation. Prerequisite: 492 or equivalent.
- **495. THE USE OF MUSICAL INSTRUMENTS IN GENERAL MUSIC EDUCATION. 3 cr.** A course designed to provide basic playing ability of the following instruments: autoharp, melody bells, recorder, guitar, piano, dulcimer, and the various Orff melodic and percussion instruments. Prerequisite: 322 or 335 or equivalent.
- 496. THE ADVANCED USE OF MUSICAL INSTRUMENTS IN GENERAL MUSIC EDUCATION. 3 cr. Course designed to improve the students playing proficiency on the following classroom instruments: guitar, recorder, autoharp, melody bells, dulcimer, piano, and the various Orff melodic and percussion instruments. Prerequisite: 495 or equivalent.

#### For Graduates Only

- 501. VOICE PEDAGOGY. 3 cr.
- 503. PIANO PEDAGOGY. 3 cr.
- 505. STRING PEDAGOGY. 3 cr.
- 507. WOODWIND PEDAGOGY. 3 cr.
- 509. BRASS PEDAGOGY. 3 cr.

**50** 

# GRADUATE COURSES 151

- **454.** LAW. 3 cr. Local, state and federal laws, rules and regulations relating to the practice of Pharmacy. Prerequisite: Second Year Pharmacy.
- **467. PESTICIDES. 2 cr.** Chemicals and drugs which have important application as insecticides, herbicides, fungicides, and rodenticides. Prerequisite: 413.
- 479. NUCLEAR PHARMACY. 2 cr. Handling and storage of radioisotopes and their application to pharmacy. The official radiopharmaceuticals and non-official radiopharmaceuticals of merit

- **540. BIOSTATISTICS. 3 cr.** The theoretical and applied techniques of data collection, analysis, and interpretation in pharmaceutical research. Prerequisite: Psychology 439.
- **541. ADVANCED MARKETING OF DRUG PRODUCTS. 4 cr.** Distributive systems and underlying economic principles, functions, policies, and practice as related to marketing drug products.
- 542. ADVANCED RETAIL PHARMACY MANAGEMENT. 4 cr. Advanced problems related to planning, organizing, and controlling the retail pharmacy.
- 543. BEHAVIORAL SCIENCES IN PHARMACY ADMINISTRATION. 4 cr. Psychology, sociology, and communications as related to pharmacy management.
- **544. NEW DRUG DEVELOPMENT. 4 cr.** Professional, administrative and legal requirements for discovery, production and distribution of a new drug.
- **545. RESEARCH METHODOLOGY. 3 cr.** Description and application of the scientific method to social and economic research problems peculiar to the health fields.
- 546. RESEARCH DESIGN. 3 cr. Design and analysis of research problems in the health care field.
- 547. HEALTH CARE ADMINISTRATION. 3 cr. A description and analysis of the current health care system in the United States, using economic and administrative concepts and principles. Prerequisite: Consent of Department Head.
- **548. HOSPITAL ADMINISTRATION. 3 cr.** The hospital as a complex health care organization, its nature and functions, personnel and staff behavior, and how it is viewed by its client, the patient. Prerequisite: Consent of Department Head.
- **549. HEALTH CARE LAW. 3 cr.** A study of legal issues pertaining to health care topics such as modes and institutions for providing medical care, liability of selected providers and review of applicable laws, rules, and regulations. Prerequisite: Consent of Department Head.
- **550. BIOCHEMICAL TOXICOLOGY. 3 cr.** A detailed coverage of biochemical mechanisms of toxicity. Prerequisite: Credit or registration in Toxicology 412 or equivalent.
- 551. DIRECTED STUDY. 1-3 cr. Maximum, 5 cr. Applicable to all disciplines.
- **552. SEMINAR. 1 cr.** Current developments in pharmaceutical disciplines. Applicable to all disciplines. Attendance required for every graduate student each semester. Not more than 2 cr. applicable to the M.S. degree or an additional 4 cr. toward the Ph.D. degree, not to exceed 6 cr. for the Ph.D. degree.
- 555. FERMENTATION. 3 cr. Production of medicinal products by microorganisms. Two hours lecture and three hours laboratory.
- 558. ADVANCED CANCER PHARMACOLOGY. 3 cr. An advanced course presenting the pathophysiology, clinical features, and pharmacology of cancers as well as the latest advances and developments in cancer therapeutics. Prerequisites: Permission of the Instructorpharmaceuticaf

- **581. ADVANCED TOXICOLOGY.3 cr.** Cellular mechanisms of adverse chemical effects in biological systems. Areas of emphasis include principles of pathology, genotoxicity, carcinogenicity, teratogenicity and toxic responses of major organ systems. Prerequisites: 415, 489.
- 582. ADVANCED TOXICOLOGY LABORATORY. 3 cr. Common laboratory techniques used to evaluate chemical toxicity. One hour lecture, six hours laboratory. Prerequisite: Credit or registration in 581.
- 583. SURFACE AND INTERFACIAL PHENOMENA. 3 cr. This course deals with the fundamentals of surface and interfacial phenomena encountered by pharmaceutical scientists in the development of dosage forms.
- 584. CHEMICAL KINETICS AND STABILITY OF PHARMACEUTICALS. 3 cr. This course deals with the fundamentals aspects of chemical kinetics applied to the stability of pharmaceutical raw materials and final dosage forms.
- 590. METHODS AND PRINCIPLES OF TOXICOLOGY. 4 cr. each. Intended to provide the graduate student with hands-on laboratory experience in methods commonly used in A. Neurotoxicology, B. Aquatic Toxicology, C. Immunotoxicology, D. Hepatotoxicology. Prerequisite for A, B, and D: 550 and Consent of Instructor. Prerequisite for C: 408 or 423.
- 599. THESIS. 3, 6, 9, 12 cr. Applicable to all disciplines. May be repeated for credit. Grades of CR (Credit) or NC (No Credit) will be awarded.
- 651. ADVANCED DIRECTED STUDY. 1-3 cr. Maximum, 10 cr. Applicable to all disciplines.
- **699. DISSERTATION. 3, 6, 9, 12 cr.** May be repeated for credit. Grades of CR (Credit) or NC (No Credit) will be awarded. Applicable to all disciplines.

## PHILOSOPHY (PHIL)

#### For Undergraduates and Graduates

- **400. INTERSECTIONS OF SCIENCE AND RELIGION. 3 cr.** This course will cover the issues that have arisen historically and also in the contemporary world in the dialogue of science and religion. Major focus should be given to how these issues and positions have affected our understanding of human nature. Topics that should be covered include: Darwin and the Evolutionary Theory, Creationism, Design, the Origin of the Cosmos, the Big Bang, Quantum Theory and Chance, the Free Will, Miracles and Prayer, and theories of Human Nature in Asian Religions and Christianity.
- **401. ANCIENT AND MEDIEVAL. 3 cr.** Philosophical thought from the Pre-Socratic to the sixteenth century, including Plato and Aristotle, the Epicureans and the Stoics, the Neo-Platonists, and Aquinas; the rise and fall of medieval scholasticism.
- **402. MODERN. 3 cr.** Philosophical thought from the seventeenth century to the present, including rationalism, empiricism, transcendental idealism, pragmatism, logical positivism, and existentialism.
- **403. ETHICS. 3 cr.** A study of the theoretical foundations of morality with reference to approaches to ethical thought, character, and action. Concepts include good and evil, right and wrong, obligations and rights, responsibility and freedom and the application of these concepts to the working out of particular ethical problems. (Same as Govm 403.)
- **404. CONTROVERSIAL ISSUES IN BIOETHICS.** 3 cr. The ethical significance of and ethical dilemmas that arise as a result of new cutting edge biotechnologies. Ethical topics include: reproductive options, abortion, stem-cell research, human cloning, genetic discrimination and confidentiality, genetic engineering, regulation of human research, and euthanasia.
- **405. PHILOSOPHY OF RELIGION. 3 cr.** A study of attempts to bring rational justification and clarification to religious beliefs and practices, focusing primarily on the concepts of Christian theology. Topics will include the existence of nature of God, faith and reason, death and immortality, mysticism, the problem of evil, religious experience, and the impact of existentialism on contemporary religious thought.
- 407. THEORIES OF HUMAN NATURE. 3 cr. This course will cover the theories of human nature that have arisen historically and also in the contemporary world. Major figures to be covered include Plato, Aristotle, Aquinas, Hobbes, Locke, Hume, Kant, Darwin, Marx, Nietzche, Freud, Sartre, Maslow, and contemporary psychological theories. This course will answer questions like what

is the human being?, what is the purpose of human life?, is the human being basically aggressive or kind?, and how do human beings differ from animals?

- **415. THEORY OF KNOWLEDGE. 3 cr.** A comparative and critical survey of the major theories that deal with the nature and extent of human knowledge and related notions, such as belief, justification, perception, and memory. Classical and contemporary philosophical positions will be covered representing a wide range of theories and their application to other disciplines of human inquiry, such as biology and psychology.
- **491. DIRECTED STUDY. 1-3 cr.** Directed study and/or research in selected areas of philosophy. A. Logic; B. Ethics; C. Ancient, Medieval, and Modern; D. Theory of Knowledge. Prerequisite: Advanced standing, approval of department head, and permission of the instructor.

# PHYSICAL SCIENCE (PSCI)

#### For Undergraduates and Graduates

**491.** SPECIAL TOPICS. 1-6 cr., Maximum, 6 cr. Special topics in Physical Science for teachers. A. General Physical Science; B. Energy. Prerequisite: Approval of Department Head.

### PHYSICS (PHYS)

#### For Undergraduates and Graduates

- **401. HEAT AND THERMODYNAMICS. 3 cr.** Principles and application of heat transfer and the laws of thermodynamics. Prerequisites: 208; Mathematics 232.
- **405. BASIC PHYSICS LABORATORY. 1 cr.** Classical physics experiments in heat and thermodynamics, mechanics, optics, and electricity and magnetism. Three hours of laboratory. Prerequisites: 315 and 401.
- 406. BASIC PHYSICS LABORATORY. 1 cr. Modern physics experiments in solid state, atomic and nuclear physics and selected experiments in departmental research areas. Three hours of laboratory. Prerequisite: 405.
- **409. OPTICS. 3 cr.** Principles and applications of geometrical and physical optics. Prerequisites: 208 and credit or registration in Mathematics 232.
- 410. PHYSICS FOR SECONDARY TEACHERS. 3 cr. Elementary concepts of physics applicable to junior and senior high school science courses. Not applicable toward B.S. or M.S. degree in physics. Prerequisite: Approval of Department Head.
- **412.** ELEMENTARY VECTOR FIELDS. 3 cr. Methods of formulation and solution of problems involving force fields as encountered in physical mechanics and electromagnetic theory. Prerequisites: 208; Mathematics 232.
- **415. MECHANICS. 3 cr.** Rigid bodies, vibrational systems, and advanced general methods. Prerequisites: 315; Mathematics 132.
- **417. ELECTRICITY AND MAGNETISM. 3 cr.** A theoretical treatment of electricity and magnetism with an introduction to electromagnetic wave phenomena. Prerequisites: 317 and credit or registration in Mathematics 232.
- **421. RESEARCH. 1-3 cr.** Research problems that emphasize current progress in physics. Three hours of laboratory work per week per credit hour. Prerequisite: Approval of Department Head.
- **424. ANALOG ELECTRONICS. 3 cr.** Discrete electronic components and circuits using them including resistors, capacitors, diodes, transistors, and operational amplifiers. Prerequisites: 208 and Mathematics 132.
- **426. ANALOG ELECTRONICS LABORATORY. 1 cr.** Basic measurement techniques, filters, power supplies, diodes, transistors, and operational amplifiers. Three hours of laboratory. Prerequisite: Registration or credit in 424.
- **433. INTRODUCTORY QUANTUM MECHANICS. 3 cr.** The development of introductory quantum theory from a phenomenological point of view with applications to atomic physics and chemistry. Prerequisite: Approval of Department Head.
- 491. DIRECTED STUDY. 1-6 cr. Maximum, 6 cr. for undergraduates; Maximum, 3 cr. for graduates. Investigative and advanced study in: A. Advanced Mechanics, B. Electromagnetic

Fields, C. Heat and Thermodynamics, D. Quantum Mechanics, E. Fluid Mechanics. Prerequisite: Approval of Department Head.

#### For Graduates Only

510. PHYSICS FOR SECONDARY TEACHERS. 3 cr. Advanced concepts of physics applicable to junior and senior high school science courses. Not applicable toward B.S. or M.S. degree in Physics. Prerequisite: Approval of Department Head.

# POLITICAL SCIENCE (POLS)

#### For Undergraduates and Graduates

**403.** ETHICS. 3 cr. A study of the theoretical foundations of morality with reference to approaches to ethical thought, character, and action. Concepts include good and evil, right and wrong,

# GRADUATE COURSES 157

441. COMPARATIVE GOVERNMENT AND POLITICS IN LATIN AMERICA. 3 cr. A

- **410. HEALTH PSYCHOLOGY. 3 cr.** Behavioral factors in physical illness and maintenance of health; including an examination of research issues, behavioral techniques in treatment, intervention and preventative medicine strategies. Prerequisites: 201, Zoology 205.
- **411. ADVANCED TOPICS. 3 cr.** A study of theoretical issues in experimental and applied areas of psychology. Prerequisite: Twelve hours of psychology.
- **415. INDUSTRIAL. 3 cr.** Application of psychological principles and techniques to problems of industry, with emphasis on employee selection and placement, merit rating, accident reduction, training, measurements, and improvement of morale. Prerequisite: 201.
- **425. PSYCHOLOGYOF ADULTHOOD AND AGING. 3 cr.** Study of physical, intellectual, personality, social and emotional development during the middle and older years of the life span.
- **427. THEORIES OF PERSONALITY. 3 cr.** Survey of the dominant personality theories. Prerequisite: Nine hours of psychology.
- **439. STATISTICS. 3 cr.** Statistical techniques needed in the study, interpretation, and preparation of educational and psychological research.
- 441. PSYCHOLOGYOF CHILD ABUSE. 3 cr. Identification, treatment, and prevention of child abuse and neglect.
- **450. EVOLUTIONARY PSYCHOLOGY. 3 cr.**Evolutionary origins of behavior are integrated into a framework of ontogeny and physiology, delineating a modern adaptationist approach to human psychology. Prerequisites: 201, BIOL226 or equivalent.
- **451. PSYCHOLOGICALTESTING AND MEASUREMENT. 3 cr.** The theory and rationale underlying the definition and measurement of human traits, abilities, and behaviors. Prerequisite: 439 recommended.

#### For Graduates Only

- **501. COGNITION. 3 cr.** The study of the thinking processes of normally functioning individuals. Topics will include memory, problem solving, heuristics, creativity, and decision making. Prerequisites: 325, 439.
- **502. SOCIAL COGNITION. 3 cr.** Study of the manner in which people sort, store, and assess information about others. Emphases include causal attributions, social attitudes, person perception, stereotyping, and small group process. Prerequisites: 315, 402, 439.
- 503. ADVANCED CHILD PSYCHOLOGY. 3 cr. Topical approach to examination of mental, motor, social, and emotional development of children and adolescents. Relevant research and literature regarding normal development, deviations from normal, and multicultural issues associated with the developmental process are presented. Prerequisite: 203. (Formerly Advanced Child.)
- **505.** ADVANCED ADOLESCENT PSYCHOLOGY. 3 cr. Topical approach to examination of mental, motor, social, and emotional development of adolescents. Relevant research and literature regarding normal development, deviations from normal, and multicultural issues associated with the developmental process are presented. Prerequisite: 203 or 205.
- **507. PSYCHOLOGICALFOUNDATIONS OF LEARNING. 3 cr.** Principles of learning and the experimental evidence upon which they are based, including individual experimentation in learning.
- **508. CLINICAL PSYCHOLOGY. 3 cr.** A survey of the diagnostic instruments, methods, and techniques as they relate to personality theory. Prerequisites: 401, 406.
- 509. INTELLIGENCE TESTING. 3 cr. Administration and interpretation of intelligence tests, including development and theoretical issues, with a focus on the Wechsler scales and Stanford Binet as well as other tests and methods. Three hours lecture and three hours laboratory. Prerequisites: 451, 515, and Approval of Department Head.
- 511. INDIVIDUAL TESTS. 3 cr. Training and supervised practice in the administration, scoring, and interpretation of individual tests of intellectual and personality functioning. Emphasis is on the Diagnostic Interview, Exner System Rorschach, Wechsler Scales, Minnesota Multiphasic Personality Inventory, and apperceptive measures. Three hours lecture and three hours laboratory. Prerequisites: 451, 509, 515 and Approval of Department Head.
- **515. PSYCHOPATHOLOGY. 3 cr.** The manifestations of deviant behavior in individuals, and the principles and theoretical models used in the description and interpretations of psychological disorders. Emphasis is on the use and limitations of the Diagnostic and Statistical Manual of Mental Disorders. Prerequisite: 401.
- 518. PSYCHOLOGICAL ASSESSMENT. 3 cr. Instruction and practice in administration and integrated interpretation of tests and other instruments used in the assessment of individual

personality traits and psychopathology. Emphasis is on assessing psychopathology using a combination of techniques. Two hours lecture and three hours laboratory. Prerequisites: 509, 511, and Approval of Department Head.

- **522. QUANTITATIVE METHODS IN THE BEHAVIORAL SCIENCES. 3 cr.** Methods of analysis of variance and covariance, multiple regression, significant parametric and non-parametric tests, and an introduction to experimental design. Two hours lecture and three hours laboratory. Prerequisite: 439.
- **523. RESEARCH METHODS. 3 cr.** Research techniques; collecting, processing, analyzing, and interpreting psychological research. Prerequisites: 315 or 316, and 522. (Formerly 521.)
- 527. PROFESSIONAL SCHOOL PSYCHOLOGY. 3 cr. Programs, problems, techniques, and ethical considerations of the psychologist in the school. Prerequisite: 509 or 511.
- 528. SEMINAR IN CONTEMPORARY ISSUES IN PSYCHOLOGY. 3 cr. Maximum, 6 cr. Selected current areas and fields of professional psychology.
- 529. DIRECTED STUDY. 1-3 cr. Maximum, 6 cr. Individual investigation of selected topics in psychology. Three hours laboratory per credit hour. Prerequisite: Approval of Department Head.
- **531. ANALYSIS OF BEHAVIOR. 3 cr.** An intensive study of the principles of learning and motivation. Prerequisite: 315.
- **534. THEORIES OF LEARNING. 3 cr.** Classical theories of learning through the year 1952, and developments giving rise to current theoretical perspectives. Prerequisite: 315 or 407.
- 552. BEHAVIOR MODIFICATION. 3 cr. Emphasis on theory and practice of modification of human behavior.
- **553. BEHAVIORAL INTERVENTION LABORATORY. 1 cr.** Field experience in behavioral assessment and the development and implementation of behavior modification programs. A laboratory course to accompany 552.
- **561. NEUROPSYCHOLOGY. 3 cr.** Anatomical and physiological substrates of behavior. Prerequisite: 303.
- 571. BASIC PSYCHOTHERAPY. 3 cr. Theories and principles of psychodynamics and techniques employed in changing individual behavior. Prerequisite: Approval of Department Head.
- 581. REMEDIATION OF LEARNING DISABILITIES. 3 cr. Seminar in contemporary research, practices, and problems concerned with remediation of special learning problems. Prerequisite: 401 or 403.
- 582. PSYCHO-EDUCATIONAL DIAGNOSIS AND INTERVENTION. 3 cr. Interpretation of individual and group educational tests with implications for the development of individual education programs and other intervention techniques. Prerequisite: 509 or 511 and Approval of Department Head.
- 588. TOPICS IN SCHOOL PSYCHOLOGY. 3 cr. Maximum, 6 cr. Topics may not be repeated for credit. Issues relative to the delivery of psychological services. Specific topics to include: A. Historical/Legal/Procedural Issues, B. Consultation/Diagnosis/Interventions. Prerequisite: Approval of Department Head.
- **591. PRACTICUM IN PSYCHOLOGY. 1-6 cr. Maximum, 6 cr.** Supervised experience in various fields of psychology. Prerequisite: Approval of Department Head.
- **592. INTERNSHIP IN PSYCHOLOGICAL SERVICES. 3-6 cr. Maximum, 12 cr.** Students are placed in approved institutional settings where they work full time. Prerequisite: Approval of Department Head.
- **597. INDEPENDENT RESEARCH. 3-6 cr.** Design, execution, and manuscript preparation of research suitable for submission for publication in a specified professional journal. Prerequisite: Approval of Department Head.
- 599. THESIS. 1-6 cr. Grades of CR (Credit) or NC (No Credit) will be awarded.

# QUANTITATIVE METHODS (QMDS)

#### For Undergraduates and Graduates

**411. OPERATIONS RESEARCH. 3 cr.** Operations research techniques including linear programming, dynamic programming, game theory, queuing theory, Monte Carlo method and simulation with emphasis on applications to manufacturing, marketing, and financial management problems. Prerequisite: 210.

# READING (READ)

For Undergraduates and Graduates 418. READING IN THE CONTENT AREA. 3 cr. A

# **GRADUATE COURSES**

- **415. JUVENILE DELINQUENCY AND JUSTICE. 3 cr.** The nature, extent, and causes of juvenile delinquency; factors in its treatment and prevention, including community and agency programs; and analysis of the legal system as it applies to juveniles. (Same as Criminal Justice 415.) (Formerly Juvenile Delinquency.)
- 419. THE FAMILY. 3 cr. The past and present role of the family as the primary social group in our cul-

- **512. SOCIAL GERONTOLOGY. 3 cr.** An examination of social aspects of adjustment to aging, attitudes toward aging, social-psychological and sociological theories of aging, successful aging, family patterns, intergenerational relationships, leisure, and retirement. Attention will be given to demographic changes, middle age, minority aged, and adult socialization. (Same as Gerontology 512. Formerly Sociology 510 Sociology of Aging.)
- 555. SOCIOLOGY OF LAW. 3 cr. An analysis of social behavior and its relationship to the development of law; law as a control mechanism; social behavior as it relates to the police, courts, and corrections; portrayal of the Criminal Justice system components in the media; and social change and the law. (Same as Criminal Justice 555).
- 565. COMMUNITY-BASED AND LONG-TERM CARE. 3 cr. A review of the various types of community based care with attention to the types of environments and services offered, the process of entry into care systems, physical and socio-emotional care, relations between residents and staff members, and social relationships inside and outside of care facilities. Health and quality of care, medical ethics, environmental health, and the delivery of services are addressed. (Same as Gerontology 565. Formerly Introduction to Long-Term Care.)
- 567. PROGRAMS AND PUBLIC POLICY. 3 cr. Analysis of the Older American's Act, national and state programs on aging, and other legislative/congressional acts: their effects on research, training, and grant development in the field of gerontology. (Same as Gerontology 567. Formerly Analysis of Programs and Practice in the Aging Network.)
- 575. RESÉARCH IN GERONTOLOGY. 3 cr. Integration and application of research designs used in gerontology; examines the impact of research on programs, policy, and planning; attention given to grant writing for research support. Prerequisite: Undergraduate methods course or Approval of Gerontology Graduate Coordinator. (Same as Gerontology 575.)
- 576. MINORITIES, CRIME, AND CRIMINAL JUSTICE. 3 cr. Examination of the role of minorities in the criminal justice system; as victims; as offenders; as defendants; as prisoners; as employees, and as professionals. (Same as Criminal Justice 576)

### SPANISH (SPAN)

#### For Undergraduates and Graduates

- **402. SEMINAR IN SPANISH LITERATURE. 3 cr. Maximum, 6 cr.** In-depth study and analysis of a specific Spanish language literary movement or writer. Prerequisite: 202 or 205.
- **405.** ADVANCED ORAL LANGUAGE DEVELOPMENT. 3 cr. Maximum, 6 cr. The refinement of conversational skills utilizing the Language Learning Center and classroom activities. Prerequisite: 202 or 205.
- **406.** ADVANCED SPANISH SYNTAX. 3 cr. An analysis of the more complex and problematic areas of Spanish grammar and vocabulary usage. Prerequisite: 231 or equivalent.
- **407. CONTEMPORARY LATIN AMERICAN LITERATURE. 3 cr. Maximum, 6 cr.** An analysis and discussion of outstanding works from the Spanish American literature of the twentieth century. Prerequisite: 202 or 205 or equivalent.
- **408.. CONTEMPORARY HISPANIC LITERATURE IN THE UNITED STATES. 3 cr.** An analysis and discussion of outstanding works of Hispanic writers of the U. S. Prerequisite: 202 or 205.
- **415. CONTEMPORARY SPANISH LITERATURE. 3 cr.** Extensive reading of authors of the Generation of 1898 and of the Twentieth Century. Prerequisite: 202 or 205.

# SPECIAL EDUCATION (SPED)

#### For Undergraduates and Graduates

- **481. CONTINUING STUDIES IN SPECIAL EDUCATION. 1-3 cr.** Various topics in special education. May be repeated. Credit may not be applied toward a degree. Grade of CR (Credit) or NC (No Credit) will be awarded.
- Credit) will be awarded.
  491. DIRECTED STUDY. 1-6 cr. Focused investigation on selected problem areas in Special Education. Prerequisite: Approval of Instructor

and/or administrators. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.

- **575. LEARNING CHARACTERISTICS OF GIFTED STUDENTS. 3 cr.** Designed to assist in the identification of the characteristics and motivational needs of the gifted learner. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.
- **576. METHODS AND MATERIALS FOR TEACHING GIFTED AND TALENTED. 3 cr.** Designed to present methods of instruction, curriculum development and materials appropriate to the needs of gifted students in the regular and special class. Prerequisite: Valid Louisiana teaching certificate or equivalent or written permission from Certification Coordinator.
- 577. GIFTED AND TALENTED PRACTICUM. 3-6 cr. A supervised experience with gifted children.

# GRADUATE COURSES 167

## THEATRE (THEA)

For Undergraduates and Graduates

401. COSTUME DESIGN. 3 cr. Teaches application of art fundamentals and historical research to

# **GRADUATE FACULTY**

\*Fredrick Adams, Assistant Professor of Foreign Languages Ph.D. University of Louisiana at Lafayette

Sarah H. Allen, CCC-SLP, Instructor of Communicative Disorders M.A., University of Louisiana at Monroe

\*Larry R. Anderson, Associate Professor of Music and Director, Jazz and Percussion Division M.M., University of Tulsa

Mark E. Arant, Associate Professor of Chemistry and Interim Dean, College of Arts and Sciences Ph.D., University of Alabama

Kevin Baer, Associate Professor of Toxicology Ph.D., Northeast Louisiana University

\*James Kelly Barnett, Part-time Assistant Professor of Marriage and Family Therapy Ph.D., University of Louisiana at Monroe

William D. Barnett, Assistant Professor of Computer Information Systems Ph.D., University of Texas at Arlington

Louis R. Bedell, Associate Professor of Physics Ph.D., Brown University

Christine T. Berry, Assistant Professor of Insurance Ph.D., Florida State University

**Ronald Berry,** Associate Professor and Dean, College of Business Administration D.B.A., Mississippi State University

Joydeep Bhattacharjee, Assistant Professor of Biology Ph.D., Texas Tech University

Christopher Blackburn, Professor of History Ph.D., Auburn University

\*Robert J. Blaine, III, Assistant Professor of Music D.M.A., Eastman School of Music

**Benny L. Blaylock,** Waste Management Endowed Professor and Head, Department of Toxicology, Associate Dean, School of Pharmacy B.A., B.S., Arkansas Polytechnic College; M.S., Ph.D., University of Arkansas for Medical Sciences

**Monica Bontty,** Assistant Professor of History Ph.D., University of California - Los Angeles

\*Alton Braddock, Assistant Professor of Criminal Justice M.A., University of Louisiana at Monroe

**Karen P. Briski**, Professor of Pharmacology and Neuroanatomy and Head, Department of Basic Pharmaceutical Sciences Ph.D., University of Michigan

Harry Brotherton, Department Head and Professor of Chemistry Ph.D., University of Florida

Allen Brown, Assistant Professor of Gerontology CGS, M.Ed., Northeast Louisiana University

**Ralph Brown**, Assistant Professor of History Ph.D., University of Tennessee, Knoxville \*Ernest E. Bruce, Associate Professor of Aviation M.B.A., University of Louisiana at Monroe

Frank N. Bruscato, Associate Professor of Chemistry

Linda Bryan, CCC-SLP, Associate Professor of Communicative Disorders Ph.D., University of Louisiana at Lafayette

Herbert Bryant, Professor of English Ph.D., University of Tennessee

**James Bulot,** Assistant Professor of Gerontology and Head, Department of Gerontology, Sociology and Political Science Ph.D., University of Massachusetts

Velma M. Butler, Associate Professor of Family and Consumer Sciences Ph.D., Oklahoma State University

**Bob N. Cage,** Professor of Educational Leadership and Coordinator of Ed.D. Consortium Program Ph.D., Iowa State University

Michael A. Camille, Associate Professor of Geography and Head, Department of Geosciences Ph.D., Texas A&M University

Henry Wilson Campbell, Professor and Head, Department of Kinesiology Ed.D., University of Southern Mississippi

\*Michael J. Cappel, Associate Professor of Social Work M.S.W., California State University (Fresno); L.C.S.W., Louisiana

**Paulette Cappel**, Assistant Professor of Social Work M.S.W., La. State University; L.C.S.W., LA

**Roger Carpenter**, Assistant Professor of History Ph.D., University of California, Riverside

John L. Carr, Professor of Biology Ph.D., Southern Illinois University at Carbondale

Holly B. Casey, Associate Professor of Educational Leadership Ed.D., University of Louisiana at Monroe

\*Sharon C. Chaney, Assistant Professor of Dental Hygiene M.P.S., Loyola University

**Richard Bruce Chardkoff,** Professor of History Ph.D., Florida State University

**M. Sean Chenoweth,** Assistant Professor of Geography Ph.D., University of Wisconsin

\*Tommie M. Church, Instructor of Kinesiology M.Ed., Northeast Louisiana University

Mark R. Clark, Associate Professor of Music D.M.A. University of Washington

\*Murrelyn F. Clark, Assistant Professor of Kinesiology M.Ed., Northeast Louisiana University

Kenneth E. Clow, Professor of Marketing Ph.D., University of Arkansas at Fayetteville

\*Michael B. Cockerham, Associate Professor of Clinical Pharmacy Practice Pharm.D., Idaho State University

**Charles L. Cole,** Professor of Marriage and Family Therapy Ph.D., Iowa State University

**Henry S. Cole,** Associate Professor and Faculty Chair, Marketing D.B.A., Louisiana Tech University

Lisa Cooper Colvin, Professor of Kinesiology Ph.D., University of Southern Mississippi

June F. Conway-Bruyninckx, Associate Professor of Family and Consumer Sciences Ph.D., Texas Woman's University

**Jan B. Corder**, Professor of Nursing and Interim Dean, College of Health Sciences, Director, School of Nursing D.S.N., University of Alabama at Birmingham

**Jose L. Cordova,** Associate Professor and Faculty Chair, Computer Science Ph.D., Mississippi State University

Jean Cottingham, Associate Professor of Psychology Ph.D., University of Southern Mississippi

Walter N. Creekmore, Professor of Education Ph.D., University of North Carolina

Sharon F. Cruse, Assistant Professor of Chemistry Ph.D., Northeast Louisiana University

\***Sally Davidson,** Associate Professor and Faculty Chair, Aviation Ed.S., University of Louisiana at Monroe

\*Kathryn Davis, Assistant Professor of Occupational Therapy M.A., Louisiana Tech University

**Michael D. Degennaro,** Associate Professor of Pharmaceutics Ph.D., University of Georgia

**Mark Doherty,** Associate Professor of Kinesiology Ph.D., Ohio University

**John Paul Dunn,** Professor of Marketing; Distinguished Professor of Entrepreneurship and Small Business; and Director, Entrepreneurship Studies Center Ph.D., University of Arkansas

Yolanda Dupre, Assistant Professor of Counseling Ph.D., University of New Orleans

**Virginia Eaton,** Professor of Computer Science and Director, Graduate Studies and Research Ed.D., Vanderbilt University

**Robert C. Eisenstadt,** Associate Professor of Economics Ph.D., Georgia State University

Khalid El Sayed, Assistant Professor at Medicinal Chemistry B.S., M.S., Ph.D., Mansoura University

**Micah Everett,** Assistant Professor of Music D.M.A., University of North Carolina-Greensburg

**Sherlyn Ezell-Powell**, Associate Professor of Curriculum and Instruction Ed.D., University of Alabama

**Carlos D. Fandal**, Professor of Foreign Languages Ph.D., Louisiana State University

\*Brian Robert Fassett, Associate Professor of Art M.A., Wayne State University

\*Anthony D. Feig, Associate Professor of Geosciences Ed.D., University of T

Chris R. Gissendanner, Assistant Professor of Biology Ph.D., University of Georgia

\*Wiley Lloyd Grafton, Associate Professor of Criminal Justice Ed.D., University of Southern Mississippi

Julia C. Guernsey-Shaw, Assistant Professor of English Ph.D., University of Arkansas

Lisa Guidry, Assistant Professor of Curriculum and Instruction Ph.D., Louisiana State University

Janet Haedicke, Professor of English Ph.D., Louisiana State University

Harry J. Hale, Jr., Professor of Sociology Ph.D., University of Tennessee

\*Bruce Hall, Assistant Professor of Gerontology Ph.D., Mississippi State University

**Robert D. Hanser,** Assistant Professor of Criminal Justice Ph.D., Sam Houston State University

Gordon E. Harvey

Ph.(OH)sity of Georgia5M

Phj 74.90 Tw (172)TTch (Ph.D., Şam HouAubuissi-7structij /F الإلامية بالمالية (بالمالية بالمالية ب مالية بالمالية بالمالي **Glenda Holland**, Professor of Educational Leadership and Associate Dean of Education and Human Development Ed.D., Texas A&M University-Commerce

**Charles Holloway,** Professor of Foreign Languages Ph.D., Louisiana State University

Saho-Chung Hsia, Assistant Professor of Pharmacology Ph.D., Wayne State University

\*Helen B. Huckleberry, CCC-SLP, Assistant Professor of Communicative Disorders M.A., Western Michigan University

Alamdar Hussain, Assistant Professor of Pharmaceutics Ph.D., Texas Tech University

**Cecil Hutto,** Assistant Professor of Psychology Ph.D., University of Mississippi

**Bessie Rene Jackson,** Associate Professor and Head, Family and Consumer Sciences Ph.D., Texas Woman's University

\*Beverly Jarrell, Associate Professor of Dental Hygiene M.Ed., Temple University

**Peggie Jelks,** Associate Professor of Curriculum and Instruction Ed.D., Ball State University

Christopher J. Johnson, Professor of Sociology Ph.D., Iowa State University

\***Norma O. Johnson,** CCC-SLP, Assistant Professor of Communicative Disorders and Director of Clinical Services M.A., Northwestern State University

**Michelle Johnston**, Assistant Professor of Educational Leadership Ph.D., Mississippi State University

Allen C. Johnston, Assistant Professor of Computer Information Systems Ph.D., Mississippi State University

Seetharama D.S. Jois, Assistant Professor of Medicinal Chemistry Ph.D., Indian Institute of Science

**H. Perry Jones,** Professor of History Ph.D., University of Mississippi

Kathryn Jones, Associate Professor of Management Ph.D., University of Tennessee

**Rhonda Adams Jones,** Professor of Curriculum and Instruction and Mathematics; Director of Division of Continuing Education Ed.D., University of Georgia

**Terry Lyle Jones,** Professor of History Ph.D., Texas A&M University

**H. Glenn Jordan**, Assistant Professor of Library Science Ph.D., University of Oklahoma

Thomas Junk, Associate Professor of Chemistry Ph.D., Texas A&M University

\***Paul M. Karlowitz,** Associate Professor and Head, Department of Aviation M.S., Central Missouri State University

**Bette J. Kauffman,** Associate Professor and Head, Department of Communication Ph.D., University of Pennsylvania

**Ross E. Keiser,** Professor of Psychology Ph.D., Loyola University of Chicago

**Annela Kelly,** Assistant Professor of Mathematics Ph.D., University of Missouri

\*Brian Kelly, Associate Professor of Mathematics Ph.D., University of Missouri at Columbia

**\*Tae-Hyun Kim**, Assistant Professor of Mass Communications M.A., The Ohio State University

John A. Knesel, Associate Professor of Biology Ph.D., Purdue University

**Carl A. Kogut,** Associate Professor of Economics Ph.D., Texas A&M University

\*Attapol Kuanliang, Assistant Professor of Criminal Justice e e e e 0 TD TD (Ph.D. -10.2 Tf 70 0 M.A., The Ohio StaT6 Masversity

AsHelenm02csor of Chemistrstant ProfeD (Ph.E

\*BrianVirgier ,

\*Sandra K. Lunte, Associate Professor in Music D.M.A., Ball State University

**Donna Walton Luse,** Professor of Business Communications, Associate Dean and Graduate Coordinator Ph.D., University of North Texas

Aubrey Dale Magoun, Professor Ph.D., University of Louisiana at Lafayette

\*Mark McCleery, Instructor in Music M.M., Louisiana State University

John Fleming McClelland, Professor of English Ph.D., University of Georgia

\***Deborah McClung-Guillory,** Assistant Professor of Music M.M., Southern Methodist University

Charles W. McConkey, Professor of Marketing Ph.D., North Texas State University

William G. McCown, Associate Professor of Psychology Ph.D., Loyola University-Chicago

**E. Michelle McEacharn,** Professor and Associate Dean of Academics, College of Business Administration D.B.A., Louisiana Tech University; C.P.A., Louisiana

Joseph R. McGahan, Professor of Psychology Ph.D., The University of Oklahoma

\*Jerry McNeil, Assistant Professor of Radiologic Technology M.A., Louisiana Tech University

Harihara M. Mehendale, Kitty DeGree Endowed Chair and Professor of Toxicology Ph.D., North Carolina State University

**Melissa V. Melancon**, Assistant Professor of Finance D.B.A., Louisiana Tech University; C.M.A.; C.F.M.

Pat Melton, Associate Professor and Head, Department of Social Work

LaRue L. Sloan, Professor of English Ph.D., Texas Tech University

\*Flint Smith, Temporary Part-time Instructor of Psychology S.S.P., Northeast Louisiana University

John David Smith, Assistant Professor of Music D.M.A., Julliard School

Lon Albert Smith, Associate Professor of Computer Science Ph.D., Tulane University

\***Pam Smith**, Temporary Part-time Instructor of Psychology S.S.P., Northeast Louisiana University

**Ruth Elizabeth Smith,** Professor and Head, Department of Foreign Languages Ph.D., University of Oklahoma

Mark D. Somers, Assistant Professor of Physics Ph.D., University of Maryland

**C. Turner Steckline**, Associate Professor of Speech Communication Ph.D., Southern Illinois University-Carbondale

**Rebecca Stephenson**, Assistant Professor of English Ph.D., University of Notre Dame

**Rick Stevens,** Associate Professor of Psychology Ph.D., University of Oklahoma

**Gary L. Stringer**, Professor of Geology and Education and Head, Department of Curriculum and Instruction Ph.D., The University of Southern Mississippi

\*John Sutherlin, Assistant Professor of Political Science Ph.D., University of New Orleans

**Paul W. Sylvester,** Professor of Pharmacology, B.J. Robison Endowed Professor of Pharmacology and Director of Research and Graduate Studies Ph.D., Michigan State University

Martin Jeffrey Taylor, Assistant Professor of Chemistry Ph.D., University of Arkansas

**Carl L. Thameling**, Associate Professor of Speech Communication Ph.D., Indiana University

**Luke E. Thomas**, Professor of Kinesiology and Dean of the College of Education and Human Development Ph.D., Louisiana State University

**Christopher Thompson**, Professor of Music and Chair, String Division D.M.A., Louisiana State University

**Kim Marie Tolson**, Associate Professor of Biology Ph.D., Northeast Louisiana University

\***Steve Tolson**, Instructor of Psychology M.S., Northeast Louisiana University

\*Cliff Tresner, Associate Professor of Art M.F.A., University of Mississippi **Bruce C. Walker**, Assistant Professor of Management Ph.D., University of Arkansas

Jerry L. Wall, Professor of Management Ph.D., University of Missouri-Columbia; SPHR

**Robert George Ward,** Professor of Art M.F.A., Louisiana Tech University

Jerrilene Washington, Associate Professor of Curriculum and Instruction Ed.D., Johns Hopkins University

Fred H. Watson, Jr., Professor of Chemistry Ph.D., Louisiana State University

**G. Dale Welch,** Professor of Gerontology and Sociology Ph.D., Louisiana State University

**Keith White,** Professor of Music, Associate Dean/Director, School of Visual and Performing Arts Ph.D., Texas Tech University

\*Joel R. Willer, Assistant Professor of Mass Communications M.Ed., Kent State University

\*Allison Wiedemeier, Instructor of Biology Ph.D., University of Missouri, - Columbia

**David Williamson,** Associate Professor and Head, Department of Psychology Ph.D., East Texas State University

Harold E. Williamson, Professor and Head, Department of Criminal Justice Ph.D., Sam Houston State University

**Stanley G. Williamson,** Professor of Management Ph.D., University of North Texas

**Holly L. Wilson,** Associate Professor of Philosophy Ph.D., The Pennsylvania State University

\*James T. Wood, Associate Professor of Computer Information Systems Ph.D., University of Texas at Arlington

**R. Lamar Woodham,** Associate Professor of Marriage and Family Therapy and Director of Programs and Clinic Ed.D., East Texas State University

**Sarah Wyatt,** CCC-A, Assistant Professor of Communicative Disorders M.A., The University of Memphis

**Mitchell B. Young,** Associate Professor of Counseling Ph.D., Purdue University

# ADJUNCT GRADUATE FACULTY MEMBERS

\*David M. Anderson, Adjunct Assistant Professor

\*Edward Lock, Adjunct Senior Scientist (Professor Equivalent) Ph.D., Council for National and Academic Awards

\*Barry S. McIntyre, Adjunct Associate Professor of Pharmacology Ph.D., Washington State University

\*Marion S. Meriwether, Adjunct Assistant Professor of Mass Communications M.A., Northeast Louisiana University

\*David S. Moreland, Adjunct Assistant Professor of Biology M.S., Northeast Louisiana University

\*Keith Ouchley, Adjunct Assistant Professor of Biology Ph.D., Louisiana State University

\*Frank Pezold, Adjunct Professor of Biology, Ph.D., University of Texas

\*Peter Pi-Cheng Fu, Adjunct Professor of Chemistry Ph.D., University of Illinois at Chicago

\*Kenneth W. Rea, Adjunct Professor Ph.D., University of Colorado

\*Martin J. Ronis, Adjunct Professor of Toxicology, Arkansas Children's Hospital Research Institute Ph.D., Reading University, UK

\*Joe Saunders, Adjunct Associate Professor of Archeology Ph.D., Southern Methodist University

Larry Short, Adjunct Professor of Management Ph.D., University of Colorado

**Robert E. Stevens,** Adjunct Professor of Marketing Ph.D., University of Arkansas

\*Stephen Webre, Adjunct Professor Ph.D., Tulane University

\*Frank A. Witzman, Adjunct Professor of Toxicology, Indiana University School of Medicine Ph.D., Marguette University

\* Associate Member of the Graduate Faculty

# **PROFESSIONAL DEGREE PROGRAMS**

# **PROFESSIONAL DOCTORAL PROGRAMS**

The professional doctorate represents a level of education beyond the usual four-year baccalaureate degree and serves as the educational base for entrylevel practice in many professions, especially those related to healthcare. The professional doctorate differs in one very significant way from traditional postgraduate academic degree programs in that it is not intended to provide extensive research training. Some professional doctoral programs admit students after the completion of a specified pre-professional curriculum (usually two to three years of post-secondary study) while others may require a prior degree as a prerequisite for enrollment. In either case, such programs transcend the traditional post-secondary educational process.

#### DOCTOR OF PHARMACY College of Pharmacy Sugar Hall 151 (318) 342-1600

### FACULTY

**F. Lamar Pritchard,** Professor and Dean of the College of Pharmacy Ph.D., University of Georgia

**Benny L. Blaylock,** Waste Management Endowed Professor and Head, Department of Toxicology, Associate Dean, College of Pharmacy B.A., B.S., Arkansas Polytechnic College; M.S., Ph.D., University of Arkansas for Medical Sciences

**Karen P. Briski**, Professor of Pharmacology and Head, Department of Basic Pharmaceutical Sciences B.S., Albright College; M.S., Ph.D., University of Michigan

**W. Greg Leader,** Professor of Clinical Pharmacy Practice and Associate Dean B.S., University of Louisiana at Monroe; Pharm.D., University of Kentucky

Harihara M. Mehendale, Professor of Toxicology, Director, Louisiana Institute of Toxicology and Kitty DeGree Chair B.S., Kamataka University; M.S., Ph.D., North Carolina State University

**Roy Parish**, Professor of Clinical Pharmacy Practice and Tom and Mayme Scott Eminent Scholars Chair in Pharmacy Practice B.S., Pharm.D., University of Florida

**Girish V. Shah,** Mary E. and Darrell L. Calhoun Chair and Professor of Pharmacology B.S., M.S., Ph.D., University of Bombay

**Paul W. Sylvester,** B. J. Robinson Endowed Professor of Pharmacology B.S., Western Michigan University; Ph.D., Michigan State University

**Edwin H. Adams**, Associate Professor of Clinical Pharmacy and Director of Student and Professional Affairs B.S., University of Louisiana at Monroe; Pharm.D., University of Arkansas

**Kevin Baer**, Associate Professor of Toxicology B.S., Ph.D, University of Louisiana at Monroe

Michael B. Cockerham, Associate Professor of Clinical Pharmacy Practice and Assistant Dean B.S., Louisiana State University; B.S., M.S. University of Louisiana at Monroe; Pharm.D., Idaho State University

**Michael D. DeGennaro**, Associate Professor of Pharmaceutics B.S., Ph.D., University of Georgia

Ronald A. Hill, Associate Professor of Medicinal Chemistry B.S., University of Michigan; Ph.D., The Ohio State University

**Charles W. Jastram, Jr.,** Associate Professor of Clinical Pharmacy Practice and Head, Department of Clinical and Administrative Sciences B.S., Pharm.D., Xavier University of Louisiana **Lesa Lawrence**, Associate Professor of Pharmacy Administration B.S., M.B.A., Ph.D., University of Louisiana at Monroe

Sharon A. Meyer, Associate Professor of Toxicology B.S., M.S., Iowa State University, Ph.D., Cornell University

**Harvey Rappaport,** Associate Professor of Pharmacy Administration B.S., Rutgers University; M.S., Medical College of Virginia; Ph.D., University of Mississippi

Justin J. Sherman, Associate Professor of Clinical Pharmacy Practice B.S., M.C.S., Pharm.D., University of Mississippi

**Susan Sirmans,** Associate Professor of Clinical Pharmacy Practice and Assistant Department Head, Clinical and Administrative Sciences B.S., Auburn University; Pharm.D., Medical University of South Carolina

**Ronda L. Akins,** Assistant Professor of Clinical Pharmacy Practice Pharm.D., Xavier University of Louisiana

**Gina C. Biglane,** Assistant Professor of Clinical Pharmacy Practice B.S., University of Louisiana at Monroe; Pharm.D., University of Florida

Khalid El Sayed, Assistant Professor of Medicinal Chemistry B.S., M.S., Ph.D., Mansoura University

**Emily W. Evans**, Assistant Professor of Clinical Pharmacy Practice Pharm.D., University of Florida

**Jeffery D. Evans**, Assistant Professor of Clinical Pharmacy Practice B.S., Pharm.D., University of Florida

Saho-Chung Hsia, Assistant Professor of Pharmacology Ph.D., Wayne State University

**Joseph B. Feldhaus,** Assistant Professor of Pharmacy Administration B.S., University of Louisville; M.S., Southern Illinois University; Ph.D., University of Mississippi

Mary L. Gauthier-Lewis, Assistant Professor of Clinical Pharmacy Practice B.S., Pharm.D., Xavier University of Louisiana

Alamdar Hussein, Assistant Professor of Pharmaceutics Ph.D., Texas Tech University Health Sciences Center

Keith E. Jackson, Assistant Professor of Pharmacology Ph.D., University of North Texas Health Sciences Center

**Tibb F. Jacobs**, Assistant Professor of Clinical Pharmacy Practice Pharm.D., University of Louisiana at Monroe

Seetharama D.S. Jois, Assistant Professor of Medicinal Chemistry Ph.D., Indian Institute of Science, Bangalore, India

**Amal K. Kaddoumi,** Assistant Professor of Pharmaceutics Ph.D., Nagasaki University, Nagasaki, Japan

**Brice A. Labruzzo,** Assistant Professor of Pharmacy Practice Pharm.D., University of Houston

Yong-Yu Liu, Assistant Professor of Pharmacology Ph.D., Shanghai University of Traditional Chinese Medicine, Republic of China

Shawn M. Manor, Assistant Professor of Clinical Pharmacy Practice Pharm.D., University of Louisiana at Monroe

Sami Nazzal, Assistant Professor of Pharmaceutics Ph.D., Texas Tech University Health Sciences Center

Lance Nickelson, Assistant Professor of Clinical Pharmacy Practice B.S., University of Louisiana at Monroe; Pharm.D., University of Arkansas

**Michael S. Racca**, Assistant Professor of Clinical Pharmacy Practice M.D., Louisiana State University Shreveport

**Laurel A. Rodden,** Assistant Professor of Clinical Pharmacy Practice, Coordinator of Early Experiential Practice Pharm.D., University of Louisiana at Monroe

Kelli R. Sorrells, Assistant Professor of Clinical Pharmacy Practice Pharm.D., Idaho State University

**Martin B. Steffenson**, Associate Professor of Clinical Pharmacy Practice B.A., M.L.S., Florida State University; B.S., University of Louisiana at Monroe; M.S., South Dakota State University; Pharm.D., University of Arkansas

**Hilary L. Tice**, Assistant Professor of Clinical Pharmacy Practice Pharm.D., Texas Tech University Health Sciences Center

Ann M. Wicker, Assistant Professor of Clinical Pharmacy Practice Pharm.D., Xavier University

**Blair P. Wilbert,** Assistant Professor of Clinical Pharmacy Practice Pharm.D., University of Louisiana at Monroe

**Michelle Zagar,** Assistant Professor of Clinical Pharmacy Practice B.A., University of Southwestern Louisiana, M.Ed., University of Southwestern Louisiana, Pharm.D., University of Louisiana Monroe

Shannon Banks, Instructor of /F2 0oPOs0 (PhM5 Tw (Assistant Professor of Clinical Pharmacy Pro-

# ADJUNCT FACULTY

Salvatore J. D'Angelo, Adjunct Clinical Professor of Pharmacy

**Tarun K. Mandal**, Adjunct Professor of Pharmaceutics B.Pharm., Jadavpur University, Calcutta, India; M.Pharm., Jadavpur University, Calcutta, India, Ph.D., Northeast, Louisiana University

**Tamica Blake May,** Adjunct Assistant Professor of Pharmacy Administration Ph.D., University of Louisiana at Monroe

Anjali A. Namjoshi, Adjunct Instructor of Pharmacy Practice Pharm.D., Xavier University of Louisiana

Mark S. Nelson, Adjunct Instructor of Pharmacy Practice B.S., Louisiana State University at Shreveport, B.S., University of Louisiana at Monroe

**Peter Ng,** Adjunct Instructor of Clinical Pharmacy Practice B.S., University of Louisiana at Monroe

Roger B. Olinde, Adjunct Instructor of Pharmacy Practice B.S., University of Louisiana of Monroe, Pharm.D., University of Mississippi

Alan R. Parrish, Adjunct Associate Professor of Medical Pharmacology and Toxicology Ph.D., University of Arizona

Walter Pierron, Adjunct Instructor of Clinical Pharmacy Practice B.S., University of Mississippi

**Nancy Pierron,** Adjunct Instructor of Clinical Pharmacy Practice B.S., Northeast Louisiana State

Martin J. Ronis, Adjunct Professor of Toxicology Ph.D., Reading University, UK

**Summer K. Schilling,** Adjunct Assistant Professor of Clinical Pharmacy Practice Pharm.D., University of Louisiana Monroe

**Annette M. Shipp,** Adjunct Assistant Professor of Toxicology Ph.D., Northeast Louisiana University

**Jun Tan,** Research Assistant Professor of Pharmacy Administration Ph.D., University of Louisiana at Monroe

Mary Julia (MJ) Terrebonne, Adjunct Professor of Pharmacy Administration B.S., Northeast Louisiana University

**Cathy Whipple,** Adjunct Instructor of Clinical Pharmacy Practice B.S., University of Louisiana at Monroe; Nuclear Pharmacy Certificate, Purdue University

Frank A. Witzman, Adjunct Professor of Toxicology Ph.D., Marquette University

# **MISSION STATEMENT**

The College of Pharmacy at the University of Louisiana at Monroe, Louisiana's College of Pharmacy, endeavors to create a professional learning environment that embraces the concept of continual quality improvement. This environment will enable the College to produce and maintain excellent academic, research and service programs that directly enhance the health and environment of the state of Louisiana and beyond.

The mission of the College of Pharmacy (COP) is to educate future health care professionals to meet the diverse pharmaceutical care needs of the people of Louisiana and to serve the professions of pharmacy and toxicology through a balanced program of education, research, service, and patient care.

# **Research/Scholarly Activity**

- 1. Promote, develop and sustain excellence in graduate study and research in the clinical, basic, social and administrative sciences, thereby adding to the body of knowledge for scientists and educators in pharmacy, toxicology and related fields.
- 2. Promote research and scholarship that lead to improved patient care.
- 3. Promote research and scholarship that lead to improved educational outcomes.
- 4. Assess and evaluate all research and scholarly activity undertaken within the College.
- 5. Provide appropriate mentorship for faculty development.

#### Service

- 1. Address the healthcare and other societal needs by involving faculty, staff, and students in service activities at the University, local, state, national and international levels.
- 2. Promote wellness and disease prevention.
- 3. Promote therapeutic interventions, rational medication use, and the judicious use of economic resources.
- 4. Advance student and faculty participation and leadership in professional organizations.

#### **Pharmacy Practice**

- 1. Promote and optimize pharmacy care in order to improve patient outcomes.
- 2. Promote postgraduate professional training and assume an active role in the development of residencies and fellowships.

# **GENERAL INFORMATION**

The College of Pharmacy was established by the State Board of Education on August 11, 1956 and continues to serve as Louisiana's sole State supported Pharmacy Program. The College of Pharmacy continues to evolve to meet the health care needs of the State's population, and in 1998, began to offer the Doctor of Pharmacy degree as its sole entry level professional pharmacy degree. The College also offers the State's only masters and doctor of philosophy degrees in the areas of pharmacy and pharmaceutical sciences. The Bachelor of Science program in Toxicology was initiated in 1982 and is one of only six programs in the country. The College of Pharmacy currently includes three academic departments - Basic Pharmaceutical Sciences, Clinical and Administrative Sciences, and Toxicology.

# ACCREDITATION

- 4. Students with the following courses in addition to those required for admission will be given preference in the 2008 admission cycle:
  - a. Biology 220, 240, 241, 305, 311, 312, and 313.
  - b. Business 305
  - c. Chemistry 350
  - d. Management 301
  - e. Math 131, 132, (Substitutes for Math 114) and 303 (substitutes for Psychology 439 or Math 116)
  - f. Physics 209 and 210

#### ADMISSION TO THE DOCTOR OF PHARMACY PROGRAM

Admission to the program is competitive, and is based on the student's academic ability, communication skills, and potential for professionalism. As required by the Accreditation Council for Pharmacy Education, the College of Pharmacy offers extensive experiential clerkship instruction in its educational program. For this reason, admissions are determined annually based upon the availability of the instructional resources available to the program. Preference for admission is extended to Louisiana residents. The University of Louisiana at Monroe, Office of Admissions determines residence status in accordance with the regulations of the University of Louisiana System Board of Supervisors.

In addition to meeting the requirements of admission for the University of Louisiana at Monroe, applicants for admission to the Professional Program in the College of Pharmacy must have completed the required pre-pharmacy preparatory coursework with no grade less than C and possess a cumulative grade-point average of at least 3.000 (uncorrected, based on a 4.0 system) in all previous coursework undertaken, exclusive of developmental courses, whether passed or failed at all institutions of attendance.

Applications for admission to the Doctor of Pharmacy program are due to the Office of Student and Professional Affairs in the College of Pharmacy no later than January 15 immediately preceding the applicants effective admission date, and all pre-pharmacy preparatory coursework and university core curriculum requirements must be completed no later than June 1st immediately preceding the applicant's requested effective admission date. Coursework completed more than seven years prior to the applicant's requested admission date cannot be used to satisfy pre-pharmacy requirements and will be excluded from all evaluations and grade point calculations associated with the professional program admission process.

Official scores from the Pharmacy Collage Admission Test (PCAT) must be submitted by students applying for admission to the professional program. PCAT scores must be submitted by the January 15 admissions deadline. Selected qualified students will be invited to campus for interviews to evaluate their communication skills and potential for professionalism. Applicants are expected to exhibit the degree of maturity commensurate with advanced academic study as well as motivation for the practice of pharmacy. Applications will be reviewed by the Admissions Committee, and the Dean will take final action on the committee's recommendation and notify the students concerned. A complete explanation of application procedures pertaining to the current admissions cycle and application forms are available online at the College of Pharmacy website (www.ulm.edu/pharmacy).

Students seeking to transfer to the professional program of the College of Pharmacy from other accredited colleges of pharmacy must meet the pre-pharmacy preparatory coursework requirements and be eligible for admission to the University. Additionally, the applicant must be in good academic standing and be eligible to continue and progress in the College of Pharmacy he/she has been attending. The student must have an overall grade-point average of at least 3.000 (4.0 system) on all coursework attempted at the time of transfer. A logical sequence of professional courses and appropriate prerequisites must have been maintained. Advanced standing will be granted on comparable subject matter

for which a grade of C, or better, has been earned. A minimum of one academic year is required for graduation. Transfer opportunities are possible only when vacancies in existing classes occur. Students admitted on a professional transfer basis to a class in progress shall be subject to all requirements and restrictions applicable to other students in the class.

Any person having been convicted of a drug related felony will not be admitted to the professional program of the College of Pharmacy.

# ATTENDANCE POLICY

The professional educational experience in the College of Pharmacy involves many multifaceted learning objectives, including professional interactions with faculty and peers, that don't lend themselves to traditional testing modalities and assignment of letter grades. As a resultC 0 Tw 0.35ptv acaaes madatorcy io allpPharmacycoursse. . Students occ(muast)Tj-354 and meet meet-mmtunzca

anywhere in Louisiana or the surrounding region. Students are expected to provide for their own housing and transportation during the practice experiences.

#### ACADEMIC, ETHICAL AND PROFESSIONAL STANDARDS

Students admitted to the College of Pharmacy are held to rigorous academic, ethical and professional standards as outlined in the College of Pharmacy Student Bulletin. To complete the Doctor of Pharmacy program, the student must have demonstrated satisfactory academic performance and ethical and professional standards. Disciplinary actions may occur based on violations of academic, ethical or professional standards as outlined in the College of Pharmacy Bulletin.

ACADEMIC PROGRESSION. Failure of a student to earn a minimum grade of "D" in a professional pharmacy course precludes progression to courses for which it is a prerequisite. In the event a that a student fails to obtain a grade of C or better in a professional pharmacy course, the student must remediate that course or its equivalent at the next offering of the course, and such remediation must be completed within one year of the original course. Course withdrawals and leaves of absences disrupt a student's progress and are discouraged. A student who must withdraw from one or more courses for compelling circumstances beyond his or her control may petition the Associate Dean of Academic Affairs to withdraw from specific courses or from all courses. Withdrawal from a course without administrative approval will result in "W" grades being treated as a grade of "F" for academic progression and retention purposes. Failure of a student to earn a minimum grade of C in all professional pharmacy courses precludes progression to the Advanced Practice Experiences. Students who fail to meet minimum progression standards may find it necessary to resign their enrollment for one or more semesters. Students who interrupt their enrollment in professional pharmacy courses for a period of more than two consecutive enrollment periods (two semesters or a 12-week summer session plus a semester) must apply for readmission to the professional program of the College of Pharmacy.

PROBATION. Any full-time or part-time student enrolled in the professional program in pharmacy who fails to maintain a minimum overall cumulative grade point average of 2.0 in required professional pharmacy courses or earns a grade of "D" or lower in two or more professional courses in a semester shall be placed on probation. Students may also be placed on probation for violation of ethical or professional standards.

REMOVAL FROM PROBATION. To be removed from probation, full-time or part-time students enrolled in the professional program of pharmacy must earn sufficient quality points to achieve an overall cumulative grade point average of at least 2.0 in required professional pharmacy courses during their next regular enrollment period, earn a grade of "C" or better on all professional pharmacy coursework during their next regular enrollment period and meet any criteria set by the Committee on Academic Standards. Students placed on probation due to violation of ethical or professional standards will be removed from probation when they have met the requirements set by the Board of Ethical and

#### cneclstion

forschiolsctir rescon, f a studenthis (placed on probation and will besu spndvedife an overal0) Tj 0 -

program. Failure to maintain appropriate progress or achievement in a course is not sufficient hardship to acquire administrative support. The request will be reviewed by the Associate Dean of Academic ide fairs Diagonsultation with the Office Tw mic AffarFda co and Profachh tals in con.farFda cs1

used a personal computer for common applications such as word processing are encouraged to complete Computer Science 170 (or equivalent) prior to enrolling in the professional pharmacy program.

### **EXPERIENTIAL PROGRAM POLICY**

The experiential program component of the professional pharmacy curriculum consists of supervised experiences of one-month duration each to be completed at affiliated practice sites. This experiential component begins with mandatory registration in supervised

- **421. HERBAL REMEDIES. 3 cr.** A study of herbal preparations and other phytomedicinals widely used by the general public as self-selected OTC products for therapeutic or preventive purposes. Emphasis is placed on the need, safety, and efficacy of herbal preparations, and the role of the pharmacist in product selection. Prerequisite: 409; credit or registration in 414.
- **423. MEDICAL IMMUNOLOGY. 2 cr.** Cellular and serum immunology. Antibody structure and function. Types of antigen antibody reactions. Immunosuppression, tolerance and enhancement. Systems mediating immunologic injury and inflammation. Immunogenetics. Prerequisites: 408, 412, 436.
- **424. PHARMACEUTICS IV. 4 cr.** A study of parenterally administered drugs and specialized delivery systems. Three hours lecture and three hours laboratory per week. Prerequisite: 432.
- **425. DRUG INFORMATION RETRIEVAL AND EVALUATION. 3 cr.** Introduction to services and resources used to provide evaluative information and associated professional responsibilities. Prerequisite: First Year Pharmacy Standing and Psychology 439.
- **426.** AGING AND DRUG USE IN THE ELDERLY. 3 cr. An examination of normative and pathological aging and their effect on drug use and response in the aged population. Prerequisite: Credit or registration in 414.
- **432. PHARMACEUTICS III. 3 cr.** The interrelationship between formulation factors and pharmacokinetic aspects of drug absorption, distribution, metabolism, and excretion. Prerequisite: 403.
- **436. PHARMACOLOGY LABORATORY. 1 cr.** A laboratory course to accompany 412. Three hours laboratory. Prerequisite: 411; credit or registration in 412.
- **440. PROFESSIONAL SERVICE ACCESSORIES. 2 cr.** Selection, indications, uses, warnings, maintenance and storage of prescription and non-prescription accessories, durable medical equipment and related items. Prerequisite: Third Year Pharmacy Standing.
- **445. PROFESSIONAL PRACTICE LABORATORY. 1 cr.** Principles and techniques of dispensing extemporaneously prepared and prefabricated products, and relevant aspects of contemporary pharmacy practice. Prerequisites: 432; credit or registration in 454.
- **446.** NON-PRESCRIPTION MEDICATIONS AND SELF-CARE. 3 cr. Selection and use of non-prescription medications for self-treatment of disease or to treat self-limiting disease states. Prerequisite: 385, 410, 413; Credit or registration in 414.
- **447.** ETHICS IN PHARMACY PRACTICE. 3 cr. This course prepares students to distinguish ethical from other kinds of issues in pharmacy, and to identify the options open to a pharmacist faced with an ethical issue.
- **451. PHARMACEUTICAL CARE MANAGEMENT. 3 cr.** The behavioral, ethical, organizational, and pharmacoeconomic determinants of medication use management in the delivery of pharmaceutical care. Prerequisite: First Year Pharmacy Standing.
- **453. HEALTH CARE SYSTEMS. 2 cr.** The organization of health care services in the United States, with emphasis on historical development, present characteristics, and future trends.
- **454.** LAW. 3 cr. Local, state and federal laws, rules and regulations relating to the practice of Pharmacy. Prerequisite: Second Year Pharmacy.
- **465. PROBLEMS. 1-3 cr., Maximum 6 cr.** Individual Investigations of selected problems in pharmaceutical chemistry, pharmacognosy, pharmacology, pharmacy, and pharmacy administration. Three hours laboratory work per week per credit hour. Prerequisite: For Pharmacy majors only. Approval of department head.
- **467. PESTICIDES. 2 cr.** Chemicals and drugs which have important application as insecticides, herbicides, fungicides, and rodenticides. Prerequisite: 413.
- **470. HOSPITAL PHARMACY. 2 cr.** The history of hospitals, organization and administration of patient care facilities, distribution of pharmaceuticals to inpatients and outpatients, abilities required of the pharmacist, and the many roles of the pharmacist as a member of the health team. Prerequisites: Second Year Pharmacy Standing.
- **471. DRUG INFORMATION AND BIOSTATISTICS. 2 cr.** Principles and techniques employed in the evaluation of clinical literature with emphasis on the effective use of pharmaceutical and medical literature. Prerequisites: Second Year Pharmacy Standing.
- **472. PROFESSIONAL SERVICE ACCESSORIES. 3 cr.** Selection, indications, uses, warnings, maintenance and storage of prescription accessories and related items. Prerequisite: Second Year Pharmacy Standing.
- **473. NONPRESCRIPTION MEDICATION. 2 cr.** The positive and negative aspects of self-medication and the pharmacist's role in evaluating, selecting, and recommending nonprescription medicine. Prerequisite: Credit or registration in 414.

- **479. NUCLEAR PHARMACY. 2 cr.** Handling and storage of radioisotopes and their application to pharmacy. The official radiopharmaceuticals and non-official radiopharmaceuticals of merit employed in therapy will be considered. Prerequisite: Second year pharmacy.
- **480. INTRODUCTORY COMMUNITY PHARMACY EXPERIENCE. 3 cr.** A one-month introduction to the practice of pharmacy in the community setting. Minimum of 40 hours per week experiential training. Prerequisite: First year pharmacy standing.
- **481. INTRODUCTORY INSTITUTIONAL PHARMACY EXPERIENCE. 3 cr.** A one-month introduction to the practice of pharmacy in the institutional setting. Minimum of 40 hours per week experiential training. Prerequisite: Second year pharmacy standing.
- **489. INTRODUCTORYTOXICOLOGY.3 cr.** Survey of the occurrence, properties and harmful effects of natural and man-made toxic substances in personal, occupational and global environments. Prerequisites: Credit or registration in Zoology 311, 313, and Chemistry 304.
- **493.** CASE STUDIES IN PHARMACY ADMINISTRATION. 2 cr. Case studies in drug marketing, pharmacy law and ethics, professional relations, and managerial accounting. Prerequisite: 451, 454.
- 494. RETAIL PHARMACY MANAL -0.76n0 Tw (493.)TjARMT(MANAL -0.76nugarmacy standing. )Tj to t

- **608.** ACUTE CARE EXPERIENCE I. 3 cr. A one-month structured experience focusing on clinical pharmacy services in the acute care setting. Minimum of 40 hours per week experiential training. Prerequisite: Fourth Year Pharmacy Standing.
- **609.** ACUTE CARE EXPERIENCE II. 3 cr. A one-month continuation of Pharmacy 608 with greater involvement in therapeutic decision making. Minimum of 40 hours per week experiential training. Prerequisite: Credit or registration in 608.
- **629. NON-PATIENT CARE EXPERIENCE. 3 cr.** A one-month structured experience focusing on aspects of pharmacy outside of direct patient care. Minimum of 40 hours per week experiential training. Prerequisite: Fourth Year Pharmacy Standing.
- 630. PATIENT CARE EXPERIENCE I. 3 cr. A one-month structured experience focusing on patient centered pharmacy services in the acute or ambulatory care setting. Minimum of 40 hours per week experiential training. Prerequisite: Fourth Year Pharmacy Standing.
- **631. PATIENT CARE EXPERIENCE II. 3 cr.** A one-month structured experience focusing on patient centered pharmacy services in the acute or ambulatory care setting. Minimum of 40 hours per week experiential training. Prerequisite: Credit or registration in 630.
- **632. PATIENT CARE EXPERIENCE III. 3 cr.** A one-month structured experience focusing on patient centered pharmacy services in the acute or ambulatory care setting. Minimum of 40 hours per week experiential training. Prerequisite: Credit or registration in 631.

# UNIVERSITY OF LOUISIANA SYSTEM BOARD OF SUPERVISORS COLLEGES AND UNIVERSITIES

DR. SALLY CLAUSEN DR. LOREN BLANCHARD MR. PAUL AUCOIN MRS. ELSIE PALMER BURKHALTER	Vice President for Academic Affairs
MRS. ELSIE PALMER BURKHALTER MR. VICTOR BUSSIE	
MR. ANDRE G. COUDRAIN	Hammond
DR. MILDRED GALLOT	
MR. JEFF JENKINS	
MR. JIMMY D. LONG, SR.	
MR. WAYNE PARKER	
MR. GORDON A. PUGH	Baton Rouge
DR. CLYDE ROUGEOU	
MR. WINFRED F. SIBILLE	
DR. EUNICE W. SMITH	
ARON WALKER III (Student)	

# **OFFICERS OF THE BOARD**

MR. JIMMY D. LONG, SR	Chair, Natchitoches
MRS. ELSIE PALMER BURKHALTER	Vice Chair, Slidell

# LOUISIANA BOARD OF REGENTS

SCOTT O. BRAME	
RICHARD E. D'AQUIN	
MARY ELLEN ROY	New Orleans
FRANCES T. HENRY	Baton Rouge
ROBERT W. LEVY	Ruston
HAROLD M. STOKES	Metairie
W. CLINTON RASBERRY, JR.	Shreveport
INGRID T. LABAT	New Orleans
WILLIAM CLIFFORD SMITH	
VICTOR T. STELLY	Lake Charles
PAT A. STRONG	Franklin
ARTIS TERRELL, JR	Shreveport
ROLAND M. TOUPS	Baton Rouge
O11.25 TD (VICTOR )Tj 40.5 0 TD (T)Tj 5 $$ . 7NR	U U

# **ADMINISTRATIVE OFFICERS**

JAMES E. COFER, SR., Ed.D., Presiderar OE

# UNIVERSITY ADVANCEMENT AND EXTERNAL AFFAIRS

DON SKELTON, Ed.D., Vice President of University Advancement and External Affairs LAURA J. W. HARRIS, B.A., Director of Media Relations LINDSEY WILKERSON, B.S., Director of Web Services ANNE LOCKHART, B.B.A., Director of Development GREG NELSON, B.A., Director of Annual Giving KEITH BROWN, B.S., Executive Director of Alumni and Community Relations TOMMYA. WALPOLE, M.A., Associate Director of Alumni Relations 

# ENDOWED CHAIRS 207

# FACULTY AND ADMINISTRATIVE EMERITI

GEORGE T. WALKER, President Emeritus Ph.D., Louisiana State University
H.T. GARNER, Professor Emeritus of the Graduate School Ed.D., University of Arkansas
DANIEL E. DUPREE, Professor Emeritus of Mathematics and Dean Emeritus Ph.D., Auburn University
VAN C. McGRAW, Professor Emeritus of Management and Dean Emeritus Ph.D., Louisiana State University
MARTHALOU ADAMS, Professor Emeritus of English

Ph.D., University of Mississippi

DANIELWm-8.85.85 859a6 -81mo Gklaho Univers81mo Gklaho Univers81mo Gklaho UniversputerGbMA8ACorr ,CALDWELL8.574 -8.8Nio Graduate SFinancessissippi

MARTHALOU ADAMS, Profes -8.574 -8.582 TDJOYCECompCHOATritus

E. DUPREE, ProfessoISPh.D., UniversitHome EconomPh. Tw (163.92 Tj -8.574 -8.859ho Univers81mo Gklaho Univers8

, Pr**ମିହଃବୁରୁନ୍µୁ E**merituEe.D 0RISTc2 -8.859 TDean Emeri.L4 -PrketingTD 0 T5.7, LouiniversitBiologmo Gklsas ସୁନ୍ନଧିୟ

ARTHALOU (DANIELWm-8.85.85 859a6 -81mo Gklaho Univers81mo Gniversit.15MS, PrREImE75 ituus of the Graduat

# INDEX

# Α

Accounting	
courses of instruction	.95
Accreditation (also see individual fields of study) Adding BX	.11

#### в

Biology	50
admission requirements	06
minor requirements (M.Ed.)	
program requirements (M.S.)	
Board of Regents	
University of Louisiana System Board of Supervisors	203
Business	
courses of instruction	
minor requirements (M.Ed.)	66
Business Administration	
admission requirements	62
courses of instruction	
program requirements (MBA)	62

# С

Calendar, University	5
Centers	18
Certificate	55
Chemistry	
courses of instruction	104
minor requirements (M.Ed.)	51
Classics	
courses of instruction	105
Clinics	18
Communication	
admission requirements	51
program requirements (M.A.)	51
Communication Studies	
courses of instruction	107
minor requirements (M.Ed.)	51
Communicative Disorders	
admission requirements	86
courses of instruction	
program requirements (M.S.)	86
Comprehensive Examinations	41, 77
Computer Information Systems	
courses of instruction	108
Computer Science	
courses of instruction	109
minor requirements (M.Ed.)	63
Councils	
Graduate	28
Research	29
Counseling	
admission requirements (M.Ed.)	74
courses of instruction	
program requirements (M.Ed.)	74
Course Drop	39
Course Load	36
Course Numbering	36
Credit Hour System	36
Criminal Justice	
admission requirements	
courses of instruction	112
program requirements (M.A.)	52
Curriculum and Instruction	
admission requirements (M.Ed.)	66

# INDEX 211

admission requirements (Ed.D.)	71
program requirements (M.Ed.)	66
program requirements (Ed.D.)	71

# D

Dance	
courses of instruction	
Degrees	
Dissertation	44
Doctor of Education	73
Doctor of Philosophy	
Doctor of Education Degree	
admission requirements	71
eligibility to remain	
policies and procedures	74
program of study	72
residence requirements	73
time limit	73
transfer of credit	73
Doctor of Philosophy Degree	
general requirements	76, 91
program of study	77, 91
residence requirements	77, 92
time limit	
time extensions	
transfer of credit	
Dropping courses	

E
Economics
courses of instruction
Educational Administration and Supervision
courses of instruction
Educational Foundations
courses of instruction
Educational Instructional Technology
courses of instruction
Educational Leadership
admission requirements (M.Ed.)
admission requirements (Ed.D.)
program requirements (M.Ed.)
program requirements (Ed.D.)
Elementary Education
courses of instruction
Elementary Education Alternative Certification
admission requirements (M.A.T.)
courses of instruction
program requirements (M.A.T.)
Eligibility to remain in Graduate School
English
admission requirements
courses of instruction
minor requirements (M.Ed.)
program requirements (M.A.)
Entrepreneurship
courses of instruction
Exercise Science
courses of instruction

# F

Facilities, Physical Faculty and Administrative Emeriti Faculty	208
associate	29
members	29
Family and Consumer Sciences	
courses of instruction	
minor requirements (M.Ed.)	
Fees	
Field Study	
Fields of Study	47
courses of instruction	126
Foreign Language Requirement	
Foreign Languages	
minor requirements (M.Ed.)	53
French	
courses of instruction	126
G	
Galleries	23
Geography courses of instruction	127
Geology	
courses of instruction	128
Geosciences	
courses of instruction	
Gerontological Studies	
certificate requirements	55
Gerontology	
admission requirements	54
courses of instruction	131
program requirements (M.A.)	54
Grading System	37
Graduate Assistantships	45
Graduate Work-Study	
Graduate Council	28
Graduate Credit	
course designation	
earned in non-degree or provisional admission status	
for courses designated: for undergraduates and graduates	
for outstanding ULM seniors	35

#### н

History admission requirements courses of instruction program requirements (M.A.) History of the University Home Economics (See Family and Consumer Sciences) Home Economics Education (See Family and Consumer Sciences) Horticulture	133 56
courses of instruction	
Humanities courses of instruction	136

# I

Insurance	
courses of instruction	
International students	

# κ

Kinesiology courses of instruction	
Kinesiology admission requirements	
program requirements (M.S.)	

# L

Library	17
Library Science	
courses of instruction	
Linguistics	
Linguistics courses of instruction	
Location of the University	11
Louisiana Education Consortium	
courses of instruction	138

#### Μ

Major Professor	
Doct3or ProfeC TD (2(138)Tj /F1 8 TfTf -343	33gmc)Tj 2Philosoph74

# INDEX 215

Graduate Degree	
Specialist in School Psychology	
Residence Requirements	
Doctor of Education	73
Doctor of Philosophy	
Master's Degree	40
Specialist in School Psychology	
Resignations	
0	

### S

Science courses of instruction	160
Second master's degree	
Secondary Education [Alternative Certification]	
admission requirements (M.A.T.)	60
courses of instruction	
program requirements (M.A.T.).	
Seniors, graduate credit for	
Sequence of significant documents, Graduate Degree	40
Social Studies	
minor requirements (M.Ed.)	55
Social Work	101
courses of instruction	
Sociology	
courses of instruction	
Spanish	100
courses of instruction	
Special Education	
courses of instruction	164
Special Education [Alternative Certification]	
admission requirements (M.A.T.)	
courses of instruction	
program requirements (M.A.T.)	70
Specialist in School Psychology	
admission	
program of study	
requirements for degree	
residence requirements	
time limit	
time extensions	
transfer of credit	82
Speech/Language/Hearing (See Communicative Disorders)	
Substance Abuse Counseling	
admission requirements	75
courses of instruction	••••••
program requirements (M.A.)	75

### т

Theatre	
courses of instruction	
Thesis	
Time extensions	
Doctor of Education	
Doctor of Philosophy	
Master's Degree	
Specialist in School Psychology	
, , ,	

Time limit	
Doctor of Education	
Doctor of Philosophy	
Master's Degree	41
Specialist in School Psychology	
Transfer of Credit	
Doctor of Education	
Doctor of Philosophy	
Master's Degree	40
Specialist in School Psychology	
Transfer students	

#### Ζ