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## The University of Memphis

## Undergraduate Bulletin

# The University of Memphis 

2006-2007

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Last Updated: 6/12/15

# Undergraduate Bulletin 

SHIRLEY C. RAINES, Ed.D., President<br>THOMAS G. CARPENTER, Ph.D., President Emeritus<br>The Ninety-third Session Will Open August 21, 2006

For students whose initial enrollment occurs Fall 2006-Summer 2007, this Bulletin is valid through Summer 2013.

The University reserves the right to cancel or alter any part of this Bulletin without notice (subject to the following):
The course offerings and requirements of the University of Memphis are continually under examination and revision. This Bulletin presents the offerings and requirements in effect at the time of publication, but is no guarantee that they will not be changed or revoked. The specific courses or activities constituting the degree
requirements for any programs are subject to state contractual terms and does not constitute a contract between the student and the University of Memphis.
The University of Memphis reserves the right to make changes as required in course offerings, curricula, academic policies and other rules and regulations affecting students to be effective whenever determined by the institution. These changes will govern current and formerly enrolled students. Enrollment of all students is subject to these conditions. Any fees, charges or costs, and all academic regulations set forth in this Bulletin are subject to change at any time, and all courses, programs, and activities described in this Bulletin are subject to cancellation or termination by the University of Memphis or the Tennessee Board of Regents at any time.
The University of Memphis provides the opportunity for students to increase their knowledge by providing programs of instruction in the various disciplines and programs through faculty who, in the opinion of the institution, are trained and qualified for teaching at the college level. However, the acquisition of knowledge by any student is contingent upon the studentï $i^{1 / 2}$ s desire and ability to learn and the application of appropriate study techniques to any course or program. Thus, the University of Memphis must necessarily limit representation of student preparedness in any field of study to the competency demonstrated at that specific point in time at which appropriate academic measurements were taken to certify course or program completion. (TBR 2:04:00:01)

The University of Memphis offers equal educational opportunity to all persons without regard to race, religion, sex, creed, color, national origin or disability. The University does not discriminate on these bases in recruitment and admission of students or in the operation of its programs and activities, as specified by federal laws and regulations. The designated coordinators for University compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 are the Vice President for Student Affairs and the Equal Opportunity Compliance Officer. Information in this document will be provided in alternate format upon request.

The University of Memphis is an Equal Opportunity/Affirmative Action University. It is committed to education of a non-racially identifiable student body.
The University of Memphis is one of 45 institutions in the Tennessee Board of Regents system, the seventh largest system of higher education in the nation. The TBR is the governing board for this system, which comprises six universities, 13 community colleges and 26 area technology centers. The TBR system enrolls more than 80 percent of all Tennessee students attending public institutions of higher education.

The University of Memphis is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, telephone number 404-6794501) to award bachelor's, first professional, master's, educational specialist's, and doctoral degrees.

The Bulletin web pages are maintained by the Director of Curriculum Planning, Dr. Catherine P. Serex. The last update occurred February 23, 2006.

Directory \| Calendar| Degree Program \| Description of the University \| Services Expenses $\mid$ Academic Regulations \| Graduation \| Advising and Degree Planning Colleges | Courses |Faculty and Staff \| Catalog Archive \| Schedule of Classes Comments

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# The University of Memphis 

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## CAMPUS DI RECTORY

Academic Counseling Center
Academic Transfer and Articulation
Admissions
Bursares Office
Center for Athletics Academic Services
Center for Counseling, Learning and Testing
Dean of Students
Financial Aid
General Education Program
Honors Program
President $\uparrow$ Office
Provost $\rangle$ Office
Registrar
(901) 678-2062
(901) 678-2783
(901) 678-2111
(901) 678-5579
(901) 678-2714
(901) 678-2067
(901) 678-2187
(901) 678-4825
(901) 678-2783
(901) 678-2690
(901) 678-2234
(901) 678-2119
(901) 678-2810

Last Updated: 6/12/15

## 2006-2007 University Calendar

The calendar is subject to change at any time prior to or during an academic term due to emergencies or causes beyond the reasonable control of the institution, including severe weather, loss of utility services, or orders by federal or state agencies. (TBR 2:04:00:01).

## The University of Memphis Academic Calendar

Study Day: The day prior to final examinations during most regular semesters. No academic activities shall be scheduled on Study Day. No study or review sessions that the student may feel obligated to attend may be scheduled.

Final Examination Period. No examination shall be given at a time other than the scheduled time except with written permission from the department chair and the college dean. No social or athletic functions shall be scheduled during the Final Examination Period.
Intercollegiate athletics are excepted from the above policies.
Last Updated: 6/12/15

## USI NG THE CATALOG FOR DEGREE PROGRAM PLANNI NG

Each student is responsible for fulfilling all of the requirements for the degree program being pursued and for following the procedures and regulations as stated in the Bulletin in effect when entering college. The Bulletin is valid for seven years. Students should keep a copy of the Bulletin they enter under until they graduate. Assistance from an advisor is helpful in planning the program of studies and in selecting the specific courses to be taken for each semester.

The Graduation from the University section of the Bulletin outlines the minimum university level degree requirements. Some colleges specify the exact manner in which the university level requirements must be met. In addition to these, the student must fulfill the college level requirements for the degree and the major requirements. If the admission or retention standards for a particular college or department differ from the University requirements, they will be listed in the college degree program description. If they do not, the University requirements apply. The guidelines below will be helpful in planning which program to follow.

1. Read the Bulletin to investigate what options are available.
2. Consult with an academic advisor in the Academic Counseling Center and the colleges which offer majors which are of interest to you;
3. Talk with the departmental faculty in these areas of interest.
4. Take advantage of the counseling offerings of the Center for Counseling, Learning and Testing (Testing, Career Counseling, Personal and Psychological Counseling, and the Educational Support Program).
5. Become familiar with the Academic Regulations section of the Bulletin; determine the grades that are needed to insure retention and graduation as well as honors classifications in the University and in individual programs.
6. If you are undecided about a major area, begin your program of studies with those courses required for all degrees.

After a major has been chosen:

1. consult with your advisor to determine what procedures are necessary to declare a major;
2. read the entire section of the Bulletin that relates to the degree and major selected; note all degree requirements listed for the college such as the number of hours required within the college and outside the college and the number of upper division hours required; list all the University General Education Program Requirements required for the college or obtain a degree sheet from the college advisor; note the major requirements (when choices are allowed, be sure to consult with your major advisor);
3. plan your coursework semester by semester; try to complete all of your lower division courses (10002000) during your first two years; be sure to check for prerequisites before enrolling in any courses, especially upper division courses; take the courses in the proper sequence.

Last Updated: 6/12/15

# DESCRI PTI ON OF THE UNI VERSITY 

- THE GRADUATE SCHOOL
- ACADEMIC PROGRAM ACCREDITATION
- CECIL C. HUMPHREYS SCHOOL OF LAW
- FACILITIES, RESEARCH AND SERVICES


## THE UNI VERSI TY OF MEMPHIS STATEMENT OF MI SSI ON

The University of Memphis is a learner-centered metropolitan research university providing high quality educational experiences while pursuing new knowledge through research, artistic expression, and interdisciplinary and engaged scholarship.

## Values

The University of Memphis, as an engaged learning community, celebrates:

- The pursuit of excellence in teaching and research as the highest measures of successful achievement.
- Interdisciplinary collaboration, artistic expression, and research as vehicles for leveraging our resources, solving problems, and multiplying our accomplishments.
- The transfer and dissemination of knowledge with community stakeholders for the intellectual, economic, and social advancement of our community.
- Innovation and creativity in everything we do.
- Respect for diversity and individual worth.
- Integrity and transparency in all our actions.
- Responsible stewardship and conservation of resources.
- Stewardship of wisdom, knowledge, and information created by our predecessors.
- Leadership and involvement in the economic, social, and professional growth of Memphis, the state of Tennessee, and the nation.


## GENERAL DESCRI PTI ON <br> Description of the University

From the opening of its doors in 1912 as a normal school for training teachers to its present status as one of Tennessees two comprehensive universities, the University of Memphis has been thrust forward by the growth of Memphis and the Mid-South. A town oriented to a rural economy and culture in 1900 grew into a large urban and commercial center mid-century, and the citys public institution of higher learning experienced comparable growth.

The metropolitan and regional requirements for more highly trained university graduates have, of necessity, caused the University to expand all its offerings in arts and sciences, business, the fine arts, education, engineering and technology, law, and several special professional fields. Degrees range from the baccalaureate through the doctorate. Approximately 80 percent of the full-time faculty have earned the highest possible degree in their fields. The University strives to optimize its resources in its quest for excellence through teaching, research and service.

With an enrollment of over 20,000, the University of Memphis is committed to developing programs of the highest caliber, for only through such a commitment will it be a standard of quality in higher education for the citizens of our senvice area. As the comprehensive university of the State University and Community College System of Tennessee, the University of Memphis is striving to increase the ratio of doctoral programs it offers, which will also require an increased emphasis on research and scholarship activity. The

University is committed to serving a diverse student body of all races, sexes and nationalities. Our students are expected, upon graduation, to be able to compete effectively with their counterparts from any other respected university in the nation.

## History

The roots of the University of Memphis date back to September 12, 1912, with the establishment and beginning of classes at West Tennessee State Normal School, which provided for the training of primary and secondary education teachers. However, the seeds for the normal school's creation were sown three years earlier, in 1909, when the Tennessee General Assembly passed a General Education law calling for establishment and maintenance of three normal schools, one school located in each of the three grand divisions of the state.

The eastern edge of Memphis became the site for West Tennessee State Normal School, which in 1929 became West Tennessee State Teachers College. In 1941, the college expanded its liberal arts curriculum, and the name was changed to Memphis State College--an institution serving three to four thousand students. The undergraduate program was reorganized into three schools and a graduate school was added in 1951.

Memphis State achieved university status in 1957, and on July 1, 1994, the name was officially changed to the University of Memphis.

## Governing Body

The governance and control of the University of Memphis is vested in the Tennessee Board of Regents. The composition and powers of the Board are set forth in Tennessee Code Annotated 49-8-201 through 498 -203. The Board consists of 18 members; 12 lay citizens appointed for six-year terms by the Governor from each congressional district and grand division of the State; one faculty member appointed for a oneyear term; one student appointed for a one-year term by the Governor from among the System institution; and four ex officio members--the Governor, Commissioner of Education, Commissioner of Agriculture, and the Executive Director of the Tennessee Higher Education Commission.

## Organization

The schools and colleges that make up the University are the Graduate School, the Cecil C. Humphreys School of Law, the University College, the Loewenberg School of Nursing, the School of Audiology and Speech-Language Pathology, and five colleges offering graduate and undergraduate programs: the College of Arts and Sciences, the Fogelman College of Business and Economics, the College of Communication and Fine Arts, the College of Education, and the Herff College of Engineering. The institution also offers a University Honors Program for highly motivated students seeking exceptional and challenging programs of study in a variety of disciplines. The colleges, departments, and the undergraduate degree programs they offer are described in more detail in the Colleges and Degree Programs section of this Bulletin.

## THE MEMPHIS COMMUNITY

Memphis, with a metropolitan area population of just over one million, is one of the South's largest and most attractive cities. As a primary medical, educational, communication, distribution and transportation center, Memphis offers a rich and full range of research opportunities and cultural experiences. The city, known worldwide for its musical heritage, has many fine restaurants, museums, and theaters, as well as one of the nation's largest urban park systems. Annual events include the St. Jude Liberty Bowl Football Classic, the Memphis in May International Festival, the Federal Express St. Jude Golf Classic, the Great River Carnival and the Mid-South Fair. The medical complex in Memphis is the South's largest and one of the nation's foremost centers of medical research. A public transportation system provides easy travel between the university and other parts of the city.

Built on bluffs overlooking the Mississippi River, Memphis is devoted to preserving its history while vigorously building its future. Clusters of stately old homes dot the city; some are still inhabited, others preserve the past as museums, some have been restored and recast into commercial establishments; all are
home to images from a long-ago time.
The University's modern and beautifully landscaped campus is centrally located in an attractive residential area of Memphis, with shopping, recreation and entertainment centers nearby. In addition to the main campus facilities, the University has research and athletic training facilities and married student housing on the South Campus, as well as teaching sites throughout West Tennessee.

## ACADEMI C PROGRAM ACCREDI TATI ON

The University of Memphis is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelor's, first professional, master's, educational specialist's and doctoral degrees. The various colleges, schools and departments and/or the individual programs are accredited by the following appropriate accrediting agencies:

- Accreditation Board for Engineering and Technology
- Accrediting Council on Education in Journalism and Mass Communication
- Association to Advance Collegiate Schools of Business International
- American Bar Association
- American Chemical Society
- American Dietetic Association
- American Association of Family and Consumer Sciences
- American Psychological Association
- American Speech-Language-Hearing Association
- Commission on Accreditation of Healthcare Management Education
- Council for Accreditation of Counseling and Related Education Programs
- Council on Rehabilitation Education
- Council on Social Work Education
- National Association for Sport and Physical Education
- National Association of Schools of Art and Design
- National Association of Schools of Music
- National Association of Schools of Public Affairs and Administration
- National Association of Schools of Theatre
- National Council for Accreditation of Teacher Education
- National League for Nursing Accrediting Commission
- Planning Accreditation Board
- Sport Management Program Review Council


## FACI LITI ES, RESEARCH, AND SERVI CES

## Academic Common Market

Participation in the Academic Common Market allows qualified students from southern states to pay instate tuition while pursuing certain degree programs at the University of Memphis. This arrangement is available only for students whose home states do not offer the designated program. The state in which the student resides determines which of the programs offered by the University of Memphis it will make available to its students.

The Academic Common Market is sponsored by the Southern Regional Education Board (SREB). Participating states are Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia (Florida and Texas grant access for graduate level programs only). Current SREB common market guidelines and requirements may be found on the web at http://www.sreb.org/programs/acm/acm/searchacm.asp

Students may request through their home state coordinators that additional programs be made accessible. A list of the state coordinators with their addresses and telephone numbers may be obtained from the Office of Curriculum Planning or the Academic Common Market web site http://www.sreb.org/programs/acm/acm/searchacm.asp.

In addition to certification requirements which the student $\geqslant \mathrm{s}$ state of residence may specify, the following pertain: (1) Students must be fully admitted to a degree program that has been approved as an Academic Common Market program (nondegree students are ineligible); (2) students must obtain a letter certifying residency term of entry and approval for the particular University of Memphis program from their state $\geqslant \mathrm{s}$ Academic Common Market coordinator.

NOTE: After enrollment, students remain eligible for in-state tuition only so long as they are continuously enrolled-consecutive fall and spring terms-in the same major for which they were originally certified. If students change major, they must process a Change of Major through their advisor and notify the Office of Admissions to change the Academic Common Market residency code on their records. Failure to process the Change of Major and to notify the Office of Admissions may subject the student to out-ofstate fees for all subsequent terms of enrollment in classes for a major other than the one for which the student received ACM certification. Missing a fall or spring term of enrollment or a change of major requires that the student be recertified through the ACM coordinator in the student $\geqslant$ s state of residence.

## Library Facilities

The University of Memphis Libraries include the Ned R. McWherter Library and five branch libraries: Audiology and Speech Language Pathology, Chemistry, Earth Sciences, Mathematics, and Music, which are contiguous to the appropriate university departments.

The McWherter Library offers many services through its Reference Department, including access to both electronic and print resources and instruction in use of all resources in the University Libraries. The Periodicals Department also offers assistance in accessing electronic resources, especially electronic full-text journals. The Government Publications Department is the Regional Federal Documents Depository for the State of Tennessee Documents. The Special Collections Departments $>$ largest collection, consisting of unique and rare manuscripts, cartographic, photographic, and printed materials, including the Mississippi Valley Collection, reflects the history and culture of the Mississippi River valley

The University of Memphis Libraries maintains agreements with other local institutions for shared use of library collections by students, faculty, and staff. These institutions include Rhodes College, LeMoyne-Owen College, Mid-America Baptist Theological Seminary, Memphis Theological Seminary, Southwest Tennessee Community College, the University of Mississippi, Christian Brothers University and Mid-South Community College.

The University of Memphis Libraries $>$ website http://lib.memphis.edu provides access for all students and faculty to the electronic resources provided by the Libraries, including the Libraries $\rangle$ catalog of its collections. Access to the website is available to all Internet users, whether at home, at an off-campus site, or at a workstation in the McWherter Library and its branch libraries.

## I nformation Systems

The University of Memphis provides its students with access to the largest public computing resource within a 100-mile radius of Memphis. Local area networks (LANS), microcomputers, and a variety of peripherals devices (printers, scanners, plotters, etc.) are connected to an optical fiber network that covers virtually the entire 1,060 acre campus. In additions, the network is accessible via dial-in services and by using other Internet Service Providers (ISPs) and Information Systems will soon provide the campus with wireless access to our network. The Help Desk (678-8888) can provide information on how to apply for access to any of the services provided by Information Systems.

UofM M students, faculty, and staff have access to more than 1200 computers (both IBM PC compatibles and Apple Macintosh machines) through 54 labs located throughout campus and at 3 remote sites. In addition, more than 30 computing labs are available in the nine schools and colleges that comprise the University of Memphis. Many of these labs house special purpose software and specialized systems such as the Smith Super-lab Cluster that provided a complete parallel computing environment for research and instruction in areas requiring heavy computational computing.

I NFORMATION SYSTEMS (I.S.) is responsible for providing all central computing support for administrative systems. I.S. designs and manages the infrastructure that supports these systems as well as those for instructional programs and scholarly research. The schools and colleges operate on a distributed design that uses local support provides (LSPs) as the first line of support for departmental computing with additional support and expertise provided by I.S. Training on a wide variety of software applications is
managed through the I.S. Training Center that provides formal training for students, faculty, and staff.
The University of Memphis is actively engaged in supplying instruction via the World Wide Web and providing staff support for faculty development of courseware through participation in a national consortia such as the MERLOT Group and as a member of the Early Adopter of Internet-2. Web access to information at U of M is provided by I.S. in cooperation with Marketing and Advancement via the I.S. the Web Team (one of several self-directed teams with Information Systems). I.S. established standards and support for web-page development throughout the University.

Information Systems is a key support unit in assisting the University of Memphis achieve it goal of assuring that every graduate of the U of M is technologically fluent; that is, graduates who not only are capable of using and understanding technology within their discipline and the world in which they live, but also capable of learning new technologies as they arise and understand how technology influences changes in the world in which we will live

## Benjamin Hooks Institute for Social Change

The Institute pursues a broad programmatic agenda of research and outreach that builds upon Dr. Hooks lifetime of work to achieve a more just society. The Hooks Institute is committed to advancing the goals of the American Civil Rights Movement, and making Memphis a national center for the study of the Civil Rights Movement and its legacy.

## Bureau of Business and Economic Research

The Bureau of Business and Economic Research is the organized research and public service unit of the Fogelman College of Business and Economics. The programs of the bureau include public service to government agencies (state and local) and the business community, continuing education, and applied general research.

## Center of Applied Psychological Research

The Center for Applied Psychological Research supports research on problems concerning health, mental health, education, schools, crime, the environment, and children and their families. The Center also supports basic scientific research in cognitive psychology, biopsychology, social psychology, developmental psychology, and research design and statistics.

## Center for Earthquake Research and I nformation

The Center for Earthquake Research and Information was established in 1977 by the Tennessee State Legislature to provide the citizens of Tennessee, governmental agencies, and the news media such services as the following: (1) accurate, immediate reports and background information on the occurrence of regional earthquakes; (2) scientific research related to the causes and consequences of local earthquakes and to the possibility of earthquake prediction; (3) studies related to the desirability of earthquake resistant construction; (4) advice to the populace, business, government, and insurance groups on the methods, means, and feasibility of reducing earthquake damage. It operates as a research organization of the University of Memphis. It supports some undergraduate student research in seismology and geophysics and civil engineering and cooperates with the Department of Geological Sciences in offering an undergraduate degree concentration in geophysics.

## Center for Research in Educational Policy

The Center for Research in Educational Policy is funded by the State of Tennessee as one of five Centers of Excellence located at the University of Memphis. CREP s mission is to implement a research agenda associated with educational policies and practices in the preK-12 public schools of Tennessee and the nation and to provide a knowledge base for use by educational practitioners and policymakers. Research outcomes are intended to not only describe the complexities of educational phenomena, but also offer recommendations for action.

Since 1989, the Center has served as a mechanism for mobilizing community and university resources to address educational problems and to meet the University's commitment to primary and secondary schools. The Center's research agenda is developed through analysis of persistent or emerging issues in schools and their communities, changes occurring in teacher education programs, and recommendations from educational authorities. In the past decade, CREP has gained national recognition for its contribution to discussions of issues such as reform of teacher education, educational equity, educational technology, school reform and restructuring, urban and multicultural education, interventions for at-risk students, and using formative evaluation methods for school improvement decision-making.

## Center for Health Services Research

The Center for Health Services Research is housed in the Division of Health Administration. The Center emphasizes collaborative, multi-disciplinary research focusing on issues in health care management, leadership, financing, economics, and administration. The Center soal is to serve as a strong partner and resource for health care organizations, both public and private, in the Mid-South region.

## Center for Manpower Studies

The Center for Manpower Studies, located in the Fogelman College of Business and Economics, conducts research on employment and training-related topics and provides technical assistance to federal, state, and local agencies. It also offers a variety of training programs for human resource development agencies throughout the southeast.

## Edward J. Meeman Biological Station

The Edward J. Meeman Biological Station was established in 1967 to encourage and foster scientific pursuits in natural history, ecology, and environmental biology. Located about 23 miles northeast of the main campus and adjacent to Meeman-Shelby Forest State Park in northwestern Shelby County, the 623acre station (with laboratory, classroom, and small conference facilities) provides students and faculty from the University of Memphis, as well as visiting investigators, with a unique site for research, teaching, and service activities. The station is an integral part of the Department of Biology.

## Ecological Research Center

The Ecological Research Center (ERC) of the Department of Biology is organized to conduct and coordinate research, teaching, and service activities in ecology and related areas. Major areas of research include: fish culture, water quality, wildlife biology, endangered and threatened species, systematics, and physiological responses of organisms to the environment. The teaching program of the ERC provides a training program for students interested in pursuing careers in various professional fields and affords an opportunity for students to participate in activities involving contemporary environmental problems. Public service activities are primarily directed toward promoting environmental awareness and providing information and consultation services to those concerned with environmental problems.

## The Marcus W. Orr Center for the Humanities

The Center for the Humanities was founded in 1987 and renamed in 1991 in memory of Dr. Orr, Professor of History. Its purpose is to support teacher and course development, independent and collaborative research, and public programs that will foster an understanding of the importance of the humanities and establish a sense of intellectual community among humanities faculty at the university. The center sponsors visiting scholars, course development grants, lectures, and a Humanities Fellows Program that supports faculty scholarship.

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## Center for Research on Women

Founded in 1982, the Center for Research on Women (CROW), located in the College of Arts and Sciences is nationally recognized for its pioneering work on race, class, and gender. CROW $\diamond$ s mission is to conduct, promote and disseminate scholarship on women and social inequality. Its approach to research, theory and programming emphasizes the structural relationships among race, class, gender and sexual identity, particularly in the U.S. South and among women of color. CROW-affiliated faculty span the University. They are currently engaged in action-oriented, community-based research on women in Memphis and the U.S. South; historically grounded research that makes visible global processes affecting the persistence of inequalities in the U.S. South; and the development of feminist theories and methods. CROW offers postdoctoral fellowships to scholars studying race and gender in the U.S. South, and provides graduate assistantships to students enrolled in the M.A. program in sociology.

## Center for the Study of Higher Education

The Center for the Study of Higher Education, located in the College of Education, conducts research and sponsors workshops and conferences in higher education.

## Center for Urban Research and Extension

The Center for Urban Research and Extension provides technical assistance, research and other services for neighborhood improvement in three Memphis Enterprise Neighborhoods. The Center supports the City of Memphis Enterprise Community program, and collaborates with neighborhood residents as they embark upon various efforts in revitalizing their neighborhood.

## Chucalissa Indian Village and Museum (C. H. Nash Museum)

This partly reconstructed prehistoric Indian village on its original site and the museum are operated by the Department of Anthropology as an educational and research facility. The indoor and outdoor exhibits are designed to reconstruct prehistoric Indian life in the Mid-South. Students are trained in the techniques of excavation, restoration and museum operations. The courses taught are listed in the Department of Anthropology offerings. Chucalissa is located 17 miles from the main campus.

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## I ntegrated Microscopy Center

The Integrated Microscopy Center provides facilities and expertise in the field of light, coufocal and electron microscopy. Users of the center include researchers and graduate students in the biological and physical sciences.

## The Institute of Egyptian Art and Archaeology

The Institute, founded in 1984 and designated a Tennessee Center of Excellence in 1985, is a component of the Art Department at the University of Memphis. The Institute is dedicated to the study of the art and culture of ancient Egypt through teaching, research, exhibition, and excavation. It is staffed by egyptologists and art historians associated with the department $\geqslant$ s art history program. Its research library consists of more than 6000 egyptological books and periodicals including rare and out-of-print volumes. The Art Museum at the University of Memphis houses the Institute>s growing collection of Egyptian antiquities, the largest in the Mid-South. The Institute also sponsors an epigraphic project at The Great Hypostyle Hall of Karnak Temple in Luxor, Egypt, and the excavation of the tomb of Pharaoh Amenmessse in the Valley of the Kings.

## I nstitute for I ntelligent Systems

The Institute is designed to bring together research and training in the broad areas of cognitive science, complex dynamical systems, artificial intelligence, and massively parallel computing (neural computing). Current research includes basic research supported by grants from funding agencies and applied research supported by industrial/governmental contracts. Ideas and techniques for research are gathered from the disciplines of cognitive psychology, computer science, philosophy of mind, neuroscience, linguistics, and mathematics. Training should include graduate courses, thesis and dissertation research, and industrial training in the form of workshops, seminars, and employee research participation.

## The Marcus W. Orr Center for the Humanities

The Center promotes interdisciplinary research and teaching in the humanities at the University of Memphis. Its various programs, including several lecture series and the sponsorship of visiting scholars, faculty seminars and symposia, are designed to encourage scholarly collaboration across departmental and college boundaries. It also seeks to promote the University $\geqslant$ s scholarly resources in the Memphis community, by offering a variety of public programs. The Center was founded in 1987, and renamed in 1991 in honor of former history professor, D. Marcus W. Orr.

## Regional Economic Development Center (REDC)

The Regional Economic Development Center represents the University in its outreach function in the field of economic development planning. In providing technical and management assistance to the public and private sectors, the Center also serves as a laboratory for interdisciplinary research and service by faculty and graduate students in solving problems of urban and regional development. The Center $\geqslant$ s professional planning staff have academic appointments and teach courses in City and Regional Planning. REDC is an outreach unit of the School of Urban Affairs and Public Policy.

## Speech and Hearing Center

Located at 807 Jefferson Avenue in the medical center of Memphis, this facility became affiliated with the University in 1967. An additional site is located on the South Campus in building \#44. Both locations serve children and adults with communication disorders. Students at the university are seen at no charge, while faculty and staff are seen for $50 \%$ of normal charges. The University administers and operates the center in cooperation with the Board of Directors of the Memphis Speech and Hearing Center, Inc.

## Other Research Units

In addition to the units described above, the University of Memphis also recognizes a wide array of other research- oriented units:

- Anthropological Research Center
- Barbara K. Lipman Early Childhood School and Research Institute
- Bureau of Sport and Leisure Commerce
- Center of Community Health (joint with UT Memphis)
- Center for River Studies
- Computational Research of Material Institute
- Exercise and Sport Science Laboratories
- Federal Express Center for Cycle Time Research
- Groundwater Institute
- Highwater Recording Company
- Institute for Egyptian Art and Archaeology
- Institute for Gambling Education and Research
- Institute for Governmental Studies and Research
- National Science Foundation Industry/University Cooperative Research Center for Bio-Surfaces Site
- Neuropsychology Research Laboratory
- Oral History Research Office
- Religious News Association Archives
- Robert Wang Center for International Business
- Southern Music Archive
- Transportation Studies Institute
- W.H. Feinstone Center for Genomic Research


## Recognized Centers and Chairs of Excellence

The University of Memphis has been designated by the Tennessee Higher Education Commission as a location for centers and chairs of excellence. The units listed below receive special funding by the State in recognition of their status.

## Centers of Excellence

- Center for Applied Psychological Research
- Center for Earthquake Research and Information
- Center for Research Initiatives and Strategies for the Communicatively Impaired
- Center for Research in Educational Policy
- Center of Excellence in Egyptian Art and Archaeology


## Chairs of Excellence

- Accounting (2)
- Art History
- Biomedical Engineering (2)
- Combinatoric Mathematics
- Economics and Managerial J ournalism
- English
- Finance
- Free Enterprise Management
- International Business
- International Economics
- J ournalism
- Judaic Studies
- Law
- Management Information Systems
- Molecular Biology
- Nursing
- Philosophy
- Real Estate
- Sales
- Urban Education


## Academic Personnel Services

The Office of Academic Personnel Services conducts the University of Memphis $\geqslant$ program for student evaluation of instruction. The Student Instructional Rating Systems (S.I.R.S.) uses a comprehensive approach for collecting, analyzing, and reporting student reactions to certain aspects of classroom instruction. All teaching faculty are required to participate in the student evaluation program. S.I.R.S. are not to be administered during the week of final exams. Faculty receive the completed forms and a computer generated summary at the beginning of the following semester. These documents, which are an important part of the dossier prepared for tenure and promotion, also provide useful information to individual faculty members for course development and/or improvement of instruction.

## I nternational Students Office in the Center for International Programs and Services

The Office of International Students advises international students regarding immigration, health, housing, social, personal, and financial concerns. Besides advising individual students, the office advises the International Students Council. The council represents six national student associations: the African Student Association, the Chinese Student Association, the Indian Student Association, the Korean Student Association, the Malaysian Student Association, and the Muslim Student Association. The office also organizes a four-day orientation for new students each semester as well as social and cultural events that encourage international students $>$ involvement in the campus community and help ease their transition into the American way of life. International Night, the biggest event of the year, provides an opportunity for the international students to share their traditional food and entertainment with the campus and the Memphis community.

## Psychological Services Center

The Psychological Services Center, located on the first floor of the Psychology Building, offers both psychological evaluations and therapeutic services to children and adults.


#### Abstract

Alumni The University of Memphis Alumni Association has offices located in the Alumni Center on campus. The staff serves the University of Memphis Alumni Association and provides a communication linkage to the University for graduates and former students. The Alumni Association and staff also offer special services for current students and serve as the sponsors for the University student Ambassador Board.

\section*{Oak Ridge Associated Universities}

Since 1971, students and faculty of the University of Memphis have benefited from the University $\geqslant \mathrm{s}$ membership in Oak Ridge Associated Universities (ORAU) is a consortium of 88 colleges and universities and a contractor for the United States Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education (ORISE), the DOE facility that ORAU operates, undergraduates, graduates, postgraduates, as well as faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of underrepresented minority students pursuing degrees in science- and engineering-related disciplines. A comprehensive listing of these programs and other opportunities, their disciplines, and details on


locations and benefits can be found in the ORISE Catalog of Education and Training Programs, which is available at http:// www.orau.gov/ orise/ educ/ $\boldsymbol{h t m}$, or by calling either of the contacts below. ORAU $\geqslant$ Office of Partnership Development seeks opportunities for partnerships and alliances among ORAUs members, private industry, and major federal facilities. Activities include faculty development programs, such as the Ralph E. Powe Junior Faculty Enhancement Awards, the Visiting Industrial Scholars Program, consortium research funding initiatives, faculty research and support programs as well as services to chief research officers.
For more information about ORAU and its programs, contact
Andrew Meyers, Vice Provost for Research, ORAU Councilor for the University of Memphis; Monnie E. Champion, ORAU Corporate Secretary, at 423-576-3306; or ORAU at http://www.orau.gov.

## Extended Programs

THE OFFICE OF PUBLIC SERVICE serves as a prime contact for individuals and organizations outside the University. Through this office, access may be gained to University facilities and resources THE MEMPHIS SMALL BUSINESS DEVELOPMENT CENTER is organized to provide business development services to new and existing small business firms throughout West Tennessee. These services add to the economic development efforts of the local communities by adding and retaining employment. Special attention is given to women, minority, and veteran-owned businesses.
JACKSON CENTER, located on the campus of Jackson State Community College, offers a wide variety of undergraduate and graduate courses and degree programs to students living in the Jackson area. In addition, the J ackson Center houses the Office of Extended Programs, which coordinates course and program delivery at various locations in West Tennessee.
THE CONTINUING EDUCATION SHORT COURSE PROGRAM serves as an important link to the Memphis community, providing comprehensive, non-credit programs ranging from professional development to personal enrichment. The program is designed to narrow the education gap left by the degree-awarding academic programs at the University of Memphis, thus complementing the Universitys mission of service to the community. The program is strongly service-oriented, providing general interest instruction to learners of all ages, regardless of their educational background. The Short Course Continuing Education product is high quality, affordable, and requires no formal admission to the University.
THE KEEP TENNESSEE BEAUTIFUL program, established in 1983, serves as the state Keep America Beautiful agency and state resource center for litter prevention and proper solid waste management education. Keep Tennessee Beautiful is funded by Tennessee Department of Transportation.

## THE GRADUATE SCHOOL

The Graduate School of the University of Memphis is the center of advanced study and research within the University. The basic objectives of the Graduate School are:

- To preserve and disseminate knowledge;
- To extend knowledge through research; and
- To prepare men and women to assume responsible and useful roles in a changing society.

The Doctor of Philosophy degree is awarded in audiology and speech pathology, biology, biomedical engineering, business, chemistry, communication arts, counseling psychology, earth sciences, educational psychology and research, engineering, English, history, mathematics, music, philosophy, and psychology. The degrees of Doctor of Audiology, Doctor of Education, and Doctor of Musical Arts are awarded by the School of Audiology and Speech-Language Pathology, the College of Education, and the College of Communication and Fine Arts, respectively. The College of Education also awards the degree of Education Specialist with a major in education. The Cecil C. Humphreys School of Law awards the Juris Doctor degree.

Masters programs are offered in forty-eight major areas through six colleges and one school. The degrees include Master of Science, Master of Arts, Master of Fine Arts, Master of Arts in Liberal Studies, Master of Arts in Teaching, Master of Business Administration, International Master of Business Administration, Master of City and Regional Planning, Master of Music, Master of Health Administration, Master of Public Administration, and Master of Science in Nursing.

Graduate certificates are offered in College Teaching, Community College Teaching and Leadership, Geographic Information Systems, Instructional Computing Applications, Museum Studies, and Women's Studies.

Visit the Graduate School at http://academics.memphis.edu/gradschool/

## CECI L C. HUMPHREYS SCHOOL OF LAW

The Cecil C. Humphreys School of Law offers a program of instruction leading to the degree of Juris Doctor.
Admission to the Cecil C. Humphreys School of Law is on a selective basis. To be eligible for admission, a student must have received a bachelor's degree from an accredited college or university and must have made a satisfactory score on the Law School Admission Test. Questions concerning additional admissions requirements should be addressed to the Assistant Dean for Admissions, Recruitment, and Scholarships at uofmlaw@profnet.law.memphis.edu. The regulations and policies of the School of Law are set out in greater detail in the Law School Bulletin, a separate publication of the University of Memphis Bulletin. Last Updated: 6/12/15

## SERVI CES TO STUDENTS

- STUDENT AID
- REGISTRATION AND STUDENT RECORDS


## - STUDENT DEVELOPMENT <br> - STUDENT LIFE

## ENROLLMENT SERVI CES

Enrollment Services aims to provide "excellence in service with a personal touch" for all students enrolled at the University of Memphis. We seek to provide services that are pleasant, friendly, effective, efficient, and without lines. Included in Enrollment Services are: Office of Admissions; Office of Student Relations and Orientation Services; Office of Student Financial Aid (including the University Scholarship Program); Office of the Registrar (including an Evening Branch Office); and the Enrollment Systems Office.

## ADMI SSI ONS

## ADMI SSI ON TO THE UNI VERSI TY

The University of Memphis offers equal educational opportunity to all persons without regard to race, religion, sex, creed, color, national origin, or disability. Inquiries about admission to any college of the University should be addressed to the Office of Admissions. This office receives and processes all applications, evaluates credentials, and issues notices of acceptance to qualified students. Undergraduate students may enter at the beginning of either of the fall or spring semesters or at the beginning of any term of the summer session.

The University of Memphis encourages all those who feel they can benefit from the educational opportunities offered by the institution to file an application for admission. Consideration is given to age, educational background, entrance examination scores, high school grades, any college attendance, and any other special talents and/or special circumstances which may affect the applicant's academic performance.

Certain instructional programs of the University are subject to special admission requirements and are subject to change according to the availability of institutional resources. Students wishing to enter one of these programs of study should check with the appropriate department or division offering the program in order to become familiar with these special requirements. Undergraduate programs with special admission requirements include, but are not limited to, professional degrees in art, music, or theatre (Bachelor of Fine Arts or Bachelor of Music), teacher education, educational services, nursing, and the University College.

Students are encouraged to apply as early as possible. Early admission contributes to better orientation, course planning, class scheduling and financial aid consideration. High school students planning to apply as freshmen should submit applications as soon as possible after completion of the junior year. Applications for admission are available from many secondary school/guidance counseling offices and from the Student Relations, Orientation, Recruitment Office, the University of Memphis, Memphis, TN 38152. All credentials become the property of the University and cannot be forwarded or returned.

Credentials will be maintained in active files for a 12-month period. After this period, credentials will be relegated to inactive status and must be submitted again before an admission decision can be made.

Regulations in this section are subject to change without notice.

## ADMISSI ON AS DEGREE-SEEKI NG UNDERGRADUATES

The deadlines for submitting applications for admission are: July 1 for the fall semester, December 1 for the spring semester, and May 1 for the summer session. While Application deadlines are listed above, registration for new students occurs much earlier. For example, fall new students register in June. Applications received after these deadlines may be delayed in processing or processed at the non-degree level.

## Freshman Applicants

An applicant who has no previous college enrollment may be considered for admission as a regular undergraduate freshman by submitting the following to the Admissions Office:

1. A final transcript of all high school credits: Early decisions can be made by submitting partial transcripts (6th or 7th semester). Transcripts carried by the student are not acceptable for the admissions file. If any courses have been taken for college credit, the institution(s) granting credit must be contacted and asked to send an official transcript to the University of Memphis, Office of Admissions. Students who do not present one unit of American History are required to register for the course during their first or second year at the university.

Graduates of an unapproved or non-accredited high school must take the General Educational Development (GED) test and earn an average standard score of at least 45. Graduates of home schools must comply with state law by submitting proof of registration with the local education agency which the child would otherwise attend with the high school transcript. Students who have achieved a high school diploma through the General Education Development (GED) Test must also have the GED scores sent to the Office of Admissions.

## 2. The score report of the American College Testing program (ACT) or the Scholastic Aptitude

 Test (SAT): The score report is a necessary part of the application and the test date should be no more than three years old at the time of enrollment.Applicants who are offered admission with the enhanced ACT English, reading or math subscores less than 19, or the equivalent on the former ACT, will be required to take special basic/developmental courses to develop academic competencies necessary for success in college level courses. Students without valid ACT/SAT scores and without college level credit in math or English will be required to take the COMPASS test in the appropriate areas. Students who feel they have been misplaced by their ACT/SAT scores are encouraged to take the COMPASS test, which can place them in a higher level course. (See Transitional Academic Studies program description in the Independent Programs section of this Bulletin for more details.)

## 3. A non-refundable application fee of $\mathbf{\$ 2 5 . 0 0}$.

## 4. Any additional items and information requested in the application materials by the Office of Admissions.

Student success at the University of Memphis is strongly predicted by academic performance in high school and also linked to performance on the ACT. Therefore, an Admissions Index will be calculated for each applicant by first multiplying the cumulative high school GPA by 30 and then adding the ACT composite score. The admission of first-time freshmen is competitive based on the calculated index, and also includes an evaluation of the high school curriculum completed. In some cases, recommendations are also considered.

Applicants who wish to provide additional information regarding special talents or circumstances may do so by contacting the Office of Admissions. Applicants with diagnosed learning disabilities should contact the Director of the Office for Students with Disabilities for further information.

## High School Curriculum Required For Admission

No high school curriculum can assure that a given student will acquire desired learning outcomes; however, the absence of certain components greatly increases the likelihood that the student will not acquire those outcomes and reduces the likelihood that the student will enjoy maximum benefits of a college experience. The justification for colleges' recommending or requiring specific high school units for admission is to reduce the likelihood that a student will be unprepared for effective work in college and to increase maximum benefits a student may enjoy.

Effective the Fall Semester 1989, among the units required for graduation, the following specific high school units must be included in the minimum admissions requirements at all Tennessee State Board of Regents universities and colleges.

## Students who do not take one or more of these required courses, where they are available, may not be eligible for admission to the University.

ENGLISH (4 units required): Units in this category must address reading and literature, writing, speaking and listening, and principles concerning the English language. Extensive experience in reading and writing should characterize all courses. VISUAL AND/ OR PERFORMI NG ARTS (I unit required): Units in this category should include a survey of the arts (visual arts, theater, music, and dance) or active participation in one or more of the arts.
MATHEMATICS ( 3 units required): Units in this category must include Algebra I, Algebra II, and geometry or an advanced course with geometry as a major component. Students are recommended to take a fourth unit in computing, advanced mathematics, or statistics. All college freshmen will benefit by having studied mathematics as seniors.
NATURAL AND PHYSI CAL SCI ENCES (2 units required): Units in this category must include mathematical skills, fundamental concepts, and some laboratory and field work. At least one unit must address detailed knowledge in the more traditional fields of biology, chemistry, or physics and must include a laboratory.
SOCI AL STUDI ES ( 2 units required): For students graduating prior to spring 1993, the units in this category may include: history, government, geography, economics, sociology, psychology, or anthropology. For students graduating in the spring 1993 or thereafter, these units must come from the following: modern history, ancient history, world history, world geography, or European history. One unit in American History is also required.
FOREI GN LANGUAGE (2 units required): Two units in a single foreign language are required in this category.
These stipulated high school units are not intended to specify what the total high school curriculum should be. Secondary schools seek to meet the needs of various student clienteles, one of which is the college-bound student. The stipulations are, on the other hand, an attempt to make a strategic application of academic competencies. They reflect the bridge from specific desired learning outcomes to a list of required college admission criteria. That list is composed of high school units presumed most likely to result in the required learning outcomes. For the sake of clarity, one unit constitutes one year of high school study of a given subject.

Applicants with subject deficiencies may, with proper institutional approvals, be admitted to the university; however, the deficiencies must be removed during the first 64 semester hours ( 30 semester hours for transfer students) of college enrollment. College level courses taken to remove unit deficiencies must be completed with a grade of C or better and will be used for elective credit only. Different requirements may be specified for certain groups of applicants: adult students (i.e., students separated from high school graduation by three or more years), GED students who are not high school graduates, and international students. Transfer and re-entry students may be required to remove any deficiencies before regular admission.

## OUT-OF-STATE APPLI CANTS

Acceptance to the University for out-of-state applicants who meet guaranteed admission standards may be granted on the same basis as for in-state applicants. Acceptance for all other out-of-state applicants is competitive.

Out of state applicants who qualify for and participate in the University Honors Program may qualify for a Non-Resident Honors Student Award.

## EARLY ADMI SSI ON APPLICANTS

Academically outstanding high school juniors who have completed three academic years of high school, accumulating at least 14 units of course work may be considered for early admission if they have the following:

1. A minimum high school cumulative grade point average (GPA) of 3.5 on a 4.00 scale.
2. A minimum ACT composite score of 26 on the ACT or the equivalent on the former ACT.
3. Written recommendations from high school principal and guidance counselor.
4. An interview with $U$ of $M$ faculty/staff committee selecting early admission students.
(2) In addition, they must agree to enroll in freshman English, and, unless successfully completed in high school, courses in American history and economics.
NOTE: Early admission applicants should also check with their high school for specific graduation

## requirements.

## Transfer Applicants

The University of Memphis welcomes applications from students who have begun college elsewhere. They may transfer to the University of Memphis with any number of units. If they have fifteen (15) or more semester units transferable from a fully accredited college or university, students are evaluated primarily on college-level work. If they have fewer than fifteen (15) transferable units, students are evaluated on a combination of college-level and high school course work, and college entrance examination results.

To qualify for degree-seeking transfer admission, the applicant must request that a transcript from each institution attended be sent directly to the Office of Admissions. Transfer applicants who graduated from high school in 1989 or later may also be subject to the high school curriculum requirements found above in this section of the Bulletin. To make this determination, a high school transcript is necessary. Therefore, all transfer applicants whose high school graduation date was in 1989 or later should have a transcript mailed directly from their high school to the Office of Admissions. Concealment of previous college or university attendance may be cause for rejection or cancellation of admission.

Admission may be granted to applicants who have honorable dismissal from the last institution attended and whose cumulative grade point average (GPA) meets the required minimum established by the Tennessee State Board of Regents, as stated below:

| Semester Hours Attempted | Minimum GPA |
| :--- | :--- |
| 14.99 or less | No minimum* |
| $15.00-29.99$ | 1.40 |
| $30.00-50.99$ | 1.70 |
| $51.00-67.99$ | 1.90 |
| 68.00 and above | 2.00 |

## * Transfer applicants with fewer than 15.00 attempted semester hours must meet the admission requirements for freshman applicants.

- Transfer applicants who have been academically dismissed from the last institution they attended or do not meet the GPA requirements listed above, will not be considered for admission until at least one regular semester (not to include summer sessions) has elapsed. After this period, these applicants must submit a new application (no additional fee required).

If acceptance to the University is granted, the applicant will be admitted on academic probation. Students on probation at their previous school will continue in that academic status.

Transfer applicants who are denied admission should contact the Office of Admissions to discuss the possibilities of attending the University in the future.

## Adult Students

The University of Memphis encourages the enrollment of adult students. In order to facilitate this, the University offers additional support services and alternative admission policies to promote the enrollment of the mature student. The Adult Student Development Office offers child care during class attendance, tutoring programs, the Adult Student Association and much more.

In addition, adult students generally are not required to provide an entrance examination for admission. They may, however, be expected to complete a placement instrument depending on individual circumstances.

Adult students are those applicants who meet one of the following criteria:

1. at least 24 years of age
2. at least 21 years of age and have been away from school for some time

For further information, please contact the Adult and Commuter Student Development Office in room 419, University Center.

## Service members Opportunity Colleges (ConAP Program)

The University of Memphis is a participant in the Service members Opportunity Colleges (SOC) partnership. Under this agreement and through the Concurrent Admissions Program (ConAP), people enlisting in the armed forces can be admitted to a college and/or university at the same time as their enlistment. Eligible soldiers can be admitted to college on a full or provisional basis, with enrollment deferred for up to two years after completion of active military service or initial active-duty for training. Enrollment of student who, subsequent to this agreement, attempts college coursework elsewhere is subject to academic performance standards stated in the catalog. In addition to the concurrent admissions, the last 25 -hour residency requirement of the university has been waived for participants. More information can be obtained through the Director of Admissions Office, the University of Memphis.

## I nternational Students

The University of Memphis believes that the presence of a balanced representation of international students on campus will enrich the educational environment of all students. Therefore, the university is authorized under federal law to enroll nonimmigrant, alien students on "F-1" and "J-1" student visas. Applicants must file complete credentials before May 1 for fall admission; September 15 for spring admission; or February 1 for summer admission. Complete credentials include all the documents listed below under "Requirements."

The international application should be completed carefully and returned to the Office of Admissions, the University of Memphis, 101 Wilder Tower, Memphis, Tennessee, 38152-3370, U.S.A. Applications and fees received after the stated deadlines will be returned.

A non-refundable international application and processing fee of $\$ 50$ (fifty dollars) is required of every international applicant, unless previously paid. A check or money order, made payable to the University of Memphis, must be sent with the application form. Applications received without the fee will be returned.

International applicants should write to the Office of Admissions for information on application procedures, qualifications, and admission to the university. Since there is considerable variation among educational systems throughout the world, international applicants will be selected on a competitive basis, after meeting the minimum standards of admission using examination scores, grade point average, relevance of academic background to intended major field of study and recommendations from the World Education Services. The university often receives more applications than can be approved; therefore, admission cannot be granted to all applicants who meet only the minimum requirements.

All transcripts, test scores, and other credentials must be accompanied by an official English translation of these documents and must be on file in the Office of Admissions by the stated deadlines before the beginning of registration for the intended term of entry.

## ADMI SSI ON REQUI REMENTS

1. Educational Background: Applicants must list on the form provided by the university every school attended, beginning with primary school, to the present, including each primary, secondary, and post secondary institution.
2. Required Transcripts: Applicants must arrange for the Office of Admissions to receive official copies of academic records of the applicant's attendance at secondary school, college, university, and professional institutions of learning. These transcripts must be sent directly from the high school or college to the University of Memphis. An exception is made for those who hold the bachelor's degree or its equivalent in that they need not send their secondary school records. Records should list the subjects studied and the grade, mark, or other evidence that each individual subject was completed to the satisfaction of the authorities in charge. If it is impossible for the school to send us an official copy, copies certified by an official at the American Embassy or a known world organization may be acceptable. All records must be in English. Since certificates and records filed for examination are not ordinarily returned, applicants should send certified photostatic copies if the documents in question cannot be easily replaced.
3. Required Test of All Applicants: All applicants whose native language is not English must supply results of the Test of English as a Foreign Language TOEFL) or its equivalent. TOEFL information may be obtained by writing: TOEFL, Educational Testing Service, Princeton, New Jersey, 08540, U.S.A. All test scores must be sent directly from the testing agency to the University of Memphis.
4. Freshman Test Required: Applicants to the first year undergraduate level must submit scores on the Scholastic Aptitude Test (SAT) or the American College Testing Program (ACT). These tests are available only in English. For information on the SAT, applicants may write to College Entrance Examination Board, Box 592, Princeton, New Jersey, 08540, U.S.A. For information on the ACT, applicants may write to American College Testing Program, P.O. Box 414, Iowa City, Iowa, 52243, U.S.A. All test scores must be sent directly from the testing agency to the University of Memphis.
5. Financial Statement: U.S. visa regulations require that certification of admission be based on both academic acceptance and satisfactory evidence of adequate funds to meet the expenses involved in the student's program of study. Applicants for an "F-1" student visa must supply, on the form provided by the university, sufficient evidence of financial support for themselves and all members of their families who will accompany them to Memphis. This requires that applicants certify that their intent is to attend
the university full time and that no employment will be required.
6. Health Certificate Required: Each international student, within 30 days from the first day of classes, must submit a certificate from a licensed U.S. physician or other qualified U.S. medical authority verifying freedom from tuberculosis. Failure to do so shall result in denial of enrollment. In the event that the student either has tuberculosis or has potential tuberculosis requiring medical treatment, continued enrollment will be conditioned upon the determination by a licensed U.S. physician that such enrollment does not present a risk to others and upon the student's compliance with any prescribed medical treatment program.

In order to enroll, all international students born after J anuary, 1957, must prove that they have been inoculated with the live measles vaccine (MMR) since J anuary, 1980. Exceptions are made for students who are pregnant or allergic to the vaccine.
7. All international students must purchase a health insurance policy through the university or provide evidence of government sponsored health insurance before they are allowed to enroll.
8. English Placement Examination: All international applicants who are accepted must take an English placement examination, administered by the English Department, before enrollment. Placement in an English class will be determined by the results of this examination. International students should arrange to be on campus approximately one week before the first day of classes for the proposed term of entry.
9. International students will not normally be allowed to register as transient students (those regularly enrolled and in good standing at another institution who desire to attend the University of Memphis for only a limited period of time). During summer sessions, exceptions may be granted only in cases where a student has an outstanding academic record and unusual circumstances are present.
10. International students who wish to apply for readmission to the university must meet the deadlines stated above.
11. International students must become familiar with the regulations of the Immigration and Naturalization Service and assume responsibility for complying with these regulations.
12. International students should be prepared to attend a four- to five-day mandatory orientation prior to the first day of class.

## Combination Senior

An undergraduate student with a total cumulative GPA of at least 3.25 , who has filed with his or her graduation analyst a plan for completing the bachelor's degree within two semesters, with the approval of the college director of graduate studies, may request to enroll concurrently in undergraduate and selected graduate courses. Students may earn up to 12 hours of graduate credit while enrolled as a Combination Senior. Approval to register for graduate credit does not imply approval for admission into a graduate program at the University or that the credit earned will be accepted towards a graduate degree. After the bachelor's degree is awarded, a Combination Senior may be admitted to a graduate degree program. Courses taken for graduate credit may not be used for both the baccalaureate and graduate degrees.

## Former Students (Readmission)

Former undergraduate students who wish to return to the University at the same level as when they previously attended and have missed any academic term excluding summer, must file an application for readmission. This form should be secured, completed, and returned to the Admissions Office. If the student has enrolled at another institution since last attending the University of Memphis, a transcript must be forwarded to the Admissions Office. An applicant will receive favorable consideration only if eligible for readmission under all University regulations, including the grade point average (GPA) for transfer students. (NOTE: International students who wish to apply for readmission to the University must meet the deadlines for new admission for international students.)

## Admission as Non-Degree Undergraduates

Applicants who wish to apply in one of the special categories listed below are encouraged to apply by the same deadlines as stated for Regular Undergraduates. While applications may be accepted until the first day of registration for the term for which the student is applying, no guarantee of admission will be made after the deadline has passed. Special category students who have attended other colleges will not have their previous college work evaluated for transfer until they have been approved for admission as regular undergraduates. An applicant who has applied as a degree-seeking undergraduate and was denied admission must generally wait a fall or spring semester or six months before applying for admission at the non-degree level.

Those who are admitted as non-degree students are not required to have an advisor. However, if nondegree students desire an advisor, they are assigned to the Academic Counseling Center for advising. Non-
degree undergraduate students may not take more than 18 semester hours of work in a single term nor may they earn more than 24 semester hours total. This limit may be extended if there has been enrollment at another institution since last attending the University of Memphis.

## NON-DEGREE APPLICANTS

An applicant who wishes to enter the University, and who is not presently pursuing a degree, may do so by applying for admission at this level and meeting one of the three conditions listed below:

## Applicants with College Degree

An applicant who has (1) earned a baccalaureate degree from an accredited institution, (2) who desires to take only a limited number of undergraduate courses, and (3) who is not presently working toward a degree at the University of Memphis may be admitted in this category.

## Applicants with Previous College Attendance but No Degree

A student currently or previously enrolled in any accredited college or university may be admitted in this category.
NOTE: Transient students (those regularly enrolled and in good standing at another institution who desire to attend the University of Memphis for only a limited period of time) should apply at the non-degree level.

## Applicants with No Previous College Attendance

An applicant who has never attended another college or university may be admitted in this category by meeting the following conditions:

1. provide proof of high school graduation or the equivalent OR
2. be at least 21 years of age or provide proof that the high school class of which he or she was a member graduated at least three years ago.
3. Applicants who are offered admission with ACT composite, English, or math scores less than 19 who wish to take an English or a mathematics course will be required to take a placement examination prior to enrollment. Based on the results of this assessment, these applicants may be required to successfully complete basic or developmental courses prior to enrolling in degree credit courses.

NOTE: Those applicants under 21 who complete their high school work during the calendar year in which they seek admission will not be considered in the non-degree category. These applicants must apply as regular undergraduate freshmen.

All non-degree students may, at any time within the stated deadlines, apply to the Office of Admissions for reclassification as degree-seeking students, effective at the beginning of the next fall or spring semester. Admission procedures and requirements are the same as those for degree-seeking undergraduate applicants with the following clarifications:

1. An acceptable entrance examination score or the equivalent may be required for students wishing to have their level changed to degree-seeking undergraduate status. Applicants who do not meet one of the criteria outlined in the Adult Students section may choose one of the following to complete this requirement:
A. Submitting an acceptable ACT or SAT score.

OR
B. Earn at the University of Memphis a cumulative GPA of 2.00 or greater that includes 12 hours or more exclusive of physical activity courses.
NOTE: Courses defined as Transitional Academic Studies (DSP) may not be used in satisfying the 2.00 requirement.
2. The high school graduation requirement may be satisfied by any of the methods listed in the regular undergraduate freshman section of this Bulletin.

After students are admitted as regular undergraduates, any credit that may have been earned as non-degree-seeking students may apply toward degree programs in the college from which a degree is sought as outlined in this Bulletin.

## Concurrent Enrollment

Outstanding high school students who have completed the junior year may be admitted and register for one college course per term of enrollment concurrently during their senior year provided they supply evidence of the following:

1. A minimum high school cumulative grade point average (GPA) of 3.20 on a 4.00 scale.
2. An ACT composite score of 22 or above.
3. A recommendation from the applicant's high school principal or guidance counselor.
4. The course concurrently enrolled students register for must be taken outside of their established school day.

NOTE: Departments may establish additional criteria for their courses.

## Admission as Audit-Only Undergraduate

Persons who are not enrolled for credit courses may register for audit courses with the approval of the Office of Admissions and the appropriate department chair. These students must have the equivalent of high school graduation or be at least 18 years of age. Clearance will be for one term only. Subsequent enrollment will require an application for readmission. Tennessee residents who have a permanent and total disability, which totally incapacitates them from working at an income producing occupation, may audit courses at the University of Memphis without paying tuition charges, maintenance fees, student activity fees, or registration fees. Admission to audit will be limited on an individual classroom basis according to space availability. An application fee of $\$ 15.00$ is required.

## NEW STUDENT ORI ENTATI ON, ADVISI NG AND REGISTRATI ON

The academic year consists of two semesters and a summer term. The fall semester begins in late August or early September and ending in December; the spring semester begins in J anuary and ends in May; and the summer session held between the end of the spring semester and the beginning of the fall semester.
The New Student Orientation program, which is required for all first time degree-seeking students, is held during the summer for new freshmen and transfer students and in December for new spring semester students. Orientation is designed to acquaint new students with registration procedures, University regulations, college life, and student activities and services.
During Orientation, students meet with an academic advisor, plan their course schedule, and register for classes. Even though advisors help students select the appropriate courses, this does not relieve students of their responsibility to study the Undergraduate Bulletin and fulfill all of the requirements for their specific degree program. (Note: Before students attain senior standing, they should consult with the college level advisor or graduation analyst of the college regarding fulfillment of requirements for their degree.)
All first-time freshmen whose ACT English, reading or math subscores are less than 19 will be required to take special basic/developmental courses to develop academic competencies necessary for success in college level courses. Students without valid ACT/SAT scores and without college level credit in math or English will be required to take the COMPASS test in the appropriate areas. Students who feel they have been misplaced by their ACT/SAT scores are encouraged to take the COMPASS test, which can place them in a higher level course. (See Transitional Academic Studies program description in the Independent Programs section of this Bulletin for more details.)
Credit is not allowed in any course for which students are not officially registered. Students must withdraw from all courses prior to the first day of classes for the session to avoid financial responsibility for fees.

## STUDENT AID

The Student Financial Aid Office administers federal, state, and institutional aid programs in order to provide financial aid to qualified students. The programs of financial aid include Scholarships, Grants, Loans,
and Student Employment. With the exception of grants, which are always need-based, each of these financial aid programs can be either need-based or non-need based. All need-based programs are based on an assessment of an Expected Family Contribution using family income and asset information provided by the completion of the Free Application for Federal Student Aid (FAFSA) by the student and/or parent. Students applying for financial aid programs that require the FAFSA must be U.S. Citizens or permanent residents, must be admitted as degree-seeking students, and if seeking a second bachelor s degree, have declared a major.

The FAFSA is also required as the application for federal student non-need based loans. The FAFSA is not required for Federal PLUS Loans (for parents of dependent students), non-federal student loans, scholarships, and non-federal student employment.

The University of Memphis priority date for filling the FAFSA for a fall semester is March 1. For a spring semester, the priority date for filing is October 1. The student must also submit any other required documents in order to complete his/her application prior to being awarded. Students are notified of any other required documents after the Student Financial Aid Office receives the FAFSA results. Please access the Student Financial Aid Office for current information: http://www.enrollment.memphis.edu/Financial Aid/

## SCHOLARSHI PS

## Academic Scholarship Programs

The University of Memphis offers several hundred scholarships each academic year in varying amounts depending on the particular guidelines for the scholarship and the academic credentials of the student.

NOTE: The Scholarship Office handles UNDERGRADUATE PROGRAMS ONLY. For more information on deadlines and any other questions you may have, contact the Scholarship Office directly at (901) 678-3213.

For more information on GRADUATE scholarships, contact the GRADUATE SCHOOL at 217 Administration Building, Memphis, TN 38152 or call (901) 678-2531.

For more information regarding LAW scholarships, contact 203 Cecil C. Humphreys School of Law, Memphis, TN 38152 or call (901) 678-5403.

## I MPORTANT NOTICE

The Federal Tax Reform Act of 1986 significantly changed the tax status of scholarships, fellowships, and grants you receive from the university. Prior to the Act, they were generally not subject to income tax. Since then scholarship, fellowship, and grant amounts exceeding tuition, fees, and course-related books, supplies, and equipment have become taxable.

The University of Memphis awards hundreds of academic scholarships each year to entering freshmen. All scholarships are awarded for the academic year (Fall and Spring semesters). Scholarships are awarded based on information submitted on the University of Memphis admissions application. A separate scholarship application is not required unless noted. The deadline for admission to the University of Memphis for scholarship consideration is March 1.

All University of Memphis scholarship program awards are based on a combination of ACT/SAT scores and cumulative high school grade point average. These scholarships are four year, renewable scholarships requiring full time enrollment. Early application to the University of Memphis is strongly encouraged as scholarship awards are limited. Students eligible for the State of Tennessee HOPE Scholarship Program (Lottery Scholarship) must apply for the scholarship and complete the Free Application for Student Aid (FAFSA) as specified by the Tennessee Student Assistance Corporation (TSAC). For more details regarding the Tennessee HOPE Scholarship Program, please go to the TSAC web site at http://www.state.tn.us/tsac/

## The Cecil C. Humphreys Merit Scholarship

Awarded to all National Merit/National Achievement finalists listing the University of Memphis as their first choice with the National Merit Scholarship Corporation. This prestigious award provides the following benefits to all recipients:

1. In-state enrollment fees
2. Campus Housing Allowance and Honors Program Residence Area Reservation
3. Campus Meal Plan
4. Dell laptop computer
5. Yearly Book Allowance of $\$ 1,000$
6. Study Abroad or National Student Exchange Stipend
7. National Merit Corporation Stipend
8. Assistance provided for travel to National Conference on Undergraduate Research
9. Non-Resident Honors Student Award (NRHSA) for out-of-state awardees.

## Cecil C. Humphreys Presidential Scholarship and Cecil C. Humphreys Herff Scholarships

Awarded to students with a minimum 30 ACT/ 1320 SAT and a 3.5 or above cumulative high school grade point average. These scholarships are awarded to a limited number of students and provide the following benefits:

1. In-state enrollment fees
2. Campus Housing Allowance and priority consideration for Honors Program Residence Area Reservation
3. Yearly Book Allowance of $\$ 1,000$
4. Study Abroad or National Student Exchange Stipend
5. Assistance provided for travel to National Conference on Undergraduate Research
6. Priority Consideration for Non-Resident Honors Student Award (NRHSA) for out-of-state awardees.

NOTE:

## Students receiving the Cecil C. Humphreys Presidential or Cecil C. Humphreys Herff Scholarship who are named National Merit Semi-Finalists will receive the National Merit Corporation Stipend

All HOPE Scholarship funds awarded will be applied to Merit and Presidential award packages above for in-state students. Students must apply for and receive HOPE funding to receive full benefits listed above.

## The University of Memphis Provost's Scholarship

Awarded to students with a minimum 28 ACT/1240 SAT and a 3.25 or above cumulative high school grade point average. The Provost's Scholarship is awarded to a limited number of students each year and provides in-state enrollment fees. HOPE scholarship funds are awarded to the student to be used for payment of other fees associated with the cost of attendance. On campus housing is encouraged to provide each scholarship student with social and scholarly activity opportunities that promote academic success.

## The Distinguished African American Scholarship

Awarded to African American students who are Tennessee Residents with a minimum 26 ACT/1170 SAT and a 3.0 or above cumulative high school grade point average. The award covers in-state enrollment fees and a $\$ 1000$ yearly book allowance. HOPE scholarship funds are awarded to the student to be used for payment of other fees associated with the cost of attendance. On campus housing is encouraged to provide each scholarship student with social and scholarly activity opportunities that promote academic success.

## The Valedictorian Scholarship

Provides funding to top scholars from each of Tennessee's accredited or state approved high schools. The recipient must rank number one in the class and meet the admission requirements of The University of Memphis. The Valedictorian Scholarship provides funding for in-state enrollment fees. HOPE scholarship funds are awarded to the student to be used for payment of other fees associated with the cost of attendance. On campus housing is encouraged to provide each scholarship student with social and scholarly
activity opportunities that promote academic success.

## The University of Memphis Dean's Scholarship

Awarded to students with a minimum 25 ACT/1130 SAT and a 3.00 or above cumulative high school grade point average. The Dean's Scholarship is awarded to a limited number of students each year and provides one-half the cost of in-state enrollment fees. HOPE scholarship funds will be applied to the balance of enrollment fees and any remaining amount to be used for payment of other fees associated with the cost of attendance. On campus housing is encouraged to provide each scholarship student with social and scholarly activity opportunities that promote academic success.

## The African American Scholars

The African American Scholars for African American students requires a 23 ACT (1060 SAT) and a minimum 3.0 cumulative high school GPA. The award covers in-state enrollment fees. HOPE scholarship funds are awarded to the student to be used for payment of other fees associated with the cost of attendance. On campus housing is encouraged to provide each scholarship student with social and scholarly activity opportunities that promote academic success.

## The Emerging Leaders Scholarship

Requires a separate application available in the Office of Student Leadership (University Center Room 427). The deadline for applications for this scholarship is early February each year. The Emerging Leaders Scholarship is awarded to a limited number of students each year and the award provides in-state enrollment fees. A minimum ACT of 20/SAT of 940 and a 2.8 or better cumulative high school grade point average is required for all applicants. For renewal of this scholarship, recipients must maintain a 2.25 cumulative grade point average for the first year and a 2.5 thereafter. HOPE scholarship funds are awarded to the student to be used for payment of other fees associated with the cost of attendance. On campus housing is encouraged to provide each scholarship student with social and scholarly activity opportunities that promote academic success.

## The African American Enrichment Scholarship

Awarded to African American students who are Tennessee Residents with a minimum 23 ACT/1060 SAT and a 3.0 or better cumulative high school grade point average. The award covers in-state enrollment fees. HOPE scholarship funds are awarded to the student to be used for payment of other fees associated with the cost of attendance. On campus housing is encouraged to provide each scholarship student with social and scholarly activity opportunities that promote academic success.

## The African American Enrichment Scholarship

Awarded to African American students who are Tennessee Residents with a minimum 21 ACT/980 SAT and a 3.5 or better cumulative high school grade point average. The award is $\$ 1,000$ for the year. HOPE scholarship funds are awarded to the student to be used for payment of other fees associated with the cost of attendance. On campus housing is encouraged to provide each scholarship student with social and scholarly activity opportunities that promote academic success.

> Unless otherwise noted, renewal of scholarships is based on a 2.75 cumulative grade point average after the first year and a 3.00 cumulative grade point average thereafter. In addition, to maintain an academic scholarship, students must complete service hours to the university. On campus housing is encouraged to provide each scholarship student with social and scholarly activity opportunities that promote academic success. All scholarships are based on a \$3,000 HOPE Award and are subject to being reduced if HOPE amount is less or if student is not eligible to receive HOPE funding. All awards are subject to reduction based on state appropriation of scholarship funding.

## Departmental Scholarship Awards

You may check with the department of your major to see if they offer any scholarships. A complete listing of all university scholarships (many administered by academic departments) can be found in the Bulletin of

The University of Memphis (Undergraduate Issue).

## Other Scholarships

Many foundations, corporations, and service organizations provide funds for scholarships or tuition assistance. Students generally apply directly to the potential donor, and usually there is a direct relationship between the student and the sponsoring organization.

## Private University Scholarships

The scholarships described below require an application form that is available in the Scholarship Office. Most private scholarships stipulate that the applicant must be an entering freshman, but a small number may be available to current students.

THE TAYLOR AND MARY RI CHARDSON SCHOLARSHI P is awarded to entering freshmen who are graduates of Lake County High School in Tiptonville, TN. Applicants must demonstrate academic ability and financial need.
THE J OHN W. AND MYRTLE P. RI CHARDSON SCHOLARSHI P is awarded to students in the upper quartile of their high school class who show a need for financial assistance. Entering freshmen and/or continuing students are considered for award. Maintenance of a 3.0 cumulative GPA is required for renewal.
THE R. C. ANDERSON SCHOLARSHI P is restricted to male students between the ages of 18 and 24 who are incoming freshmen from Benton, Decatur, and Henderson counties in Tennessee. Maintenance of a 2.8 cumulative GPA is required for renewal.
THE J AMES E. MCGEHEE MORTGAGE COMPANY SCHOLARSHI P is awarded to a Shelby County entering freshman that has demonstrated outstanding academic achievement. Maintenance of a 2.8 cumulative GPA is required for renewal.
THE UNI VERSI TY OF MEMPHIS FACULTY/ STAFF SCHOLARSHIP is awarded to entering freshmen and/or currently enrolled students who are children or spouses of $U$ of $M$ Faculty/Staff with 3 years continuous employment at The $U$ of $M$. Entering freshmen must have a 20 ACT and a high school GPA of 3.0 or better to be considered. Current students must have been enrolled for two semesters at The $U$ of $M$ with a minimum cumulative GPA of 3.0. Maintenance of a 2.8 cumulative GPA is required for renewal. THE LESLIE GRUBER SCHOLARSHIP is awarded to entering freshmen with a minimum 3.0 cumulative high school GPA and evidence of financial need. Non-renewable.
THE MEMPHIS HIGH SCHOOL ALUMNI SCHOLARSHI P is awarded to an entering freshman who is a graduate of a Memphis high school and who demonstrates academic ability. Maintenance of a 2.8 cumulative GPA is required for renewal.
THE BI LLY J. MURPHY SCHOLARSHIP is awarded to a Memphis area student who has demonstrated financial need and shows scholastic ability. Established in 1974 to honor former U of M Athletic Director, Billy J. Murphy for his long service to the school.
THE ABE WALDAUER MEMORI AL SCHOLARSHI $\mathbf{P}$ is awarded to entering freshmen that are residents of Shelby County. Applicant must demonstrate academic ability, financial need, and must be employed between 24 and 27 hours weekly to be considered for this scholarship. Non-renewable.
THE JAMES McCLENDON HI GHLAND 100 SCHOLARSHI P is awarded to an entering freshman that is a graduate of a Memphis area high school and has demonstrated financial need and academic potential. Non-renewable.
THE HENRY M. AND LENA MEYER KAHN SCHOLARSHIP is awarded to students with and ACT of 21 or above and a high school cumulative GPA of 3.0 or above. Preference is given to students of the Jewish faith. Maintenance of 2.8 cumulative GPA is required for renewal.
THE J OHN WI LCOX SCHOLARSHIP is awarded to one freshman, one sophomore, one junior and one senior at the University of Memphis. Maintenance of 2.5 cumulative GPA is required for renewal.
THE EXCHANGE CLUB OF EAST MEMPHIS/ ALLEN SHACKELFORD SCHOLARSHIP is awarded to a hearing impaired or deaf student enrolled full time at the University of Memphis. If no qualified applicant is chosen the award can be given to a student training to be a teacher of the deaf.
THE LUTHER C. McCLELLAN ALUMNI CHAPTER MI NORITY SCHOLARSHIP is awarded to a full-time student with a minimum cumulative GPA of 2.5 . Applicant must submit letter of recommendation. Financial need and participation in extracurricular activities may be considered. African American students may be given special consideration. Non-renewable.
THE FISHER-MAHER SCHOLARSHIP is awarded to a current student with a minimum cumulative GPA of 2.8. Financial need is considered in the selection process. Students may be part time.
THE FURR-BOWMEN SCHOLARSHI P is awarded to an entering freshman that meets the University of Memphis admission requirements. Financial need may be considered in the selection process. Maintenance of 2.5 cumulative GPA is required for renewal.
THE JUDGE BERNICE DONALD SCHOLARSHIP is awarded to an undergraduate sophomore student with a cumulative GPA of at least 2.8. Applicant must be a US citizen, and financial need may be considered in the selection process. Special consideration may be given to African-American females. The Rho Gamma Chapter of Zeta Phi Beta Sorority funds the J udge Bernice Donald Scholarship. Non-renewable.
THE FLORA RAWLS MEMORI AL SCHOLARSHIP is awarded to entering freshmen and/or current students with financial need. Freshman recipients must demonstrate academic potential and current students must have a minimum cumulative GPA of 3.0 to be considered.

THE DAVI D COLLI NS-OMI CRON DELTA KAPPA SCHOLARSHI P is awarded to a voting member of the University of Memphis Omicron Delta Kappa who demonstrates exceptional leadership. Recipient must expect to receive a baccalaureate degree from the University of Memphis during the year of scholarship receipt and must enroll in graduate or professional school at the University of Memphis immediately following graduation.

## THE COLLEGE OF ARTS AND SCI ENCES

THE BELLE MCWI LLI AMS SCHOLARSHI P recipient must be enrolled in the College of Arts and Sciences, demonstrate an above average interest in American history, have diverse extracurricular activities, and demonstrate outstanding academic achievement. The recipient must be a sophomore or above with at least a 3.0 GPA.
THE CARROLL BOWMAN SCHOLARSHIP is awarded to a philosophy major with demonstrated financial need and academic potential.
THE OPPORTUNI TY FOUNDATI ON PAUL SCHWARTZ SCHOLARSHI P is awarded to social work majors who are seniors with a 2.5 minimum GPA.

THE BOTANY BOOK AND SCHOLARSHIP FUND is awarded to a student studying botany or biology at the University of Memphis.
THE LOUNSBURY GEOLOGY SCHOLARSHI P is awarded to sophomores, juniors, and seniors enrolled full-time who have a minimum cumulative GPA of 3.0 . The recipients must be majoring in geology, with preference given to students interested in oil and gas exploration.
THE DR. RUSSELL A. J ONES MEMORI AL SCHOLARSHI P is awarded to a senior majoring in chemistry, microbiology and molecular cell sciences, or related science discipline. Preference may be given to those students pursuing careers as physicians. Recipients must have and maintain a minimum GPA of 3.0 in his/her major.
THE DR. PAUL H. SI SCO SR. MEMORI AL SCHOLARSHIP is awarded to full-time students majoring in geography. A minimum GPA of 2.50 is required.
THE BOB BAKER SCHOLARSHIP is awarded to a junior or senior majoring in history with a minimum GPA of 3.0. Students with financial need will be given preference.
THE GOLDYE FEI NSTONE SCHOLARSHI P is awarded to a student majoring in microbiology and molecular cell sciences on the basis of academic and research achievements as well as potential for professional success.
THE GENERAL HERBERT L. GRI LLS MEMORI AL SCHOLARSHI P is awarded to a student majoring in any discipline in the College of Arts and Sciences. Freshmen with a minimum ACT of 27, and upperclassmen with a minimum GPA of 2.8 are eligible.
THE JOSEPH NAPOLEON AND NANCY HARRIS MITCHELL SCHOLARSHI PS are awarded to transfer students who have declared a major in any discipline in the College of Arts and Sciences. Students must have two years of college from a four-year institution or an Associates degree from an accredited community college, as well as a minimum GPA of 3.25.
THE MARY PETTUS MEMORI AL SCHOLARSHI P is awarded to a full-time upperclassman majoring in Foreign Languages with a minimum cumulative GPA of 3.0.
THE R. P. CLARK SCHOLARSHI P is awarded to an outstanding junior majoring in mathematical sciences. Emphasis for the award is based on academic merit as well as financial need.
THE MARCUS W. ORR HUMANI TI ES SCHOLARSHI P, established by former students and friends of Dr. Orr to honor his outstanding contributions to the University, is awarded annually to a student majoring in one of the humanities.
THE OMAR E. SMITH SCHOLARSHI P in biology is awarded to outstanding juniors and seniors majoring in biology with emphasis in ecology. Students should apply during their sophomore year.
THE PRISCI LLA RUSHTON SCHOLARSHIP is awarded to a full-time biology major who has demonstrated academic achievement, leadership ability, and strong potential for professional success.
THE EDWARD T. BROWNE SCHOLARSHI P is awarded to a full-time biology major who has demonstrated academic achievement, leadership ability, and strong potential for professional success.
THE MI LTON ADDI NGTON SCHOLARSHI P is awarded to the top graduating senior on the basis of outstanding achievement in the field of psychology at the University of Memphis.
THE WI LLIAM H. ZUBER SCHOLARSHI P is awarded to a B.S. in Chemistry major who has completed at least 16 hours of chemistry course credit.
THE J.C. WI LLI AMS MEMORI AL SCHOLARSHI P is awarded to a B.S. in Chemistry major who has completed at least 16 hours of chemistry course credit.
THE KALTENBORNS MATHEMATI CS SCHOLARSHI P is awarded to an undergraduate majoring in mathematical sciences with at least a 3.0 GPA. Recipient must complete 15 semester hours of course work, maintaining a 3.5 GPA in all math courses.
THE JOHN MALMO ADVERTI SI NG, I NC. SCHOLARSHI P is awarded to English and marketing students who desire to pursue careers in advertising or public relations. Financial need is considered. Recipients must be U.S. citizens.
ELI ZABETH PHI LLI PS SCHOLARSHI P is awarded to a junior or senior African-American English major with a minimum GPA of 2.5.

ALBERT H. WOOLLETT SCHOLARSHIP is awarded to a student majoring in Physics. Renewable if student maintains a GPA of 3.0. Financial need may also be considered.

DR. NASEEB SHAHEEN SCHOLARSHIP is awarded to a sophomore, junior, or senior with a minimum GPA of 2.5 who is majoring
in Chemistry, Physics, or Mathematics with plans to teach at the high school level. Recipient must be a Tennessee resident.

## THE FOGELMAN COLLEGE OF BUSI NESS AND ECONOMI CS

(Awarding of scholarships, in several cases, is contingent upon donor funding).
THE THOMAS Y. OWEN SCHOLARSHI P is awarded to an accounting major demonstrating both financial need and outstanding academic achievement. A minimum cumulative GPA of 3.00 must be maintained. U.S. residency is required.
THE ETHEL LEWIS SCHOLARSHI P is sponsored by The University Career Associates of the University of Memphis. The scholarship is available to a full-time junior or senior student majoring in business. The recipient must be a resident of Shelby County in Tennessee and must have a minimum cumulative GPA of 3.0. Preference will be given to a student who demonstrates financial need.
THE DR. R. W. JENNI NGS SCHOLARSHIP, a memorial to a former U of M faculty member, provides financial assistance to a worthy junior or senior majoring in management, preferably in office administration.
THE JOHN ELKI NGTON SCHOLARSHIP in land use development is awarded to a junior student with a minimum GPA of 3.25 majoring in real estate or an allied discipline. Preference is given to a student with a career interest in the land use development field.
THE RISK AND I NSURANCE MANAGEMENT SOCI ETY SCHOLARSHIP is awarded to students classified as at least juniors. Recipients must have a minimum cumulative GPA of 2.60 and a major in risk management or insurance management.
THE MEMPHIS BOARD OF REALTORS/ MARK SOWARDS MEMORI AL SCHOLARSHI P is awarded to students who are majoring in real estate or an allied discipline. A minimum cumulative GPA of 2.50 is required.
SHELBY GROUP I NTERNATI ONAL ENDOWED SCHOLARSHI P FUND is awarded to a full-time student majoring in business with a minimum of 3.0 GPA . Freshmen with a 3.5 GPA from high school are eligible.
THE S. L. KOPALD SCHOLARSHI P is awarded to students who are graduates of a Memphis City or Shelby County high school. Incoming freshmen must have a minimum ACT score of 26 . The recipient must be majoring in marketing, and must maintain a minimum GPA of 3.00 .
THE ELEANOR O\&NEILL SCHOLARSHIP is awarded to students majoring in advertising, public relations or journalism. Academic merit is considered. The recipient must be a full-time student and maintain a cumulative GPA of at least a 2.80 .
FOGELMAN COLLEGE OF BUSI NESS AND ECONOMICS ALUMNI SCHOLARSHIP awarded to a junior or senior business major with a 3.0 GPA.
THE E. I. CRAWFORD/ DELTA SI GMA PI SCHOLARSHI P is awarded to a full-time student in good standing in the Fogelman College of Business and Economics with a minimum cumulative 2.25 GPA . The recipient must be nominated by the Gamma Zeta Chapter of the Delta Sigma Pi Fraternity and is selected by a committee.
THE SHELTON AND BRUCENE HARRISON SCHOLARSHIP is awarded to entering freshmen as well as currently enrolled students majoring in either marketing or management. Entering freshmen must have been in the upper third of their high school class. All recipients must maintain a minimum cumulative GPA of 3.0. Preference shall be given to students in need of financial assistance.
WATKI NS AND UI BERALL ACCOUNTI NG SCHOLARSHI P AWARD is awarded to accounting majors enrolled in the School of Accountancy. The students must have a 3.0 minimum GPA both overall and in Accounting courses. Candidates for the scholarship shall have demonstrated academic merit and interpersonal, communication and leadership skills. If there are equally qualified candidates on the above criteria, students demonstrating financial need will have priority.
ACCOUNTANCY ENRICHMENT FUND SCHOLARSHIP is awarded to an accounting major who has a 3.0 GPA and who has completed ACCT 2010.
TI M TREADWELL III / UNI ON PLANTERS SCHOLARSHIP is awarded to an outstanding junior or senior who is majoring in property or casualty insurance, banking, business or closely related subject. The recipient must be a U.S. citizen and a Tennessee resident.
J OHN TULLY/ UNI ON PLANTERS SCHOLARSHI P is awarded to a full-time junior or senior majoring in banking or some area in business with a cumulative 3.0 GPA. The student must be a U.S. citizen and Tennessee resident.
ANDREW M. WRAY III MEMORI AL SCHOLARSHIP is awarded to a full-time junior or senior enrolled in the College of Business and Economics with an interest in Financial Planning and have a 3.0 minimum GPA overall. The recipient must be a U.S. citizen. GOLDSMI TH'S-MACY'S I NTERNSHI P SCHOLARSHI P is awarded to a sophomore or junior business major with a 3.0 GPA and strong leadership skills. The student must have retail experience and an interest in pursuing retailing as a career. The summer after receiving the scholarship the student must intern at one of the Memphis locations of Goldsmith's-Macy's.
SCHOOL OF ACCOUNTANCY SCHOLARSHIP is awarded to a sophomore, junior, or senior student majoring in accounting. The student must have a 3.0 GPA.
J AMES DOYLE APPLI NG SCHOLARSHI P is awarded to a full-time senior majoring in business with at least 95 earned credit hours. The student must demonstrate a financial need and maintain a 3.0 GPA.
NELL W. BAUGH I NTERNATI ONAL BUSI NESS SCHOLARSHIP is awarded to a junior, senior, or graduate student majoring in international business. The student must be a U.S. citizen and maintain a 2.75 GPA.
HERMAN BENSDORF II MEMORI AL SCHOLARSHIP is awarded to a junior majoring in business. The student must be a graduate of a high school in Shelby County and be a current resident of Shelby County.
ROY W. AND SUE T. BLACK ENDOWED SCHOLARSHI P FUND was established by Roy W. Black, a University of Memphis
alumnus. The recipient must be an African-American or Hispanic student majoring in business. The student must be a graduate of a high school in Chester, Crocket, Decatur, Dyer, Fayette, Hardeman, Hardin, Haywood, Lauderdale or McNairy county in Tennessee. Preference will be given to freshman and Hardeman County graduate.
J AMES E. HARDWOOD ENDOWED SCHOLARSHI P is awarded to a junior and a senior majoring in business. The student must be full-time and maintain a minimum 3.0 GPA. A student who receives this scholarship will automatically receive it as a senior if the student continues to meet the requirements.
I NSURANCE PROFESSI ONALS OF MEMPHIS, I NC./ CLYDE H. BEAUMONT MEMORI AL SCHOLARSHI P is awarded to a student majoring in insurance. The recipient must be a junior or senior, maintain a 2.5 GPA and demonstrate financial need. KEYSTONE LABORATORIES SCHOLARSHI P is awarded to an African-American student majoring in accounting. he recipient must have a 3.0 GPA and be a U.S. citizen.
KRAMER ENDOWMENT FUND SCHOLARSHI P is awarded to a full-time business major. The recipient must be of $\rangle$ nontraditionale age and in need of financial assistance. The student must be a U.S. citizen and a resident of Tennessee. The recipient may receive this award for a maximum of four years provided the student continues to meet the criteria.
MYERS FAMI LY MEMORI AL SCHOLARSHIP is awarded to a full-time student with a minimum of sixty credit hours completed and has a minimum GPA of 2.75 . The recipient shall exhibit good communication and writing skills. The student shall participate in not more than twenty hours per week in a learning experience at Interactive Solutions, Inc.
PERKI NS RESTAURANT AND BAKERY SCHOLARSHI P is awarded to a student majoring in hospitality and resort management. The student must be at least a sophomore with a strong academic record. Preference will be given to a student who demonstrates financial need.
THOMAS R. PRICE/ UNI ON PLANTERS MEMORI AL SCHOLARSHI P is awarded to a full-time junior or senior majoring in banking, business or a discipline that would promote the forestry industry. The recipient must have a 3.0 GPA , be a resident of Tennessee and a U.S. citizen. Preference is given to an employee or a child of Union Planters Bank employee.
VERNA T. SHARPES ENDOWED SCHOLARSHIP is awarded to a full-time female student majoring in business. The student must demonstrate financial need and maintain a 2.5 GPA.
TENNESSEE MOVERS ASSOCI ATI ON SCHOLARSHI P IN TRANSPORTATION is awarded to a full-time student majoring is transportation/logistics. The recipient must maintain a 2.5 GPA . Preference will be given to a student that demonstrates financial need.
J ACK WALLACE SCHOLARSHI P, SALES AND MARKETI NG EXECUTI VES OF MEMPHI S, I NC. is awarded to a junior or senior majoring in sales or marketing. The recipient must have a 3.0 GPA.
STACEY STECKLER SPRI NKLE MEMORI AL SCHOLARSHI P, a memorial to a former University of Memphis internal auditor, is awarded to either undergraduate or graduate students majoring in accounting. The recipient must have a minimum GPA of 2.5 .
Financial need is considered. Preference shall be given to students attending night classes.
TRAMMELL CROW COMPANY SCHOLARSHIP is awarded to an undergraduate or graduate student with a goal of a career in real estate. Preference will be given to a real estate major that demonstrates financial need. A minimum GPA will be required for the undergraduate student. If all requirements continue to be met, students may be eligible to receive this award for a maximum of two years.
OPUS1 SCHOLARSHIP is awarded to a junior or senior majoring in economics that has submitted or is planning to submit an article to Opus1.
MORGAN KEEGAN SCHOLARSHI P is awarded to an undergraduate or graduate student that is majoring in finance. The recipient may attend part-time or full-time and must have a minimum GPA of 3.0.
I NTERCONTI NENTAL HOTELS SCHOLARSHI P is awarded to a sophomore, junior, or senior majoring in hospitality and resort management. Preference will be given to female and/or minority students.
WESTON COMPANI ES SCHOLARSHI P IN MEMORY OF SHERMAN FRANKLI N, a former U of M faculty member, is awarded to a full-time undergraduate or graduate student majoring in real estate. Preference will be given to a student that demonstrates financial need.
MEMPHI S RESTAURANT ASSOCI ATI ON/ HARDI N'S SYSCO FOOD SERVI CES, LLC SCHOLARSHI P is awarded to a full-time junior or senior majoring in hospitality and resort management. The recipient must be a resident of Shelby County, Tennessee and have a minimum GPA of 3.0. Preference will be given to a student with an interest in the food service industry.
SI M MEMPHI S CHAPTER GARY LASKO MEMORI AL ENDOWED SCHOLARSHI P was established by the Society for Information Management $\geqslant$ Memphis Chapter to memorialize Gary Lasko who died at the World Trade Center on September 11, 2001. This scholarship is awarded to a full-time management information systems major who has completed a minimum of 85 credit hours.
CAESARS ENTERTAI NMENT OPPORTUNI TY SCHOLARSHI $P$ is awarded to a resident of Tunica County, Mississippi who is a graduate of Rosa Fort High School and majoring in hospitality and resort management. The student must maintain a minimum GPA of 2.5. Preference will be given to African-American and/or Hispanic students that demonstrate financial need.
FRANK FLAUTT ENDOWED SCHOLARSHI P is awarded to a hospitality and resort management major with a minimum GPA of 2.0 who has worked in the hospitality/resort industry for at least one year and plans to make it his/her career and/or a high ability student with an ACT of 27 or higher, who has no hospitality/resort industry experience, but plans to make it his/her career.
DR. NEI L SOUTHERN LOGISTICS SCHOLARSHIP is awarded to a full-time student enrolled in the Fogelman College of
Business and Economics who is interested in a career in the field of Logistics.
C. THOMAS AND KATHERI NE H. WHI TMAN SCHOLARSHI $P$ is awarded to an entering freshman who is a graduate of Immaculate Conception High School, Bishop Byrne High School or Catholic High School in Memphis, Tennessee . The recipient shall have scored a minimum of 27 on the ACT and must be enrolled in the Fogelman College of Business and Economics. Student may
receive the scholarship for four years if the student maintains a minimum GPA of 3.0 and takes a course load which enables him/her to complete the degree in four academic years.
PAPASAN FAMI LY ENDOWED SCHOLARSHI P is awarded to an undergraduate or graduate student majoring in business. Preference will be given to students with a parent, guardian or grandparent that is, or has been, an employee of Memphis Light Gas \& Water (MLGW). The student shall demonstrate a financial need as well as outstanding academic promise. Freshman awardees shall have scored a 25 or higher on the ACT. Upper class members and graduate students shall have maintained a minimum GPA of 3.0.

MORGAN MORTON FAMI LY SCHOLARSHI P is awarded to a student that is a resident of Shelby County and a graduate of either Collierville or Houston High School. The recipient must be a full-time undergraduate student. Preference shall be given to freshman students who are in need of some financial assistance and to business majors. Preference shall also be given to high ability students and/or students participating in the Emerging Leaders program at the University of Memphis. The recipient may receive the scholarship up to five years as long as the student maintains a GPA of 2.5 or better.
FOGELMAN COLLEGE OF BUSI NESS \& ECONOMI CS HI GH ABI LITY STUDENT SCHOLARSHI P is awarded to entering freshmen who have scored a 27 or higher on the ACT. The recipient must be a full-time student majoring in business. The student may receive the scholarship for a maximum of four years as long as the student maintains a minimum GPA of 3.3.
W. HARRY FEI NSTONE FCBE HIGH ABI LITY STUDENT SCHOLARSHIP is awarded to entering freshmen who have scored a 27 or higher on the ACT. The recipient must be a full-time student majoring in business. The student may receive the scholarship for a maximum of four years as long as the student maintains a minimum GPA of 3.0.

## THE COLLEGE OF COMMUNI CATI ON AND FI NE ARTS

(Awarding of scholarships, in several cases, is contingent upon donor funding).
THE VARIETY CLUB-ROBERT S. J OHNSON SCHOLARSHI P was endowed in 1974 to honor the late noted writer for the Memphis Press Scimitar. A scholarship is given to a junior or senior majoring in Journalism who is seeking a career in some phase of that profession. Both financial need and scholarship are factors in the selection of the recipient. The recipient must be a graduate of a Memphis area high school.
THE J OHN PAUL J ONES J OURNALI SM SCHOLARSHI P provides a scholarship in Journalism to a minority student of academic merit in financial need.
J OURNALI SM ALUMNI SCHOLARSHI PS are awarded to undergraduates and graduate students majoring in J ournalism.
FRANK AHLGREN SCHOLARSHI P is awarded to a news editorial J ournalism major.
MEMPHIS GRIDI RON SHOW I NC. SCHOLARSHI PS are awarded to undergraduate students at the University of Memphis who have an interest in Music, Journalism or Communication
ISAAC HAYES EVENI NG OF SOUL SCHOLARSHI PS are awarded to students majoring in Theatre and Dance on the basis of financial need and who have demonstrated competence in theatre arts, with special emphasis placed on African-American theatre. THE ETHEL T. MAXWELL VOICE SCHOLARSHIP is given to a voice major in the Applied Music degree program, Bachelor of Music. Incoming freshmen must be in the upper quartile of their high school class and have a demonstrated voice talent.
THE HERBERT HERMANN MEMORI AL PI ANO SCHOLARSHI P is awarded to a pianist with at least a 20 ACT score or a 3.0 GPA. Auditions for jury board exams will be considered. The scholarship selection is coordinated by the Rudi E. Scheidt School of Music piano faculty and the Scholarship Office.
THE BAND ALUMNI SCHOLARSHIP FUND is awarded by the Board of Directors of the Band Alumni Chapter from candidates recommended by the band faculty. The student must be a Music major with a minimum GPA of 2.50 .
MARCHI NG BAND SCHOLARSHI PS are awarded to students to participate in the University Marching Band. These awards are based on audition, band needs and previous marching band experience, regardless of academic major. Application and audition schedules are available in the School of Music office and band office. Scholarships are renewable with satisfactory performance. THEATRE AND DANCE SCHOLARSHI PS are awarded to students majoring in Theatre and Dance on the basis of need and promising talent.
THE ELBA GANDY MEMORI AL MUSI C SCHOLARSHI P is awarded to a student studying music at the University of Memphis. THE BI LLY M. J ONES SCHOLARSHI P is awarded to a student studying and/or working in an area that relates to community relations. This would qualify any undergraduate student studying in marketing, commercial art or any discipline within the College of Communication and Fine Arts.
THE PRESSER AWARD is awarded to a junior majoring in Music. Award is given at the beginning of studentes senior year. THE CLEMENT SANTI MEMORI AL MUSI C SCHOLARSHIP is awarded to a student majoring in Music. The recipient is selected by a committee.
RI CHARD R. RANTA WREG-TV SCHOLARSHIP is to be awarded to an incoming student majoring in Communication. The recipient must have a cumulative 3.0 GPA.
COLLEGE OF COMMUNI CATI ON AND FI NE ARTS ENRI CHMENT FUND SCHOLARSHI PS AND AWARDS may be given to students majoring in a discipline within the College of Communication and Fine Arts. Recipients must have a minimum 2.5 GPA. THE CLEMENT SANTI MEMORI AL THEATRE SCHOLARSHI P is awarded to a full-time student majoring in Dramatic Arts. The recipient is selected by a committee.
THE SANTI FAMI LY LEGACY SCHOLARSHI P is awarded to students pursuing a degree majoring in music with a concentration in performance in the area of voice with preference given to student participating in opera. In order to receive this scholarship,
recipients must have a minimum ACT score of 23 , live in the Mid-South region, and be proven leaders in their community. Freshmen recipients may receive this award for a maximum of four consecutive years of all criteria continue to be met. Scholarship recipients shall be selected by a committee within the College of Communication and Fine Arts.
MI LLS MORRIS OFFI CE FURNITURE DESI GN SCHOLARSHIP is awarded to a junior or senior enrolled at the University of Memphis and pursuing a degree in the field of design. Recipients must have a minimum GPA of 3.0 and be a Mid-South area resident (TN, AR, MS). Priority will be given to students who demonstrate a need for financial assistance.
THE SPECI AL MUSIC SCHOLARSHI P is awarded to an undergraduate Music major at the University of Memphis on the basis of merit.
VAN W. WALTON MEMORI AL SCHOLARSHI P is awarded to students in Architectural Technology. The recipient must be a junior or senior with a minimum GPA of 3.0.
THE WREG-TV / U of M BAND DAY SCHOLARSHIP is awarded annually to a student pursuing an undergraduate degree in Music.
THE KEI TH KENNEDY SCHOLARSHI P may be awarded annually to majors in Theatre and Dance on the basis of talent and theatrical achievement.
THE DONALD AND MARY VAUGHN ART SCHOLARSHIP provides a scholarship in art to a freshman of academic merit in academic need.
THE ART DI RECTORS CLUB OF MEMPHIS SCHOLARSHI P is awarded annually to an outstanding Art major with a concentration in Graphic Design and a GPA of at least 3.0. Selection is based on portfolio review.
THE DANA D. J OHNSON ART SCHOLARSHI P is awarded annually to an outstanding sophomore, junior, or senior majoring in Art with a concentration in Fine Arts, Art History, or Art Education. A minimum cumulative GPA of 3.0 is required, and preference is given to a student with exceptional portfolio work if recipient is majoring in studio art.
THE FRANCES FALLS AUSTI N SCHOLARSHIP is awarded to an incoming freshman pursuing an undergraduate degree in art. Preference is given to a student with exceptional portfolio work.
THE MARY MARGARET ROSS ART ALUMNI SCHOLARSHI P is awarded annually by the Art Alumni Chapter to an outstanding Art major with a minimum cumulative GPA of 3.0.
THE I NTERI OR DESI GN ALUMNI SCHOLARSHIP is awarded annually by the Interior Design alumni to an outstanding junior or senior Interior Design major with a minimum cumulative GPA of 3.0.
THE MEMPHIS RADI O GROUP KI X-106/ SOUL CLASSI C 103.5/ STAR 98/ SMOOTH J AZZ 98.9/ WHZN RADI O
SCHOLARSHI P is awarded to students majoring in Communication who have a 3.0 GPA or are in the top $25 \%$ of their high school graduating class. Recipients must maintain full-time status.
TALENT BASED SCHOLARSHI PS IN VISUAL ARTS are awarded annually to incoming freshmen pursuing degrees in Art. Preference is given to students with exceptional talent and potential; portfolio presentation, artistic background, personal character, and intelligence and scholarship. Applicants must complete a standard departmental scholarship form, and will be notified of dates for portfolio presentation (usually in the late fall of a student $\rangle$ s senior high school year, but continuing until all scholarships are awarded). These scholarships are renewable for four years. Recipients must maintain full-time status, follow the recommended sequence of Art courses, and maintain a 2.8 GPA.
ELEANOR B. O仓NEILL SCHOLARSHIP is awarded to students majoring in Journalism with an emphasis in advertising or public relations.
THE ELVI S PRESLEY SCHOLARSHI P is given to deserving students majoring in Communication or Music. Students must have a 2.5 GPA.

TALENT BASED SCHOLARSHI PS I N MUSI C are awarded annually to students entering the Rudi E. Scheidt School of Music who demonstrate outstanding musical talent through audition. Applicants must complete an application and schedule an audition. They will be notified of subsequent audition dates. Recipients may renew the scholarship with satisfactory musical and scholastic progress.

TALENT BASED SCHOLARSHI PS IN THEATRE AND DANCE are awarded annually to students entering the University of Memphis Theatre and Dance Department based upon theatrical talent and potential; artistic background; personal character; and intelligence and scholarship. Applicants must complete a standard departmental scholarship application and selected finalists will be notified of dates for audition or portfolio presentation. Recipients must maintain full-time status and a 2.7 GPA .
EMERSON A. ALBURTY AWARDS may be awarded to students who have demonstrated excellence in an area of communication and fine arts at their present high school or college and who will be a full-time major in the College of Communication and Fine Arts. Recipients must have and maintain a 3.0 GPA or its equivalent. Scholarship recipients are to be selected by the dean of the college and representatives of departments within the college.
MEMPHI S-GERMANTOWN ART LEAGUE AWARD is awarded to a student who demonstrated exceptional artistic abilities in any discipline within the Art Department.
KATHY KRI EGER AWARD is awarded to a student majoring in Communication with a concentration in Broadcasting and Electronic Media who has demonstrated academic merit, involvement in programs, and involvement with WUMR Radio Station.
JOE AND LI LA NORTON J OURNALI SM SCHOLARSHIP is awarded to a junior or senior majoring in Journalism.
THE ELI ZABETH AND HAROLD ROBI NSON SCHOLARSHI P is awarded to full-time undergraduate students majoring in a discipline within the College of Communication and Fine Arts with a minimum GPA of 3.0 and a minimum ACT score of 24.
Preference may be given to students from the rural Mid-South and financial need may be considered.
THE SAM PHI LLI PS SCHOLARSHI P is designated for an outstanding Recording Technology major.

THE CHARLIE RICH SCHOLARSHI P is awarded to an outstanding J azz major.
ROBERT KELLEY MEMORI AL SCHOLARSHI PS are open to students enrolled in Music Business at the Rudi E. Scheidt School of Music. Recipients are required to have been in the top $20 \%$ of their high school graduating class or have a minimum cumulative GPA of 3.0. These scholarships may be renewed for four consecutive years.
LI LY AFSHAR GUI TAR SCHOLARSHI P is open to full time undergraduate or graduate students enrolled in the guitar program of the Rudi E . Scheidt School of Music. The recipient must be a talented guitarist with a minimum 3.0 GPA. Non-Tennessee residents and foreign students may be eligible for this scholarship. Preference is given to students who demonstrate extreme financial need.
JOE DeGEROLAMO MEMORIAL SCHOLARSHIP is open to undergraduate and graduate students enrolled in the Jazz program at the Rudi E . Scheidt School of Music. Recipients must demonstrate financial need as well as academic merit.

## THE COLLEGE OF EDUCATI ON

SARAH P. EATON SCHOLARSHI P provides scholarships for elementary education students from Crittenden and St. Francis counties in Arkansas.
THE KI WANI S CLUB OF EAST MEMPHIS MEMORI AL SCHOLARSHIP is presented to a junior, senior, or graduate student majoring in special education and demonstrating high achievement and need. The recipient must be a Shelby County resident and must have a minimum cumulative GPA of 2.50 .
THE HAROLD W. PERRY SCHOLARSHIP is awarded to a student majoring in Special Education and Rehabilitation who, in training as a teacher to work with the multi-handicapped, demonstrates high scholastic achievement, experience, and a willingness to work with the handicapped.
THE COLLEGE OF EDUCATION ALUMNI CHAPTER SCHOLARSHI P is awarded to an Education major. The applicant must demonstrate need and maintain a 3.0 cumulative GPA. The recipient must be a junior or senior.
THE ERNEST C. BALL SCHOLARSHI P is awarded to a student majoring in Education who shows academic ability and financial need.
THE FRANCES I NA STEWART DAVI ES SCHOLARSHI P assists female students pursuing degrees in Family and Consumer Sciences who maintain a minimum GPA of 3.0. Financial need may be considered.
THE ELLEN DAVI ES-RODGERS SCHOLARSHI P assists students pursuing degrees in Early Childhood Education with emphasis on nursery school, kindergarten, and grades 1,2 and 3 . The recipient must maintain a minimum 3.0 GPA.
THE BARBARA TUCKMAN MEMORI AL SCHOLARSHIP is awarded to students enrolled in economics classes. The recipient must maintain an undergraduate minimum cumulative GPA of 3.00 and a graduate minimum cumulative GPA of 3.20 and should be interested in economics education.
THE ELMA ROANE SCHOLARSHI P is awarded to a full-time undergraduate with a minimum GPA of 2.75 and/or a graduate student with a minimum GPA of 3.25 . Recipients must declare a major in HMSE and have a desire to work with young people through teaching, coaching, sports leadership, or athletic training.
J ACK TALLEY SCHOLARSHI P is awarded to a junior or senior majoring in Consumer Science and Education with a concentration in home furnishing. Must be a Tennessee resident and have a minimum GPA of 2.5.
GEORGE W. ETHERIDGE EDUCATION ALUMNI SCHOLARSHI PS Two George W. Etheridge Education Alumni Scholarships will be awarded annually. One award will be made to an undergraduate teaching candidate who has been admitted to the Teacher Education Program. The second scholarship will be awarded to a junior, senior, or graduate non-teaching major. Applicants must be College of Education majors and present evidence of full-time enrollment, outstanding academic ability, financial need, service and leadership.
THE MELVI N A. HUMPHREYS PRIZE FOR STUDENT RESEARCH is awarded to an undergraduate or graduate student pursuing an academic major in the department of Health and Sport Sciences, or who has graduated within the previous year. Recipients are selected on the basis of the best, single and/or first authored scholarly work presented or published in an academic or professional forum.
THE DOCKERY FAROS SCHOLARSHI P is awarded to an undergraduate student majoring in Health and Human Performance, or Sport and Leisure Studies. The recipient must demonstrate an intense desire to pursue a career in coaching. The scholarship is intended for students who are entering their junior or senior years, who have a minimum GPA of 2.5 , and who show leadership abilities in the department of Health and Sport Sciences.

## THE HERFF COLLEGE OF ENGI NEERI NG

THE HERFF ENGI NEERI NG SCHOLARSHI PS provided annually through the Herbert Herff Estate are available to beginning and currently enrolled students who have demonstrated aptitude for engineering. Applications for these scholarships are submitted through the Herff College of Engineering. Recipients must have a competitive academic record.
THE CALVI N STREET MEMORI AL SCHOLARSHIP is awarded to a junior who must have a cumulative GPA of 2.5. The student must be an Engineering Technology major and exhibit academic merit. Scholarship selection is coordinated by the chair of the Engineering Technology Department and Engineering Technology Scholarship Committee.
THE RAYMOND J OHN AND MYRLIE FENNER COLTHARP MEMORI AL SCHOLARSHIP is awarded to an undergraduate Engineering Technology student who has at least a 2.0 GPA, and is in financial need. The recipient must be a citizen of the U.S. THE RICHARD E. WHITMORE SCHOLARSHI P is awarded to a Tennessee resident who is a sophomore, junior, or senior

Engineering student demonstrating both financial need and academic achievement, preferably majoring in construction, and an active member of the student chapter of AGC.
TENNESSEE ROAD BUI LDERS ASSOCI ATI ON provides scholarships for students interested in following a transportation career and construction related to road building. Selection is made by the Tennessee Road Builders Association. The recipient must have a minimum cumulative GPA of 2.0 and be enrolled in a Civil Engineering curriculum.
HOYT B. WOOTEN SCHOLARSHIP is awarded to students in Electrical Engineering. The recipient must be a junior or senior and demonstrate academic ability and financial need.
THE PI CKERI NG MEMORI AL SCHOLARSHI P is awarded to students majoring in Civil Engineering. A minimum cumulative GPA of 3.0 is required.
THE ASSOCI ATED GENERAL CONTRACTORS OF AMERI CA SCHOLARSHI PS are awarded to students studying the field of construction within the Civil Engineering department. Selections are made based on academic merit.
THE LEON D. CASH SCHOLARSHIP is awarded to juniors and seniors majoring in Electrical Engineering. A minimum cumulative GPA of 2.50 is required.
THE JOE RUTHERFORD MEMORI AL SCHOLARSHI P (CI VI ENGI NEERI NG) is awarded to an undergraduate student majoring in Civil Engineering with a 3.0 GPA. The recipient must be a U.S. citizen and a resident of Shelby County.
THE CLARENCE AND MAE WEI SS ENGI NEERI NG SCHOLARSHI P is awarded to a student majoring in Engineering. Preference may be given to Chemical Engineering students should the major be established at the University of Memphis. The scholarship may be renewed by the college.
ENGI NEERI NG SCHOLARS SCHOLARSHI P is awarded to an Engineering student selected by the Dean.
PAUL Y. I SBELL MEMORI AL SCHOLARSHI PS are awarded to Engineering Technology students majoring in manufacturing technology.
MAXWELL F. MCDADE, SR. MEMORI AL SCHOLARSHIP is awarded to students majoring in Civil Engineering.
DON FARLEY MEMORI AL ENDOWMENT FUND SCHOLARSHIP is awarded to a Civil Engineering student who demonstrates academic merit and financial need.
THE BODI NE SCHOLARSHI P is awarded to juniors or seniors in Electrical Engineering.
SHELBY-SKI PWI TH SCHOLARSHI P is awarded to a student in Mechanical Engineering.

## LOEWENBERG SCHOOL OF NURSI NG

THE SHARON L. HANSARD MEMORI AL SCHOLARSHIP is awarded to a student enrolled in U of Mes School of Nursing. The applicant must be of high moral character and dedicated to service of others, possess academic ability, and have a need for financial assistance to attend $U$ of $M$.
THE NURSI NG ALUMNI SCHOLARSHI P is designed to assist deserving students in pursuing a Nursing career. The applicant must maintain a 3.0 GPA or better.
THE ALLENE FARRIS MEMORI AL SCHOLARSHIP is awarded to Dyer Country Nursing students based on academic merit.
REGI NA MONTESI MEMORI AL SCHOLARSHI P is awarded to a registered nurse attending the University of Memphis to fulfill prerequisites for a B.S. in Nursing. The student must be a U.S. citizen, have a minimum cumulative 2.5 GPA, and possess academic ability.
WI LLI AM A. AND RUTH F. LOEWENBERG SCHOLARSHIP is designed to assist students in pursuing a Nursing career. The student must be a U.S. citizen, have a minimum 2.5 GPA and show financial need.
SAI NT FRANCIS HOSPITAL AUXI LI ARY ENDOWED SCHOLARSHIP is awarded to a full time junior nursing student with a minimum cumulative GPA of 3.00.
TENNESSEE NURSES $\Leftrightarrow$ ASSOCIATION SCHOLARSHIP is presented to a last semester Nursing student who is a resident of District 1, which includes Shelby and Fayette Counties. The student must be in good standing academically. Members of TNA and TSNA are given preference.
THE LEITIE PATE WHITEHEAD FOUNDATI ON SCHOLARSHI PS are awarded to Nursing students who possess academic ability, high moral character, and financial need. Applicants must be U.S. citizens.
THE NATI ONAL HEALTHCARE SCHOLARS FOUNDATI ON SCHOLARSHIP is awarded to minority students pursuing a
baccalaureate degree in nursing who have a financial need and are in good academic standing.

## UNI VERSITY COLLEGE

THE E.A. HAMI LTON SCHOLARSHI P provides financial assistance to students who are firefighters or dependents of firefighters. THE UNI VERSI TY COLLEGE ALUMNI CHAPTER SCHOLARSHI PS are awarded to juniors or seniors enrolled in the University College, based upon financial need. A minimum GPA of 2.50 is required.

## SPECI AL SCHOLARSHI PS

AFROTC 2, 3, AND 4 YEAR COLLEGE SCHOLARSHI PS cover full tuition, laboratory fees, reimbursement for textbooks and provide a nontaxable $\$ 200$ per month subsistence allowance for those enrolled in the Aerospace Studies program. High school
applicants must have at least a 2.5 GPA on a 4.0 scale, and a minimum ACT composite score of 24 ( 1000 SAT). The University of Memphis students may compete for 2 or 3 year full-tuition scholarships based on their cumulative GPA in all college work attempted. GPA requirements vary according to academic major.
AFROTC PROFESSI ONAL OFFICER COURSE INCENTI VE SCHOLARSHIP is available to ANY contract cadet enrolled in the Professional Officer Course who earned a minimum of 2.35 GPA for the most recent term completed. This scholarship pays $\$ 1500$ per semester toward tuition and $\$ 225$ per semester for books. Students also receive a nontaxable $\$ 200$ per month subsistence allowance. Contact AFROTC for information on how to join the Professional Officer Course and become eligible for this scholarship. AFROTC EXPRESS SCHOLARSHIP is designed for outstanding minority and non-minority University students pursuing degrees in areas critical to the Air Force. Students must have a minimum college GPA of 2.65 to apply. Qualified minority students may apply regardless of academic major; non-minority students should contact the department for academic major requirements. Scholarships are available for 2 or 3 years, and cover full tuition, books and fees. Students also receive a nontaxable $\$ 200$ per month subsistence allowance.
ARMY ROTC SCHOLARSHI PS are 4-, 3-, and 2-year scholarships for students who desire to serve in the U.S. Army as officers. Offered by the U.S. Army, these scholarships pay tuition, provide an allowance for books and incidental fees, and pay up to $\$ 1,500$ a year for subsistence.
ARMY ROTC MI NORITY SUPPLEMENTAL SCHOLARSHI PS are available to minority students attending the University of Memphis on an Army ROTC scholarship including Black, Oriental, Hispanic, American Indian, or other ethnic backgrounds which meet Federal minority requirements.
ARMY ROTC SUPPLEMENTAL SCHOLARSHI PS are attractive supplements awarded to high ability ROTC students who are attending the University of Memphis on an Army ROTC scholarship. The scholarships are awarded based on academic merit and leadership potential. The scholarship funds can be used toward any school-related expense.
ARMY ROTC LEADERSHIP SCHOLARSHI P PROGRAM offers scholarships to students who attend the University of Memphis and enroll in the Army ROTC program. The scholarships are awarded annually based on demonstrated leadership and academic merit. The scholarships pay full in-state tuition and are restricted to full-time undergraduate students. The scholarships are renewable for up to 8 semesters for four-year students, 6 semesters for three-year students, and 4 semesters for two-year students.
NAVY ROTC SCHOLARSHI PS pay for tuition, textbooks, fees of an instructional nature and a subsistence allowance. Four-year scholarships are awarded annually based on a competitive selection process in which consideration is given to such factors as high school records, college board scores, extracurricular activities, and leadership qualities. Students who do not receive a four-year scholarship through the national scholarship competition but are sincerely interested in the challenge of becoming a Navy or Marine Corps Officer may enroll as a College Program Midshipman. These students do not initially receive financial benefits but they are eligible to compete for scholarships that provide tuition, textbooks, fees of an instructional nature and a subsistence allowance for the remaining three years of their degree program. The Navy also has a two-year scholarship program available to students beginning their junior year in college.
THE J AKE FONDREN SCHOLARSHI P recipient must be a U.S. citizen and an undergraduate of good academic standing who demonstrates financial need and exhibits a definite interest in golf.
THE CURTIS PERSON GOLF SCHOLARSHIP is awarded to undergraduates, either male or female, who exhibit an outstanding talent for golf. Recipients must be U.S. citizens, in good academic standing, and demonstrate financial need.
THE COCKROFT LAUGHLI N BASEBALL SCHOLARSHI P is awarded to a student athlete who is nominated by a chartered Tennessee Fellowship of Christian Athletes Chapter, a Tennessee resident, and a member or prospective member of the University of Memphis saseball team.
DOUG GRANGER MEMORIAL SCHOLARSHI P is awarded to a member of the baseball team who is a scholar/athlete. Recipient must exemplify the fierce competitiveness and leadership qualities which were attributes of the late Doug Granger.
THE $U$ of M HANDBALL SCHOLARSHI $P$ is given to students participating on the $U$ of $M$ Handball Team. Recipients are selected on the basis of athletic ability and leadership.
BAI LEY PRICHARD MEMORI AL RACQUETBALL SCHOLARSHIP assists student athletes on the University of Memphis
Racquetball Team. The recipient must maintain a 2.5 minimum GPA.
HELEN HAMI LTON PERSON MEMORI AL GOLF SCHOLARSHI P provides assistance for female undergraduate students who are talented golfers and who maintain a minimum GPA of 2.5.
C. HILLMAN ROBBI NS MEMORI AL SCHOLARSHI P assists students who are members of the University of Memphis Golf Team.

THE AVRON FOGELMAN BASEBALL SCHOLARSHIP is awarded to members of the University of Memphis baseball team.
THE TIM McCAGE MEMORI AL SOCCER SCHOLARSHIP is awarded to a freshman from the West Tennessee area who is a
member of the University of Memphis Soccer Team.
THE CHARLIE MULWEE SCHOLARSHIP is awarded to members of the $U$ of $M$ Handball Team. Recipients must be in good academic standing.

## GRANTS

The following grants are need-based programs that do not require repayment. Grants are only available to students who are pursuing their first bachelor $\geqslant$ s degrees.
FEDERAL PELL GRANT
The Federal Pell Grant program provides awards ranging from $\$ 400$ to approximately \$4,000 based the Expected Family Contribution and the enrollment status of the student. The highest awards are for full-time
attendance (12+ credit hours per semester). A Pell Grant is limited to the equivalent of two full-time semester awards during an academic year plus the summer terms.

## FEDERAL SUPPLEMENTAL EDUCATI ONAL OPPORTUNITY GRANT

The Federal Supplemental Educational Opportunity Grant program provides awards ranging from $\$ 500$ to $\$ 4,000$ to Pell Grant eligible students based on their financial need - the difference between the total student budget and the Expected Family Contribution. Initial awards are for fall and spring semesters. Summer awards are only available if there are funds remaining.

## THE TENNESSEE STUDENT ASSI STANCE AWARD PROGRAM

The Tennessee Student Assistance Program is available to residents of the State of Tennessee. To qualify, students send in the Free Application for Federal Student Aid early enough to be processed by May 1 preceding the start of a fall semester. The student must be Pell Grant eligible. Award amounts depend on annual funding and are for fall and spring semesters only.

## Loans

Each of the federal loan programs require at least half-time enrollment (six credit hours). Payments can be deferred for continued half-time enrollment and canceled for specific types of employment after graduation (for example, teaching). Additional deferment/cancellation information is available from the Student Financial Aid Office.

## FEDERAL PERKI NS LOAN PROGRAM

The Federal Perkins Loan program is a need-based program that provides low interest loans for up to $\$ 4,000$ per academic year. These loans are awarded to students that have the highest financial need - the difference between the total student budget and the Expected Family Contribution. The interest rate is 5\% annually and payments begin nine (9) months after the student is no longer enrolled at least half-time. Initial awards are for fall and spring semesters. Summer awards are only available if there are funds remaining.

## FEDERAL DI RECT SUBSI DI ZED STUDENT LOAN

The Federal Direct Subsidized Loan is a need-based program that provides low interest loans. Loan amounts are awarded based on the students financial need - the difference between the total student budget and the Expected Family Contribution. Payments on subsidized loans are deferred until six (6) months after the student is no longer enrolled at least half-time.

## FEDERAL DI RECT UNSUBSI DI ZED LOAN

The Federal Direct Unsubsidized Loan is a non-need based program that provides low interest loans. Although this program is not based on financial need, a studentss eligibility for subsidized loan must be determined before an unsubsidized loan can be approved. Interest payments on unsubsidized loans begin within 60 days of the disbursement of the loan. Interest can be deferred while the student is enrolled at least half-time but is added to the loan principal in a process called capitalization.

## DI RECT LOAN AMOUNTS

For students who meet the federal definition of being dependent (refer to the FAFSA for this definition), the maximum annual loan amounts including fall, spring and summer for a subsidized loan plus an unsubsidized loan are based on the academic year of the student:

$$
\begin{array}{lc}
\text { Freshman } & \$ 2,625 \\
\text { Sophomore } & \$ 3,500 \\
\text { Junior/Senior/ } & \\
\text { 2nd Bachelor s. } & \$ 5,500
\end{array}
$$

For students who meet the federal definition of being independent (refer to the FAFSA for this definition), the following additional maximum annual unsubsidized loan amounts including fall, spring, and summer are available based on the academic year of the student:
Freshman/
Sophomore \$4,000
Junior/Senior/
2nd Bachelors \$5,000
The amount of subsidized loan cannot exceed the students financial need when combined with any other financial aid programs received by the student, and the amount of subsidized plus unsubsidized loan cannot exceed the total student budget when combined with any other financial aid programs received by the student.

## ENTRANCE AND EXIT I NTERVIEWS

First-time borrowers are required to have an entrance interview prior to the disbursement of a Direct Loan
in order to familiarize them with the terms of repayment and their rights and responsibilities. Both Direct Loan and Perkins Loan borrowers are required to have an exit interview when they graduate or discontinue attendance at the University of Memphis.

## FEDERAL DI RECT PLUS LOAN

The Federal Direct Plus Loan is a non-need based low interest loan available to parents of students who meet the federal definition of being dependent (refer to the FAFSA for this definition). To apply, students or parents complete a loan request form obtained from the Student Financial Aid Office. Approval for this loan requires a credit check. The maximum loan amount is the difference between the total student budget and any other financial aid being received by the student. Principal and interest payments begin within 60 days of the disbursement of the loan. PLUS loans are available for fall, spring, and summer.

## TENNESSEE TEACHI NG SCHOLARS PROGRAM

The Tennessee Teaching Scholars Program is a forgivable loan up to $\$ 1,500$ per academic year for college juniors, seniors, and post bachelores degree students admitted to a state-approved teacher education programs at an eligible Tennessee post-secondary institution. The student must pledge to teach at the public preschool, elementary, or secondary level in Tennessee one year for each year the award is received. Applications and information about this program may be obtained from the Tennessee Student Assistance Corporation, the University of Memphis College of Education, or the Scholarship Office.

## INSTITUTI ONAL/ PRI VATE LOAN PROGRAMS

The University has privately funded loan programs to meet the needs of students who may not be eligible for the federal or state loan programs, or who can repay within a short time.

## FREEMAN LOAN PROGRAM

The Freeman Loan Program was established for the sole purpose of providing worthy/needy students loans to help pay a part of their educational costs when other financial assistance is not available. Eligibility for this low interest, long-term loan program is based upon satisfactory academic progress and financial need. The application for this program is the FAFSA, which is available from the Student Financial Aid Office.

## C.I.O.S. LOAN

The C.I.O.S. Loan program is a privately funded non-need based program to help students meet expenses. Full time students ( 12 credit hours undergraduate or 9 credit hours graduate) who have a minimum GPA ( 2.5 undergraduate; 3.0 graduate), have completed at least one semester at the University of Memphis, and have not previously defaulted on a student loan are eligible to borrow up to $\$ 1,000$ per semester, $\$ 2,000$ per academic year, including summer. The interest rate is $5 \%$ and payments begin six (6) months after ceasing full-time attendance at the University of Memphis. This loan program requires an application that is available from the Scholarship Office.

## GENERAL EVERETT R. COOK ARNOLD AIR SOCI ETY LOAN

This loan fund was established to provide financial assistance in the form of short-term loans for students enrolled in the Professional Officer Course of the Air Force Reserve Officers Training Corps. Applications for this loan are available from Air Force ROTC.

## GENERAL RALPH H. WOOTEN LOAN

This loan fund was established for the purpose of providing low interest educational loans to students enrolled in the Air Force Reserve Officers Training Corps. Applications for this loan are available from Air Force ROTC.

## UNI VERSI TY BOOK LOAN

The University Book Loan is a $15 \%$ interest-bearing loan, with a maximum loan amount of $\$ 250$. Any amount approved will be credited to the student>s Tiger Fund\$ Account and must be used for textbooks and other educationally related materials. This loan (interest plus principal) must be repaid by November 1 of the fall semester, April 1 of the spring semester, and by August 1 of the summer semester. Applications for this loan are available from the Bursares Office.

## STUDENT EMPLOYMENT

The University of Memphis offers two programs of on-campus employment. Federal Work-Study is a needbased financial aid program. The regular student employment program is not need-based and is available to any student enrolled at least half-time. J ob openings for both programs are posted in the Student Employment Office.

## FEDERAL WORK-STUDY

Federal Work-Study (FWS) is a need-based financial aid program that provides employment opportunities. FWS awards are based on the student $\geqslant$ s financial need - the difference between the total student budget
and the Expected Family Contribution. The amount awarded is the maximum the student can earn during the fall and/or spring semesters, or during the summer terms. Initial awards are for fall and spring semesters. Summer awards are only available if there are funds remaining. FWS earnings are excluded when completing the FAFSA.

## REGULAR STUDENT EMPLOYMENT

The regular student employment program provides employment opportunities regardless of the student $\gg$ financial need. Earnings under the regular student employment program are included when completing the FAFSA.

## I NTERNATI ONAL STUDENTS

Pursuant to federal regulations of the Immigration and Naturalization Service, there is a restriction on the number of hours students on certain visas may work. International students who have questions regarding student employment should contact the International Student Advisor.

## Return of Funds/ Earning Your Financial Aid

The Higher Education Amendment of 1998 established the concept that federal financial aid must be earned through class attendance. A student has not earned $100 \%$ of his/her financial aid until he/she has attended at least $60 \%$ of the term. If a financial aid recipient totally withdraws on or before the $60 \%$ point of the term, there is a portion of the aid that has not been earned (the date through which a student has attended $60 \%$ is published in each term's Schedule of Classes. The unearned portion of the aid is equal to the percentage of the term remaining at the point of withdrawal and must be returned to the Department of Education. The unearned portion is repaid by both the student and the school based on a federal formula. The school can use any refund generated by the withdrawal to pay the potion it owes back. However, depending on the time of withdrawal, the student may also be responsible for repaying a portion of his/her fees that had been previously paid by the financial aid.

Students who withdraw though the 60\% point of the term will receive a letter indicating how much they are responsible for repaying to the federal financial aid programs and to the University of Memphis. The following example illustrates the Return of Funds:
A student withdraws on the tenth day of a term that is 100 days long. He/she has received $\$ 2,000$ in federal grants which paid the fees of $\$ 1,500$ and gave the student a balance check of $\$ 500$.

## Calculating the Unearned Financial Aid

Length of Term = 100 days
Days Not Attending $=90$ (100-10)
Total Financial Aid $=\$ 2,000$
Total Fees = \$1,500
Percent of Aid Unearned $=90$ ( 90 divided by 100)
Total Unearned Aid $=\$ 1,800$ ( $\$ 2,000 \times 90 \%$ )

## Calculating the Repayments

Each students balance is calculated based on the date of withdrawal, the amount of financial aid received, and whether the programs of financial aid received include grants or loans. If a student must totally withdraw, it is best to attend class through $\mathbf{6 0 \%}$ of the term to avoid any financial penalty.

A balance is calculated based on the adjusted fees and reduced grants. The student is given a pro rata adjustment of the fees (refer to Refund of Registration Fees in this Bulletin):
Adjusted fees $=\$ 150[\$ 1,500-\$ 1,350(\$ 1,500 \times 90 \%)]$
Adjusted grant $=\$ 200$ ( $\$ 2,000$ original grant - $\$ 1,800$ unearned grant)
The student is due a $\$ 50$ refund from the University based on the difference between the adjusted fees ( $\$ 150$ ) and the adjusted grant ( $\$ 200$ ).

The University must repay the lesser of the total unearned financial aid, or the total fees multiplied by the percent of aid unearned. Since total fees ( $\$ 1,500$ ) are less than total aid ( $\$ 2,000$ ), the amount to be repaid is based on the total fees. Total financial aid to be repaid by the University $=\$ 1,350$ [ $\$ 1,500$ (fees) $x$ 90\%].

The student must repay the portion of the unearned aid not repaid by the University. Federal regulations
allow unearned grant to be reduced by half. Students portion of unearned grant $=\$ 450(\$ 1,800$ unearned - $\$ 1,350$ repaid by the University).
Grant to be repaid by student $=\$ 225$ ( $\$ 450 \times 50 \%$ ).
The Higher Education Amendments of 1998 specify the following order in which any unearned amounts are to be returned to Title IV financial aid programs: Federal Direct Loan Programs (unsubsidized then subsidized); Federal Perkins Loan Program; Federal Direct PLUS loans; Federal Pell Grant Program; Federal SEOG Program; any other programs funded by Title IV including the Tennessee Student Assistance Program; other federal, state, private or institutional aid programs. Any amount remaining after the applicable programs have been fully repaid is returned to the student.

## SATI SFACTORY ACADEMIC PROGRESS POLICY FOR FINANCI AL AID RECI PIENTS

All students who receive federal or state financial aid must be enrolled in a program leading to a degree and must meet federal and institutional standards for academic progress in order to establish and retain aid eligibility. Students receiving athletic or other University administered awards must also meet the satisfactory academic progress standards that have been established by awarding entity.

Academic progress for federal and state financial aid programs is based on three measures: cumulative grade-point average, completion rate based on credit hours completed compared to attempted, and a maximum time frame for degree completion. The following describes the Universitys standards for each of these three measures, and when these standards are reviewed:

## I. Cumulative Grade-Point Average

The following standards apply to the combined transfer/University GPA.
Students must meet the following minimums which are consistent with the Universitys standard as published in this Bulletin. Quality hours are those credits used to compute the grade-point average (GPA) including grades of $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$, or F and transfer credits with grades of incomplete. The first attempt of a course that is repeated is excluded for the quality hour computation.

| QUALITY HOURS | MINIMUM GPA |
| :--- | :--- |
| 14.99 or less | No Minimum |
| $15.00-29.99$ | 1.40 |
| $30.00-50.99$ | 1.70 |
| $51.00-67.99$ | 1.90 |
| $68.00+$ | 2.00 |

## II. Completion Rate

All students are required to complete a minimum of $66 \%$ of the credit hours attempted at the University of Memphis. Courses with a grade of $\geqslant \mathrm{D}\rangle$ or better count as completed. Credit hours attempted included audits, incompletes, withdrawals, and repeated or failed classes.

## III. Probation

Students whose number of credit hours completed is below $66 \%$ of credits hours attempted, but is at least $50 \%$,
will be placed on probation the first time this occurs.

## IV. Suspension

Students whose number of credits completed is below $50 \%$ of credits attempted, or whose credits completed were below $66 \%$ and whose completion rates do not improve $66 \%$ by the next review, will be suspended from eligibility for grants, loans (with the exception of emergency, book LOANS), and Federal Work-Study employment.

## V. Maximum Time Frame

The maximum time frame for the completion of a first degree is limited by federal regulation to $150 \%$ of the published length of the degree program. Most undergraduate programs at the University
of Memphis are 120 hours. The maximum number of hours during which a student is eligible to receive financial aid is 180. The 180 hours include transfer hours and all attempted hours. Up to 30 hours of required Transitional Academic Studies courses are excluded from the maximum time frame.

## VI. Review of Progress Standards

A. GPA is reviewed upon submission of a financial aid application, and at the end of each spring semester.
B. Completion Rate is reviewed annually at the end of each spring semester.
C. Time Frame is reviewed at the end of each fall and spring semester, and at the end of the summer sessions.

## VI I. Notification/ Appeals

Students whose financial aid eligibility is suspended as a result of failure to meet one or more of the standards of satisfactory academic progress will be sent a letter from the Student Financial Aid Office including a Satisfactory Academic Progress Appeal form. In order for an appeal to be approved, it must be based on documented extenuating circumstances. For the GPA and completion rate standards, students can also restore their aid eligibility by improving their academic performance enough to meet the standard (s).

## VIII. Financial Aid Fresh Start

Students accepted under the Academic Fresh Start Program will have their GPAs reviewed based only on courses completed at the University of Memphis.

## REGI STRATI ON AND STUDENT RECORDS

## REGI STRATI ON

All continuing students are expected to register during November for the following Spring semester and in April for the following Summer OR Fall. Students are responsible for becoming familiar with the deadlines, rules, and regulations related to registration.

## Student Records

The Office of the Registrar provides grade reporting and transcript services. Current semester grades may be obtained on TIGERWEB at www.tigerweb.memphis.edu.

The University of Memphis requires written authorization from the student to release transcripts. Transcripts may be requested in person, room 003, Wilder Tower, by mail, or by FAX (901) 678-3249. Include the following information with your request: complete name, former names, Social Security Number, birth date, current address, first and last years of attendance, address (es) where transcript is to be mailed, number of copies to each address. Sign and date your request. There is no fee for transcripts; however, a transcript will not be released if student has not satisfied all obligations to the University. If you have any additional questions, please contact Transcripts Office at (901) 678-3927.

The University is required by state law to withhold grade reports and transcripts from students who have outstanding financial obligations to the University.

## Student and Faculty Services

Student Information Services provides services to students related to their current term enrollment and their personal biographic/demographic data. These services include: schedule adjustments (drop/add/withdrawal), name changes, address changes, etc. This office, room 003, Wilder Tower is open some evenings and weekends.

## Veterans Services

Mission: The Office of Veterans Services, room 003, Wilder Tower, provides assistance for eligible National Guard/Reserves, veterans and/or dependents who enroll at the University of Memphis and who make application for: (1) Programs of Education or Training, (2) VA Tutorial Services. Other assistance includes: liaison with Veterans Administration Regional Office, counseling, and counseling referral for personal, family, career, financial, and educational problems.
Applications for VA Benefits: Those who will be using VA educational assistance while enrolled at the University of Memphis should contact the Office of Veterans Services. They should also be prepared to
furnish the following items as applicable:

1. The number 4 original or copy of the DD214 or other armed forces separation papers.
2. Copy of Delayed Enlistment Contract.
3. Copies of marriage licenses and children $\geqslant$ s birth certificates.
4. Copy of final divorce decree if either veteran or spouse has been previously married.
5. VA file number if different from social security number.

Advance Pay: Advance payment is available for eligible veterans and dependents who plan to enroll on at least a half-time basis. Applications will be accepted in the Veterans Services Office as early as 120 days before the term begins but no later than 45 days before the beginning entry. Generally, the advance pay deadline for the fall semester is around J uly 15, while spring semester deadline is around November 15. Advance pay checks include an allowance for the month or fraction thereof in which the course begins and the allowance for the following month. Advance pay checks are mailed to the school for delivery to the student at registration. Initial applicants who do not apply for advance pay may expect their check to be mailed to their home within six to eight weeks after registration.
Enrollment Status: For VA benefits during the regular terms (Fall and Spring), 12 semester hours constitute a full-time load for undergraduate students; 9 hours is full-time for graduate students. However, training time for summer session at the undergraduate and graduate level is based on the number of semester hours attempted per term. The Veterans Administration places restrictions on those who receive veterans educational benefits. Some of these restrictions includes: (1) regular class attendance, (2) satisfactory academic progress, and (3) adherence to a specific degree plan.
Degree Plan: Only courses that are required for the degree and major may be certified for VA pay. VA will not pay for repeat courses if the grade already earned is accepted by the $U$ of $M$ and will fulfill graduation requirements toward the declared degree and major (even if the course was taken at another institution with or without use of the G.I. Bill). VA will not pay for elective courses in excess of those needed to meet graduation requirements.
Although advisors are provided for veterans, this assistance does not relieve students of the responsibility for fulfilling all VA and University requirements.
Certification: Enrollment certifications are mailed and/or electronically submitted to the appropriate VA Regional Office upon receipt of the Veterans Request for Certification Form. Students are required to submit this form to the Veteran Services Office at the University of Memphis each semester. Students will be certified on a term-by-term basis. Pre-certification will be done only when a request for advance pay is made.

## STUDENT DEVELOPMENT

"Lifelong Learning and Success!" Student Development offers co-curricular, educational programs and individualized services to help student be successful and health in all aspects of their lives. Students seeking to enroch their educational experience at the UofM, will find numerous opportunities within Student Development to acquire and enhance practical academic and life success skills. Some of the opportunities include wellness education and health care, personal counseling and stress management training, career exploration and development, internship and job placement. tutoring and academic skills development, accessibilityh services, leadership skills coaching, interpersonal effectiveness training, and information and referral services. The UofM knows that academic and career success are inextricably tied to the student's wellbeing and effectiveness in intellectual, personal, social, emotional, physical, spiritual, financial, and family arenas. Student Development works in conjunction with Academic Affairs and Student Life to offer a broad array of programs, services, and experiences to address the needs of the whole student.

## Adult and Commuter Student Services

Adult and Commuter Student Services, room 424, University Center, serves adult students who are beginning or returning to school after some time in the workplace or home, and traditional and nontraditional age commuter students.

Located in the University Center, Adult and Commuter Student Services maintains the Adult Information Center, a resource area where services and special programming for this student population is posted regularly. Information on the Adult Scholarship program is also available.

The Adult Student Association, a student organization geared toward the social needs of the returning student is maintained through Adult and Commuter Student Services. This organization provides an informal way for students to receive support during their educational experience and to express concern about any
particular issues that may arise. Lifelong Learning with Friends is the motto of the Adult Student Association, which serves as a network for the returning student.

## Psychological Counseling

The psychological counseling component provides students with the opportunity to discuss and explore any concerns and feelings that are of importance to them. Problems in relationships, feelings of loneliness or inadequacy, family or marriage difficulties, depression, the inability to concentrate or study, or simply feeling the need to talk things out are all examples of concerns that are dealt with through psychological counseling. The staff is professionally trained and experienced in working with a wide variety of student concerns through individual and group counseling, testing, programs and workshops, and referral to additional service centers on and off campus. The counselors subscribe to the confidentiality policy in the ethics and guidelines established by the American Psychological Association.

## Career Counseling

Career Counseling affords students an opportunity to explore self, career options, obtain information relating academic majors to career choices, evaluate employment outlook information, and develop realistic career goals. Through counseling, computer assistance and testing, each person is given the opportunity to make a well-considered career choice.

## The Testing Center

The Testing Center provides testing services for University and professional school admissions purposes as well as for licensure and certification in a variety of professional areas. The center also offers a variety of personality and psychological tests.

## Educational Support Program

The Educational Support Program (ESP) provides free tutorials through six learning centers: Academic Enhancement (General Education courses, study, reading, test-taking strategies), English (writing across the curriculum), Mathematics (math for all courses), Business (all courses in those majors), Foreign Language (Spanish and other languages), Engineering/Engineering Technology (all majors). Students must be enrolled in the course at U of M for which the tutorial is requested. Tutors are available for both individual and group study sessions. Workshops are regularly presented and can be scheduled for classes and organizations.

## Student Disability Services

Student Disability Services provides information and support services that enable students with disabilities to take full advantage of the educational opportunities at the University of Memphis. Specific services are determined individually and are based on functional limitations caused by disability. Services include pre-enrollment planning; specialized orientation; early registration; adapted campus housing; academic aids such as readers, note takers, and interpreters; test accommodations; alternate format text and print materials; assistive computer technology and other special aids; assistance arranging classroom accommodations; supportive guidance and counseling; and liaison with state rehabilitation agencies. Some services require advance notice to arrange.

All persons who have a permanent disability are encouraged to register with Student Disability Services and to provide this office with medical documentation of the functional limitations related to their disability. This registration entitles qualified students with disabilities to the legal rights provided under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Given adequate time, experienced staff will provide assistance in evaluating individual needs and in developing a plan for appropriate disability services. For more information, please contact the Director of Student Disability Services.

## Career And Employment Services

Career and Employment Services (C\&ES) helps prepare students and alumni with proficient job search skills and assistance with locating employment upon graduation with business, education, government, industry, and non-profit organizations. Services provided include: on-campus interviews with employer representatives; job listings of employment opportunities on the web through MonsterTRAC and Memphis Chamber of Commerce as well as a resource library; and on-line job referral services allowing employers to view resumes of students utilizing "eRecruiting" software.
In addition, C\&ES co-sponsors three Career Fairs annually. The fairs occur in the Fall and Spring semesters which include: a Corporate and Government Career Fair, the Graduate School Fair, co-sponsored with the U of M Graduate School and College of Arts and Sciences, and the Education Fair co-sponsored with The College of Education.
Individual counseling is available to students needing assistance with resumé writing, cover letters, and
their job search. Class presentations are done throughout the fall and spring semesters on topics including: Resumé Writing, Successful Interviewing Skills, Dress for Success, Negotiation Job/Salary Offers, and Proper Dining Etiquette.
All services are offered free of charge. For purposes of interviewing, registration for services through eRecruiting is required and it is recommended that seniors and graduate students register three semesters prior to graduation. C\&ES is open Monday and Tuesday 8:00 a.m. - 5:00 p.m., and Wednesday through Friday 8:00 a.m. - 4:30 p.m. Facilities are located in 400 Wilder Tower.
Off-campus part-time employment opportunities for currently enrolled students are also coordinated in C\&ES and these openings can be viewed in 400 Wilder Tower.
http://www.people.memphis.edu/~univplace/

## Student Health Services

Location and Hours: Student Health Services is located on the main campus at 3770 DeSoto Avenue, south of McWherter Library. It is open Monday through Friday, 8:00 a.m.- 4:30 p.m. throughout the year. The facility is closed evenings, weekends, holidays, and announced University Holidays. Early evening hours may be available Monday through Thursday, 4:30-6:00 during the Fall and Spring semesters.

Eligibility for Care: Medical services are available only to students, faculty, and staff members. Each visit to Student Health Services requires that the individual present his/her validated identification card before treatment, except in cases of emergency.

Services: Student Health Services is staffed with a physician, a nurse practitioners, registered nurses, LPN, a Laboratory and X-ray technologist, health educator, and various administrative support personnel. Student Health Services major emphasis is on the diagnosis and treatment of short-term, acute, medical illnesses on an outpatient basis. Ones family doctor should continue to be the primary source for medical care. A Family Planning Clinic is provided by the Memphis and Shelby County Public Health Department at Student Health Services every Wednesday, Thursday, and Friday. The Family Planning Clinic provides birth control information, devices, medications, and examinations (by appointment). First aid only is available for visitors to campus and for workman s compensation injuries.

Charges: Routine diagnosis and treatment of illnesses and injuries, X-rays, most laboratory analyses, and specialized clinics are free of charge for students. Faculty/Staff personnel are seen for nominal office and laboratory/X-ray charges. When more in-depth evaluation or treatment is needed the patient is referred off-campus, and the patient is responsible for all charges incurred for these services. The patient will be asked to pay Student Health Services directly prior to the performance of the specialized lab tests. Payment may be made by cash, check, MasterCard/Visa credit card or Tiger Fund\$. Charges for Family Planning Clinic are on a sliding fee scale basis, and are separate from Health Services charges (i.e., cash or checks only).

Health Insurance: The Tennessee Board of Regents has authorized a private insurance company to provide health insurance for students. Students may pick up a brochure about the insurance from Student Health Services. The student pays the insurance company directly for the policy.

## STUDENT LIFE

Student Life offers students a wide variety of services and learning experiences outside the formal classroom setting. Included in the area of Student Life are the departments of Campus Recreation and Intramural Services, Minority Affairs, Residence Life and Dining Services, Student Judicial and Ethical Programs, Student Leadership and Involvement, and the University Center. The Office of Student Life also serves as liaison with the campus religious centers and as advisor to the Student Government Association. Information may be obtained from the Office of the Dean of Students, room 443, University Center.

## Child Development Center

Childcare services are available for the University of Memphis students. Space is available on a first come/first serve basis. The center accepts children between the ages of 30 months and 12 years.

During the fall and spring semesters, the center's hours are Monday through Thursday, 7:30 a.m. to 9:00 p.m., Friday, 7:30 a.m. to 4:30 p.m. and Saturday 8:30 a.m. to 12:30 p.m. The summer semester operating hours are Monday through Thursday from 6:30 a.m. to 9:00 p.m. and Friday from 6:30 a.m. to 4:30 p.m. Hours of operation may vary due to enrollment. For additional information, come to the Child Development Center located at 3875 Tiger Paw South (Northeast of the Central Avenue Parking Lotadjacent to the University town-home community).

## Emerging Leaders

This student development program consists of academic courses, structured activities, and experiences that are designed to develop and refine participants leadership abilities. While all students are eligible to apply for participation in the program, participation is mandatory for students who have Emerging Leadership Scholarships.
Emerging Leaders are required to take leadership courses for credit, hold offices in diverse student organizations, serve as mentors for underclassman students, and remain active in volunteer service. Upon completion of the program, students receive official documentation on leadership transcripts, which confirm extensive involvement and instruction in the program.

## General Fraternities and Sororities

Thirteen international fraternities and eleven international sororities are active on the University of Memphis campus. The University strives to maintain a strong Greek community through coordination of Greek activities provided by the Office of Greek Affairs in areas of social service, scholarship, spiritual life, social development, and sense of leadership.

Fraternities: Alpha Phi Alpha, Alpha Tau Omega, Kappa Alpha Order, Kappa Alpha Psi, Kappa Sigma, Lambda Chi Alpha, Omega Psi Phi, Phi Beta Sigma, Phi Gamma Delta, Pi Kappa Alpha, Pi Kappa Phi, Sigma Alpha Epsilon, Sigma Chi, and Sigma Phi Epsilon.

Sororities: Alpha Delta Pi, Alpha Gamma Delta, Alpha Kappa Alpha, Delta Gamma, Delta Sigma Theta, Kappa Delta, Phi Mu, Pi Beta Phi, Sigma Gamma Rho, Sigma Kappa, and Zeta Phi Beta.

## Campus Recreation and Intramural Services (CRIS)

The Campus Recreation and Intramural Services (CRIS) program is designed to fulfill a vital educational function and provide students, faculty, staff, and other members of the University community the opportunity to participate in a variety of activities for personal enjoyment and satisfaction.

CRIS supervises recreation at the Student Recreational and Fitness Center, which provides for the use of tennis courts, racquetball/handball courts, fields, gymnasiums, pools, fitness rooms, and other play areas; organizes intramural tournaments; coordinates a sports club program; and sponsors leisure course activities, clinics, and special events. The Student Recreation and Fitness Center provides excellent facilities for instructional, intramural, and sports and fitness programs. These programs, both individual and group, offer a wide variety of choices, and are offered at all levels of play. The student oriented CRIS staff gives
personal attention to the needs of all individual participants.

## Student Judicial and Ethical Programs

The Office of Student Judicial and Ethical Programs is responsible for the administration and coordination of student disciplinary actions involving both social and academic misconduct under the Code of Student Rights and Responsibilities. The office is also a resource for the interpretation of policies that affect students and for programs on ethics and academic integrity. The Office of Student Judicial and Ethical Programs is located in room 105, University Center.

## Dining Services

The University has dining facilities, vending areas, and coffee bars open to all students.

## Minority Affairs

The Office of Minority Affairs advises minority students with regard to their academic, social, personal, and financial concerns, and helps students to adjust to living and functioning in an urban university setting. The office also assists minority organizations with program planning and management.

In addition to advising students, the office is the home to the Black Student Association, Black Scholars Unlimited, Hispanic Student Association, and the NAACP. The office is also responsible for coordinating events in conjunction with Black History Month and Hispanic Heritage Month.

## Religious Affairs

Several religious organizations provide activities and communities that focus on the religious or spiritual development of University students. Many of these organizations have ministry facilities close to campus or utilize University facilities for their programs. Organized religious groups include: Baptist Student Union, Barth House (Episcopal), University Catholic Center, Christian Student Center (Church of Christ), Fellowship of Christian Athletes, Gospel Choir, Jewish Student Union, Muslim Student Association, RUF (Reformed University Fellowship), River's Edge (United Methodist), River $<$ Edge (Presbyterian USA), and Tiger Christian Fellowship.

## Residence Life

Residence Life, located in room 011, Richardson Towers, is the administrative office for the University of Memphis residence halls. Residential communities provide an environment to enhance individual growth and development through the implementation of educational, cultural, social, and recreational programs that encourage interaction among residents, faculty, and staff. Building accommodations and rental charges for
each residence hall can be found in the Expenses section of this Bulletin.

## Michael D. Rose Theatre and Lecture Hall

The Michael D. Rose Theatre and Lecture Hall features a 938-seat theatre with sound and lighting as well as a large movie screen with surround sound. The main lobby can be used as a meeting, reception, display, or dining area. The entertainment lobby can be used for smaller group gatherings. Further amenities include a large concession area, student ticket office, and dressing room for entertainers.
Student Activities Council
The Student Activities Council is the principal programming body for the University community. It is composed primarily of student volunteers for the purpose of providing social, cultural, recreational and educational activities, and events that appeal to a wide variety of tastes. Concerts, fashion shows, coffee house entertainment, movies, speakers and cultural events are just a few of the many activities planned and facilitated by the Student Activities Council (SAC).

## Student Government

The Student Government Association (SGA) of the University of Memphis is a unique organization of students who work together and are committed to improving the University community. SGA represents all students, graduate and undergraduate, and strives to bring each studentes interest to the forefront.

The University of Memphis SGA consists of the Executive members, the Senate, the Student Court, and the Freshmen Council. The SGA office is located in room 411, University Center.

## Student Organizations

Over 150 student organizations are registered with the University. Student organizations represent a broad range of endeavors including academic, social, spiritual, cultural, service, recreational, and special interest. For information, contact the Office of Student Activities, room 425, University Center.

## Volunteerism and Service-Learning

The Office of Student Activities promotes and supports service efforts by the University of Memphis students and works with local community agencies to engage students in a variety of meaningful service activities. The office serves as a resource center for community service programming in order to help students expand their understanding of social/community issues, develop leadership skills, and work on solutions to real life problems. For more information on these initiatives, contact the Office of Students Activities, room 425, University Center.

## University Center

The University Center is the focal point for activities and events in the University community. Along with its many programs and activities, the center provides conveniences and services such as food service, catering, automatic banking, discount tickets for community events, gameroom, University post office and 3,800 mail boxes, rental lockers, television, lost and found, vending, public phones, ballroom, meeting rooms, electronic news and advertising display, rider-driver board, information desk and central scheduling for University Center, Alumni Mall and student plaza. The Center is an organization with programs designed to encourage students and other members of the University community to meet and share interests and talents in an action-learning setting.

## OTHER ACTI VITIES AND SERVICES

## Academic Counseling Center

All freshmen, transfer, and readmitted students who have not decided upon an academic major are assigned to the Academic Counseling Center (ACC). The purpose of the ACC is to provide academic counseling that will prepare students to choose a major and then be enrolled into one of Uof M's degree granting colleges. The counselors are available by appointment to discuss the many academic programs offered and to help the students explore these possibilities as they relate to their personal and educational goals.

## Athletic Academic Services

The Center for Athletic Academic Services is located in Wilder Tower, room 600, and provides counseling, tutoring, scheduling assistance, career planning and special services for all the University of Memphis student athletes. The center also handles NCAA interpretations and the academic eligibility requirements of student athletes.

## I ntensive English for I nternationals (ESL)

The intensive English language program has been developed to meet the needs of internationals in Memphis and the surrounding area, and from abroad. English language instruction for non-native speakers of English is offered at five levels of instruction. For students coming from abroad, the program follows the

University calendar for the fall and spring semesters. An eight-week session is offered during the summer. Internationals residing locally can enroll for shorter periods of time. Classes designed to meet special needs can also be arranged outside of those regularly scheduled.

## International Programs and Study Abroad

The Office of International Programs administers semester and year-long exchange programs and facilitates study abroad programs for shorter periods of time. Exchanges are currently available at more than 120 colleges and universities in some 40 countries through the International Student Exchange Program (ISEP) and the College Consortium for International Students (CCIS). Some of the ISEP and CCIS programs are taught totally in English and others totally in the native language, but many provide the opportunity to increase language skills while taking other courses in English.
Direct or one-on-one exchanges are also administered by International Programs. The University of Memphis currently has agreements for such exchanges with universities in China, Czech Republic, France, Japan, Korea, Germany, Netherlands, and the United Kingdom. Negotiations to add to the number of exchange partners are underway, both direct and through our affiliated programs.
Short-term study programs in the summer are offered by faculty members of the University of Memphis and through consortia and affiliated programs. Spanish study in Costa Rica and the British Studies Program in London are among the more popular offerings. The Office of International Programs also maintains a library of information on other international programs for semester or summer study around the world.
International Student Identification Cards which provide insurance and discounts for students traveling abroad may be purchased at the Office of International Programs.
Competitive Study Abroad Scholarships are available to academically able students. In order to assist with the added cost of international travel, financial aid, which is available for on-campus study, is available for study abroad as well.
The Office of International Programs welcomes the opportunity to advise students on the possibilities of study abroad.

## Pre-Health

The University of Memphis offers the prerequisite courses student must complete prior to applying for admission to professional school in medicine, dentistry, optometry, osteopathic medicine, pharmacy, veterinary medicine, podiatry, chiropractic medicine, physician assistant or cardio-respiratory care, as well as the prerequisite classes required for admission to an allied health program such as cytotechology, dental hygiene, health information management, medical technology, occupational therapy, or physical therapy. The Pre-Health Advising Center, located in 107 Scates Hall, and designated faculty members work closely with students seeking admission to professional school. Students receive counseling in regard to course sequencing and professional school admission requirements. In addition, the Pre-Health advisor coordinates workshops and meetings with health science professionals to provide students with in-depth insight into their chosen profession.
The University of Memphis Chapter of Alpha Epsilon Delta (AED), the National Premedical Honor Society, holds regular peer mentorship sessions and activities of interest to pre-health students. Qualified students are encouraged to apply for membership in AED. Membership eligibility criteria and application forms are available in 107 Scates Hall.
The Pre-Health Advising Center welcomes the opportunity to be of assistance to students whose goal is admission to a health science professional school and encourages them to take advantage of the
opportunities the Center provides.

## Pre-Law

Law schools do not prescribe a definite pre-law curriculum for prospective applicants. Therefore, there is no single major required for pre-law students. Instead, law schools seek to attract applicants possessing a broad educational background. The University of Memphis offers a minor in Legal Thought and Liberal Arts, designed for students who intend to enter the legal profession. Course work in the minor introduces students to the major intellectual traditions of the West and assists in the development of the skills necessary for future success in law school.

The Pre-Law Society provides students the opportunity to meet practicing attorneys, judges, law school faculty and admissions officers as well as other students with similar interests. The society, in cooperation with the Cecil C. Humphreys School of Law, sponsors an annual orientation afternoon at the law school during which members have the opportunity to attend classes and meet law faculty and students.

Students interested in law school, the minor in Legal Thought and Liberal Arts or the Pre-Law Society should contact the Pre-Professional advisor in room 107 Scates Hall, The University Store

The University Store is managed by Barnes and Noble Bookstores, Inc. for the convenience of students, faculty and staff. In addition to textbooks and required school supplies, the store handles a large selection of general books, complete line of insignia clothing and gift merchandise, microcomputers, art supplies, and a variety of items for the convenience of the resident students.

## Post Office

The University Post Office has post office boxes available for rent by students and faculty. Student mail should be addressed as follows:
Student Name
The University of Memphis
XXXX Campus Postal Station
Memphis TN 38152-xxxx

## Automobiles on Campus

Each student who operates and parks any motor vehicle on the campus of the University of Memphis must be registered with the Parking Office by receiving an official permit (hang tag). Permits (hang tags) are permanent and must be displayed when parking a vehicle on campus. The Parking Office will issue each new student a permit (hang tag) when the student registers for classes. The student will receive a validation sticker for placement on the original parking permit every subsequent semester that he or she registers.

A valid parking hang tag does not guarantee a parking space on University property. It is the driver s responsibility to locate an authorized parking space and abide by the parking rules and regulations of the University of Memphis. Citations will be issued and vehicles may be towed for violations.

## Art

The Department of Art sponsors visiting artists and lecturers, workshops and symposia through the academic year. The Art Museum of the University of Memphis (AMUM) provides students and the community with an on-going schedule of exhibitions. It also houses permanent collections of African and Egyptian art and artifacts. The Museum maintains a wide selection of objects from ancient to contemporary that are available for student research.

## Music

The Department of Music presents annually some 200 concerts, recitals and other cultural events to the University and community at large. It offers many activities and programs in which students may participate as individuals or as groups. Qualified students, regardless of major, may participate in the numerous musical groups including the University Symphony Orchestra, the University bands, and a variety of choral groups and small instrumental ensembles. Additionally the Universitys state-of-the-art recording studios are open for student use after proper instruction.

## Theatre and Dance

The Theatre and Dance Department sponsors guest artists, workshops, and a full season of theatre and dance productions available to all full-time students. Additionally, all students, regardless of major, are invited to participate in departmental productions either as performers or backstage persons. Production opportunities exist in both the main theatre and dance season as well as many informal activities such as Lunchbox Theatre.

## Communication

Programs in radio, television, and film are offered by the Department of Communication. WUMR-FM 92 is student operated. Two state-of-the-art television/film studios also offer students the opportunity to participate in broadcasting quality productions.

## Publication

Students write and edit The Helmsman, the University newspaper (4 issues per week).

## Goodwyn Institute Lectures

The lectures and addresses offered by the Goodwyn Institute cover a variety of subjects. The purpose of these lectures is to provide a system of continued education for adults and youths along general and special interests, concentrating on illustrated lectures covering all areas of the world, and to afford authoritative and accurate information upon practical and cultural subjects.

## Cheerleaders

The University of Memphis cheerleaders are one of the $\rangle$ Premier College Squads in the Nation. The cheerleading squads consist of a Varsity team (up to 10 couples) and an all-women Blue Squad that has 14 to 16 members. The mascot, Pouncer, and both squads cheer at all University of Memphis home football and basketball games. The Blue Squad also cheers for the Lady Tigers home games in the Field House on the University of Memphis campus. The cheerleaders and $\geqslant$ Pouncer are involved in an array of
community and University activities. For additional information, contact the Cheerleading Office, room 375, Field House.

## Pom Pon Squad

The University of Memphis PomPon Squad is the top dance team in the country, having won the National Championships nine times. There are two squads, the Varsity and Junior Varsity. Both squads perform at all home football games. The Varsity attends all mens basketball games, performing half-time shows at selected games. The Junior Varsity performs at the Lady Tigers home games. For additional information, contact the PomPon Office, room 377, Field House.

## HONORS AND AWARDS

## Honor Societies

Alpha Epsilon Delta, international premedical honor society
Alpha Kappa Delta, the national honorary society in sociology
Alpha Lambda Delta, a national honor society for freshman students
Black Scholars Unlimited, an honor society promoting academic experiences in scholarship, leadership, and service with special emphasis towards black students
Chi Beta Phi, a national science and mathematics honorary society
Chi Sigma Iota, a national counseling honor society
Gamma Beta Phi, an honor and service society
Gamma Theta Upsilon, a national honorary society for geography students.
Golden Key National Honor Society, a national interdisciplinary honor society for academically outstanding juniors and seniors
Honors Students Council, an organization for University Honors students
Kappa Delta Pi, a national honor society in education
Lambda Pi Eta, a communications studies honorary
Mortar Board, a national honor society established to provide for cooperation among honor societies for seniors
Omicron Delta Kappa, the National Leadership Honor Society
Order of Omega, a national honor society for members of Greek fraternities
Phi Alpha Theta, the national honor society in history
Phi Eta Sigma, a national freshman scholastic honor society
Pi Delta Phi, a society to recognize outstanding scholarship in French language and literature
Pi Sigma Alpha, the national honor society in political science
Pi Tau Sigma, the national honor society in mechanical engineering
Psi Chi, the national honor society in psychology
Sigma Delta Pi, the national Spanish honor society
Sigma Pi Sigma, a national honor society for physics students
Sigma Tau Delta, a national honor society for English language and literature students
Tau Beta Pi, a national engineering academic honor society

## Awards

Whoes Who Among Students in American Universities and Colleges, one of the highest honors that a student may receive at the University of Memphis

## THE COLLEGE OF ARTS AND SCIENCES

THE BETA BETA BETA AWARD is annually presented to the graduating senior and member of the society who graduates with the highest grade point average in Biology.
BIOLOGY FACULTY AWARD is presented to the undergraduate student who makes the most significant contribution to the department.
THE AMERI CAN INSTITUTE OF CHEMI STRY AWARD is presented to the graduating Chemistry major who best demonstrates leadership, ability, character and scholastic ability.
THE DEPARTMENT OF CRIMI NAL J USTICE annually presents the Mu Sigma Chi Professional Criminal Justice Award to the student of Criminal Justice deemed outstanding in professional activities.
THE DEPARTMENT OF ENGLI SH offers several awards:
a. The Distinguished Scholarship Award presented each year to the English major whose work demonstrates an unusually high order of academic excellence.
b. Honors Thesis Award presented in recognition of the outstanding honors thesis by a student in the English Honors Program.
c. Giem and Collins Writing Contest: Presented for excellence in student writing produced in freshman and sophomore English courses. Rules and entry forms are available in room 463, Patterson.
FRENCH GOVERNMENT ASSI STANTSHI PS: The French Government through the French Embassy in The United States, on the recommendation of the French Section of the Department of Foreign Languages, each year awards one or more assistantships in France for the teaching of English in secondary schools.
THE DEPARTMENT OF GEOLOGI CAL SCI ENCES annually presents the Outstanding Senior Award to the outstanding major exhibiting scholarship, leadership and service.
THE DEPARTMENT OF GEOGRAPHY presents each year the Paul H. Sisco Award to the outstanding senior Geography major. THE DEPARTMENT OF HISTORY annually presents the Tennessee Historical Commission Award to that senior student of History judged by the faculty to be the outstanding History major. The department also presents an award for the outstanding paper presented by an undergraduate.
THE DEPARTMENT OF MATHEMATICAL SCI ENCES annually presents the R. P. Clark Memorial Award to an outstanding junior. THE DEPARTMENT OF PHI LOSOPHY OUTSTANDI NG STUDENT AWARD is presented to that student of Philosophy chosen on the basis of high scholastic achievement papers written, and performance in senior honors seminars.
THE DEPARTMENT OF PHYSI CS each year presents the Outstanding Student Award to the most distinguished senior Physics major.
THE DEPARTMENT OF POLITICAL SCI ENCE presents the Outstanding Student Award each year to the graduating senior majoring in Political Science who has compiled the best record of academic achievement in the discipline. Also The John W. Burgess Award is presented for meritorious achievement in Political Science, and the Pre-Law Award is presented to the political science major whose pre-law studies demonstrate high promise for a distinguished legal career.
THE DEPARTMENT OF PSYCHOLOGY presents annually The Dr. Milton C. Addington Award for Excellence in Psychology to the senior Psychology major exhibiting the most individuality, interest, initiative, integrity, creative ability and originality.
THE DEPARTMENT OF SOCI OLOGY annually presents The Outstanding Student Award to the senior student judged to be the outstanding Sociology major. Also the Division of Social Work presents the Graduate with Distinction Award to the graduate who has been selected for dedication, achievement, and potential for professional service.
ALPHA EPSI LON DELTA, pre-medicine and allied health professions honor society, annually presents the Student of the Year Award to the member who has demonstrated outstanding leadership, loyalty, and responsibility.
CHI BETA PHI SCI ENCE AWARDS: Students who have attained the highest academic average during their four years of study in each of the following disciplines: Biology, Chemistry, Geology, Mathematical Sciences, Physics, and Psychology are honored by having their names inscribed on a plaque.

## THE FOGELMAN COLLEGE OF BUSI NESS AND ECONOMI CS

DEANeS AWARD FOR MOST OUTSTANDING STUDENT is presented to an outstanding student who has displayed strong leadership, outstanding character, scholarship, and who is active in department and campus activities.
SCHOOL OF ACCOUNTANCY OUTSTANDI NG GRADUATE AWARD is presented to the graduating student who has the highest
overall scholastic average among all Accountancy majors.
THE TENNESSEE SOCI ETY OF CERTI FIED PUBLI C ACCOUNTANTS AWARD, Memphis Chapter, is presented annually to the graduating student who has the highest overall scholastic average among all Accountancy majors.
THE OUTSTANDI NG ECONOMI C UNDERGRADUATE STUDENT AWARD is presented by the Department of Economics to a junior or senior Economics student with the highest grade point average. A similar award is presented to the graduate student in Economics.
THE MEMPHIS CHAPTER OF THE SOCI ETY OF CHARTERED PROPERTY CASUALTY UNDERWRI TERS annually awards a check and a plaque to the outstanding student in the field of insurance.
ACADEMIC EXCELLENCE AWARD FOR THE DEPARTMENT OF MANAGEMENT is presented annually to the B.B.A. graduate in Management of the past year with the highest scholastic achievement.
ACADEMIC EXCELLENCE AWARD FOR THE DEPARTMENT OF MANAGEMENT I NFORMATI ON SYSTEMS AND DECISI ON
SCI ENCES is awarded to the B.B.A. graduate of the previous year with the highest scholastic achievement.
OUTSTANDI NG UNDERGRADUATE MARKETI NG STUDENT is presented to a graduating student with outstanding scholastic achievement and service to the department, University, and community.
OUTSTANDI NG UNDERGRADUATE LOGI STI CS/ MARKETI NG MAJ OR is presented to a graduating student with outstanding scholastic achievement and service to the department, University, and community.
OUTSTANDI NG UNDERGRADUATE MARKETI NG MANAGEMENT MAJ OR is presented to a graduating student with
outstanding scholastic achievement and service to the department, University, and community.
OUTSTANDI NG UNDERGRADUATE SALES MAJ OR is presented to a graduating student with outstanding scholastic achievement and service to the department, University, and community.
CRAWFORD DELTA SI GMA PI AWARD is awarded annually to an outstanding pledge member of the Delta Sigma Pi Fraternity
who has demonstrated creative leadership skills and outstanding scholastic ability．
DELTA SI GMA PI ，international business fraternity annually awards a scholarship key to the student in The Fogelman College of Business and Economics graduating with the highest academic average in business．
THE UNI ON PLANTERS／U of M FOGELMAN COLLEGE ALUMNI CHAPTER SCHOLASTIC ACHI EVEMENT AWARDS are awarded each semester to three graduating seniors in recognition of their outstanding scholastic achievement in the college．Award includes a check and their names inscribed on a plaque．

## THE COLLEGE OF COMMUNI CATION AND FI NE ARTS

DEAN 2 S ACADEMIC ACHIEVEMENT AWARD is available to a student majoring in a discipline within the College of Communication and Fine Arts．It recognizes the graduating student with the highest grade point average．
DEAN $勹$ S CREATIVE ACHIEVEMENT AWARD is based on outstanding creative activity in the areas encompassed by the College of Communication and Fine Arts．
CREATI VE ACHI EVEMENT IN ART is awarded annually by the Art Department for outstanding creative achievement in art to a senior majoring in Art．A cumulative GPA of at least 3.0 is required．
仓BEST OF SHOW AWARD＂JURIED STUDENT EXHIBITION is awarded annually to the student whose work is judged $\langle$ Best of Show $\rangle$ in the Annual Juried Student Exhibition．
THESIS AWARD I N ART HISTORY is presented in recognition of an outstanding masters thesis in Art History．
ART HISTORY GRADUATE AWARD is presented annually to a graduate student for outstanding initiative and research．
ART HISTORY UNDERGRADUATE AWARD is presented annually to an undergraduate student for outstanding work in Art History．
I NTERI OR DESI GN ALUMNI STUDENT DESI GN AWARDS at the sophomore，junior，and senior levels are given for the best design of a given project．
SOCI ETY OF PROFESSI ONAL J OURNALISTS，Memphis Chapter，annually presents a certificate of achievement and a cash award to the student chosen as outstanding in the field of Journalism．
SOCI ETY OF PROFESSI ONAL J OURNALISTS，SI GMA DELTA CHI MARK OF EXCELLENCE AWARDS，Arkansas，Louisiana， Mississippi，West Tennessee Region，annually presents first place awards for Best TV Broadcasting，Best Editorial Cartoon，Best Feature Article，and Best Photography Feature．
SI GMA ALPHA IOTA COLLEGE HONOR AWARD is an award based on musicianship，scholarship，and general contribution to the collegiate chapter．
SI GMA ALPHA IOTA HONOR CERTI FI CATE is presented annually to the graduating senior of this chapter having attained the highest academic average．
PAUL EAHEART MEMPHIS WOODWI ND QUI NTET SCHOLARSHI P is presented in honor of Paul Eaheart for excellence in wind performance．
LUBRANI CLARI NET AWARD，in memory of Professor Frederic Lubrani，is presented for clarinet performance ability，general scholarship，service to the Rudi E．Scheidt School of Music，and potential in the profession．
SMIT COMPOSI TI ON AWARD is presented in memory of Professor J ohannes Smit for excellence in composition．
HEARST AWARDS are presented as the result of an annual national Writing，Broadcasting，and Photography competition among accredited journalism programs for work appearing in student publications．Cash prizes range from $\$ 200$ to $\$ 2,000$ with matching awards going to sponsoring journalism departments．
HOHENBERG FOUNDATION，I NC．DANCE AWARD is presented annually to a student pursuing a Bachelor of Fine Arts degree with a concentration in Dance．The recipient must have at least a 2.5 GPA．
ART CENTER SUPPLY AWARD is given annually to a sophomore，junior，or senior majoring in Graphic Design．Selection is based on portfolio and academic performance．
MEMPHI S－GERMANTOWN ART LEAGUE AWARD is presented annually in the spring to an undergraduate Art major who has demonstrated exceptional artistic abilities in any discipline within the Department of Art．
UNI VERSI TY BOOKSTORE SUPPLY AWARD is given annually to an undergraduate Art major．Selection is based on portfolio and academic performance．
THE LI NN SI TLER THEATRE AWARD is presented to an outstanding Theatre student with a minimum GPA of 3．0．
THE SAUL BROWN AWARD is given to a J ournalism major concentrating in news writing．Saul Brown retired from the Memphis Press－Scimitar in 1980 as the newspaper s chief photographer．Selection for the award is based on talent，skill，and a student食s promise as a journalist as demonstrated by his or her articles and／or photographs．
THE KAPPA TAU ALPHA AWARD is given to the member of Kappa Tau Alpha Journalism honor society who has achieved the highest academic average．
THE MTNA STUDENT ACHEI VEMENT AWARD is given by the Music Teachers National Association annually to a music student for excellence in studio teaching．
THE RAYMOND LYNCH OBOE AWARD established to recognize the distinguished career of the former oboe teacher and associate dean of the College of Communication and Fine Arts，Dr．Raymond Lynch，is given annually to an outstanding oboist． THE HAROLD STREI BI CH AWARD，established in memory of Att．Harold Streibich recognizes an outstanding Music Business student．

BELLE MELODIES SCHOLARSHIP AWARD is sponsored by St. Marys Episcopal School in support of a Recording Technology student.
PHI KAPPA LAMBDA ACADEMIC ACHI EVEMENT AWARD is presented to the senior music student with the highest GPA.

## THE COLLEGE OF EDUCATI ON

EELEANOR MAE FERGUSON AWARD is presented each year to the outstanding junior or senior woman Physical Education major who displays strong leadership, outstanding character, and high scholarship and who performs an active role in departmental and campus activities.
RALPH HATLEY SR. AWARD is presented to the outstanding junior or senior male Physical Education major who displays strong leadership, outstanding character, and high scholarship and who performs an active role in departmental and campus activities.
THE DEPARTMENT OF Health and Sport Sciences OUTSTANDI NG SENI OR IN SPORT AND LEISURE STUDIES AWARD is presented annually in recognition of meritorious scholarship, leadership and service to the University, the community and the profession.
THE DEPARTMENT OF Health and Sport Sciences OUTSTANDI NG GRADUATE STUDENT AWARD is presented annually in recognition of meritorious scholarship, leadership and service to the University, the community and the profession.
THE DEPARTMENT OF Health and Sport Sciences OUTSTANDI NG SENI OR IN Health and Human Performance AWARD is presented annually in recognition of meritorious scholarship, leadership and service to the University, the community, and the profession.
THE DEPARTMENT OF INSTRUCTI ON AND CURRI CULUM LEADERSHIP OUTSTANDING SENI OR AWARD is presented annually to an outstanding senior majoring in Special Education and Rehabilitation who displays strong leadership, outstanding character and scholarship and takes an active role in departmental and campus activities.
THE FRANK DYER, JR. KAPPA DELTA PI J UNI OR ACADEMIC ACHI EVEMENT AWARD is presented annually to the junior having the highest grade point average.
THE J OHN R. PETRY KAPPA DELTA PI SENI OR ACADEMIC ACHI EVEMENT AWARD is presented annually to the senior having the highest grade point average.
THE DEPARTMENT OF CONSUMER SCI ENCE AND EDUCATION OUTSTANDI NG SENIOR AWARD is presented each year to the graduating senior in the department with the highest academic average.
THE MARQUITA L. IRLAND SCHOLARS AWARD is presented annually to a graduate with outstanding contributions in the areas of leadership, service to the community, to the profession of family and consumer sciences, and scholarship.
THE MEMPHIS EDUCATI ON ASSOCI ATI ON AWARD is presented each year to the graduating senior who, having graduated from the Memphis City Schools System and completed all college level work in a teacher education program at the University, has attained the highest grade point average of the students in this category.
THE HEBER E. RUMBLE OUTSTANDI NG STUDENT TEACHER AWARD is presented each year to the student whose performance in student teaching is judged to be the most outstanding.
THE DEPARTMENT OF INSTRUCTI ON AND CURRI CULUM LEADERSHIP OUTSTANDI NG EARLY CHI LDHOOD MAJ OR AWARD is presented annually to the Early Childhood Education major who has demonstrated outstanding scholarship, involvement in professional organizations, and professional potential.
THE DEPARTMENT OF INSTRUCTI ON AND CURRI CULUM LEADERSHIP OUTSTANDI NG ELEMENTARY EDUCATI ON
MAJ OR AWARD is presented annually to the Elementary Education major who has demonstrated outstanding scholarship, involvement in professional organizations, and professional potential.
THE DEPARTMENT OF INSTRUCTION AND CURRICULUM LEADERSHIP OUTSTANDING MASTER®S DEGREE
CANDIDATE AWARD is presented to the master s candidate who has demonstrated outstanding scholarship, involvement in professional organizations, and professional integrity.
THE DEAN 2 S AWARD is presented annually on the basis of scholarship, professionalism, leadership, and service to the College of Education, the University, and/or professional organizations.

## THE HERFF COLLEGE OF ENGI NEERI NG

OUTSTANDI NG SENI OR AWARDS in the College of Engineering are presented to the outstanding senior, based on scholarship, in each of the following departments: Electrical Engineering, Mechanical Engineering, and Engineering Technology.
OUTSTANDING STUDENT MEMBER OF IEEE is presented an award by The Institute of Electrical and Electronics Engineers, student chapter.
THE THOMAS S. FRY AWARD is presented annually to the graduating Civil Engineering student who has demonstrated outstanding academic achievement.
THE T. S. WU DESI GN AWARD is presented annually to the graduating Civil Engineering student who has demonstrated outstanding design capability throughout the curriculum.
ASSOCI ATED GENERAL CONTRACTORS AWARD is presented annually by the student chapter for outstanding achievement.
FRED H. KELLOGG AWARD is presented annually to the outstanding student in Civil Engineering that is most likely to be an
outstanding professional engineer.

ASHRAE AWARD is presented annually to the outstanding junior in Mechanical Engineering.
ENGINEERING DEANeS AWARD is presented annually to the graduating student who has compiled the highest academic achievement in the college.
ENGI NEER-I N-TRAI NI NG AWARD is presented to the student who achieves the highest score on the Fundamentals of Engineering examination, which is the first step in becoming a registered engineer.

## SCHOOL OF NURSI NG

HI GHEST ACADEMI C ACHI EVEMENT AWARD is presented annually by the University of Memphis Nursing Alumni Association to the graduating senior in nursing who has the highest overall scholastic average.
OUTSTANDI NG STUDENT AWARD is presented annually to the graduating senior in Nursing who best demonstrates academic achievement, leadership and professionalism.
OUTSTANDI NG FOUNDATI ONS NURSI NG STUDENT AWARD is presented annually to a student who has completed the Foundations of Nursing course and who demonstrated excellence in clinical competency in providing nursing care.
OUTSTANDI NG ADULT HEALTH \& PSYCHI ATRI C/ MENTAL HEALTH NURSI NG STUDENT AWARD is presented annually to a student who has completed the Adult Health Nursing and Psychiatric/Mental Health Nursing courses and who demonstrated excellence in clinical competency in providing nursing care.
OUTSTANDI NG MATERNAL/ CHI LD HEALTH NURSI NG STUDENT AWARD is presented annually to a student who has completed the Nursing Care of the Expanding Family and Child Health Nursing courses and who demonstrated excellence in clinical competency in providing nursing care.
OUTSTANDI NG ADVANCED ADULT HEALTH NURSI NG STUDENT AWARD is presented annually to a student who has completed Advanced Adult Health Nursing course and who demonstrated excellence in clinical competency in providing nursing care.

OUTSTANDI NG COMMUNITY HEALTH NURSI NG STUDENT AWARD is presented annually to a student who has completed the Community Health Nursing course and who demonstrated excellence in clinical competency in providing nursing care.

## UNI VERSITY COLLEGE

DISTI NGUI SHED SPECI AL PROJ ECT AWARD is presented to each student whose special project has been judged outstanding by the Faculty Council of University College.
FACULTY COUNCI L AWARD is presented to the graduating senior, each commencement, who has earned the highest overall grade point average.
DEANeS AWARD FOR SPECIAL ACHIEVEMENT is given to honor University College graduates who have demonstrated academic achievement, leadership, professional and/or social commitment, and determination to complete a baccalaureate program. ACADEMI C ACHI EVEMENT AWARD is given to University College baccalaureate graduates who have demonstrated academic excellence and scholarly potential.
ALMA BUCOVAZ AWARD FOR URBAN STUDIES IN THE UNIVERSITY COLLEGE is presented to a junior or senior with an approved baccalaureate program that addresses urban problems and seeks to ameliorate urban needs.
BORNBLUM J UDAI C STUDIES AWARD is presented to students who have excelled in the study of Hebrew Language and/or Judaic Studies.
THE LEGAL RESEARCH AWARD is given annually to the paralegal student demonstrating exceptional mastery of the principles of legal research and writing.
OUTSTANDI NG DISTANCE EDUCATI ON STUDENT AWARDS are presented each year to the students (one undergraduate and one graduate) who, while taking courses away from the main campus, have demonstrated unusual commitment and scholarly endeavor in the pursuit of continuing their education. Consideration for the award may include grade point average, unusual family commitment, service to peers, ability to balance scholarly pursuit with work, family, and community service, and unusual service to U of M or Extended Programs.
OUTSTANDI NG PARALEGAL STUDENT AWARD presented to a student seeking a Bachelor of Professional Studies degree in Paralegal Services who has demonstrated academic achievement, leadership, professional and/or social commitment, and dedication to the paralegal profession and the university.

## DEPARTMENT OF AEROSPACE STUDI ES

THE PRESI DENT'S AWARD is presented annually to the senior AFROTC cadet who has demonstrated outstanding attributes of leadership and high moral character. Selection is made by AFROTC, with final approval by the university president.
ANGEL OF THE YEAR AWARD is presented to the member of Angel Flight who has given the most in service to the campus and the community.
ARNOLD OF THE YEAR AWARD is presented to the member of Arnold Air Society who has given the most in service to the campus and the community.

## DEPARTMENT OF MI LITARY SCI ENCE

SOLDIEReS MEDAL is awarded to cadets who distinguish themselves by an act of heroism at advanced camp.
ROTC MEDAL FOR HEROI SM is awarded to cadets who distinguish themselves by an act of heroism performed on or off campus.
THE PRESIDENTeS AWARD is presented annually to the $U$ of $M$ senior cadet who has demonstrated outstanding attributes of leadership and high moral character. Selection is made by the department chair with final approval by the University president.
GEORGE C. MARSHALL ROTC AWARD is presented annually to the $U$ of $M$ senior cadet who has demonstrated outstanding leadership and scholastic qualities.
HUGHES TROPHY AWARD is presented annually to the cadet who is recommended by the professor of military science and the dean as the most outstanding commissioned graduate based upon officer potential and academic leadership.
PALLAS ATHENE AWARD is presented annually to the most outstanding graduating female cadet.
NATI ONAL DEFENSE TRANSPORTATI ON ASSOCI ATI ON AWARD is presented annually to the most outstanding senior cadet who is recommended by the professor of military science and the dean as being in the top twenty five percent of the ROTC and academic class and who possesses an interest in the Transportation Corps.
ARMED FORCES COMMUNI CATI ONS ELECTRONI CS ASSOCI ATI ON HONOR AWARD is presented to a senior cadet majoring in Math, Chemistry, Physics, Engineering, or Photography who is active on campus or academically distinguished and has demonstrated outstanding qualities of military leadership and high moral character.
ALDEN PATRI DGE COMMEMORATI VE AWARD is presented to the top graduating Science or Engineering student in the Army ROTC program.
DI STI NGUI SHED MI LITARY STUDENT/ GRADUATE AWARD is presented annually to senior cadets who are in the upper third of the ROTC class and upper half of the University class who are active on campus, are outstanding leaders, and possess an aptitude for military service.
DEPARTMENT OF THE ARMY SUPERIOR CADET DECORATI ON AWARD is presented annually to outstanding junior and senior cadets who have demonstrated academic leader qualities in scholastic and related activities and officer potential, and who are in the top twenty five percent of their ROTC and academic class.
AMERICAN LEGI ON GENERAL MI LITARY EXCELLENCE AWARD is presented annually to the outstanding cadet who has demonstrated qualities in military leadership, discipline, character, and citizenship, and is in the top twenty five percent of ROTC and academic class.
AMERICAN LEGI ON SCHOLASTI C EXCELLENCE AWARD is presented annually to the outstanding junior and senior cadets who have demonstrated qualities in leadership and actively participated in student activities. and who are in the top twenty five percent of their ROTC class and the top ten percent of their academic class.
SOCI ETY OF AMERI CAN MI LITARY ENGI NEERS AWARD is presented annually to the junior and senior cadets who are recommended by the professor of military science and the Dean as being in the top twenty five percent of the ROTC and academic class and the outstanding Engineering students of the year.
ASSOCI ATI ON OF THE UNITED STATES ARMY AWARD is presented to the junior who contributes the most, through leadership, to advancing the standing of the Military Science Department while in the top twenty five percent of the ROTC class and top ten percent of the academic class.
AMERI CAN DEFENSE PREPAREDNESS AWARD is presented annually to the junior cadet who demonstrated outstanding leader qualities and participated actively in campus activities, placed in the top twenty percent of the platoon at Advanced Camp, received a B or above in all ROTC classes, and is in the upper half of the academic class.
ARMED FORCES COMMUNI CATI ONS ELECTRONI CS ASSOCI ATI ON SCHOLARSHI P AWARD is presented to Basic Course students accepted to the Advanced Course who are of high moral character, in the top twenty five percent of their academic class, and in need of financial assistance in completing a degree in Electrical Engineering or Technical Photography.
DAUGHTERS OF THE FOUNDERS AND PATRIOTS OF AMERICA AWARD is presented annually to a freshman or sophomore cadet who is in the top twenty five percent of the ROTC class and has demonstrated excellence in history, the potential for good leadership, and related accomplishments reflecting the ideals of patriotism.

## DEPARTMENT OF NAVAL SCI ENCE

TRI DENT HONOR SOCI ETY AWARD is presented to outstanding Naval midshipmen who have demonstrated the highest caliber of academic excellence.

## NROTC AWARDS

PRESIDENTeS AWARD is presented annually by the University president to a graduating senior who demonstrates outstanding attributes of leadership and high moral character.
NAVY LEAGUE OF MEMPHIS HONOR SWORD AWARD is presented to the Naval Graduate selected as the one Midshipman of the graduating class who has consistently demonstrated the highest leadership ability throughout the program.
RESERVE OFFI CERS ASSOCI ATI ON is presented annually to the outstanding freshman, sophomore, junior, and senior who have demonstrated above average scholastic achievements, exceptional mastery of previous Naval Science courses, and superior potential for commissioned service.

THE RETI RED OFFI CERS ASSOCI ATI ON AWARD is presented to the outstanding junior who has demonstrated above average scholastic achievement, high moral character and exceptional potential for military leadership.
AMERICAN DEFENSE PREPAREDNESS ASSOCI ATI ON AWARD is presented annually to an outstanding senior whose scholastic achievements are in the top half of the class and in the top one-fifth of NROTC enrollment at the University, who has shown active participation in athletics or campus activities and demonstrated outstanding leadership qualities.
SOCI ETY OF THE WAR OF 1812 AWARD is presented annually to an outstanding sophomore whose scholastic average is within the upper quarter of the class, and who demonstrates the ideals of Americanism.
SONS OF THE AMERICAN REVOLUTI ON MEDAL is presented annually to an outstanding freshman who has demonstrated leadership, military bearing and all around excellence in NROTC program studies and activities.
NATI ONAL SOJ OURNERS AWARD FOR AMERI CANI SM is presented annually to a sophomore or junior who has demonstrated the ideals of Americanism, outstanding scholastic achievements and the potential to be an outstanding leader.
AMERICAN LEGI ON ROTC GENERAL MI LITARY EXCELLENCE AWARD is presented annually to one freshman, sophomore, and junior, each of whose scholastic achievements are in the top quarter of the class and who have demonstrated outstanding qualities in military leadership, discipline, character and citizenship.
AMERI CAN LEGI ON ROTC SCHOLASTI C EXCELLENCE AWARD is presented annually to a freshman, sophomore, junior, and senior, each of whose scholastic achievements are in the upper ten percent of the University and who have demonstrated high qualities of military leadership.
MI LITARY ORDER OF THE WORLD WARS MEDAL is presented to a freshman, sophomore, junior, and senior who each have demonstrated marked improvement in military scholastic achievements.
VETERANS OF FOREI GN WARS AWARD is presented annually to a freshman, sophomore, junior and senior who each have demonstrated achievement and concentrated effort in Naval Science and academic subjects and demonstrated capability and diligence in the Naval ROTC program.
DAUGHTERS OF THE AMERI CAN REVOLUTI ON AWARD is presented annually to a graduating senior whose scholastic achievements are in the top quarter of the class and who has demonstrated qualities of dependability, good character, adherence to military discipline, leadership ability and a fundamental and patriotic understanding of the importance of the ROTC program.
DAUGHTERS OF THE AMERI CAN REVOLUTION CERTI FICATE is presented annually to a junior who best exemplifies the qualities of dependability, good character, adherence to military discipline, leadership ability and a fundamental and patriotic understanding of the importance of the ROTC program.
DAUGHTERS OF FOUNDERS AND PATRIOTS OF AMERI CA AWARD is presented annually to an outstanding sophomore or freshman who demonstrates qualities of dependability, good character, discipline, leadership, and patriotism.
MI LITARY ORDER OF FOREI GN WARS MEDAL is presented annually to an outstanding freshman, sophomore, and junior who each have demonstrated discipline, good character, and leadership ability.
AMERI CAN VETERANS OF WORLD WAR II , KOREA, AND VI ETNAM MEDAL is presented annually to an outstanding freshman with superior standing in military and academic subjects.
NAVAL I NSTI TUTE LEADERSHI P AWARD is presented annually to a graduating College Program student, Officer Candidate, and Marine Enlisted Commissioning and Education Program student who each have demonstrated outstanding potential for Naval leadership.
GENERAL DYNAMI CS AWARD is presented annually to a Midshipman, Officer Candidate, and Marine Enlisted Commissioning and Education Program student who each have demonstrated outstanding leadership ability.
ARMED FORCES COMMUNI CATI ONS AND ELECTRONIC ASSOCI ATI ON AWARD is presented to Midshipmen of good moral character, who are in the top fourth of their class, working toward a degree in electronics, communications, electrical engineering, mathematics, computer technology or intelligence systems, and who need financial assistance.
ARMED FORCES COMMUNI CATI ONS AND ELECTRONIC ASSOCI ATION HONOR CERTI FI CATE is presented annually to a junior who has demonstrated high achievement in leadership and in academics and is academically strong in electronics, communications, electrical engineering, mathematics, computer technology or intelligence systems.
NAVAL SUBMARI NE LEAGUE AWARD is presented annually to the graduating senior who has demonstrated superior leadership ability and academic aptitude for entry into the Submarine Warfare Community.
MARI NE CORPS ASSOCI ATI ON AWARD is presented annually to the graduating Marine-option Midshipman or Marine who best exemplifies the leadership qualities and professionalism of a Marine officer.
MARI NER OF THE YEAR is presented annually by the Naval Science Department to a member of the Mariners who has given most in service to the department, University, and community.

## SPECI AL AWARDS

MARI A LEONARD SCHOLARSHI P AWARD is presented annually by Alpha Lambda Delta, national scholastic honor society, to the senior member of the society with the highest academic average.
GOLDEN KEY NATI ONAL HONOR SOCI ETY presents annually two scholarships to junior and senior members of the local chapter who have excelled in scholarship, leadership and participation in activities.
PHI KAPPA PHI SCHOLARSHI P AWARDS are presented annually to five undergraduate and graduate members who demonstrate high scholastic ability and excellent leadership, who provide meaningful service to the University, and who will continue their studies at the University.

THE DAVID A. COLLI NS-OMI CRON DELTA KAPPA LEADERSHIP SCHOLARSHIP AWARD is presented to a member of the $U$ of $M$ Circle who will continue studies at the graduate level, who has shown responsible and effective leadership, who has made significant contributions to the student body, and who inspires and encourages others to use their leadership talents for the benefit of their peers.
THE HONORS PROGRAM DIRECTOR§S AWARD is presented to an honors student for outstanding academic performance in an honors curriculum.
THE JIMMY CARTER PRESI DENTI AL AWARD FOR VOLUNTEERI SM is presented to that student who best exemplifies the spirit of volunteerism and action that helps alleviate human need.
THE J OSEPH R. RILEY STUDENT SERVI CE AWARD is presented for outstanding service to the Honors Program and the Honors Student Association.
THE SAMUEL T. BOSWELL STUDENT LEADERSHI P AWARD is presented in recognition of outstanding leadership in campus issues and activities, example set for peers, the display of personal and political courage, and/or community involvement.
ROSETTA I. MI LLER AWARD is presented to the outstanding woman student who has returned to college despite significant hardships.
GREEK ALL-SI NG FOLLIES SCHOLARS MERIT AWARDS: Scholarships of $\$ 250$ each are awarded annually by the Interfraternity Council to the pledge/associate from the previous fall or spring semester who attained the highest grade point average, and to the fraternity member with the highest grade point average over the past two consecutive semesters.
THE WOMEN ${ }^{-}$S PANHELLENIC COUNCIL annually awards one $\$ 250$ scholarship to the sorority member who has attained the highest scholastic average. In addition, a Pledge Scholarship in the amount of $\$ 250$ is awarded to the fall semester pledge who attained the highest average for the semester.
TWO PANHELLENIC COUNCI L scholarships are awarded each spring to the PHC fraternity man and sorority woman who have obtained the highest cumulative grade point average for the previous year. Awards are in the amount of $\$ 250$ each.
WOMEN§S INTERCOLLEGIATE ATHLETICS SCHOLAR AWARD is presented annually to the woman athlete who has maintained the highest grade point average while at the University.
THE ELMA ROANE OUTSTANDING WOMAN ATHLETE AWARD is presented to the junior or senior woman athlete who best exemplifies the following qualities: drive, enthusiasm, determination, concern for others, love for athletics, maturity, involvement in campus activities, and self discipline in all aspects of life.
CAMPUS RECREATI ON AND I NTRAMURALS AWARDS are presented annually to the intramural Greek, intramural Independent Resident, Panhellenic Manager of the Year, and Outstanding Official of the Year who show leadership and interest in the intramural program.
Last Updated: 6/12/15

## EXPENSES

- MISCELLANEOUS FEES
- APPEAL PROCEDURES


## UNI VERSI TY FEES AND CHARGES

GENERAL: All University fees and charges are calculated and assessed consistent with policies and procedures of the Tennessee Board of Regents and the University of Memphis. Information in this catalog is intended to cover the situations that most students will encounter. However, the University may have additional policies and procedures by which fees and charges are implemented or that apply to unusual situations.

The fee amounts indicated in this edition of the Bulletin are for the 2005-2006 academic year. Because of rapidly changing conditions, it may become necessary to alter a fee structure.

## REGI STRATI ON (ENROLLMENT) FEES

The information in this section concerning registration fees is applicable only to students enrolled in the undergraduate colleges and departments of the University. Similar information for students in The Graduate School and The School of Law is available in the catalogs of those schools. The fees are found at the Bursar's website: http://bf.memphis.edu/finance/bursar/feepayment.php

## Other Fees

Fees associated with housing rates, meal rates, admission fees, course fees and the Regent's Online Degree Program courses can be found at http://bf.memphis.edu/finance/bursar/otherfees.php

FOREI GN LANGUAGE PLACEMENT EXAMI NATION: The fee for taking a foreign language placement examination is $\$ 160$ minimum and an additional $\$ 15$ for each hour in excess of three (3) per course. These fees are non-refundable and must be paid prior to the examination.
LATE REGISTRATI ON FEE: A late registration fee of $\$ 100$, which is not included in the Fee Schedule above, will be assessed to each student who does not complete registration by the semester's first day of classes.
LATE PAYMENT FEE: A late payment fee of $\$ 100$ will be assessed to each student who does not satisfy at least the initial installment amount of enrollment fees ( $50 \%$ of fees after all financial aid, scholarships and/or sponsorships have been applied for the fall or spring semester; 100\% of fees for summer sessions) by the deadline dates noted at Fee Payment Schedule. The student's registration is subject to cancellation.
PAYMENT OF FEES AND DEBTS: Registration (enrollment) fees may be paid by cash, check, money order, Visa/MasterCard/Discover, Financial Aid/Scholarship Award(s), or University TIGER FUND\$ account. Fees may be paid as soon as the student registers for courses and are due by the fee payment deadline date noted at http://bf.memphis.edu/ebursar/
The University offers a deferred (installment) payment plan to assist students with the payment of enrollment fees. Please refer to the University's Installment Payment Plan for enrollment fees.

It is expected that a check or draft given to the university, for any reason, will be honored by the bank on which it is drawn. A check or draft dishonored by the bank on which it is drawn may be presented a second time at the discretion of the University. A $\$ 20$ returned item fee will be assessed for any checks/drafts returned.

The privilege of making payments to the University by personal check and check cashing privileges will be revoked for any student who has had more than one returned check/draft within a twelve month period. The suspension of this privilege will be for a period of one year from the date the last item is redeemed.

A student will not be permitted to satisfy registration fees by check if any previous check in payment of registration fees has been returned. Students on a "NO CHECKS" status must be prepared to satisfy registration fees with cash, cashier's check, or by authorized credit card draft.

## Eligibility for Deferment of Payment of Tuition and Fees by Certain Eligible Students Receiving U.S. Department of Veteran Affairs or Other Governmentally Funded Educational Assistance Benefits

Servicemembers, veterans, and dependents of veterans who are eligible beneficiaries of U.S. Department of Veteran Affairs education benefits or other governmentally funded educational assistance, subject to the conditions and guidelines set forth in Tennessee Code Annotated 49-7-104 as amended, may elect, upon formal application, to defer payment of required tuition and fees until the final day of the term for which the deferment has been requested. Application for the deferment must be made no later than 14 days after the beginning of the term, and the amount of the deferment shall not exceed the total monetary benefits to be received for the term. Students who have been granted deferments are expected to make timely payments on their outstanding tuition and fees balance once education benefits are being delivered, and eligibility for such deferment shall terminate if the student fails to abide by any applicable rule or regulation, or to act in good faith in making timely payments. This notice is published pursuant to Public Chapter 279, Acts of 2003, effective July 1, 2003.

I NDEBTEDNESS TO UNI VERSITY: Policy of the Tennessee Board of Regents prohibits the enrollment of any person who owes the university any amount of money. All outstanding financial obligations to the university must be satisfied before a student will be allowed to register for courses. Tennessee law prohibits the release of grades, transcripts or diplomas of any person having outstanding financial obligations to the university.

REFUND OF REGISTRATION (ENROLLMENT) FEES: The following refund percentages of enrollment fees (Maintenance, Out-Of-State Tuition, Materials, Applied Music, Nursing Clinical Practicum, Business, Engineering and other course fees, and Student Activity Fees) apply to students who withdraw from the university or who drop to an hourly load below full time:
A. 100\% Refund: (1) A full ( $100 \%$ ) refund of these fees will be provided until the semester's first day of classes, (2) for courses cancelled by the University, and (3) in the case of the death of the student during the semester.
B. $\mathbf{7 5 \%}$ Refund: A $75 \%$ refund will be provided beginning with the semester's first day of classes and extending for a period of time as noted at http://www.tigerweb.memphis.edu (click on Fee Payment).
C. $\mathbf{2 5 \%}$ Refund: A $25 \%$ refund will be provided beginning at the expiration of the $75 \%$ refund period and extending for a period of time as noted at http://www.tigerweb.memphis.edu (click on Fee Payment).
D. At the conclusion of the $25 \%$ refund period, there will be no refund of these fees.
E. Students who receive Federal Title IV Funds and who withdraw from the University may be eligible for a refund of enrollment fees based on the Federal pro-rate refund calculation. Please refer to the Student Aid section of this Bulletin for specific information on pro-rata refunds and the return of Federal Title IV Funds.

## OTHER REGI STRATI ON (ENROLLMENT) FEE I NFORMATI ON

RESI DENCY CLASSI FI CATI ON: All determinations concerning the classification of students as in state or out of state for fee purposes are made in the Office of Admissions. The determinations are based on the regulations and guidelines of the Tennessee Board of Regents. If, for any reason, there is a question about a student's residency classification for fee payment purposes, the student is responsible for requesting a review of their residency status before classes begin.

ACADEMI C COMMON MARKET: Participation in the Academic Common Market allows qualified students from southern states to pay in-state tuition while pursuing certain degree programs at the University of

## Expenses

Memphis. This arrangement is available only for students whose home states do not offer the designated program. The state in which the student resides determines which of the programs offered by the University of Memphis the home state will make available to its students.

The Academic common Market is sponsored by the Southern Regional Education Board (SREB). Participating states are Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia (Florida and Texas grant access for graduate level programs only). Current SREB common market guidelines and requirements may be found on the web at:
http://www.sreb.org/programs/acm/acm/searchacm. asp.
Students may request through their home state coordinators that additional programs be made accessible. A list of the state coordinators with their addresses and telephone numbers may be obtained from the Office of Curriculum Planning or the Academic Common Market web site
http://www.sreb.org/programs/acm/acm/searchacm.asp.
In addition to certification requirements which the student's state of residence may specify, the following pertain: (1) students must be fully admitted to a degree program that has been approved as an Academic Common Market program (non-degree students are ineligible); (2) students must obtain a letter certifying residency term of entry and approval for the particular University of Memphis program from their state's Academic Common Market coordinator.

NOTE: After enrollment, students remain eligible for in-state tuition only so long as they are continuously enrolled-consecutive fall and spring terms- in the same major for which they were originally certified. If students change major, they must process a Change of Major through their advisor and notify the Office of Admissions to change the Academic Common Market residency code on their records. Failure to process the Change of Major and to notify Office of Admissions may subject the student to out-of state fees for all subsequent terms of enrollment in classes for a major other than the one for which the student received ACM certification. Missing a fall or spring term of enrollment or a change of major requires that the student be recertified through the ACM coordinator in the student's state or residence.

FEES FOR TOTALLY DISABLED PERSONS AND PERSONS OVER 60 YEARS OF AGE: Persons who are domiciled in Tennessee and (1) have a permanent disability that totally incapacitates them from the potential to work at an occupation that brings them an income, or (2) who will become 60 years of age or older during the academic semester in which they begin classes, may AUDIT courses at the University of Memphis without paying tuition charges, maintenance fees, student activity fees, access fees, or registration fees. Admission to AUDIT will be limited on an individual classroom basis according to space availability. Those who are totally disabled and those who will become 65 years of age or older during the academic semester in which they begin classes, and who are domiciled in Tennessee, may enroll for courses for credit at the cost of one-half the normal per credit hour fee, not to exceed $\$ 70$ per semester.
Direct inquiries regarding these programs may be addressed to Registration Service, room 003, Wilder Tower.

## MI SCELLANEOUS FEES

MUSI C I NDUSTRY FEES: Students who wish to apply for credit for experiential learning in Music Industry may obtain guidelines for this procedure from the Dean of the College of Communication and Fine Arts. A non-refundable $\$ 25$ contract advising fee will be charged for the assessment of the portfolio. See © Experiential Learning Credit Fees for related fee information.
CREDIT BY EXAMI NATI ON OR PLACEMENT EXAMI NATION: The fee for taking an examination for credit or a placement examination is $\$ 60$ minimum and an additional $\$ 15$ for each hour in excess of three (3) per course. These fees are non-refundable and must be paid prior to the examination.

EXPERI ENTI AL LEARNI NG CREDIT FEES: Students who apply for credit for experiential learning will pay a fee of $\$ 30$ per credit hour for which credit is awarded. For students enrolled under a group contract, a maximum fee of $\$ 180$ will be assessed for credits assigned under the terms of the contract.

## Expenses

Currently the University College and the College of Communication and Fine Arts award credit for experiential learning. See $\geqslant$ University College Fees $\geqslant$ and $\geqslant$ Commercial Music Fees $\rangle$ for related fee information.
MUSI C LOCKER RENTAL: Music students are required to have a locker for storage of University-owned musical instruments or equipment. Personal instruments may also be stored in the locker. A fee of $\$ 5$ per semester is assessed for the locker rental. Students will be expected to pay for any damages.
TRANSCRI PTS: There is no fee for transcripts. Transcripts are issued only at the request of the student in person or by letter. No transcript will be issued for a student who has any unfulfilled obligations to the University.
UNIVERSI TY COLLEGE FEES: In addition to the $\$ 15$ application fee, students who apply to the University College must pay a $\$ 40$ fee, which includes a $\$ 15$ non-refundable screening fee plus a $\$ 25$ contract/advising fee, refundable if the application is not accepted.
VARIOUS COURSE FEES: Certain other course offerings may require various fees to obtain the necessary course related supplies.
WALL LOCKERS: University rental lockers are located in the following buildings: University Center (first floor), Engineering (first floor), and Jones Hall (basement and third floors). There is a $\$ 5$ per semester fee for the rental of wall lockers. Wall locker fees are paid at the Bursars Office ( 115 Wilder Tower). Wall lockers are assigned in room 208, University Center after wall locker fees have been paid.

The listing of any fee or incidental charge in this publication does not constitute a contract between the University and the student. As a condition of registration, each student will pay the fees in effect for the semester for which he or she registers. All questions in regard to fees, fee payment, refunds, and appeals should be directed to the Bursares Office (115 Wilder Tower).

Fees are subject to change without notice. The University will usually collect the amount of fees due at the time of enrollment fees satisfaction in accordance with the residency classification and fee rates in effect. After all enrollments are complete, any over-collections will be refunded and students will be billed for any under-collections.

Fees for AUDITING courses are assessed on the same basis as fees for credit courses. Courses offered between terms, for concentrated periods during a term, or at specific locations may be subject to fees on a per-hour basis only.

## APPEAL PROCEDURES

APPEAL PROCEDURES FOR FEES/ CHARGES/ REFUNDS: Any individual may appeal the assessment, application, calculation, collection, or interpretation of any University fee, charge deposit, or refund. The University has developed the following processes for an appeal:

Traffic Fines/ Citations:Traffic fines and citations may be appealed through a separate process on forms available from the Parking Office, Office of Judicial Affairs, or the Student Government Association Office.

Residence Life and Dining Services: Appeals related to Residence Life and Dining Services financial matters should be filed first with the Office of Residence Life and Dining Services for processing. Decisions of the Office of Residence Life and Dining Services may be appealed in writing to the Office of the Assistant Vice President of Student Affairs and the Dean of Students. This decision may be appealed to the University Fee/Refund Appeals Committee.

All Other University Fees/ Charges, Refunds, etc.: A written appeal of all other financial matters should be filed first on forms available from the Bursar's Office (115 Wilder Tower). The Bursar's office will provide a decision in writing to the appellant. Decisions of the Bursar's Office may be appealed in writing to the Office of the Assistant Vice President for Finance.

The Office of the Assistant Vice President for Finance will provide a decision in writing of those matters appealed to that office. This decision may be appealed to the University Fee/Refund Appeals Committee. The recommendation of the committee will be forwarded to the Vice President for Business and Finance for a final decision, which will conclude the University's appeal process.

## UNI VERSI TY I D CARDS

The University of Memphis issues each student an identification card that bears the student's image and social security number. All students should obtain this permanent identification card that is used as the primary campus-wide method of determining privileges and accesses permitted each student. The ID card is required for the borrowing of library books, admission to or approval to pick up or purchase student tickets to athletic and social events, the sale of used text books, and other official purposes.

There is no charge to the student for the initial University ID card and it is automatically validated each semester the student enrolls. The card remains the property of the University of Memphis and should be surrendered upon the request of any University official. Each student may possess only ONE University ID card at any time.

Students may obtain a replacement for a lost, stolen, or damaged University ID card from Ask TOM Answer Center in the Wilder Tower Lobby between the hours of 8:00 a.m. and 5:00 p.m., Monday through Thursday, and 8:00 a.m. - 4:00 p.m. Friday. Students will be charged a $\$ 10$ fee to replace a card that has been lost or stolen. A charge of $\$ 2$ will be made to change any data on an ID card.

## TI GER FUND\$

A personal TIGER FUND\$ account, which is accessed through the University ID card, is available to all students at the University of Memphis. TIGER FUND\$ is a declining balance money management program that provides students with a convenient way to obtain supplies and services on campus without the need to carry cash or the inconvenience of paying by check or credit card.

TI GER FUND\$ is accepted at numerous campus locations including the University Store, Health Center, and campus food service locations.

Additional information on the advantages and convenience of having a personal TIGER FUND\$ account may be obtained from the Bursar's Office in 115 Wilder Tower. Last Updated: 6/12/15

# ACADEMI C REGULATI ONS 

## - APPEALS <br> - CLASS ATTENDANCE <br> - CLASSIFICATION OF STUDENTS

- SCHOLASTIC STANDARDS
- ADDITIONAL MEANS OF EARNING CREDIT
- UNDERGRADUATE GRADE APPEAL


## APPEALS

Students have the right to appeal decisions made by University officials in the implementation of University policy. If a student feels that individual circumstances warrant an appeal, the request for appeal must be filed in the University office responsible for the implementation of that policy or the office specified in the policy statement.

## CLASS ATTENDANCE

Instructors may use class attendance in computing grades. If they choose to do so, they must present all students attending the first and second class meetings with a complete written statement of their policy, detailing the weight of attendance in determining the final grade.

A student who is absent from the final examination without the permission of the teacher incurs a grade of "F" on the examination and may, depending on the weight of the examination in determining the final grade, incur a grade of "F" for the course.

Instructors will report to the Office of the Registrar all students who have not attended any class meetings during the first two weeks of classes (fall/spring) or the first week of classes (summer). These students will be sent a $\geqslant$ Notice of Non-Attendance. $\geqslant$ Students accept both fee and grade liability at the time of registration. Students who do not attend classes are responsible for processing an official drop/withdrawal on TIGERWEB at www.tigerweb. memphis.edu. In order to avoid fee or grade liability, students must drop/withdraw prior to the first day of classes for the session in which the course is taught.

Students who receive VA benefits or Title IV funds (federal financial assistance) for enrollment fees but who stop attending, may have current and future awards cancelled and may have to repay benefits immediately, whether or not they officially withdraw or drop courses. Furthermore, students who stop attending will be assigned a grade of $\geqslant \mathrm{F}\rangle$ in courses from which they have not officially withdrawn. Instructors report the last known date of attendance as the student $\geqslant \mathrm{s}$ unofficial withdrawal date.

## Adding and Dropping Courses

After the official registration period is over, students may make adjustments in their schedules through the process of adding and/or dropping courses. Courses dropped through the 14th calendar day of sessions seven weeks or longer or the 7th calendar day of sessions shorter than seven weeks will not be shown on the student $\langle$ s permanent record. Courses dropped after these days will be shown on the permanent record with withdrawal grades of "W". A student may drop any course or courses up through the last day to drop specified in the University Calendar for that session. Requests for exceptions must be made by the end of the next regular term following the term in which the grade was assigned, and normally only as part of a request for withdrawal from the University. Exceptions are made only by the dean in the college in which the student is earning a degree, or by the dean $\geqslant$ s designee, and only on the basis of such extenuating circumstances as serious personal illness and relocation because of employment. To stop attending a class without officially dropping the course incurs the grade of $\geqslant \mathrm{F}\rangle$.

## Withdrawal From University

Any student who wishes to officially withdraw from the University may do so on the web, or in person through the Office of the Registrar in Student and Faculty Services, room 003, Wilder Tower. Failure to officially withdraw will result in grades of $\geqslant \mathrm{F}$ for the courses in which the student is enrolled.

NOTE: Withdrawal is not permitted beyond the last day to withdraw specified in the University Calendar for that term or session. Requests for exceptions must be made by the end of the next regular term following the term in which the grade was assigned. Exceptions are made to this policy only in cases of such extreme circumstances as serious personal illness and relocation because of employment. Withdrawal requests after the deadline should be filed in the dean s office of the student $\geqslant$ major college or the Academic Counseling Center for students with no declared major.

## Enrollment Transactions

Enrollment transactions include registration, adding and dropping courses, and withdrawing from the university. The official date shall be the date that the request is submitted to the Office of the Registrar, subject to the final review and approval of the Assistant Vice Provost for Enrollment Services. If the final review reveals any apparent violation of the University's academic regulations and/or contractual relationships between the University and the student, the Assistant Vice Provost for Enrollment Services has the authority to suspend the transaction pending joint review with the college dean, the department chair, and the student's academic advisor. If the joint review verifies the legitimacy of the transaction, the official date will be that originally established. If the joint review culminates in a finding that academic regulations and/or contractual relationships have been violated, the entire transaction may be permanently invalidated.

## CLASSI FI CATI ON OF STUDENTS

Classification of students is based on the number of college level credit hours earned as shown in the following table.

| Classification | Semester Hours |
| :--- | :--- |
| Freshman | $0-29$ |
| Sophomore | $30-59$ |
| Junior | $60-89$ |
| Senior more | 90 or mor working on a degree |
| Special | Students not working |

In order to avoid a possible delay in graduation, students who have completed the required number of hours to be classified as juniors but who have not completed their basic requirements in the Lower Division should schedule these uncompleted requirements during the first semester in which such courses are available.

## Credit Hours, Full-Time Classification, and Maximum Load

The unit of credit at the University of Memphis is the semester hour. A semester hour is defined as the credit earned for the successful completion of one hour per week in class for one semester; or two to three hours per week of laboratory for one semester. (A course which gives three semester hours credit will normally meet for three lecture or recitation hours per week, or for two lecture or recitation hours and twothree laboratory hours per week; or for some other combination of these.) Each lecture hour presupposes a minimum of two hours preparation on the part of the student.

The minimum credit hour load for classification as a full-time student is 12 credit hours for a term (all sessions combined for fall, spring, or summer). The maximum loads are found in the table below. The maximum credit hour load includes all course enrollments for any term, both at the University of Memphis and any concurrent enrollment at other institutions. It does not include credit by examination. No student is permitted to enroll for correspondence or extension courses while carrying a maximum credit hour load.

## MAXI MUM CREDIT HOUR LOAD

Maximum Hours*
Fall or Spring
Summer
Individual Session Maximums
First or Second Fall or Spring
Pre Summer or Three Week Session
First or Second Summer
Full Summer
Enrollment of less than 12
or Summer term is defined as being less than full-time. Maximum hours should
not exceed individual session limits or the term maximum.

* Students must have approval from the appropriate official in their
degree-granting college for hours in excess of the maximum.
NOTE: ID card validation of full-time for student activity purposes nem
is based on minimum of six credit hours per semester and does not necessarily
constitute a full-time academic load.


## ACADEMI C STANDARDS

## Grades and Quality Points

## GRADES

At the end of each session, instructors report to the Office of the Registrar the standing of all students in their classes. The grade of a student in any course is determined by class standing and examination, combined in such proportion as the instructor in charge of the course may decide. The instructor s grading scale will be provided to students on the course syllabus.
The instructor $\geqslant \mathrm{s}$ evaluation of the student $\geqslant \mathrm{s}$ work is expressed by the following grades which are converted to quality points for the purpose of averaging grades.

| Grade | Quality Points |
| :--- | :---: |
| A + | 4.00 |
| A | 4.00 |
| A- | 3.84 |
| B+ | 3.33 |
| B | 3.00 |
| B- | 2.67 |
| C+ | 2.33 |
| C | 2.00 |
| C- | 1.67 |
| D+ | 1.33 |
| D | 1.00 |
| F | 0.00 |
| W (Withdrew) | 0.00 |
| I (Incomplete) | 0.00 |


| NR, None Reported | 0.00 |
| :--- | :--- |
| NC, Non Credit | 0.00 |
| *IP, In Progress | 0.00 |
| *S, Satisfactory | 0.00 |
| *U, Unsatisfactory | 0.00 |
| T (see below) | 0.00 |
| AD, Audit | 0.00 |
| CR, Credit | 0.00 |

$*$ Grades used to postpone or suspend course completion include $\geqslant \mathrm{I}\rangle$ (Incomplete), $\geqslant \mathrm{IP}\rangle$ (In Progress), and $\geqslant \mathrm{W}\rangle(\mathrm{Withdrawn})$.
Independent studies courses, student teaching, workshops, practical, and internships should be graded $\geqslant A-F, I P \geqslant$ or $\geqslant S / U, I P . \geqslant A$ grade of $\geqslant S, \geqslant \geqslant<\geqslant$ or $\geqslant \mathrm{IP} \geqslant$ does not carry any quality points and is not included in computing GPA. All courses for which the student is registered are recorded as passed (with a letter grade), $\geqslant$ T $\geqslant$, failed, dropped, withdrew, audit, credit, satisfactory, unsatisfactory, or incomplete. In no case is credit allowed in any course for which the student is not properly registered.

Grade of Incomplete: The grade of "I" (Incomplete) may be assigned by the faculty member in any course in which the student is unable to complete the work due to extraordinary events beyond the student $\geqslant$ s control that are acceptable to the faculty member. The $\geqslant 1 \geqslant$ may not be used to extend the term for students who complete the course with an unsatisfactory grade. Unless the student completes the requirements for removal of "I" within 45 days from the end of the semester or summer term in which it was received (see University Calendar), the "I" will be changed to "F," whether or not the student is enrolled. The faculty member may grant up to a 45 -day extension if sufficient extenuating circumstances exist. At the end of the extension period, the I will automatically revert to $\rangle$ if the student has not completed the requirements. The student will be certified for graduation only when all requirements are met, including the removal of I$\rangle$ grades. For students who have an $\rangle \mathrm{I}\rangle$ in a course required to fulfill degree requirements in the semester in which they expect to graduate, the certification process and graduation will automatically be deferred to the next term.

In Progress: In courses with $\geqslant$ In Progress (IP) grading, faculty members may assign $\geqslant$ IP to extend the time permitted for completion of research or course requirements. A student awarded an $\geqslant$ IP $\rangle$ grade must re-enroll in the course for the same number of hours to complete the work. The final grade will be submitted by the faculty member at the end of the term in which the work is completed. This should be the semester following the $\geqslant \mathrm{IP}$ grade.

Grade Changes: Grades properly issued in a course by the faculty member of record will not be altered except when an error was made in computation or reporting or as a result of a formal grade appeal. A grade other than "I" or "IP" may not be changed as a result of additional work after a grade has been submitted to the Office of the Registrar. The Grade Appeals procedure is described below.
$\Leftrightarrow$ T" Grade: The "T" grade allows students to complete independent studies courses in variable time periods that might exceed a regular enrollment period. The following procedure governs the use of the "T" grade:

1. Prior to the registration period, the faculty member obtains approval of the department chair and dean to use the "T" grade in a course(s).
2. The dean notifies the Office of the Registrar of courses for which the "T" grade may be awarded.
3. At the end of the regular term, the faculty member has the following options:
a. Award grades A-F.
b. Award an "I" grade if the faculty member feels that the work can be completed in 45 days. (If an "I" grade is awarded, a roster with the student's name on it will be sent to the faculty member during the 45 -day period. The faculty member must record either $\langle\mathrm{A}\rangle$ to the "T" grade to prevent an automatic assignment of "F.")
c. Award a "T" grade. If the "T" grade is awarded, the student must re-register for the course in order to earn credit. The "T" grade is not used in the computation of GPA.

## Grade Reports

Current semester grades may be obtained on TIGERWEB at www.tigerweb.memphis.edu. Grades are normally available by the Thursday after the last day of the exam period for the session.

## Withholding of Grade Reports

The University is required by State law to withhold grade reports, transcripts and diplomas from students who have outstanding financial obligations to the University. When financial obligations have been resolved, students may obtain their grades on TIGERWEB at www.tigerweb.memphis.edu.

## Repetition of Courses

A student may repeat most courses in an attempt to improve the grade previously earned. There are some courses that may not be repeated for this purpose. Information concerning these courses may be obtained from the office of the chair of the department in which the course is offered. In some degree and major programs, there are restrictions on course repetitions even after drops or withdrawals. The student should always check with the major advisor before enrolling in a course a second or subsequent time(s).

The University is not obligated to allow substitutes for repetition of courses, which have been deleted from the curriculum. Credit by examination may not be used for the purpose of improving a grade previously earned in a course taken for credit.

Grades earned in the second and each subsequent attempt will count towards the student's GPA.
A student may not attempt the same course more than three times. Exceptions to this policy will be granted only on appeal to the Vice Provost for Academic Affairs.

The record will continue to reflect all grades earned in the same course.

## Audit Courses

Students who are admitted to the University of Memphis may register to audit a course with the prior approval of the instructor and the department chair. Students enrolling on an audit basis do not receive academic credit for that course. Particularly in high-demand courses, departments should make sure that students who need these courses for degree credit can be accommodated before they issue permits for audits. Audits should not be used simply as a vehicle for obtaining access to laboratory or studio facilities. Auditors are not required take examinations and do not receive a regular letter grade. There should be a precise agreement between the student and the instructor as to the extent and nature of the student participation in the course, including class discussions, projects, and readings. Students auditing a course will receive AD (Audit) on the transcript only if they have attended regularly and participated according to the prior agreement with the instructor.
A student may not change from a grade point to an audit or from an audit to a grade point basis after the last day to add classes for that session. Any questions concerning this policy should be referred to the colleges.
Fees for audits will be assessed on the same basis as fees for credit courses.

## Credit/ No-Credit Courses

The University, wishing to encourage students to broaden their range of interest without jeopardizing their grades, allows students who have earned at least 60 semester hours with a minimum grade point average of 3.0 to enroll in credit/no-credit courses. For this purpose, students may take up to 8 hours of coursework on a credit/no credit basis provided that these courses are unrestricted electives. Specifically excluded are general education, college, major and degree requirements and requirements for a minor. A student taking a course on a credit/no-credit basis must meet the prerequisites for that course as set forth
in the Bulletin, or have permission of the instructor.
人 Neither a credit nor a no-credit grade is counted in a student's grade point average, but, like all other grades, is entered on the permanent record.

Credit (CR) grade is given for $\geqslant \mathrm{C}$ - or better work on the traditional grading scale and no-credit (NC) is given for less than $\geqslant \mathrm{C}$ - $\geqslant$ work.
$\rangle$ The student only receives credit in the course if credit (C- or better) is received.
(2) A student may not repeat a course for credit/no-credit if the student received a conventional grade (A-F or S).

Students who transfer from one college to another should be aware that credit/no-credit hours may be accepted in one college and not in another. In every instance, approval to register for a course on a credit/no-credit basis must be obtained from the advisor and the dean of the student's degree-granting college prior to registration for that class.

With approval, a student who registers for a course on a credit/no-credit basis may change the registration to a letter grade point basis only during the add period, and a student who registers for a course on a letter grade point basis may change the registration to a credit/no-credit basis only during the add period for the term or session of the course. The student who successfully completes a credit/no-credit course will receive the appropriate number of hours as credit toward graduation. These hours will not be used in the computation of the grade point average.

## Undergraduate Grade Appeal Procedure

## Purpose of the Undergraduate Grade Appeals Procedure

The responsibility for evaluating student work and assigning grades lies with the instructor of the course. The purpose of the grade appeal procedure is to provide a review process 1) for a student to understand the reasons why the grade was assigned, 2) for the instructor to become aware of and correct possible errors, 3) for appropriate supervisors at the department and college level to review the basis on which a grade has been awarded and to correct cases in which a grade is determined to have been assigned based on arbitrary or capricious action, or other reasons not related to academic performance. If, after departmental and college review, the grade is still in dispute, an appeal may be submitted to the Undergraduate Grade Appeals Committee, which consists of faculty and student representatives, for final resolution.

In all cases of a disputed grade, the student has burden of proof that the grade assigned was not appropriate. If the case has not been resolved at the student/ instructor level, then the student should submit a written petition that would include a copy of the syllabus along with copies of any tests, quizzes, assignments or other written work completed and graded as part of the class requirements to the appropriate step of review. At each step of further review, copies of any previously submitted materials and any written responses to those petitions should be included.

It is important to distinguish grounds for grade appeal from questions about quality of instruction. Successful grade appeals should be based on evidence that the student performed at a level sufficient to warrant a different grade. It is important for students to bring to the instructor $\geqslant s$ and the department $\geqslant \mathrm{s}$ attention perceived deficiencies in instruction, but these by themselves do not normally warrant a change in grade. For a successful grade appeal, the student should be able to show, for example, not that the student could have earned a grade of $\geqslant \mathrm{B}\rangle$ under different circumstances, but rather that the student actually did earn a grade of $\boldsymbol{B}$ according the standards set out on the syllabus for that course, but was assigned a lower grade. If, in the opinion, of the department or the college, deficiencies in instruction are so grave as to warrant an alternative accommodation, then the proper remedy will normally involve alternative assignments or examinations to allow the student the opportunity to demonstrate the appropriate level of
competency in that area to earn a different grade than the grade originally assigned. The decision about these cases should be made at the departmental or college level. In disputed cases where the appeal is based primarily upon perceived quality of instruction, the Undergraduate Grade Appeals Committee has the option of referring the case directly to the Vice Provost for Academic Affairs.

## Procedures

A student wishing to appeal a grade must follow Steps 1-4 listed below. (The deadlines listed below apply to the dates when classes are in session during the fall or spring semesters.) If a student fails to observe the deadlines, the decision made in the previous step will be final. If a department or college fails to respond to the student $>$ s complaint within the deadline, the student should contact the Office of Academic Affairs. The deadline for filing the appeal should be extended appropriately to ensure that the student retains the opportunity to pursue the appeal at the next step. All correspondence and records will be retained in the office in which the complaint is resolved.

Step 1: The student should first consult with the instructor, at the latest within two weeks of the beginning of the subsequent fall or spring semester, in an effort to provide a satisfactory resolution of the complaint. If the student cannot schedule a meeting with the instructor, the student may contact the department chair, who will schedule the meeting between the student and the instructor. The only exception to this step is the case in which the instructor is unavailable. In this case, the student may proceed directly to Step 2.

Step 2: If the complaint is not resolved in Step 1, the student may present the complaint in writing by the end of the third week in the semester to the chair of the department in which the course was offered. Included in the petition the student should attach the appropriate materials described above, and if available, the instructors written explanation for the assigned grade. The department chair will attempt to resolve the complaint in consultation with the instructor and the student. The department chair will provide a written response to the student within two weeks from the time the written complaint has been received. If the department chair was the instructor of the course, the student may proceed directly to Step 3.

Step 3: If the complaint has not been resolved at the departmental level, the student may appeal further by presenting a written petition to the dean of the college in which the course was offered, along with a copy of the materials presented at the previous stage and any written responses received from the department. At the latest, this petition should be presented within one week after the departmental response. Within two weeks of the time the complaint was received, the dean may use any resources available to resolve the conflict.

If the dean finds that the request does not have merit, the dean shall notify the student in writing, with copies sent to the instructor and the department chair. If the dean and the department chair agree that the grade should be changed, the dean shall be empowered to change the grade without the instructor s consent. Either the student or the instructor may appeal this decision in Step 4. If the dean and the department chair do not agree, the dean shall present his or her view in writing to the student, with copies to the instructor and the department chair, so that the student may include that information in an appeal to the Undergraduate Grade Appeals Committee for final resolution of the complaint.

Step 4: If the complaint has not been resolved through the previous steps, the student may present a grade appeal petition addressed directly to the Undergraduate Grade Appeals Committee through the Office of Academic Affairs. Copies of written materials and petitions presented at the previous steps, along with any written responses received from the department or the college, must be included with the petition at the time of submission. The deadline for submission of a petition is March 15 for grades awarded during the previous fall term, and October 15 for grades awarded during the previous spring or summer terms. The Office of Academic Affairs will forward the petition along with the attached materials to the chair of the Undergraduate Grade Appeals Committee, who will distribute copies to the members of the Committee.

The Committee members shall review the petition and the attached materials and then forward their recommendation to the chair of the Committee about whether a hearing is warranted in this case. If a majority of the Committee does not vote that the case merits a hearing, the grade stands as issued. If a majority of the Committee votes in favor of a hearing, the chair of the Committee shall inform the student
and the instructor, and shall arrange a hearing to be attended by the student, the instructor, and the members of the Undergraduate Grade Appeals Committee or their designated alternates. Copies of the Committees decision for the hearing shall be sent to the department chair and dean of the college.

Prior to the hearing, the instructor should be given a copy of the students petition and supporting materials. If members of the Committee feel that additional factual information is needed prior to or after the hearing to render a decision, the chair of the Committee should inform the Office of Academic Affairs of that request in writing, and that office should make every effort to provide that information in writing to the Committee. At the hearing, first the student and then the instructor will each have the opportunity to present their cases orally and to present any other written materials they deem appropriate. The Committee members shall have the opportunity to ask questions to both the student and instructor. At the end of the meeting, the student and then the instructor shall be given the opportunity for brief closing statements.

The chair of the Committee should inform the student, the instructor, the department chair, the college, and the Office of Academic Affairs of the Committee s decision in writing within one week of the hearing. If a majority of the Committee agrees that the grade should be changed, the Office of Academic Affairs will notify Student Records of the grade change. Otherwise the grade shall remain as recorded. The decision of the Undergraduate Grade Appeals Committee shall be final.

The Undergraduate Grade Appeals Committee shall be composed of seven members and seven alternates constituted as follows:

A chair designated by the Vice Provost for Academic Affairs, a faculty member and alternate designated by the dean of the college involved, two faculty members and two alternates designated by the Faculty Senate, one student and one alternate designated by the college, two students and two alternates selected through the Student Government Association.

Although the primary responsibility of the Committee is to review grade appeals and assign the appropriate grade in cases where the appeal is upheld, the Committee shall also report any findings of discrimination or prejudice to the Office of Academic Affairs for further consideration and possible action.

## COMPUTI NG GPA

Computation of a student's college-level undergraduate grade point average includes all courses attempted except credit/no-credit, audit, incomplete, developmental, and satisfactory/unsatisfactory courses and "T" grades. As an example: a student carrying five three-semester-hour courses for a total of 15 semester hours makes the following grades: A, B, C, T, F, thus accumulating grade points in the amount of $12,9,6,0$, 0 , for a total of 27 . To compute the grade point average, divide the number of quality hours (except "T" grade) (12) into the grade points earned (27) for an average of 2.25 .

Graduation: A minimum 2.0 grade point average on all work attempted is required for graduation.

## Academic Fresh Start

An ACADEMIC FRESH START is provided for undergraduate students who have gained maturity through extended experience outside higher education institutions and have demonstrated better than average academic performance following their return to the University of Memphis. It allows for the calculation of the applicant's grade point average and credit hours toward graduation to be based only on work done after returning to college. Preliminary information and application forms may be obtained from the Office Academic Status and Retention. Requirements to be satisfied by a student requesting an Academic Fresh Start toward a baccalaureate degree are as follow:

- Separation from all academic institutions for at least four years.
- Formal application must be made prior to completion of 24 semester hours of earned graded course work following the readmission or admission to the University of Memphis.
- Developmental studies courses (DSP) will not count toward the 24 semester hours of earned course work.
- The applicant must complete at least 6 semester hours of earned graded course work within one semester.
- Only courses for degree credit may be counted.
- At the time of application for ACADEMIC FRESH START, the student must have a GPA of at least 2.50 for all work attempted after returning to college.
- Formal application describing the academic degree plan must be submitted to the Office of Academic Status and Retention Services.
- After the academic plan is reviewed, the Office of Academic Status and Retention Services will forward the plan to the appropriate college dean for approval.

Upon approval of the college dean, the student will be granted an Academic Fresh Start. It may be granted once. The student s permanent record will remain a record of all work; however, the student will forfeit the use for degree purposes at the University of Memphis, any college or University credit earned prior to the four-year separation indicated above. The date of the fresh start will coincide with the date of re-entry following prolonged separation, and the permanent record will note that a fresh start was made and the date of the fresh start. The record will also carry the notation, $\geqslant$ GPA and credit totals are based only on work beginning with that date. That date will be treated as the date of entry in determining which Bulletin may be used for graduation.

The University of Memphis honors academic fresh start completed at other accredited institutions of higher education.

## ACADEMI C STATUS AND RETENTI ON

At The University of Memphis, students' academic status is denoted by one of three conditions:
(I) GOOD STANDING
(2) ACADEMIC PROBATION
(3) ACADEMIC SUSPENSION

Official notification of academic status is by means of the grade report available to each student at the end of the regular semester or summer session. Students can obtain their current semester grades/academic status on TIGERWEB, www.tigerweb.memphis.edu. Specific questions concerning academic probation/suspension should be directed to the Office of Academic Status and Retention Services, room 200, Wilder Tower. The academic status of probation or suspension will be stated at the end of the report of grades. Policies and procedures related to each of these conditions are outlined in the following comments.

## Good Standing

Students are in good standing so long as their overall grade point average is equal to the minimum cumulative GPA required on the sliding retention scale as defined in this policy statement. The term good standing indicates only that students are meeting the minimum standard for retention in the University. However, in order to meet graduation requirements, students must have a cumulative GPA of 2.00.

## Academic Probation

A student will be placed on academic probation at the completion of any fall, spring, or summer term when the student $\geqslant$ s overall GPA falls below the following:

人 A student on academic probation who withdraws from the University during the first probationary semester will be continued on academic probation. Withdrawal by such a student from any subsequent probationary semester will be treated as an academic suspension requiring clearance from the Office of Academic Status and Retention Services for any future registration. Students who are enrolled on academic probation are allowed to register for the following semester. However, students whose grades result in an academic suspension will be automatically withdrawn from the University before classes for that term begin. Students are considered in good standing and eligible to participate in extracurricular and organizational activities sponsored by the University while on probation unless other requirements are specified by a particular group, organization, or activity.

## Academic Suspension

Students on academic probation who, at the end of the following term of enrollment, fail to raise their GPAs to at least the required minimum on the Sliding Scale Retention Policy above will be suspended. There is one exception to this policy: students on academic probation will not be suspended at the end of any fall, spring, or summer term during which a term average of 2.00 has been earned.

Students who have been dismissed from the University on academic suspension may apply for readmission only after the following time periods have elapsed. These times are minimum time-periods before which readmission petitions will not be considered by the Office of Academic Status and Retention. Admission decisions after these minimum time-periods will be based on a number of criteria that serve as indicators of a student's prospects for academic success if readmission is granted.

1. A student who incurs a first suspension must remain out of the University a minimum of one regular semester (fall or spring).
2. A student who incurs a second suspension must remain out of the University a minimum of one calendar year.
3. A student who incurs a third suspension must remain out of the University a minimum of three calendar years.
4. A student who has been readmitted following a third suspension and who then fails to meet the retention standards should be aware that he or she may thereby become ineligible for further enrollment at the University of Memphis.

Students on academic suspension who apply for readmission must participate in a counseling interview that is an important part of the readmission decision. There are specific deadlines that students applying for readmission after leaving on academic suspension must observe to make it possible to schedule this interview and allow for appropriate advising and planning to enable the student to be successful if the student is readmitted to the University.

Any course work taken at another accredited college or university will be used in determining eligibility for readmission to the University of Memphis. Students who left the University of Memphis on academic suspension must fulfill all previously attempted high school deficiency and remedial and developmental coursework requirements before they will be considered for readmission at the University of Memphis .

The Office of Academic Status and Retention, Room 200, Wilder Tower , is responsible for the administration of this policy.

## Recognition for Academic Performance

The University of Memphis recognizes outstanding academic performance in a variety of ways. In addition to those listed below, there are other honors and awards listed in the descriptions of the various honors programs.

## THE DEAN'S LIST

The Dean's List is composed of those students enrolled for 12 hours in the fall or spring semesters with a 3.5 grade point average for that semester.

Transitional Academic Studies courses (DSP) are not considered in calculating eligibility for the Dean's List. College level courses used to satisfy high school deficiencies will be considered in the computations to determine eligibility for the Dean's List.

## GRADUATI ON WI TH DI STI NCTI ON

Students who intend to achieve Graduation with Distinction must do the following:

1. Fulfill all graduation requirements at the University of Memphis.
2. Complete a minimum of forty-two (42) semester hours at the University of Memphis by the time of graduation.
3. Earn the following grade point average to achieve the listed designations:

$$
\begin{array}{ll}
3.2500-3.4999 & \text { Cum Laude } \\
3.5000-3.7999 & \text { Magna Cum Laude } \\
3.8000-4.0000 & \text { Summa Cum Laude }
\end{array}
$$

*The actual conferral of Graduation with Distinction cannot be made until the student $\rangle$ s final GPA at the University of Memphis has been certified by the College/School.

## PRI VACY RI GHTS OF PARENTS AND STUDENTS

The Family Educational Rights and Privacy Act of 1974, with which the University complies fully, is designed to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with The Family Educational Rights and Privacy Act Office (FERPA) concerning alleged failures by the institution to comply with the Act.

The provisions for the release of information about students and the rights of students and others to have access to the University of Memphis education records are published in their entirety in the University of Memphis Procedure "Privacy of Education Records which is available in the offices of the Registrar and the University Counsel.

## CREDIT TRANSFERRED FROM OTHER I NSTI TUTI ONS

## 1. Transfer Credit for Previous Instruction

Credit from post-secondary institutions will be granted and applied toward degree requirements only when it is for courses that are substantially equivalent to those offered at the University of Memphis. Credit not equivalent to courses at the University of Memphis may be posted to the students record and may be used as elective credit or as determined by the dean of the college from which the student is to graduate. After the student has been approved for admission as a regular undergraduate, the Office of Admissions will evaluate credit for University-wide use. The office of the dean in each college has the authority for determining the use of acceptable credit toward specific degree programs in that college.

The University of Memphis accepts transfer credit for college-level courses taken at accredited institutions of higher education. Student petitions for transfer credit for courses completed at institutions that are not regionally accredited are considered on a case-by-case basis. The student must present a petition in writing to the Office of Admissions at the University of Memphis with a list of courses for which credit is desired.

The student must provide transcripts from the institutions, documentation from each course that includes the course content, course level, contact minutes, the standards for assessing student work, and documentation of the academic credentials of the course instructor. Based on an examination of these materials and after consultation with the appropriate academic department or college, the Office of Admissions will review the student's petition and provide confirmation of those courses that have been approved for transfer credit.

## 2. Earning Transfer Credit after Enrollment at the University of Memphis

After enrollment as regular undergraduates at the University of Memphis, students should obtain prior approval from the dean of the college from which they are to graduate before taking a course at another institution for the purpose of meeting degree requirements at the University of Memphis. The student who intends to take a course at another institution should consult with the Admissions Office and obtain forms for use in securing the dean s approval. Courses taken without prior approval are subject to possible disapproval when they are presented for evaluation at the University of Memphis.

Before credit earned at another institution can be transferred and recorded on a permanent academic record, the student must have an official transcript from the institution mailed to the Admissions Office and must contact the college dean s office to request that the credit be posted.
The maximum credit hour load allowed for any term includes all course enrollments both at the University of Memphis and any concurrent enrollment at other institutions. (See 2 Credit Hours and Maximum Load

## 3. Transfer Credit for Distance Education

Credit from other institutions for distance education courses taught by independent study, on-line computer instruction, or other methods, is evaluated in the same manner as transfer credit for classroom-based instruction. As with other transfer credit, students enrolled as regular undergraduates must seek prior approval from the dean of the college from which they are to graduate before taking courses to meet degree requirements at the University of Memphis.

## ADDI TIONAL MEANS OF EARNING CREDIT

## 1. Credit for Selected Secondary School Courses <br> a. Advanced Placement Credit

The University of Memphis participates in the Advanced Placement Program of the College Entrance Examination Board. Appropriate credit is awarded for scores of 3, 4, or 5. Advanced placement credit may also apply to certain university requirements and to major requirements. Information about credit awarded may be obtained from the Admissions Office and the Office of Admissions website.

## b. I nternational Baccalaureate Program

The University of Memphis recognizes secondary students $>$ participation in the International Baccalaureate Program and awards college credit for completion of selected courses. To be eligible for credit, students must earn a score of 4 or higher. Information on credit awarded is available in the Admissions Office.

## 2. Credit for Instruction in the Armed Services

An official evaluation of armed services instruction is made after a student is accepted as a regular undergraduate student. Credit awarded for completion of service schools will be governed by recommendations at the baccalaureate level from the current Guide to the Evaluation of Educational Experience in the Armed Services. DD Form 295 must be presented to the Admissions Office for evaluation.

Veterans who have completed one year or more of continuous full-time active military service will receive a waiver of the required physical activity course, but will be required to take HMSE 1100 Concepts of Fitness and Wellness. Upon presentation of a copy of the veteranss report of separation (DD Form 214) to the Admissions Office, six semester hours of health and physical education credit will be awarded. Veterans with less than one year of continuous full-time service who have completed basic training while on active duty will be awarded credit as recommended in the Guide to the Evaluation of Educational Experiences in the Armed Forces.

## 3. Credit for Non-collegiate Sponsored I nstruction

Credit is awarded for non-collegiate sponsored instruction offered by corporations, associations, labor unions, government agencies, and training providers which has been evaluated by the Program on Noncollegiate Sponsored Instruction of the American Council of Education and recommended in the current

Guide to Educational Programs in Non-collegiate Organizations. The Office of Admissions should be contacted for information.

## 4. Credit by Examination

Credit by examination is awarded based upon standardized examinations and upon examinations administered by departments of the University for specific courses and for placement. Students may not take an examination for credit in a course previously taken for credit, with the exception of lower division transfer courses that the student wishes to validate for upper division credit. Students may, however, take an examination for credit in a course that was audited or in courses at a lower level than a course taken for credit. Credit by examination may not be used to satisfy the Computation Intensive, Writing Intensive, and Integration requirements of the General Education Program.

## a. CLEP and DANTES Standardized Examinations

The University of Memphis awards credit for standardized examinations of the College-Level Examination Program (CLEP) of the College Board and for standardized examinations of the Defense Activity for NonTraditional Education Support (DANTES). Credit awarded is based upon credit recommendations and minimum scores recommended by the American Council on Education. CLEP and DANTES credit may also apply to certain University requirements and to major requirements. For information on credit awarded, test dates, and fees, contact the Testing Center.

## b. Departmental Examinations

Almost all courses in the undergraduate curriculum, except for those with laboratory, research, or performance requirements, are available for credit by examination. Students who believe that they have already mastered the material of a particular course offered at the University of Memphis may take a departmentally administered examination for credit in that course.
To apply for credit by examination, a student must be enrolled at the University of Memphis and have a GPA of 2.00 or above. An eligibility form may be obtained in the Office of the Registrar -
Corrections/Analysis. Permission to take a credit examination must then be obtained from the chair of the department in which credit is sought and from the dean of the college in which the student is seeking a degree. Students pay $\$ 60$ per course, plus $\$ 15$ per credit hour in excess of three (3) credit hours per course (see Fees and Charges) prior to taking the exam. To receive credit, the student $\geqslant \mathrm{s}$ examination grade should be the equivalent of a "C" or above. Credit is indicated on the student $\geqslant \mathrm{s}$ record as CR.

## 5. Upper Division Credit by Validation Examination

Credit for courses at the freshman or sophomore level is transferred as lower division credit even though the content may be equated to University of Memphis upper division (junior/senior) level courses in some cases. In order to receive upper division credit for a lower division course that has an upper division equivalent, the credit must be validated through appropriate departmental examinations, portfolios, or other documentation. Contact the department to see if this option is available, to make application and to obtain information. There is no fee for validation examinations.

## 6. Credit for Course Placement and Completion

Some departments offer the opportunity to receive credit by course placement and completion for selected courses. Students who receive prior approval from the department chair may enroll in a University of Memphis course at the level for which they feel previous instruction or experience qualifies them. Upon completion of the course, they receive credit for certain sequential courses numbered lower than the one in which they enrolled. Recording of credit for the lower numbered course(s) is contingent upon completion of the higher level course with a minimum grade of " C ". Upon completion of the course, approval of the chair of the department and payment of fees are required for credits to be recorded. (See Fees and Charges)
In the Department of Foreign Languages and Literature, students whose first college-level course in a language is 2010 may apply for credit for 1020 in that language. Students whose first college-level course is 2020 may apply for credit for 1020 and 2010 in that language, and those whose first college-level course in a language is a $3 x x x$ course in composition and/or conversation may apply for credit for 1020, 2010, and 2020 in that language.

## Credit for Experiential Learning by Assessment

Students seeking degrees in the College of Communication and Fine Arts, the College of Education, and University College may be granted credit for college level knowledge and understanding related to the student $\geqslant \mathrm{s}$ major area of study and gained from work experience, life experience, or non-college instruction. The student who wants an assessment of such learning prepares a portfolio that describes and documents the learning. Portfolios are assessed by faculty who teach in that area.
Assessment by portfolio is reserved for knowledge and competencies which do not readily fit into the credit by examination procedures described above. More detailed information about procedures may be obtained

## GRADUATI ON FROM THE UNI VERSITY

- GENERAL REOUIREMENTS
- UNIVERSITY GENERAL EDUCATION PROGRAM
- REQUIREMENTS FOR TEACHER LICENSURE
- BULLETIN APPLICABILITY
- SECOND BACHELOR'S DEGREE


## GENERAL REQUI REMENTS

## STATEMENT OF TENNESSEE BOARD OF REGENTS GENERAL EDUCATI ON POLI CI ES

Effective Fall Semester 2004, each institution in the State University and Community College System of Tennessee (The Tennessee Board of Regents System) will share a common lower-division general education core curriculum of forty-one (41) semester hours for baccalaureate degrees and the Associate of Arts and the Associate of Science degrees. Lower-division means freshman and sophomore courses. The courses comprising the general education curriculum are contained within the following subject categories:

## Baccalaureate Degrees and Associate of Arts and Associate of Science Degrees*

Communication 9 hours**
Humanities / Fine Arts9 hours (At least one course must be in literature.)
Social/Behavioral Sciences 6 hours
History 6 hours***
Natural Sciences 8 hours
Mathematics 3 hours
Total 41 hours
*Foreign language courses are an additional requirement for the Associate of Arts (A.A.) and Bachelor of Arts (B.A.) degrees. The B.A. degree requires proficiency in a foreign language equivalent to completion of two years of college-level work. The A.A. degree requires proficiency in a foreign language equivalent to completion of one year of college-level work.
**Six hours of English Composition and three hours in English oral presentational communication are required.
***Students who plan to transfer to Tennessee Board of Regents (TBR) universities should take six hours of United States History (three hours of Tennessee History may substitute). Students who plan to transfer to University of Tennessee System universities or to out-of-state or private universities should check requirements and take the appropriate courses.

Although the courses designated by Tennessee Board of Regents (TBR) institutions to fulfill the requirements of the general education subject categories vary, transfer of the courses is assured through the following means:
(2) Upon completion of an A.A. or A.S. degree, the requirements of the lower-division general education core will be complete and accepted by a TBR university in the transfer process.
人 If an A.A. or A.S. is not obtained, transfer of general education courses will be based upon fulfillment of complete subject categories. (Example: If all eight hours in the category of Natural Sciences are complete, then this $\geqslant$ block $\geqslant$ of the general education core is complete.) When a subject category is incomplete, course-by-course evaluation will be conducted. The provision of block fulfillment pertains also to students who transfer among TBR universities.
$\geqslant$ Institutional/departmental requirements of the grade of $\geqslant \mathrm{C}\rangle$ will be honored. Even if credit is granted for a course, any specific requirements for the grade of $\geqslant \mathrm{C}\rangle$ by the receiving institution will be enforced.

In certain majors, specific courses must be taken also in general education. It is important that students and advisors be aware of any major requirements that must be fulfilled under lower-division general education.

Courses designated to fulfill general education at the University of Memphis are published below. A complete listing of the courses fulfilling general education requirements for all system institutions is available on the TBR website (www.tbr.state.tn.us) under Transfer and Articulation Information.

## UNI VERSI TY GENERAL EDUCATI ON PROGRAM

Room 500, Wilder Tower
http://academics.memphis.edu/gened/
The University General Education Program promotes a shared core learning experience for all undergraduate students at the University of Memphis and provides a framework upon which the college major can build. The major purpose of the Program is to provide students the opportunity to acquire tools, develop skills and awareness necessary for completing a college career and assuming the roles of a lifelong learner and an active, informed participant in contemporary society.

The University of Memphis General Education Program consists of 41 hours of coursework from a variety of disciplines. Students should consult their advisors on specific General Education Program courses that may be required for the major. The following are the General Education Program categories and their approved courses. Former course numbers appear in parentheses.
A. Communication (9 hours)

ENGL 1010 (1101) English Composition - Expository writing, emphasizing content, organization, and style.
ENGL 1020 (1102) English Composition and Analysis - Expository writing, including library work and documented papers.
[All candidates for graduation at the University of Memphis are required to complete English 1010 and 1020, or their equivalents, with a grade of or better. Before enrolling in English 1010, a student must have either (1) an ACT English score of 19 or above, or (2) an SAT verbal score of 460 or above, or (3) a satisfactory completion of a placement test administered by the University of Memphis Testing Center. Those who do not meet the requirements above, must successfully complete DSPW 0800 with a grade of or better before proceeding to English 1010. English 1010 and 1020 must be taken in sequence; no credit will be allowed for English 1020 until 1010 has been completed successfully.]

COMM 2381 Oral Communication - Basic oral communication, includes speaking, critical listening, and decision-making.
B. Mathematics ( 3 hours)

MATH 1420 (1182) Foundations of Mathematics II
MATH 1830 (1312) Elementary Calculus (3) - An introductory course to calculus.
MATH 1910 (1321) Calculus I (4) - Calculus for the following majors: math, computer science, science, and engineering.
MATH 2000 Experiences in Mathematics (3) - Introduction to contemporary mathematics and its application to various areas of modern life.

## C. Humanities ( 9 hours)

ENGL 2201 Literary Heritage - Major literary texts exemplifying narrative, lyric and dramatic modes of discourse.

## OR

ENGL 2202 Literary Heritage: African-American Emphasis

## Plus two of the following courses

ART 1030 (1101) Introduction to Art - Fundamental principles of visual artistic expression as the basis for understanding Western and non-Western traditions.
CLAS 2481 Mythology - Thematic study of ancient myths.
COMM 1851 Introduction to Film - Film as a cultural, artistic, and social phenomenon.

DANC 1151 Introduction to Dance - Dance as an expressive art form, a symbolic language, and an integral aspect of world cultures.
HIST 1110 (1301) Development of World Civilization I - Traces civilization from ancient times to circa
1500.

HIST 1120 (1302) Development of World Civilization II - Forms of civilization from 1500 to the present. JDST 2850 Religions of Abraham: Judaism, Christianity, Islam - Religious traditions arising from ancient Near East.
MUS 1030 (MUHL 1101) Music Appreciation - Music of various Western and non-Western cultures.
PHIL 1101 Classical Issues in Philosophy - Introduction to philosophical thought, focusing on its emergence in the Classical period.
PHIL 1102 Values and the Modern World - The nature, development, and criticism of major philosophies of values.
POLS 1101 Introduction to Ancient Political Thought - Fundamental questions of ancient political thought.
POLS 1102 Introduction to Modern Political Thought - Fundamental questions of modern political thought.
THEA 1030 (1551) Introduction to Theatre - Experiential, conceptual, historical, and cultural study of theatre.
UNIV 3580 Hebrew and Greek Legacy - Interdisciplinary examination of major traditions of ancient Hebraic and Greek cultures.
UNIV 3581 Faith, Reason and Imagination - Interdisciplinary examination of the religious, rationalist, and aesthetic viewpoints as distinctive ways of understanding.
D. American History (6 hours)

HIST 2010 (2601) The United States to 1877 - United States from discovery to end of political reconstruction, and
HIST 2020 (2602) The United States Since 1877
One of the following may be substituted for HIST 2010 OR HIST 2020:
ANTH 3282 Cultural History of American Communities
HIST 3863 Social and Intellectual History of the United States
HIST 2030 History of Tennessee
HIST 3881 African-American History
HIST 4851 History of Women in America
POLS 4212 Constitutional Law: The Origins and Evolution of Civil Liberties in the United States
POLS 4405 Origin and Development of American Political Thought
SOCl 3422 Racial and Ethnic Minorities
E. Social / Behavioral Sciences ( 6 hours)

ANTH 1100 Human Origins and Variations - Origins of humans and human society, behavior, and culture.
ANTH 1200 Cultural Anthropology - Origins and development of human culture throughout the world. CSED 2101 The Family in Global Perspective - Interdisciplinary overview of the family as a primary, global, social institution.
ECON 2110 Introduction to Macroeconomics - Nature and functions of the national economy in a global context.
ECON 2120 Introduction to Microeconomics - Operations of the market economy at the individual and firm level.
ESCl 1301 (GEOG 1301) Survey of World Regions - Survey of economic, cultural, and physical traits characteristic of developing and industrialized nations.
ESCl 1401 (GEOG 1401) Introduction to Cultural Geography - Geographical aspects of human behavior.
POLS 1100 American Government - Origins, structures, and processes of the American system of
government.
POLS 1301 Governments of the World - Comparisons of political issues and systems in a variety of European, Asian, and African countries.
POLS 1501 International Relations - Conflict, competition, and cooperation among global factors in the world arena.
PSYC 1200 General Psychology - Introduction to social aspects of psychology as a science of behavior.

PSYC 3510 Deviance: Its Role in History and Culture - Defamation and glorification of concepts of deviance across cultures.
SOCI 1111 Introduction to Sociology - Concepts and methods of sociology, social structure, and social institutions.
SOCI 2100 Sociology of International Development - Social change in an increasingly interdependent world.
UNIV 2304 Gender and Society - Interdisciplinary study of gender as a social experience among different racial, ethnic, class, and cross-cultural groups.
F. Natural Science: 8 hours

BIOL 1010/1011 (1071/1072) Introduction to Biology I / Lab
BIOL 1020/1021 (1081/1082) Introduction to Biology II/Lab - A study of the biosphere and the structure, and functions of its plants and animals.
BIOL 1110/1111 (1151/1152) General Biology I / Lab
BIOL 1120/1121 (1161/1162) General Biology II/Lab - Unifying principles of biology: Cell structure, cell function, heredity, origin and development of life.
CHEM 1010/1011 (1101) Intro to Chemistry I: General/Inorganic
CHEM 1020/1021 (1102) Intro to Chemistry II: Organic/Biochemistry - Fundamental laws of chemistry and their impact on modern society.
CHEM 1110/1111 (1131/1121) General Chemistry I/General Chemistry I Lab
CHEM 1120/1121 (1132/1122) General Chemistry II/General Chemistry II Lab
ESCI 1010/1011 (GEOG 1001/1011, 1010/1011) Weather and Climate/Lab
ESCI 1020/1021 (GEOG 1002/1022, 1020/1021) Landforms/Lab - The Earth and its atmosphere, including climate, oceans, landscapes, environmental hazards.
ESCI 1040 (GEOL 1101, 1040) Physical Geology
ESCI 1103 (GEOL 1103) Environmental Geology - Processes that operate within, on and impact the surface of the Earth.
ESCl 1050 (GEOL 1102, 1050) Historical Geology
PHYS 1010/1001 Introduction to Physics/Lab
PHYS 1020/1002 Survey of Astronomy/Lab - Physics and astronomy for non-technical students; natural laws of motion, heat, sound, light, heavenly bodies.
PHYS 2110/2111 (2510/2003) Physics I for Science and Engineering - Calculus/ Physics I Lab
PHYS 2120/2121 (2520/2004) Physics II for Science and Engineering $\geqslant$ Calculus/ Physics II Lab

## 1. GRADE POI NT AVERAGE

To receive a bachelor s degree from any of the colleges in the University, students must have a grade point average of at least 2.00 (i.e., two quality points for every semester hour attempted). If for any reason a student offers more than 132 semester
hours credit for graduation, the ratio of two quality points to one semester hour of credit must be
maintained. To attain this standard the candidate must have a 2.00 average on all courses attempted in the University. Students with transfer credit are
required to maintain an average of 2.00 on all courses taken at the University of Memphis.

## 2. RESIDENCE REQUI REMENTS

A student will satisfy residence requirements for graduation by earning at least twenty-five (25) percent of credit hours required for the degree at the University of Memphis. At least thirty (30) of the final sixty (60) hours required for the degree must be completed at the University of Memphis. A student transferring credits from a two-year college or institution must complete, as a requirement for the baccalaureate degree, a minimum of sixty semester hours in an accredited senior institution.
In addition, the student must meet the residence requirements for the specific degree as established by the college or school in which it is offered. Exceptions to residence requirements can be authorized by the appropriate dean. Residence requirements for specific degrees within each college or school may be found in the Colleges, Degree Programs and Courses section. For more details, the student should inquire in the office of the dean of the appropriate college or school.

## 3. TESTI NG AS A PREREQUISI TE FOR GRADUATION

Any or all students may be required to take one or more tests designed to measure general education achievement and achievement in their major as a prerequisite to graduation, for the purpose of evaluation of academic programs. Unless otherwise provided for in any individual program, no minimum score or level of achievement is required for graduation. Participation in testing may be required for all students, for students in selected programs, and for students selected on a sample basis. Details concerning these regulations and the dates of the examinations will appear in the online class listings each semester.

## 4. FILING FOR GRADUATION

All students are required to file an intention to graduate during the semester preceding the semester of graduation. The deadlines for this filing are included in the academic calendar in the online class listings. It is the responsibility of the student to insure that this deadline is met.

## REQUI REMENTS FOR TEACHER LI CENSURE

An undergraduate student can be recommended for licensure to teach in Elementary Education (Grades 18); Early Childhood Education (Grades PreK-4); or Special Education (Grades K-12); or Physical Education (Grades K-12) in the State of Tennessee by completing all degree requirements for that endorsement as outlined for the Bachelor of Science in Education in the COLLEGE OF EDUCATION DEGREE PROGRAMS section of this Bulletin.

A student in any of these programs must (1) file an application for admission to the Teacher Education Program in The College of Education; (2) fulfill the requirements and application procedures for the Internship/Student Teaching Program; (3) file an intent to graduate application before the University deadline; (4) have an overall GPA of no less than 2.50 and a grade of "C" or above in each required professional education course; (5) take the Core Battery and the Specialty area (if required) of the National Teacher Examinations (NTE); and (6) fulfill all other graduation requirements listed under the TEACHER EDUCATION PROGRAMS: REQUIREMENTS section.

Students entering the University for the first time as freshmen who wish to prepare for teaching careers in fields other than Elementary Education, Early Childhood Education, Special Education, or Physical Education should see the academic advisor in the College of Education, room 204, Ball Hall.

Graduate, special, and transfer students who wish to obtain a teachers license should confer with the academic advisor in the College of Education, room 204, Ball Hall, concerning their individual requirements.

## BULLETI N APPLI CABI LITY

## DEGREE/ MAJ OR

A student may complete the requirements for the initial degree under the provisions of any valid UofM Bulletin provided the effective date of that Bulletin is not earlier than the student $\geqslant$ s initial admission to UofM or some other accredited institution of higher learning. The degree requirements published in the Undergraduate Bulletin of the University of Memphis are valid for seven years from the beginning of the academic year to which the Bulletin applies. For students whose initial enrollment occurs Fall 2006-Summer 2007, this Bulletin is valid through Summer 2013.

With the approval of the dean of the college through which the student $\geqslant$ s degree is offered, any student who had completed at least fifteen semester hours of course work and whose progress was interrupted by a call to active military duty may extend the validity date for graduation for any Bulletin valid at the time of the call to active duty. Though the student should attempt to complete requirements within the normal seven-year validity period, the dean may grant an extension commensurate with actual time served on active military duty and time required for directly related medical treatment that prevents the student $\geqslant \mathrm{s}$ reenrollment. Qualification for this extension is contingent upon re-enrollment within a period of time deemed reasonable by the dean. The extension is not allowed for a full military career.

The seven-year Bulletin validity period applies only to degree requirements as specified in Graduation from the University and Colleges, Degree Programs and Courses sections of the Bulletin. It does not apply to regulations in the Academic Regulations section. Specific regulations apply for the year in which they appear in the Bulletin.

## MI NOR

A student with a declared major may pursue any established minor described in this or any subsequent Bulletin. The selected minor must be different than the declared major and require approval of the degree granting college under which the student is graduating. The minimum of 18 credit hours for a minor is required. Some of the hours in the minor may also be included in the student's general education and degree requirements. There must be at least 9 hours at the upper division level. The GPA required for the minor is that of the degree granting college. Students must complete the coursework for the minor as described in the College and Degree Programs section of the undergraduate Bulletin. The minor must be declared no later than graduation check-out time. All course requirements for the minor must be completed by the time of graduation.

The minors available for the 2006-2007 academic year are the following:

## College of Arts and Sciences

Aerospace Studies
African and African American Studies
Anthropology
Asian Studies
Biology
Chemistry
Computer Science
Criminology and Criminal Justice
English
Environmental Studies
Foreign Languages
Geography
Geological Sciences
History
Judaic Studies
Legal Thought and Liberal Arts
Mathematical Sciences
Military Science
Naval Sciences
Nonprofit Management
Philosophy
Physics
Political Science
Psychology
Public Administration
Social Work
Sociology
Women's Studies

## Fogelman College of Business and Economics

Accounting
Business Economics
Finance
International Business

# College of Communication and Fine Arts 

## Art

Art History
Communication
Dance
J ournalism
Music
Photography
Theatre

## Herff College of Engineering

Computer Engineering Technology
Electronics Engineering Technology
Manufacturing Engineering Technology

## University College

American Studies
Religion in Society

## SECOND BACHELOR'S DEGREE

All students who hold a baccalaureate degree from a regionally accredited institution of higher education, including the University of Memphis, may earn another bachelores degree with a different title.

To earn the second bachelores degree, the student must:

1. Complete any additional college requirements as determined by the office of the dean of the college granting the second baccalaureate degree.
2. Complete all requirements for the major as determined by the department in which the second baccalaureate degree is sought.
3. Complete a minimum of 30 semester hours in residence.
4. Complete the American history as required by Tennessee State Law.
5. Earn a minimum cumulative grade point average of 2.0 and a minimum GPA of 2.0 in all coursework taken at the University of Memphis.

## SECOND MAJ OR

Two majors in the same degree may be pursued simultaneously or subsequently. If a student completes the requirements from a valid Bulletin for an additional major for a degree previously earned at the University
of Memphis, that major may be posted on the student's record if the student applies for the additional major through the appropriate dean's office. Last Updated: 6/12/15

## COLLEGES AND DEGREE PROGRAMS

The following section contains the specific requirements for completing each degree, major, concentration and minor offered by the University. It is organized by college and department. Students are urged to consult with an advisor for assistance in planning their degree programs and selecting appropriate courses.

## College of Arts \& Sciences

African and African American Studies, Anthropology, Biology, Chemistry, Computer Science, Criminology and Criminal Justice, Earth Sciences, Economics, English, Foreign Languages \& Literatures, History, I nternational Studies, Mathematical Sciences, Philosophy, Physics, Political Science, Psychology, Public and Nonprofit Administration, Sociology, Social Work, ROTC Programs

## Fogelman College of Business and Economics

Accountancy, Business Economics, Finance, Hospitality and Resort Management, International Business, Logistics/ Supply Chain Management, Marketing Management, Management Information Systems, Sales

## College of Communication and Fine Arts

Architecture, Art, Art History, Communication, J ournalism, Music, Theatre and Dance

## College of Education

Human Development and Learning, Health and Sport Sciences, Instruction \& Curriculum Leadership, Integrative Studies, Physical Education Teacher Education, Special Education, Sport and Leisure Management

## Herff College of Engineering

Biomedical Engineering, Civil Engineering, Electrical and Computer Engineering, Engineering Technology, Mechanical Engineering

## Loewenberg School of Nursing

## University College

I ndependent Programs<br>University Honors Program, Transitional Academic Studies Last Updated: 6/12/15

## COURSE DESCRI PTI ONS

## Statement of Tennessee Board of Regents (TBR) General Education Policies

Effective Fall Semester 2004, each institution on the State University and Community College System of Tennessee (The Tennessee Board of Regents System) will share a common lower-division general education core curriculum of forty-one (41) semester hours for the baccalaureate degrees and the Associate of Arts and the Associate of Science degrees. Lower-division means freshmen and sophomore courses. The course comprising the general education curriculum are contained within the following subject categories:

| Subject Area | Semester Credit Hours Required |  |
| :---: | :---: | :---: |
| Communication <br> Six hours of English Composition and three hours in English oral presentational |  |  |
| Humanities / Fine Arts, including at least 3 semester credit hours in literature |  |  |
| Social/ Behavioral Sciences 6 |  |  |
| History <br> TBR Universities require American History, except in a limited number of majors exempted from the requirement. (See specific university catalogs concerning majors that are exempt.) <br> Students who plan to transfer to TBR universities should take should take six hours of United States History (three hours of Tennessee History may substitute). Students who plan to transfer to University of Tennessee System universities or to out-of-state or private universities should check requirements and take appropriate courses. |  |  |
| Natural Sciences 8 |  |  |
| Mathematics |  | 3 |
| Total |  | 41 |

* Foreign language courses are an additional requirement for the Associate of Arts (A.A.) and Bachelor of Arts (B.A.) degree. The B.A. degreee requires proficiency in a foreign language equivalent to completion of two years of college-level work. The A.A. degree requires proficiency in a foreign language equivalent to completion of one year of college-level work.


## I dentifying Courses Satisfying the Minimum Degree Requirements

Although the courses fulfilling the minimum degree requirements may vary in actual design among institutions, many contain similar content. These courses are identified by common course rubrics (prefixes) and numbers in all TBR institutions to facilitate transferability. The actual courses designated by each institution to fulfill the Minimum Degree Requirements, including courses that may not be a part of the common course prefix and numbering pattern, are denoted in catalogs by the symbol. A complete matrix of courses that satisfy the Minimum Degree Requirements at all TBR institutions and an explanation of the common course rubric and numbering system are available on the TBR web page (www.tbr.state.tn.us).

Explanation of course description format: The official course title appears in boldface type following the course number. The figures in parentheses after the course title denote the number of semester hours of credit for that course. If the credit is variable, to be determined by the department, that fact is indicated by the minimum and maximum credit, as BIOL 4000 (2-4).

If the phrase "Same as . . ." and another course number appear in parentheses following the credit hours, the course is cross listed with a course in another department, and when offered by both departments, may be taken through either. If another course number in parenthesis follows the credit hours, it is the former number for the same course. Credit may not be received for both the former number and the current number of the same course.

For those courses including regular laboratory hours, the lecture/ laboratory hour distribution is written in italics near the end of the course description. At the end of many course descriptions, prerequisites and/ or corequisites
are listed. Students are responsible for meeting the stated prerequisites prior to enrolling for the course.
A [G] at the end of the course description indicates that the course may be used to fulfill University General Education Program requirements. These requirements vary somewhat according to the particular degree program or major. Similarly, a [W] indicates a course approved as writing intensive for some programs, a [C] indicates a computation intensive course, and an [I] indicates an integrative course.

Courses are numbered according to the following system:
0001-0999 Courses for which the credit does not apply toward minimum degree requirements or for which credit is restricted.
1000-1999 Courses primarily for freshmen
2000-2999 Courses primarily for sophomores
3000-3999 Courses primarily for juniors
4000-4999 Courses primarily for seniors and for which graduate credit is not offered.
(There is sometimes a corresponding 6000 number for which graduate credit is offered to graduate students who fulfill the additional requirements for such credit.)

1000-2000 level courses are lower division courses, 3000-4000 level courses are upper division courses. Course numbers have no reference to the semester in which the courses are taught.

## ELEMENTS OF COURSE DESCRI PTI ON

1ART 24002-36002.4Museum Operation. 5(3). 6(3050). 7(Same as ANTH 4002). 8Basic aspects of museum organization, management, exhibit planning and execution, and maintenance of collections and records. 9Two lecture/ two laboratory hours per week. 10(F). 11PREREQUISITE: ART 3090. I2COREQUISITE: ART 4001. 13(S/ U). 14[G].

1. Subject area
2. Course number/level
3. 6000 level cognate
4. Course title
5. Credit hours
6. Former course number
7. Cross listing
8. Course description
9. Lecture/laboratory description
10. Semester in which course usually offered $(\mathbf{F})=$ Fall, $(\mathbf{S p})=$ Spring, $(\mathbf{S u})=$ Summer
11. Prerequisite
12. Corequisite
13. Special Grading
14. General Education*

* [G] = General Education; [C] = Computation Intensive; [W] = Writing Intensive; [I] = Integrative

Courses and their descriptions can be found by selecting the first letter of the course identifier, for example, CHEM, of the course name in the letter range or by selecting program's name below (found under the college's name.)

## A B-D E-F G-I J-L M N-P $\quad$ Q-T $\quad$ U-Z

## 1. College of Arts \& Sciences

```
O AFRICAN AND AFRICAN AMERICAN STUDIES (AAAS)
O ANTHROPOLOGY (ANTH)
O BIOLOGY (BIOL)
o CHEMISTRY (CHEM)
- COMPUTER SCIENCE (COMP)
- CRIMINOLOGY AND CRIMINAL IUSTICE (CIUS)
- EARTH SCIENCES (ESCI)
- ENGLISH (ENGL)
O FOREIGN LANGUAGES AND LITERATURES
    - CLASSICS (CLAS)
    - GREEK (GREK)
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SPANISH (SPAN)

- HISTORY (HIST)
- INTERDISCIPLINARY STUDIES (INTD)
- INTERNATIONAL STUDIES (INTL)
- IUDAIC STUDIES (JDST)
- MATHEMATICS (MATH)
- PHILOSOPHY (PHIL)
- PHYSICS (PHYS)
- POLITICAL SCIENCE (POLS)
- OPEN LEARNING FIRE SERVICES PROGRAM (PADM)
- LATIN (LATN) O PUBLIC AND NONPROFIT ADMINISTRATION (PADM)
- LANGUAGES AND LITERATURE (LALI)
- PSYCHOLOGY (PSYC)
- ARABIC (ARAB)
- SOCIOLOGY (SOCI)
- CHINESE (CHIN)
- SOCIAL WORK (SWRK)
- FRENCH (FREN)
- STATISTICS (MATH)
- GERMAN (GERM)
- HEBREW (HEBR)
- ITALIAN (ITAL)
- AEROSPACE STUDIES (AERO)
- MILITARY SCIENCE (ARMY)
- NAVAL SCIENCE (NAVY)
-     - APANESE (JAPN)
o WOMEN'S STUDIES (WMST)
- RUSSIAN (RUSS)


## 2. Fogelman College of Business and Economics

- ACCOUNTANCY (ACCT)
- BUSINESS ADMINISTRATION (BA)
- ECONOMICS (ECON)
- DECISION SCIENCES (ISDS)
- FINANCE, (FIR)
- HOSPITALITY AND RESORT MANAGEMENT (HPRM)
- MANAGEMENT INFORMATION SYSTEMS (MIS)
- MANAGEMENT (MGMT)
- MARKETING (MKTG)


## 3. College of Communication and Fine Arts

- COMMUNICATION/FINE ARTS (CCFA)
- ARCHITECTURE (ARCH)
- ART (ART)
- SACRED MUSIC (MUSA)
- ART HISTORY (ARTH)
- COMMUNICATION (COMM)
- APPLIED MUSIC (MUAP)
- MUSIC EDUCATION (MUSE)
- LOURNALISM (IOUR)
- MUSIC INDUSTRY (MUID)
- MUSIC
- MUSIC THEORY AND COMPOSITION (MUTC)
- MUSIC HISTORY, LITERATURE, AND APPRECIATION (MUHL)


## 4. College of Education

○ COUNSELI NG, EDUCATI ONAL PSYCHOLOGY \& RESEARCH

- COUNSELING AND PERSONNEL SERVICES (COUN)
- EDUCATIONAL PSYCHOLOGY AND RESEARCH (EDPR)
- HEALTH AND SPORT SCI ENCES
- HEALTH AND HUMAN PERFORMANCE (EXSS)
- DIETETICS (NUTR)
- HEALTH AND SPORT SCIENCES(HMSE)
- HEALTH PROMOTION (HPRO)
- PHYSICAL EDUCATION TEACHER EDUCATION (PETE) PHYSICAL EDUCATION ACTIVITIES (PHED)
- SPORT AND LEISURE COMMERCE (SLC)
- SPORT AND LEISURE MANAGEMENT (SLS)
- INSTRUCTION AND CURRICULUM LEADERSHIP
- EARLY CHILDHOOD EDUCATION (ECED)
- ELEMENTARY EDUCATION (ELED)
- INSTRUCTIONAL DESI GN AND TECHNOLOGY (IDT)
- INSTRUCTION AND CURRICULUM LEADERSHIP (ICL)
- SPECIAL EDUCATION (SPED)
- EDUCATIONAL SERVICES (EDSV)
- LEADERSHIP (LEAD)


## 5. Herff College of Engineering

- CIVIL ENGINEERING (CIVL)

6. COMPUTER ENGI NEERING TECHNOLOGY (CETH)

- BIOMEDICAL ENGI NEERING (BI đM) ELECTRONICS ENGI NEERING TECHNOLOGY (EETH)
- ELECTRICAL ENGINEERING (EE().) MANUFACTURING ENGINEERING TECHNOLOGY (METH)
- COMPUTER ENGI NEERING (EECQ. TECHNOLOGY (TECH)
- ENGINEERING (ENGR) 10. MECHANICAL ENGINEERING (MECH)


## 11. Loewenberg School of Nursing

 - NURSING (NURS)12. University College

- FAMILY ANDCONSUMER SCIENCE (CSED)
- PARALEGAL STUDIES (LEGL)
- UNIVERSITY COLLEGE (UNIV)


## 13. I ndependent Programs

- UNIVERSITY HONORS PROGRAM (UNHP)

O UNIVERSITY OF MEMPHIS LIBRARIES (LBRY)

- ORIENTATION PROGRAM (ACAD)
- TRANSITIONAL ACADEMIC STUDIES (DSP)


## Last Updated: 6/12/15

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MARCIA TAYLOR, M.A., Assistant to the Dean

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TAVETIA R. CIRCUS (2005), Staff Sergeant, United States Air Force, Noncommissioned Officer in Charge of Information Management
STEVEN E. FELL (2005), Lieutenant Colonel, United States Air Force, Professor of Aerospace Studies: B.S., 1978, Illinois State University; B.A., University of South Florida, 1984; M.A., The George Washington University, 1992; Master of Military Operational Art and Science, 2000, Air University
HENRY B. MACRI (2005), Captain , United States Air Force, Assistant Professor: B.S., 1997, East Carolina University
CHRISTOPHER P. WHITE (2004), Captain, United States Air Force, Assistant Professor: B.B.A., 1994, Calvin College; M.S., 2001, Air Force Institute of Technology
DAMITA J. WILSON (2005), Staff Sergeant, United States Air Force, Noncommissioned Officer in Charge of Personnel

ANTHROPOLOGY<br>RUTHBETH D. FINERMAN, Ph.D., Chair<br>LINDA A. BENNETT (1986), Professor, Associate Dean: B. A., 1965, Clarion State College; M.A., 1966,

Indiana University; Ph.D., 1976, American University
MELISSA CHECKER (2002), Assistant Professor: B.A., 1990, University of Pennsylvania; M.A., 1997, M.Phil., 1998, Ph.D., 2002, New York University
RUTHBETH D. FINERMAN (1985), Professor, Chair: B.A., 1977, M. A., 1979, Ph.D., 1985, University of California at Los Angeles
J ANE M. HENRICI (2001), Assistant Professor: B.A., 1979, University of Texas at Austin; M.A., 1981, University of Chicago; Ph.D., 1996, University of Texas at Austin
STANLEY E. HYLAND (1976), Associate Professor, Head, School of Urban Affairs and Public Policy: B.A.,
1969, M.A., 1970, University of Cincinnati; Ph.D., 1976, University of Illinois
SATISH KEDIA (1998), Associate Professor: B.Sc., 1985, M.S., 1987, M.Phil., 1990, Delhi University; Ph.D.,
1997, University of Kentucky
ROSS SACKEIT (2004), Instructor: Ph.D., 1996, University of California, Los Angeles
DANIEL C. SWAN (2003), Associate Professor, Director, Chucalissa Museum: B.A., 1978, SUNY-Binghamton; M.A., 1982, Ph.D., 1990, University of Oklahoma

CHARLES WILLIAMS, JR. (1979), Associate Professor: B.A. 1969, Rust College; M.A., 1976, Ph.D., 1981, University of Illinois

## BI OLOGY

CHARLES LESSMAN, Ph.D., Interim Chair
MELVIN L. BECK (1974), Professor: B.S., 1967, Arkansas Tech. College; Ph.D., 1974, University of Arkansas MACIEJ BIERNACKI (2002), Assistant Professor: M.S., 1985, Akademia Techniczno-Rolnicza w Bydgoszczy (Poland); Ph.D., 1996, University of Windsor (Canada)
CHARLES J. BIGGERS (1969), Professor: B.S., 1957, Wake Forest University; M.A., 1959, Appalachian State University; Ph.D., 1969, University of South Carolina
MARTHA P. BROWN (1966), Assistant Professor: B.S., 1963, M.S., 1966, Memphis State University
KING-THOM CHUNG (1988), Professor: B.S., 1965, National Taiwan University; M.A., 1967, University of California, Santa Cruz; Ph.D., 1972, University of California, Davis
JUDITH A. COLE (2003), Assistant Professor: B.A., 1977, University of Rhode Island; Ph.D., 1985, University of Connecticut
LEWIS B. COONS (1976), Professor, Director of Integrated Microscopy Center: B.A., 1964, M.S., 1966, Utah State University; Ph.D., 1970, North Carolina State University
MI CHAEL H. FERKIN (1995), Professor: B.S., 1977, M.S., 1982, SUNY, Brockport; Ph.D., 1988, Boston
University
SCOTT B. FRANKLIN (1996), Associate Professor: B.S., Upper Iowa University; M.S., 1990, Ph.D., 1996, Southern Illinois University
DAVID A. FREEMAN (2002), Assistant Professor: B.A., 1991, Kent State University; Ph.D., 1996, University of Connecticut
T. KENT GARTNER (1976), Professor: B.S., 1960, Rutgers University; Ph.D., 1965, University of California, Davis
JACK W. GRUBAUGH (1995), Associate Professor: B.S., 1978, Central College; M.S., 1983, Western Illinois University; Ph.D., 1994, University of Georgia
RAMI N HOMAYOUNI (2006), Associate Professor, Director, Bioinformatics Program: B.S., 1989, Ph.D., 1996 University of Houston
MICHAEL L. KENNEDY (1974), Professor: B.S., 1966, M.S., 1968, Memphis State University; Ph.D., 1975, University of Oklahoma
KRISTIN M. KRAMER (2005), Assistant Professor: B.S., 1994, University of Illinois; M.S., 1998, Ph.D., 2001, University of Minnesota
CHARLES A. LESSMAN (1988), Professor, Interim Chair: B.A., 1970, M.S., 1975, Ph.D., 1980, University of Minnesota
CARLOS E. LOPEZ-ESTRANO (2003), Assistant Professor: B.S., 1990, Central University of Venezuela; Ph.D., 1996, Autonomous University of Madrid, Spain
DONALD D. OURTH (1974), Professor: B.A., 1961, M.A., 1966, University of Northern Iowa; Ph.D., 1969, University of Iowa
MATTHEW J. PARRIS (2000), Associate Professor: B.A., 1994, St. J ohn's University; Ph.D., 1999, University of Missouri, Columbia
S. REZA PEZESHKI (1994), Professor: B.S., 1971, University of Tehran; M.S., 1977, Ph.D., 1982, University
of Washington
STEPHAN J. SCHOECH (2000), Associate Professor: B.S., 1988, M.S., 1990, Arizona State University; Ph.D., 1995, University of Washington
STEVEN D. SCHWARTZBACH (2001), Professor: B.A., 1969, State University of New York, Buffalo; Ph.D., 1975, Brandeis University
BILL A. SIMCO (1966), Professor: B.S., 1960, College of the Ozarks; M.A., 1962, Ph.D., 1966, University of Kansas
STANLEY E. STEVENS, JR. (1989), Professor: B.A., 1966, M.A., 1968, Ph.D., 1971, University of Texas, Austin
THOMAS R. SUTTER (1999), Professor, Chair of Excellence in Functional Genomics: B.S., 1980, St.
Bonaventure University; Ph.D., 1988, University of Cincinnati College of Medicine
BARBARA J. TALLER (1983), Associate Professor: B.S., 1971, Baldwin-Wallace College; Ph.D., 1978, University of Wisconsin-Madison
GARY VOELKER (2003), Assistant Professor: B.A., 1992, University of Minnesota; Ph.D., 1998, University of Washington
TIT-YEE WONG (1985), Professor: B.S., 1974, M.S., 1976, Murray State University; Ph.D., 1981, University of Houston

## CHEMI STRY

PETER K. BRIDSON, Ph.D., Chair
DANIEL BAKER (2006), Assistant Professor: B.S., 1992, Central Michigan University; Ph.D., 1998, University of Arizona
PETER K. BRIDSON (1980), Associate Professor, Chair: B.S., 1975, Ph.D., 1978, University of London THEODORE J. BURKEY (1985), Professor: B.S. 1976, Harvey Mudd College; M.S., 1978, Ph.D., 1982, University of California, San Diego
CHHABIL DASS (1994), Associate Professor: B.Sc., 1962, M.Sc., 1964, Rajasthan University; Ph.D., 1984, University of Nebraska
GARY L. EMMERT (2002), Assistant Professor: B.A., M.S., 1992, Tennessee Technological University; Ph.D., 1999, Miami University (Ohio)
TAREK FARHAT (2005), Assistant Professor: B.S., 1990, University of Greenwich; M.S., 1993, University of Victoria; Ph.D., 2002, University of Florida
MARK BARRY FREI LICH (1985), Associate Professor: B.S., 1966, Brooklyn College (C.U.N.Y.); Ph.D., 1974, Purdue University
LARRY WAYNE HOUK (1968), Professor: B.S., 1963, Middle Tennessee State University; Ph.D., 1967, University of Georgia
HENRY A. KURTZ (1983), Professor, Dean: B.S., 1972, Georgia Institute of Technology; Ph.D., 1977, University of Florida
YING-SING LI (1982), Professor: B.S., 1960, Cheng Kung University; Ph.D., 1968, University of Kansas ROGER VAUGHAN LLOYD (1975), Associate Professor: B.S., 1958, Pennsylvania State University; M.S., 1961, West Virginia University; Ph.D., 1971, Carnegie-Mellon University
ABBY L. PARRILL (1998), Professor: B.S., 1992, Central Michigan University; Ph.D., 1996, University of Arizona
RICHARD L. PETERSEN (1980), Associate Professor: B.S., 1969, University of Wisconsin-Madison; Ph.D., 1975, University of Wisconsin-Milwaukee
EUGENE PINKHASSIK (2000), Associate Professor: M.S., 1991, University of Kazan; Ph.D., 1997, Institute of Chemical Technology, Prague
YONGMEI WANG (2003), Associate Professor: B.S., 1985, University of Science and Technology, Hefei, China; Ph.D., University of Notre Dame
C. EDWIN WEBSTER (2005), Assistant Professor: B.S., 1995, University of West Florida; Ph.D., 1999, University of Florida

## COMPUTER SCI ENCE

## SAJJAN G. SHIVA, Ph.D., Chair

JULIA CAMPBELL (1995), Visiting Instructor: M.S., 1978, University of Lodz, Poland; M.S., 1985, Memphis State University

DIPANKAR DASGUPTA (1997), Professor: B.E., 1981, Assam Engineering College, Guwahati, India; M. Tech, 1987, Indian Institute of Technology, Kharagpur, India; Ph.D., 1993, University of Glasgow, UK
STANLEY PHI LLIP FRANKLIN (1972), Professor: B.S. 1959, Memphis State University; M.S., 1962, Ph.D., 1963, University of California at Los Angeles
MAXIMI LIANO H. GARZON (1984), Professor: M.S., 1980, Ph.D., 1984, University of Illinois at Urbana ROBERT KOZMA (2000), Professor: M.Sc., 1982, Moscow Energy University; M.Sc., 1988, Eotvos University; Ph.D., 1992, Delft University of Technology
SANTOSH KUMAR (2006), Assistant Professor: B.Tech., 1998, Institute of Technology, Banaras Hindu University; M.S., 2002, Ph.D., 2006, Ohio State University
KING-IP LIN (1996), Associate Professor: B.S., 1990, University of Hong Kong; M.S., 1993, University of Maryland; Ph.D., 1996, University of Maryland, College Park
THOMAS LEE MCCAULEY (2002), Assistant Professor: B.A., 1997, M.S., 1999, Ph.D., 2001, University of Memphis
BRAD MONTGOMERY (2005), Instructor: B.S., 2000, M.S., 2003, Arkansas State University VINHTHUY PHAN (2003), Assistant Professor: B.A., 1998, Brandeis University; M.S., 2001, Ph.D., 2003, State University of New York at Stony Brook
VASI LE RUS (2004), Assistant Professor: B.S., 1997, Technical University of Cluj-Napoca, Romania; M.S., 1999, Ph.D., 2002, Southern Methodist University
LINDA SHERRELL (2001), Visiting Associate Professor: B.S., 1972, M.S., 1974, Auburn University; Ph.D., 1995, Louisiana State University
SAJJ AN G. SHIVA (2002), Professor, Chair: B.E., 1969, Bangalore University: M.E.E., 1971, Ph.D., 1975, Auburn University
LAN WANG (2004), Assistant Professor: B.S., 1997, Peking University, China; M.S., 1999, Ph.D., 2004, University of California at Los Angeles
QUISHI WU (2006), Assistant Professor: B.S., 1995, Zhejiang University, China; M.S., 2000, Purdue University; Ph.D., 2003, Louisiana State University
YANG XIAO (2002), Assistant Professor: B.S., 1989, M.S., 1991, Jilin University, China; Ph.D., 2001, Wright State University
J UNMEI ZHU (2003), Assistant Professor: B.S., 1992, Fudan University, China; M.S., 1998, University of Southwestern Louisiana; Ph.D., 2003, University of Southern California

## EARTH SCI ENCES

## MERVIN J. BARTHOLOMEW, Ph.D., Chair

MERVIN J. BARTHOLOMEW (2002), Professor, Chair: B.A., 1964, The Pennsylvania State University; M.S., 1969, University of Southern California; Ph.D., 1971, Virginia Polytechnic Institute and State University JER-MING CHIU (1982), Professor: B.S., 1971, National Taiwan Normal University; M.S., 1974, National Central University, Taiwan; Ph.D., 1982, Cornell University
RANDEL T. COX (1999), Assistant Professor: B.S., 1981, M.S., 1986, University of Arkansas; Ph.D., 1995, University of Missouri
MOHAMED ADAM M. DOSI (2005), Instructor; B.S., 1986, University of Dar-es-Salaam; M.S., 1992, University of Wales; Ph.D., 2003, University of Kansas
DAVID H. DYE (1981), Associate Professor: B.A., 1972, Memphis State University; M.A., 1976, Louisiana State University; Ph.D., 1980, Washington University
MI CHAEL A. ELLIS (1990), Professor: B.Sc., 1977, University College of Swansea, U.K.; Ph.D., 1984, Washington State University
ARLEEN A. HI LL (2003), Assistant Professor: B.S., 1994, Mary Washington College; M.S., 1998, Ph.D., 2002, University of South Carolina
ARCHI BALD C. JOHNSTON (1979), Professor: B.S., 1967, Rhodes College; Ph.D., 1978, University of Colorado
HSI ANG-TE KUNG (1981), Professor: B.S., 1968, University of Chinese Culture; M.S., 1972, Ph.D., 1980, University of Tennessee, Knoxville
CHARLES A. LANGSTON (2001), Professor: B.S., 1972, Case Western Reserve University; M.S., 1974, Ph.D., 1976, California Institute of Technology
DANIEL LARSEN (1995), Associate Professor: B.S.,1985, Arizona State University; M.S., 1988, Ohio State University; Ph.D., 1994, University of New Mexico
DAVID NORMAN LUMSDEN (1967), Professor: B.A., 1958, M.A., 1960, State University of New York at

Buffalo; Ph.D., 1965, University of Illinois
BEATRICE MAGNANI (2006), Research Assistant Professor: M.S., 1994, Ph.D., 1999, Universita degli Studi di Perugia, Italy
ANDREW M. MI CKELSON (2005), Assistant Professor: B.A., 1990, Beloit College ; M.A., 1996, Ph.D., 2002, Ohio State University
EZRA OZDENEROL (2003), Assistant Professor: B.S., 1996, University of Ankara (Turkey); M.L.A., 1996, Ph.D., 2000, Louisiana State University
CHRISTINE POWELL (1999), Professor; B.A., 1971, SUNY Binghampton; M.A., 1973, Princeton; Ph.D., 1976, Princeton
J OSE PUJ OL (1985), Associate Professor: B.S., 1968, Universidad del Sur, Argentina; M.S., 1982, University of Alaska; Ph.D., 1985, University of Wyoming
PAMELA M. RIDDICK (2006), Instructor: B.S., 1986, M.S., 1990, Memphis State University
EUGENE S. SCHWEIG (1985), Adjunct Professor: B.S., 1975, University of Missouri; M.S., 1983, Ph.D., 1985, Stanford University
ROBERT SMALLEY, JR. (1987), Associate Professor: B.S., 1975, Rensselaer Polytechnic Institute; M.S., 1978, Ph.D., 1988, Cornell University
GEORGE H. SWI HART (1988), Professor: A.B, 1979, Colby College; M.S., 1981, University of Iowa; Ph.D., 1987, University of Chicago
LENSYL URBANO (2002), Assistant Professor: B.S., 1996, City University of New York; Ph.D., 2001,
University of Minnesota
ROY B. VAN ARSDALE (1993), Professor: B.A., 1972, Rutgers University; M.S., 1974, University of
Cincinnati; Ph.D., 1979, University of Utah
THAD A. WASKLEWICZ (1999), Associate Professor: B.S., 1991, Plymouth State College; M.A., 1992, Ph.D., 1996, Arizona State University
MITCHELL M. WITHERS (2001), Associate Research Professor: B.S., 1992, Millersville University; M.S., 1994,
Ph.D., 1997, New Mexico Institute of Mining and Technology

## ENGLISH

STEPHEN TABACHNICK, Ph.D., Chair
MI CHAEL ALBERS (2000), Associate Professor: B.A., 1980, Coe College; M.S., 1994, North Carolina State University; Ph.D., 1999, Texas Technological University
CATHY ALLEN (2004), Instructor: B.A., 1996, M.A., 1998, University of Memphis
REBECCA STOUT ARGALL (1966), Assistant Professor: B.A., 1965, Guilford College; M.A., 1966, University of North Carolina
MARY VROMAN BATTLE (1968), Associate Professor: B.A., 1948, College of St. Teresa; M.A., 1954, Catholic University of America; Ed.D., 1986, Memphis State University
RICHARD C. BAUSCH (2005), Professor, Chair of Excellence: B.A., George Mason University, 1973; M.F.A., 1975, University of Iowa
J OHN BENSKO (1998), Professor; B.A., 1973 University of Alabama; M.F.A., 1979, University of Alabama;
Ph.D., 1985, The Florida State University
CYNTHI A BERNSTEIN (1999), Professor: B.A., 1969, Cornell University; M.A., 1972, Ph.D., 1987, Texas A\&M University
SUZANNE BIEDENBACH (2004), Instructor: B.A., 1986, Mount Union College; M.A., 1990, Wright State University; Ph.D., 2004, University of Akron
SHARON BETH BISHOP (2006), Instructor: B.A., 1993, Maryville College; M.F.A., 2001, University of Memphis
THERON BRITT (1990), Associate Professor: B.A., 1978, University of Oregon; M.A., 1982, Ph.D., 1990, University of California at I rvine
BARBARA MURRAY CHING (1992), Associate Professor: B.A., 1980, Duke University; M.A., 1985, New York University; Ph.D., 1990, Duke University
LORI NDA COHOON (2004), Assistant Professor: B.A., 1992, West Chester University; M.A., 1994, Simmons College; Ph.D., 2001, University of Southern Mississippi
MICHAEL J. COMPTON (2004), Instructor: B.A., 1993, Memphis State University; M.A. 1995, University of Memphis; M.F.A., University of Tennessee at Knoxville
TERESA SPROUL DALLE (1984), Associate Professor: B.A., 1970, Memphis State University; M.S., 1974,
M.A., 1975, Ph.D., 1983, University of Arizona

BRENDA KAY DRIVER (2004), Instructor: B.A., 1970, M.A., 1974, Memphis State University
LEIGH ANN DUCK (2000), Associate Professor: B.A., 1989, Rice University; M.A., 1993, Southern Methodist
University; Ph.D., 2000, University of Chicago
KAY PARKHURST EASSON (1977), Professor: B.A., 1962, M.A., 1968, Ph.D., 1970, University of Tulsa
J EANNI NE EDWARDS (2004), Instructor: B.A., 1972, M.A., 1975, Memphis State University
AMY C. EICHHORN-MULLIGAN (2005), Assistant Professor: B.A., University of Iowa, 1997; M.Phil., 2000,
D.Phil., 2004, Oxford University

SAGE GRAHAM (2004), Assistant Professor: B.A., 1989, Rhodes College; M.A., 1995, University of Memphis; Ph.D., 2003, Georgetown University
CHARLES EDWARD HALL, JR. (1984), Associate Professor: B.A., 1976, Oakland University; M.A., 1979, University of Florida; Ph.D., 1983, University of Florida
CARY HOLLADAY (2002), Assistant Professor: M.A., 1982, Pennsylvania State University
KRISTEN IVERSON (2003), Assistant Professor: B.A., 1981, University of Colorado; M.A., 1991, Ph.D., 1996,
University of Denver
J OSEPH J ONES (2004), Assistant Professor: B.A., 1983, M.A., 1993, Ph.D., 2002, University of Arizona LOEL KIM (1999), Associate Professor: B.A., 1990, University of Wyoming; M.A., 1992, Ph.D., 1998,
Carnegie Mellon University
J AMES KOVARIK (2004), Instructor: B.A., 1983, M.A., 1985, Memphis State University
CLINTON R. LANIER (2006), Assistant Professor: B.A., 1998, M.A., 2000, Ph.D., 2006, New Mexico State
University
YVONNE LEATHERWOOD (2004), Instructor: B.A., 1996, M.A., 1999, University of Memphis
CATHERINE GIMELLI MARTIN (1990), Professor: B.A., 1970, Ph.D., 1989, University of California at Santa
Cruz
REGI NALD MARTIN (1983), Professor: B.S., 1977, Boston University; M.A., 1979, Memphis State University; Ph.D., 1985, University of Tulsa; M.F.A., 1993, Norwich University
BRAD MCADON (2002), Assistant Professor: B.A., 1985, Western Baptist College; M.A., 1997, Sonoma State University; Ph.D., 2002, Texas A\&M University
J AMES MCCLAI N (2004), Instructor: B.A., 1993, University of California at Davis; M.A., 1998, University of Memphis
LADRICA MENSON-FURR (2003), Assistant Professor: B.A., 1993, Spelman College; M.A., 1995, Ph.D., 2002, Louisiana State University
VERNER MITCHELL (1999), Associate Professor: B.A., 1979, United States Air Force Academy; M.A., 1985, Colorado State University; Ph.D., 1995, Rutgers University
J AMES W. NEWCOMB (1972), Associate Professor: B.A., 1963, M.A., 1965, Creighton University; Ph.D., 1974, University of Iowa
J OSHUA PHILLIPS (2002), Assistant Professor: B.A., 1991, Columbia University; M.A., 1995, Ph.D., 2002, University of Chicago
GENE ALAN PLUNKA (1983), Professor: B.A., 1971, University of Maryland-Baltimore County; M.A., 1972, Ph.D., 1978, University of Maryland-College Park
SUSAN POPHAM (2001), Assistant Professor: B.A., 1990, M.A., 1996, Ph.D., 2000, University of Louisville CATHERINE POWERS DICE (2005), Instructor: B.A., 1989, M.A., 1991, Memphis State University
KATHRYN RIDLEY (2004), Instructor: B.A., 2000, M.A., 2003, University of Memphis
J OHN RONAN (2001), Assistant Professor: B.A., 1990, Ph.D., 2000, University of California
THOMAS LYON RUSSELL (1984), Professor: B.A., 1968, M.A., 1974, Ph.D., 1981, University of Kansas
KATHY LOU SCHULTZ (2006), Assistant Professor: B.A., 1990, Oberlin College; M.F.A., 1996, San Francisco
State University; Ph.D., 2006, University of Pennsylvania
J EFFREY M. SCRABA (2006), Assistant Professor: B.A., 1990, M.A., 1993, University of Calgary; Ph.D., 2006,
Rutgers University
NASEEB SHAHEEN (1969), Professor: B.A., 1962, American University of Beirut; M.A., 1965, Ph.D., 1969, University of California at Los Angeles
STEPHEN TABACHNICK (2000), Professor, Chair: B.A., 1966, University of California, Berkeley; M.A., 1967, University of Chicago; Ph.D., 1971, University of Connecticut
HAROLD TERRELL (2004), Instructor: B.A., 1985, Memphis State University; M.A., 1998, University of Memphis
EMILY THRUSH (1990), Professor: B.A., 1971, Duke University; M.A., 1979, University of Florida; Ph.D., 1990, Georgia State University
CYNTHIA GRANT TUCKER (1967), Professor: B.A., 1963, Denison University; Ph.D., 1967, University of

Iowa
JENNI FER A. WAGNER-LAWLOR (1990), Professor, Associate Dean: B.A., 1979, Ph.D., 1990, Yale University

## FOREIGN LANGUAGES AND LITERATURES

RALPH ALBANESE, Ph.D., Chair
RALPH ALBANESE (1990), Professor, Chair: B.A., 1966, M.A., 1968, Queens College ; Ph.D., 1972, Yale University
PILAR ALCALDE (1998), Associate Professor of Spanish: B.A., 1988, Universidad Complutense , Madrid , Spain ; M.A., 1994, Ph.D., 1998, University of Southern California
FERNANDO BURGOS (1981), Professor of Spanish: B.S., 1970, M.A., 1973, University of Chile; Ph.D., 1980, University of Florida
SARA CEPEDA (2006), Instructor of Spanish: B.A., 2002, M.A., 2004, University of Memphis
MARJ ORIE CHAMPION (2005), Instructor of French: B.A., 1978, Christian Brothers University ; M.A., 1982,
M.A., 1989, Memphis State University

CHERYL ANNE COX (1984), Associate Professor of Classics: B.A., 1976, York University , Toronto , Canada ;
Ph.D., 1983, Duke University
RUTH CRAWFORD (2006), Visiting Assistant Professor of German: B.A., 1998, University of Liverpool
JOHN R. DURBIN (2004), Assistant Professor of German: B.A., 1992, Yale University ; M.A., 1997, Indiana University
JERI LIZABETH FACKELMAN (2005), Instructor of French: B.A., 1977, New College of the University of South Florida, M.A., 1996, University of Vermont; Ph.D., 2003, University of Michigan
MARY JANE FENWICK (1976), Associate Professor of Spanish: B.A., 1962, Indiana University; M.A., 1971, Ph.D., 1979, University of Minnesota
J AI ME M. FERRÁN (2005), Assistant Professor of Spanish: B.A., 1987, M.A., 1997, Syracuse University;
Ph.D., 2003, University of North Carolina
LOURDES GABI KAGOJ EASKOA (2005), Assistant Professor of Spanish: B.A., 1991, Universidad de Deusto; M.A., 1998, University of Nevada; Ph.D., 2005, University of Arizona

COSETTA GAUDENZI (2002), Assistant Professor of Italian: Laurea, 1992, Università di Bologna; M.A., 1993, University of Warwick; Ph.D., 2000, University of Texas at Austin
DANI EL GUERRA-MONJ E (2001), Instructor of Spanish: B.A., 1999, B.S., 1999, Arkansas Technological University; M.A., 2001, University of Memphis
WILLIAM HENDEL (2006), Instructor of French: B.A., 1996, University of California at Berkeley
MI SCHA HOOKER (2002), Instructor of Classics: B.A., University of Calgary
SUSAN M. J OHNSON (1985), Associate Professor of French: B.A., 1973, University of Chicago; M.A., 1975,
Michigan State University; M.L.S., 1983, Ph.D., 1983, Indiana University
MONICQUE LAROCQUE (2004), Instructor of French: B.A., 1988, University of North Carolina at Charlotte; M.A., 1999, University of Louisiana at Lafayette

NANCY L. MAGALLANES (2002), Instructor of Spanish: B.A., 1969, Rhodes College; M.A., 1973, Vanderbilt University
LILIAN MARQUES RODRIGUES (2003), Instructor of Spanish: B.A., 1999, Armando Alvares Penteado
Foundation, Brazil; M.A., 2003, University of Memphis
CARLA MARTINEZ (2001), Instructor of Spanish: B.A., 1992, Bryn Mawr College; M.A., 1997, University of Memphis
YUKI MATSUDA (2000), Associate Professor of Japanese: B.A., 1989, Michigan State University; M.A., 1991, University of Massachusetts; M.A., 1993, Ph.D., 1997, University of Southern California
MONIKA NENON (1993), Professor of German: M.A., 1983, Ph.D., 1987, University of Freiburg, Germany FATIMA R. NOGUEIRA (2005), Visiting Assistant Professor of Spanish: M.A., 2000, The University of Memphis; M.A., 2003, Vanderbilt University
DAVID L. SIGSBEE (1976), Associate Professor of Classics: B.A., 1960, Concordia Senior College, Ft. Wayne, Indiana; M.A., 1961, Ph.D., 1968, University of Michigan
SUSAN K. SILVER (2000), Associate Professor of French: B.A., 1982, M.A., 1991, University of Louisiana, Lafayette; Ph.D., 1996, Tulane University
R. CLAY TANNER (1997), Instructor of Spanish and Language Lab Coordinator: B.A., 1985, Baker University; M.A., 1988, University of Iowa
WILLIAM J OHN THOMPSON (1989), Associate Professor of French, Assistant Dean: B.A., 1983, M.A., 1984,
McMaster University, Canada; Ph.D., 1989, Cornell University

FRANCI SCO VIVAR (1996), Assistant Professor of Spanish: B.A., 1979, Universidad Complutense, Madrid, Spain; M.A., 1990, California State University; Ph.D., 1995, University of California-Los Angeles

HISTORY<br>JANANN M. SHERMAN, Ph.D., Chair

J AMES M. BLYTHE (1992), Professor: B.S., 1968, M.A., 1972, Penn State University; M.A., 1982, Ph.D., 1987, Cornell University
BEVERLY G. BOND (1996), Associate Professor: B.S., 1969, M.A., 1969, Memphis State University; M.Ed., 1976, Columbia University; Ph.D., 1996, University of Memphis
PETER J. BRAND (2001), Assistant Professor: B.A., 1990, University of Texas at Arlington; M.A., 1992, Memphis State University; Ph.D., 1998, University of Toronto
WALTER ROBERT BROWN (1965), Associate Professor: B.A., 1962, Millsaps College; M.A., 1963, Ph.D., 1973, Emory University
MARGARET M. CAFFREY (1988), Associate Professor: B.A., 1969, College Misericordia; M.A., 1979, Ph.D., 1986, University of Texas
JAMES ROBERT CHUMNEY, JR. (1965), Associate Professor: B.S., 1957, Memphis State University; M.A., 1961, Trinity University; Ph.D., 1964, Rice University
CHARLES WANN CRAWFORD (1962), Professor: B.A., 1953, Harding College; M.A., 1958, University of Arkansas; Ph.D. 1968, University of Mississippi
MAURICE A. CROUSE (1962), Professor: B.S., 1956, Davidson College; M A., 1957, Ph.D., 1964, Northwestern University
DOUGLAS WAYNE CUPPLES (2002), Instructor: B.A., 1970, M.A., 1976, Ph.D., 1995, The University of Memphis
GUI OMAR DUENAS-VARGAS (2003), Assistant Professor: B.A., 1969 Xavier University; M.A., 1983, Ph.D., University of Texas at Austin
JAMES EDWARD FICKLE (1968), Professor: B.S., 1961, Purdue University; M.A., 1963, Ph.D., 1970, Louisiana State University
ROBERT J. FRANKLE (1970), Associate Professor: B.A., 1963, St. Olaf College; M.A., 1965, Ph.D., 1970, University of Wisconsin
ARAM G. GOUDSOUZI AN (2004), Assistant Professor: B.A., 1994, Colby College; M.A., University of Massachusetts-Amherst; Ph.D., 2002 Purdue University
ROBERT H. GUDMESTAD (2004), Assistant Professor: B.S., 1987, North Dakota State University; M.A., 1993, University of Richmond; M.S., 1999, Ph.D., 1999, Louisiana State University
J OSEPH M. HAWES (1984), Professor: A.B., 1960, Rice University; M.A., 1962, Oklahoma State University; Ph.D., 1969, University of Texas
J ONATHAN J UDAKEN (1999), Associate Professor: B.A., 1990, University of California, Berkeley; M.A., 1993, Ph.D., 1997, University of California, Irvine
ABRAHAM DAVID KRIEGEL (1964), Professor: B.A., 1958, Hunter College; M.A., 1960, Ph.D., 1965, Duke University
DENNIS H. LAUMANN (2000), Associate Professor: B.A., 1992, State University of New York at Binghampton; M.A., 1994, Ph.D., 1999, University of California, Los Angeles
KEVIN WAYNE MARTIN (2005), Assistant Professor: B.A., 1996, University of Houston; M.A., 2000, Ph.D., 2005, Georgetown University
KELL FREEMAN MITCHELL, JR. (1963), Associate Professor: B.A., 1957, M.A., 1960, Ph.D., 1966, University of Georgia
SUZANNE ONSTINE (2006), Assistant Professor: B.A., 1991, University of Arizona; M.A., 1993, Ph.D., 2001, University of Toronto
D'ANN R. PENNER (1997), Associate Professor: B.A., 1989, California State University; M.A., 1990, Ph.D., 1995, University of California, Berkeley
CATHERINE PHI PPS (2006), Assistant Professor: B.A., 1990, Carleton College; M.A., 1998, Duke University JANANN M. SHERMAN (1994), Professor, Chair: B.S., 1985, The School of the Ozarks; M.A., 1990, Ph.D., 1993, Rutgers University
ARWIN D. SMALLWOOD (2003), Associate Professor: B.A., 1988, M.A., 1990, North Carolina Central University; Ph.D., 1997, Ohio State University
STEPHEN K. STEIN (2001), Instructor: B.A., 1989, M.A., 1992, University of Colorado at Denver; Ph.D., 1999, The Ohio State University

DANIEL L. UNOWSKY (1999), Associate Professor: B.A., 1988, University of Michigan; M.A., Ph.D., 2000, Columbia University

## BORNBLUM J UDAI C STUDI ES <br> DAVID A. PATTERSON, Ph.D., Director

SHAUL BAR (1990), Associate Professor: B.A., 1978, Haifa University; M.A., 1983, Ph.D., 1988, New York University
STEPHEN D. BENIN (1987), Associate Professor: B.A., 1969, University of Rochester; M.A., 1971, Ph.D., 1980, University of California, Berkeley
DAVID A. PATTERSON (1996), Professor, Director, Bornblum Chair of Excellence in Judaic Studies: B.A., 1972, M.A., 1976, Ph.D., 1978, University of Oregon

## MATHEMATI CAL SCI ENCES

J AMES E. JAMISON, Ph.D., Chair
MANOHAR LAL AGGARWAL (2005), Assistant Professor: B.A., Punjab University ( India ); M.A., 1960, Ph.D., 1977, Delhi University
GEORGE A. ANASTASSIOU (1986), Professor: B.A., 1975, University of Athens , Greece ; M.A., 1981, Ph.D., 1984, University of Rochester
DI ONYSIA S. BACOPULOS (1989), Instructor: B.S.E., 1979, M.S., 1982, Memphis State University
PAUL NEVI LLE BALISTER (1998), Professor: B.A., 1987, M.A., 1991, Ph.D., 1992, Cambridge University
BELA BOLLOBAS (1994), Professor, Hardin Distinguished Chair of Excellence in Combinatorics: Dr. Rer. Nat., 1967, Budapest; Ph.D., 1972, D.Sc., 1985, Cambridge University
MARIA F. BOTELHO (1988), Professor: B.S., 1980, University of Porto; Ph.D., 1988, University of California, Berkeley
JAMES T. CAMPBELL (1984), Associate Professor: B.S., 1978, Georgia Institute of Technology; M.S., 1982, Ph.D., University of North Carolina-Chapel Hill
TSZ HO CHAN (2006), Assistant Professor: B.S., 1996, University of Illinois; Ph.D., 2002, University of Michigan
HONGQIU CHEN (2000), Associate Professor: B.S., 1983, Chengdu University of Sciences and Technology;
M.A., 1988, Academia Sinica; Ph.D., 1998, University of Texas, Austin

ANNITA J. DAVIS (1998), Instructor: M.S., 1995, University of Memphis
LIH-YUAN DENG (1984), Professor: B.S., 1975, M.S., 1977, National Taiwan University; M.S. 1979, Purdue University; M.S., 1982, Ph.D., 1984, University of Wisconsin-Madison
DAVID DWI GGI NS (2006), Instructor: B.A., 1980, Southwestern at Memphis; M.S., 1984, Memphis State University; Ph.D., 1993, Southern Illinois University at Carbondale
RALPH J. FAUDREE, JR. (1971), Professor, Provost: B.S., 1961, Oklahoma Baptist University; M.S., 1963, Ph.D., 1964, Purdue University
NI KOS FRANTZ KI NAKAS (2006), Assistant Professor: B.S., 1996, University of Crete; M.A., 1998, Ph.D., 2002, Stanford University
MISTY TURNER FREEMAN (2005), Instructor: B.S., 1990, M.S., 1992, University of Mississippi
EBENEZER O. GEORGE (1983), Professor: B.A., 1968, Harvard University; M.S., 1972, University of Illinois; Ph.D., 1977, University of Rochester
GISELE RUIZ GOLDSTEIN (1996), Professor: B.S., 1980, Ph.D., 1986, Tulane University
JEROME A. GOLDSTEIN (1996), Professor: B.S., 1963, M.S., 1964, Ph.D., 1967, Carnegie Mellon University ANGELA GRANT (1999), Instructor: B.A., 1980, Stephens College; M.S., 1984, Ph.D., 1988, University of Arkansas
J OHN R. HADDOCK (1970), Professor: B.A., 1966, M.S., 1968, Ph.D., 1970, Southern Illinois University THOMAS C. HAGEN (2003), M.S., 1995, University of Texas at Dallas ; Ph.D., 1998, Virginia Polytechnic Institute and State University
APRIL M. HOFFMEISTER (2005), Assistant Professor: B.S., 1997, Bradley University; M.S., 1999, Ph.D., 2002, University of Illinois
JAMES E. JAMI SON (1970), Professor, Chair: B.S., 1965, M.S., 1967, Ph.D., 1970, University of Missouri, Rolla
ANNA H. KAMI NSKA (1989), Professor: M.S., 1973, Ph.D., 1978, Doctor habilitatus, 1986, A. Mickiewicz University, Poznan, Poland

JENO LEHEL (2001), Professor: M.S., 1968, Eotvos Lorand University; Ph.D., 1984, Hungarian Academy of Sciences
PEI-KEE LIN (1986), Professor: B.S., 1973 Tsing Hua University; M.S., 1981, Ph.D., 1980, Ohio State University
RANDALL MCCUTCHEON (2001), Assistant Professor: B.A., 1988, Anderson College; Ph.D., 1995, The Ohio State University
KENNETH MCCLAIN (1986), Instructor: B.A., 1962, Mississippi State University; M.A., 1966, Louisiana State University
ROSEMARIE MONTGOMERY (2006), Instructor: B.S., 2000, M.S., 2003, Arkansas State University
MAGDALENA MUSAT (2005), Assistant Professor: Diploma, 1993, University of Bucharest; M.S., 1997, Ph.D.,
2002, University of Illinois
VLADIMIR S. NI KIFOROV (2003), Assistant Professor: M.S., 1978, Ph.D., 2004, Sofia State University JANET G. PITTS (2004), Instructor: B.S., 1975, M.A.T., 1992, Memphis State University
CECIL C. ROUSSEAU (1970), Professor: B.S., 1960, Lamar State College of Technology; M.S., 1962, Ph.D.,
1968, Texas A\&M University
WAI-YUAN TAN (1975), Research Professor: B.S., 1956, Provincial College, Taiwan; M.S., 1959, National
Taiwan University; M.S., 1963, Ph.D., 1964, University of Wisconsin
BETTE R. VETETO (1994), Instructor: B.S.Ed., 1970, M.Ed., 1976, Memphis State University
MATĖ WIERDL (1995), Professor: B.S.,1985, The Eotvos Lorand University; Ph.D., 1989, The Ohio State University
SEOK PIN WONG (1965), Professor: M.S., 1962, University of Delaware; Ph.D., 1967, University of Illinois

## MI LITARY SCIENCE

LTC. GREGORY V. MARINICH, M.S.A.
Professor of Military Science

HARRY D. BROOKS (2006), Major, United State Army, Assistant Professor: B.S., 1992, Embry Riddle Aeronautical University
SCOTT M. CALDWELL (2006), Captain, Army-National Guard, Assistant Professor: B.A., 1993, University of Mississippi
EARLJ. HUDGENS (2006), Master Sergeant, United States Army, Chief Instructor/Senior Enlisted Advisor CASSIUS V. DAVIS (2006), Government Service 9, Supply Technician
KIMBERLY D. HUDGENS (2006), United States Army Reserve/COMtek, Administrative Technician: B.A., 2004, University of Memphis
GREGORY V. MARI NICH (2006), Lieutenant Colonel, United States Army, Chair: B.S, 1984, University of North Carolin at Wilmington; M.S.A., 1998, Central Michigan University
MI CHAEL D. MOORE (2006), Sergeant First Class, United States Army, Instuctor

## NAVAL SCI ENCE

CAPTAIN TIMOTHY J. HOWINGTON, USN
Professor of Naval Science

CEDRIC CRAWFORD (2004), Chief Petty Officer, U.S. Navy, Administrative Officer: A.S., 2000, Park University
CHARLES D. GODWIN (2006), Captain, U.S. Marine Corps, Assistant Professor of Naval Science: B.A., 2001 University of Colorado- Boulder
DELDRICK GRAY (2003), Lieutenant, U.S. Navy, Assistant Professor of Naval Sciences: B.A., 199, University of Mississippi
TIMOTHY J. HOWI NGTON (2004), Captain, U.S. Navy, Professor of Naval Science: B.A., 1978, Northeast Louisiana University; M.A., Naval War College; M.S., Salve Regina University
JASON MOFFITT (2004), Gunnery Sergeant, U.S. Marine Corps, Assistant Marine Officer Instructor TRI CIA L. TEAS (2005), Lieutenant , U.S. Navy, Assistant Professor of Naval Science: B.S., 1996, The University of Memphis
DAVID R. SNOW (2005), Commander, U.S. Navy, Associate Professor of Naval Science: B.A., 1986, Georgia College ; M.B.A., 1993, Auburn University

TRACY WHITE (2006), Lieutenant, U.S., Navy, Assistant Professor of Naval Science: B.A., 1998, Arkansas Tech University

## PHI LOSOPHY

NANCY DAVIS SIMCO, Ph.D., Chair
ROBERT L. BERNASCONI (1988), Moss Professor of Philosophy: B.A., 1972, Ph.D., 1982, Sussex University PLESHETTE DEARMITT (2006), Assistant Professor: B.A., 1991 Duquesne University; M.A., 1997, Ph.D., 2006, DePaul University
REMY DEBES (2006), Assistant Professor: B.A., 1997, Boston University; Ph,D., 2006, University of Michigan
DAVID K. HENDERSON (1991), Professor: B.A., 1979, M.A., 1982, Wichita State University; M.A., 1985, Ph.D., 1985, Washington University
GENE G. JAMES (1964), Professor: B.A., 1959, Wake Forest University; Ph.D., 1969, University of North Carolina
ALAN KIM (2000), Assistant Professor: B.A., 1990, Haverford College; Ph.D., 2000, McGill University BILL E. LAWSON (2005), Distinguished Professor: B.A., 1975, M.A., 1977, Ph.D., 1980, University of North Carolina
LEONARD LAWLOR (1989), Professor: B.A., 1978, Eastern Michigan University; Ph.D., 1988, State University of New York, Stony Brook
MARY BETH MADER (2002), Assistant Professor: A.B., 1982, Smith College; Ph.D., 1998, University of Texas at Austin
SARAH MILLER (2003), Assistant Professor: B.A., 1996, Haverford College; M.A., 1999, Ph.D., 2003, State University of New York at Stony Brook
THOMAS NENON (1985), Professor: B.A., 1972, Regis College; M.A., 1974, Boston College; Ph.D., 1983, University of Freiburg
HOKE ROBI NSON (1981), Professor: B.A. 1969, George Washington University; M.A. 1971, University of Texas; Ph.D., 1978, State University of New York, Stony Brook
TIMOTHY ROCHE (1985), Associate Professor: B.A., 1974, Washington and Lee University; M.A., 1980, Ph.D., 1984, University of California-Davis
KAS SAGHAFI (2006), Assistant Professor: B.A., 1990, Duquesne University; M.A., 1995, Ph.D., 2002, DePaul University
NANCY DAVIS SIMCO (1966), Professor, Chair: B.A., 1962, M.A., 1965, Ph.D., 1969, University of Kansas J OHN L. TIENSON (1987), Professor: B.A. 1963, University of California, Berkeley; M.A., 1966, Ph.D., 1970, University of Illinois, Urbana
DEBORAH P. TOLLEFSON (2002), Assistant Professor: B.A., 1992, St Anselm College; M.A., 1995, University of South Carolina; Ph.D., 2002, Ohio State University

## PHYSI CS

SHAH JAHAN, Ph.D., Chair
B. N. NARAHARI ACHAR (1984), Professor: B.Sc., 1960, Mysore University, India; M.S., 1965, Ph.D., 1968, Pennsylvania State University
BENTLEY BURNHAM (2006), Instructor: B.A., 1987, Lehigh University; M.A., 1990, Ph.D., 1996, Duke University
DONALD R. FRANCESCHETTI (1979), Professor: B.S., 1969, Brooklyn College of the City University of New York; M.A., 1971, Ph.D., 1974, Princeton University
JOHN W. HANNEKEN (1979), Associate Professor: B.S., 1971, Ohio University; M.S., 1974, University of Houston; M.A., 1977, Ph.D., 1979, Rice University
M. SHAH JAHAN (1980), Professor, Chair: B.Sc. 1963, M.Sc., 1964, Rajshahi University (Bangladesh); Ph.D., 1977, University of Alabama
MOHAMED LARADJI (2002), Assistant Professor: B.Sc., 1986, University of Sidi Bel-Abbes (Algeria); M.Sc., 1989, Ph.D., 1993, McGill University
ROBERT RIGGS MARCHINI (1968), Professor: B.S., 1962, DePaul University; Ph.D., 1969, Clemson University
SANJ AY R. MISHRA (1999), Associate Professor: B.Sc., 1987, M.Sc., 1989, South Gujarat University; Ph.D., 1996, University of Missouri, Rolla

MARK OSPECK (2003), Assistant Professor: B.S., 1977, U.S. Naval Academy; Ph.D., 1996, Brandeis University
JOAN T. SCHMELZ (1998), Professor: B.S., 1980, M.S., 1982, Rensselaer Polytechnic Institute; Ph.D., 1987, Pennsylvania State University

## POLITI CAL SCI ENCE <br> SHANNON LINDSEY BLANTON, Ph.D., Chair

MARY ANDERSON (2005), Assistant Professor: B.A., 1994, M.A., 1996, University of Central Florida; M.S., 2003, Ph.D., 2005, Florida State University
ROBERT G. BLANTON, III (1997), Associate Professor: B.A., 1989, North Carolina State University; M.A., 1994, Ph.D., 1996, University of South Carolina
SHANNON LINDSEY BLANTON (1999), Associate Professor, Chair: B.A., 1989, Georgia College; M.A., 1991, University of Georgia; Ph.D., 1996, University of South Carolina
NICHOLAS CHARRON (2006), Instructor: B.A., 2000, University of Maine; M.A., 2002, University of Rhode I sland; M.S., 2004, Florida State University
BENJ AMI N L. HOOKS (1995), Distinguished Professor of Political Science and History; J.D., 1948, DePaul University College of Law
LISA HUFFSTETLER (2003), Instructor: B.A., 1991, University of California, Riverside; M.A., 1995, University of South Carolina
DOUGLAS R. IMIG (1998), Professor: B.A., 1984, St. Mary's College of Maryland; M.A., 1986, Ph.D., 1991, Duke University
MATTHIAS KAELBERER (2004), Associate Professor: B.A., University of Tubingen; M.A., 1991, Ph.D., 1997, Princeton University
HEATHER LARSEN (2006), Assistant Professor: B.A., 2000, M.A., 2002, Ph.D., 2006, University of Washington
J. HARVEY LOMAX (1977), Associate Professor: B.A. 1970, Furman University; M.A., 1973, Ph.D., 1979, University of Chicago
WI LLIAM DAVID MADLOCK (2002), Instructor: B.A., 1973, M.A., 1977, Memphis State University
HARRY RICHARD MAHOOD (1964), Professor: B.A., 1951, M.A., 1952, University of Oklahoma; Ph.D., 1960, University of Illinois
DAVID RICHARDS (2005), Assistant Professor: B.A., 1990, The College of New Jersey; M.A., 1994, East Stroudsburg University; Ph.D., 1999, Binghamton University, SUNY
SHARON STANLEY (2006), Assistant Professor: B.A., 1999, Dartmouth College; M.A., 2000, Ph.D., 2006, University of California, Berkeley

## PSYCHOLOGY <br> ARTHUR C. GRAESSER, Ph.D., Chair

ROGER AZEVEDO (2006), Assistant Professor: B.A., 1989, M.S., 1993, Concordia University; Ph.D., 1998, McGill University
J EFFREY S. BERMAN (1985), Professor: B.A., 1972, Reed College; A.M., 1976, Ph.D., 1979, Harvard University
CHARLES DOUGLAS BLAHA (2003), Associate Professor: B.A., 1976, University of California; Ph.D., 1986, University of Oregon
ROBERT COHEN (1976), Professor: B.A., 1970, University of Virginia; M.A., 1972, Ph.D., 1975, Miami University (Ohio)
MELLONI NICOLE COOK (2003), Assistant Professor: B.S., 1991, Mary Washington College; Ph.D., 1996, Pennsylvania State University
RICHARD DALE (2006), Assistant Professor: B.A., 2000, University of Toronto; Ph.D., 2006, Cornell University
WILLIAM ORRINGTON DWYER (1969), Professor: B.A., 1964, College of Wooster; M.A., 1968, Ph.D., 1969, Southern Illinois University
THOMAS KEVIN FAGAN (1976), Professor: B.S.Ed., 1965, M.A., 1966, Ph.D., 1969, Kent State University RANDY FLOYD (2001), Assistant Professor: B.A., Hendrix College, 1994; M.Ed., 1995, Ph.D., 1999, Indiana State University
J. BARRY GHOLSON (1974), Professor B.A., 1964, Kent State University; M.A., 1967, Ph.D., 1968, University
of Iowa
ARTHUR C. GRAESSER (1985), Professor, Chair: B.A., 1972, Florida State University; Ph.D., 1977, University of California-San Diego
DAVID A. HOUSTON (1992), Associate Professor: B.A., 1975, Northwestern University; J.D., 1980, Ph.D., 1989, Indiana University
XIANGEN HU (1993), Associate Professor: B.S., 1982, M.S., 1985, Huazhong University; M.A., 1991, Ph.D., 1993, University of California, Irvine
KATHERI NE M. KITZMANN (1996), Associate Professor: B.A., 1986, The College of William and Mary; M.A.
1990, Ph.D., 1996, University of Virginia
ROGER J AMES KREUZ (1988), Professor: B.A., 1983, University of Toledo; M.A., 1985, Ph.D., 1987,
Princeton University
RONALD LANDIS (2006), Associate Professor: B.A., 1989, Pennsylvania State University; M.A., 1992, Ph.D., 1995, Michigan State University
FRANK CRAGG LEEMING (1963), Professor: B.S., 1958, University of Illinois; M.A., 1961, Ph.D., 1963, University of Mississippi
HEIDI LEVITT (1999), Associate Professor: B.A., 1991, M.A., 1993, Ph.D., 1998, York University
MAX LOUWERSE (2003), Assistant Professor: M.A., 1996, University of Utrecht; Ph.D., 2001, University of Edinburgh
DOUGLAS B. MATTHEWS (1999), Associate Professor: B.S., 1991, Southwest Missouri State University; M.A., 1994, Ph.D., 1996, Miami University (Ohio)

RICHARD GLENN MCCOWEN (2005), Research Assistant Professor: B.S., 1996, University of Washington;
M.S., 2002, Ph.D., 2004, The University of Memphis

MEGHAN MCDEVITT-MURPHY (2006), Assistant Professor: B.A., 1997, Rutgers University; M.S., 2001,
Ph.D., 2004, Auburn University
DANI ELLE S. MCNAMARA (2002), Associate Professor: B.A., 1982, University of Kansas; M.A., 1989, Wichita
State University; Ph.D., 1992, University of Colorado
ANDREW WI LLIAM MEYERS (1976), Professor, Vice Provost for Research: B.A., 1970, University of
Rochester; M.S., 1972, Ph.D., 1974, Pennsylvania State University
GUY MITTLEMAN (1990), Professor: B.A., 1978, M.S., 1981, Ph.D., 1985, University of Michigan
J AMES MURPHY (2006), Assistant Professor: B.A., 1995, Seton Hall University; M.S., 1999, Ph.D., 2003, Auburn University
ROBERT ALLEN NEIMEYER (1983), Professor: B.A., 1976, University of Florida; Ph.D., 1982, University of Nebraska
THERESA MONTGOMERY OKWUMABUA (2003), Visiting Assistant Professor: B.S., 1976, Southern University; M.S., 1977, University of Georgia; Ph.D., 1982, Memphis State University

GI LBERT R. PARRA (2005), Assistant Professor: B.A., 1996, New Mexico State University; M.A., 1999, Ph.D., 2004, University of Missouri-Columbia
LESLIE A. ROBI NSON (2002), Associate Professor: B.A., 1978, Rhodes College; M.S., 1981, Florida State University; Ph.D., 1990, Memphis State University
LYNDA M. SAGRESTANO (2006), Associate Professor, Director, Center for Research on Women: B.S., 1988, Duke University; M.A., 1990, Ph.D., 1993, University of California, Berkeley
J AMES P. WHELAN (1990), Associate Professor: B.A., 1980, LaSalle College; M.A., 1983, Ph.D., 1989,
Memphis State University
WI LLIAM HENRY ZACHRY, JR. (2005), Visiting Professor: A.B., 1964, Oberlin College ; M.S., 1967, Ph.D., 1972, Memphis State University

## SOCI OLOGY

## LARRY R. PETERSEN, Ph.D., Interim Chair

GREGORY V. DONNENWERTH (1974), Professor: B.A., 1965, Buena Vista College; M.A., 1966, University of South Dakota; Ph.D., 1971, University of Missouri
GRAVES E. ENCK (1974), Associate Professor: B.A. 1961, North Texas State University; M.A., 1968, Texas Christian University; Ph.D., 1975, Yale University
CYNTHIA F. PELAK (2002), Assistant Professor: B.A., Albion College; M.A., 1995, Ph.D., 2002, Ohio State University
LARRY R. PETERSEN (1977), Professor, Interim Chair: B.A., 1972, M.A., 1974, Ph.D., 1977, Washington State University

J AMES D. PRESTON (1971), Professor: B.S., 1962, Middle Tennessee State University; M.A., 1964, Ph.D., 1967, Mississippi State University
JEAN-PIERRE REED (2003), Assistant Professor: B.A., 1987, University of California, Santa Cruz; M.A., 1993, Ph.D., 2000, University of California, Santa Barbara
CAROL RAMBO (1993), Associate Professor: B.A., 1986, M.A., 1987, Ph.D., 1993, University of Florida WANDA RUSHI NG (1998), Associate Professor: B.A., 1973, M.A., 1981, University of North Carolina, Greensboro; Ph.D., 1998, University of Tennessee
DI ANE SHINBERG (2002), Assistant Professor: B.A., 1990, Vassar College; M.S., 1996, Ph.D., 2001, University of Wisconsin-Madison
JOSEPH C. VENTI MI GLIA (1981), Associate Professor: B.A. 1967, M.A., 1968, Indiana University; Ph.D., 1973, University of Wisconsin

## SCHOOL OF URBAN AFFAIRS AND PUBLIC POLICY <br> STANLEY E. HYLAND, Ph.D., Head of School

PHYLLIS BETTS (1996), Associate Professor: B.A., 1972, M.A., 1974, Ph.D., 1978, University of Chicago

## DIVISION OF CITY AND REGI ONAL PLANNING <br> GENE PEARSON, M.U.R.P., Director

REZA BANAI (1983), Professor: B.Arch., 1973, Miami University; M.Arch., 1975, Virginia Polytechnic Institute; M.A., Ph.D., 1983, University of Pennsylvania
GENE PEARSON (1974), Associate Professor, Director: B.P.A., 1966, M.U.R.P., 1971, University of Mississippi
STEVE REDDING (1999), Assistant Professor: B.A., 1970, Auburn University; M.Ed., 1972, University of West
Georgia; M.B.A., 1979, Mississippi State University
SUSAN ROAKES (1991), Associate Professor: B.A., 1981, Virginia Polytechnic Institute; M.S.P., 1987, University of Tennessee; Ph.D., 1991, University of Wisconsin-Madison
CHARLES SANTO (2005), Assistant Professor: B.A., 1996, Washington and Lee University; M.U.R.P., 1999,
Virginia Commonwealth University; Ph.D., 2005, Portland State University

## CRI MI NOLOGY AND CRI MI NAL J USTI CE

RANDOLPH DUPONT, Ph.D., Chair
RANDOLPH DUPONT (2003), Professor, Chair: B.A., 1973, Loyola University of the South; Ph.D., 1981, University of Texas at Austin
DAVID R. FORDE (2000), Professor: B.Sc., 1982, University of Victoria; M.A., 1986, University of Manitoba;
Ph.D., 1992, University of Alberta
DAVID J. GIACOPASSI (1977), Professor: B.A., 1969, St. Anselm College; M.A., 1971, Ph.D., 1975,
University of Notre Dame
DONNA HUDDLESTON (1999), Instructor, Undergraduate Coordinator: B.A., 1980, M.A. , 1988, Memphis State University
W. RI CHARD JANIKOWSKI (1988), Associate Professor: B.A., 1979, Loyola University of Chicago; J.D., 1982, DePaul University
WAYNE J. PITTS (2004), Assistant Professor: B.A., 1991, Western Carolina University; M.A., 1995, Ph.D., 2003, University of New Mexico
K.B. TURNER (2003), Assistant Professor: B.S., 1983, Jackson State University; M.S., 1988, University of Nebraska at Omaha; Ph.D., 1996, University of Nebraska at Lincoln
MARGARET VANDIVER (1992), Professor: B.S., 1975, University of Colorado; M.A., 1983, Ph.D., 1989, Florida State University
YASCHICA WILLIAMS (2006), Assistant Professor: B.A., 1996, M.S., 1999, University of Alabama; Ph.D., 2006, Western Michigan University

DIVISION OF HEALTH ADMI NISTRATION<br>CAMILLE BARSUKIEWICZ, Ph.D., Interim Director

CAMILLE BARSUKIEWICZ (1999), Associate Professor, Interim Director: B.S., 1989, Cedar Crest College;
M.S., 1994, St. Joseph's University; Ph.D., 1998, Pennsylvania State University

DAVID BURCHFIELD (1999), Assistant Professor: B.A., 1992, M.A., 1994, University of Memphis; Ph.D., 1998, Cornell University
PAUL E. FITZGERALD (2000), Associate Professor: A.B., 1973, Washington University; M.S.W., 1975, St. Louis University; Ph.D., 1981, University of Alabama, Birmingham

## DI VISI ON OF PUBLIC ADMI NSTRATI ON DOROTHY NORRIS-TIRRELL, Ph.D., Director

J AMES R. CARRUTH (2001), Instructor: B.A., 1960, University of Memphis; M.P.A., 1968, University of Colorado; M.B.A., 1984, Marymount University of Virginia; Ph.D., 2002, University of Mississippi J OY A. CLAY (1990), Associate Professor: R.N., 1968, Illinois Masonic Hospital School of Nursing; B.A., 1971, University of Washington; M.A., 1974, Loyola University; Ph.D., 1991, Virginia Polytechnic Institute and State University
DAVID N. COX (1978), Professor: B.A., 1965, Ball State University; M.A., 1968, University of Queensland; Ph.D., 1977, Indiana University
ED FRENCH (2006), Assistant Professor: B.A., 1986, University of Tennessee; M.C.M., 1994, East Tennessee State University; M.Ed., 2006, University of Virginia; Ph.D., 2001, Mississippi State University
CHARLES E. MENIFIELD (2004), Associate Professor: B.A., 1990, M.P.A., 1992, Mississippi State University; Ph.D., 1996, University of Missouri-Columbia
DOROTHY NORRIS-TIRRELL (1993), Associate Professor, Director: B.S., 1978, Harding University; M.S.W., 1980, University of Arkansas at Little Rock; Ph.D., 1992, Florida International University

## DI VI SI ON OF SOCI AL WORK

JEROME BLAKEMORE, Ph.D., Director
J EROME BLAKEMORE (1999), Associate Professor, Director: B.S., 1977, Western Illinois University; M.S.W., 1979, Western Michigan University; Ph.D., 1992, University of Illinois-Chicago
SUSAN HUTCHINSON (2000), Associate Professor: B.S., 1973, Indiana University; M.S.W., 1976, University of Illinois; Ph.D., 1994, University of Texas at Austin
GARY F. SCHNEIDER (2004), Director of Field Placement and Community Outreach: B.S., 1970, North Dakota State University; M.S.S.W., 1988, University of Tennessee, Knoxville
KATHRYN WHITTED (2006), Assistant Professor: B.S.W., 1996, Northern Michigan University; M.S.W., 1998, Western Michigan University; Ph.D., 2005, University of Tennessee

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BARBARA STEVENSON, M.B.A., Recruiting/Scholarship Director

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KENNETH R. LAMBERT, Ph.D., Director
LAWRENCE J. ABBOTT (1998), Associate Professor: B.S., 1989, University of Minnesota ; Ph.D., 1998, University of Oregon
CHARLES BAILEY (2003), Professor and Arthur Andersen Alumni Chair of Excellence in Accounting: B.B.A., 1969; M.B.A. 1973; M.P.A., 1980, Ph.D. 1981, Georgia State University , C.M.A., 1980
DENTON COLLINS (2003), Associate Professor: B.S. 1976, University of Houston ; M.S., 1991, University of

Wyoming ; Ph.D., 1995, University of Colorado at Boulder
MAHMUD HOSSAIN (2006), Assistant Professor: B.C., 1994, M.C., 1995, University of Dhaka; M.S., 1997, University of Kentucky; Ph.D., 2003, Baruch College
NANCY HISEY MARDIS (1989), Associate Professor: B.A., 1966, M.A., 1973, University of Oklahoma; J.D., 1980, Memphis State University
KENNETH R. LAMBERT (1982), Professor, Director: B.S.B.A. 1968, Southeast Missouri State University; M.B.A., 1972, Ph.D. 1976, University of Arkansas

CRAI G J. LANGSTRAAT (1987), Professor: B.S., 1972, Arizona State University; J.D., 1978, Arizona State University College of Law; LL.M., 1982, University of San Diego School of Law; C.P.A., 1974, Arizona JAMES M. LUKAWITZ (1989), Associate Professor: B S, 1983, Ph.D., 1989, Florida State University; C.P.A., 1985, Florida
JOHN M. MALLOY (1988), Professor: B.B.A., 1961, M.B.A., 1966, Southern Methodist University; Ph.D., 1970, Louisiana State University; J.D., 1974, Salmon P. Chase School of Law of North Kentucky University; C.P.A., 1965, Texas; Member of Ohio Bar, 1974

PETER L. McMICKLE (1978), Professor: B.B.A. 1967, Memphis State University; M.A., 1969; Ph.D., 1977, University of Alabama; C.P.A., 1970, Tennessee
GEORGE S. MINMIER (1976), Professor: B.S.B.A., 1956, University of Arkansas; M.B.A., 1963, Southern Methodist University; Ph.D., 1974, University of Arkansas; C.P.A., 1978, Tennessee, C.M A., 1978
LARRY MOORE (1987), Associate Professor: B.A., 1971, Vanderbilt University; M.A., 1974, Memphis State University; J.D., 1976, Washington University
ZABIHOLLAH REZAEE (2001), Professor and Thompson-Hill Chair of Excellence in Accounting: B.S., 1976, I ranian Institute of Advanced Accounting; M.B.A., 1980, Tarleton State University; Ph.D., 1985, University of Mississippi
IRVIN LEE TANKERSLEY (1973), Associate Professor: B.B.A., 1967, Memphis State University; J.D., 1972, Tulane University
J. DAVID SPICELAND (1981), Professor: B.S., 1971, University of Tennessee; M.B.A., 1972, Southern Illinois University; Ph.D. 1976, University of Arkansas; C.P.A., 1975, Arkansas, 1976, Louisiana
JERRY TURNER (1999), Associate Professor: B.S., 1969, University of Texas at Austin; M.B.A., 1972, Texas A\&M University; M.S., 1990, University of Colorado; Ph.D., 1994, Texas A\&M University; C.P.A., 1973 New Mexico, 1975, Colorado

## ECONOMICS

JULIA A. HEATH, Ph.D., Chair
PINAKI S. BOSE (1995), Associate Professor: B.A., 1978, Calcutta University; M.A., 1981, Delhi University; Ph.D., 1990, State University of New York
CYRIL F. CHANG (1981), Professor: B.A., 1969, National Chengchi University; M.A., 1972, Memphis State University; Ph.D., 1979, University of Virginia
RICHARD DENMAN EVANS (1978), Professor: B.A., 1970, M.A., 1971, Ph.D., 1974, University of Missouri K. K. FUNG (1975), Professor: B.A., 1964, University of Hong Kong; Ph.D., 1970, Harvard University JOHN E. GNUSCHKE (1976), Professor; Director, Center for Manpower Studies and Bureau of Business and Economic Research: B.S., 1969, Utah State University; M.A., 1971, Ph.D., 1975, University of Missouri MI CHAEL J. GOOTZEIT (1975), Professor: B.S., 1961, City College of New York; M.A., 1963, Ph.D., 1966, Purdue University
JULIA A. HEATH (1986), Professor, Chair: BA., 1978, Bluffton College; Ph.D., 1986, University of South Carolina
ANDREW HUSSEY (2006), Assistant Professor: B.A., 2000, St. Olaf University; M.A., 2001, Ph.D., 2006, Duke University
DAVID M. KEMME (1994), Professor and Shelby County/ William N. Morris Chair of Excellence in International Economics: B.A., 1973, Miami University; M.A., 1975, Ph.D., 1980, Ohio State University VOLODYMYR LOGOVSKYY (2004), Assistant Professor: B.A., 1996, NaUKMA, Ukraine; M.A., 1999, EERC MA Program, Ukraine; M.S., 2001, Purdue University; Ph.D., 2004, Purdue University
ALBERT A. OKUNADE (1987), Professor: B.S., 1980; M.S., M.B.A., 1982, Wright State University; Ph.D., 1986, University of Arkansas
ROSE M. RUBIN (1994), Professor: B.A., 1961, Wellesley College; M.A., 1966, Emory University; Ph.D., 1968, Kansas State University
WILLIAM SMITH (1993), Professor: B.A., 1979, American College in Paris; M.A., 1980, University of Miami;

Ph.D., 1987, University of Virginia
QUANG $\widehat{2}$ RICHARD $\widehat{\geqslant}$ ZHANG (2001), Assistant Professor: B.A., 1991, Renmin University of China; M.A., 1993, Ph.D., 1998, The Ohio State University

## FI NANCE, INSURANCE AND REAL ESTATE RONALD W. SPAHR, Ph.D., Chair

QUENTIN C. CHU (1984), Professor: B.S., 1977, National Chiao Tung University ; M.A.S., 1979, Ph.D., 1984, University of Illinois
J OON HO HWANG (2005), Assistant Professor: B.S., 1997, M.S., 1999, Korea Advanced Institute of Science and Technology (KAIST), M.S. 2003, Ph.D. 2005, Indiana University
PANKAJ K. J AIN (2002), Assistant Professor: B.Com., 1993 Rajasthan University, India; M.B.A., 1995, Indian Institute of Management: L.LB., 1998, Bombay University; M.S., 2000, Ph.D., 2002, Indiana University CHRISTINE X. JIANG (2001), Professor: B.S., 1984, Fudan University; M.S., 1998, Massachusetts Institute of Technology; Ph.D., 1992, Drexel University
PHILLIP THEODORE KOLBE (1989), Associate Professor: B.S., 1970, United States Air Force Academy; M.A., 1981, Ph.D., 1988, University of Arizona
THOMAS H. McI NISH (1990), Professor, Wunderlich Chair of Excellence in Finance: B.A., 1968, BirminghamSouthern College; M.A., 1971, American University; Ph.D., 1978, University of Pittsburgh
MARS A. PERTL (1982), Professor: B.B.A. 1961, Ph.D., 1974, University of Iowa
C. S. PYUN (1970), Professor: B.A., 1960, Kyung Hee University; M.B.A., 1962, Miami University (Ohio); Ph.D., 1966, University of Georgia
LESLIE S. SCRUGGS, JR. (1969), Associate Professor: B.B.A., 1963, Memphis State University; M.B.A., 1964, University of Chicago; Ph.D., 1974, Vanderbilt University
RONALD W. SPAHR (2005), Professor, Chair: B.S.M.E., 1966, South Dakota State University ; M.B.A., 1969, University of Southern California ; Ph.D., 1976, University of Wisconsin
ROBERT A. WOOD (1990), Distinguished Professor: B.A., 1961, University of Washington ; M.S., 1968,
Stanford University ; Ph.D., 1978, University of Pittsburgh

## MANAGEMENT

 ROBERT R. TAYLOR, Ph.D., ChairDAVID G. ALLEN (1998), Associate Professor: B.S., 1991, M.S., 1993, Georgia Institute of Technology; Ph.D., 1999, Georgia State University
JOHN M. AMIS (2001), Associate Professor: B.Sc. 1990, University of Birmingham ( UK ); M.Sc., 1992 ( Dalhousie University ; Ph.D. 1998, University of Alberta .
RABI S. BHAGAT (1990), Professor: B.S., 1969, Indian Institute of Technology; M.A., 1972, Xavier Labor Relations Institute; M.A., 1974, Ph.D., 1977, University of Illinois at Urbana-Champaign
ERIC BREY (2006), Assistant Professor: B.S., 2002, M.S., 2003, University of Wisconsin; Ph.D., 2006, Purdue University
V. CAROL DANEHOWER (1989), Associate Professor, Associate Dean for Academic Programs: B.A. 1977, Hendrix College; M.A., 1978, University of Arkansas; D.B.A., 1987, University of Kentucky
BARBARA D. DAVIS (1994), Associate Professor: B.S. 1974, Knoxville College; M.A., 1975, University of Kentucky; Ed.D., 1990, Memphis State University
PETER S. DAVIS (1989), Professor: B.S.B.A., 1973, Appalachian State University; Ph.D., 1988, University of South Carolina
COY A. JONES (1981), Professor: B.B.A., 1971, University of Oklahoma; M.B.A., 1978, University of Central Oklahoma; Ph.D., 1982, University of Oklahoma
BENWARI L. KEDIA (1988), Professor, Wang Chair of Excellence in International Business: B.Comm., 1960, University of Rajasthan; LL.B., 1964, University of Bombay; M.B.A., 1966, Atlanta University; Ph.D., 1976, Case Western Reserve University
THOMAS R. MI LLER (1971), Professor, Associate Dean for Administration: B.A., 1966, M.B.A., 1968, Ph.D., 1972, Ohio State University
ROBERT M. O'HALLORAN (2002), Professor, Director, Kemmons Wilson School of Hospitality and Resort Management: B.A., 1975, University of Massachusetts; M.B.A., 1983, Ph.D., 1998, Michigan State University CHARLES A. PIERCE (2004), Associate Professor: B.S. 1990, Syracuse University ; M.A., 1992, Ph.D., 1995, University at Albany, State University of New York

ROBERT W. RENN (1989), Associate Professor: B.S., 1982, Kennesaw State College; M.S., 1984, Ph.D., 1989, Georgia State University
ROBERT R. TAYLOR (1983), Associate Professor, Chair: B.A., 1970, Rollins College; M.A., 1976, Ph.D., 1979, Louisiana State University
HOWARD S. TU (1988), Associate Professor: B.A., 1965, Northwest Nazarene College; M.B.A., 1984, Boise State University; Ph.D., 1988, University of Massachusetts at Amherst
ROBERT ROEBUCK WIGGINS (2002), Associate Professor: A.B., 1975, Vassar College; M.B.A., 1977, Ph.D., 1995, University of Texas at Austin
LACHELLE R. WI LBORN (2002), Assistant Professor: B.S., 1990, Tuskegee University; M.S., 1994, Ph.D., 1999, Virginia Polytechnic Institute and State University
PETER WRIGHT (1988), Professor, Chair of Excellence in Free Enterprise Management: B.A., 1969, Ohio State University; M.B.A., 1973, Ph.D., 1975, Louisiana State University

## MANAGEMENT I NFORMATI ON SYSTEMS

JASBIR S. DHALIWAL, Ph.D., Chair
LLOYD DEMAR BROOKS (1971), Professor: B.S., 1964, Middle Tennessee State University ; M.S., 1968, Ed.D. 1971, University of Tennessee
JUDITH COMPTON BROWN (1964), Assistant Professor: B.B.A., 1961, Memphis State University ; M.S., 1962, University of Tennessee
CHARLES J. CAMPBELL (1978), Associate Professor: B.S., 1968, M.A., 1970, Southwest Texas State University ; Ph.D., 1975, University of Texas
J ASBIR S. DHALIWAL (2005), Professor, Chair: B.S., 1982, University of Malaya ; M.B.A., 1986, Ph.D., 1993, University of British Columbia
MARK L. GI LLENSON (1995), Professor: B.S., 1969, Rensselaer Polytechnic Institute; M.S., 1970, Ph.D., 1974, Ohio State University
WADE M. JACKSON (1985), Associate Professor: B.Sc., 1974, Lambuth College; M.B.A., 1976, Memphis State University; Ph.D., 1983, Texas A \& M University
RADHI KA J AIN (2006), Assistant Professor: B.Engr., 1998, M. Engr., 2001, Stevens Institute of Technology BRIAN D. JANZ (1995), Professor: B.S., 1984, M.B.A., 1989, Ph.D., 1995, University of Minnesota EUNTAE TED LEE (1999), Associate Professor: B.S., 1984, Seoul National University; M.S., 1989, The Pennsylvania State University; Ph.D., 1996, University of Nebraska
J ARVIS B. MOORE (2000), Assistant Professor: B.S., 1979, California State University, Los Angeles; Ph.D., 2000, Florida State University
ROBI N SUZANNE POSTON (2003), Assistant Professor: B.S., 1987, University of Pennsylvania ; M.S., 1992,
University of Central Florida ; Ph.D., 2003, Michigan State University .
JUDITH CANFIELD SIMON (1975), Professor: B.S., 1961, Oklahoma State University; M.B.A., 1969, West Texas State University; Ed.D., 1976, Oklahoma State University
SANDRA RICHARDSON (2006), Assistant Professor: B.S., 1997, University of New Mexico; M.S., 2002, Texas Tech University; Ph.D., 2006, University of Central Florida
THOMAS FRANKLIN STAFFORD (2001), Associate Professor: B.A., 1982, University of Richmond; M.A., 1984, University of Florida; Ph.D., 1993, University of Georgia; Ph.D., 2001, University of Texas at Arlington

RONALD B. WILKES (2001), Assistant Professor: B.S., 1970, University of Tennessee, Martin; M.B.A., 1981, Memphis State University; Ph.D., 1987, University of Minnesota

## MARKETI NG AND SUPPLY CHAI N MANAGEMENT

MARLA ROYNE STAFFORD, Ph.D., Chair
MEHDI M. AMINI (1988), Professor: B.A., 1976, Tehran University; M.B.A., 1979, University of North Texas; M.S., 1984, Ph.D., 1989, Southern Methodist University

EMIN BABAKUS (1985), Professor: B.A., 1968, Turkish Naval Academy; B.Sc., 1978, Istanbul University; M.A., 1981, M.S., 1982, Ph.D., 1985, University of Alabama

GREGORY W. BOLLER (1988), Associate Professor, MBA Program Director: B.S., 1982, M.S., 1984, Ph.D., 1988, Pennsylvania State University
ALAN J. BUSH (1988), Professor: B.A., 1976, Winona State University, M.B.A., 1978, Ph.D., 1983, Louisiana State University

GEORGE DEITZ (2005), Assistant Professor: B.A. 1988, B.S., 1988, M.S., 1991, West Virginia University, Ph.D., 2005, University of Alabama
BALAJI C. KRISHNAN (1999), Associate Professor: B.S., 1989, Marathwada University; M.M.S., 1991, University of Bombay; Ph.D., 1998, Louisiana State University
JASON LIU (2006), Assistant Professor: B.Engr., 1996, M.Engr., 1998, Tsinghua University
SATISH MEHRA (1978), Professor: B.Sc., 1966, University of Delhi; B.ENGG., 1969, University of Poona;
M.B.A, 1972, Ph.D., 1978, University of Georgia

ERNEST L. NICHOLS (1991), Associate Professor: B.A., 1980, University of Maine at Orono; M.B.A., 1985, Ph.D., 1993, Michigan State University
J OHN J OSEPH PEPIN (1965), Professor, Dean: B.B.A., 1962, M.B.A., 1964, Memphis State University; Ph.D., 1969, University of Mississippi
MI CHAEL RACER (2004), Associate Professor: B.A., 1984, Rice University , M.S., 1986, Ph.D., 1990, University of California Berkeley .
JAMES PETER RAKOWSKI (1978), Professor: A.B., 1967, Princeton University; Ph.D., 1971, Columbia University
KATRINA SAVITSKIE (2002), Assistant Professor: B.A., 1993, M.B.A., 1998, Ph.D., 2002, Michigan State University
DANIEL L. SHERRELL (1995), Professor: B.S., 1973, M.B.A, 1974, Auburn University; Ph.D., 1980, University of South Carolina
MARLA ROYNE STAFFORD (2001), Professor, Chair: B.A., 1981, University of Arizona; M.B.A., 1988, Rollins College; Ph.D., 1993, University of Georgia
PETER KIET TAT (1980), Associate Professor: B.A., 1969, National Taiwan University; M.S., 1972, Memphis State University; D.B.A., 1979, Mississippi State University
JEFF THIEME (2003), Assistant Professor: B.S., 1989, M.B.A., 1992, University of Missouri Columbia, Ph.D., 1998, Michigan State University .

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DIONNE R. CHALMERS, M.A., Administrative Associate II
PATTY BLADEN LAWRENCE, M.A., Director of Development

## ART

JAMES E. JACKSON, M.F.A., Chair
FRED C. ALBERTSON (1987), Associate Professor: B.A., 1974, University of California-Irvine; M.A., 1977,
Ph.D., 1980, Bryn Mawr College
SHERRY L. BRYAN (1984), Associate Professor: B.S., 1980; M.S., 1982, Memphis State University; M. Arch., 1991, Virginia Polytechnic Institute \& State University
LUCAS A. CHARLES (2002), Assistant Professor: B.A., 1998, University of Tennessee; M.G.D., 2002, North Caroline State University
LORELEI H. CORCORAN (1990), Associate Professor: B.A., 1975, Tufts University; Ph.D., 1988, University of Chicago
CAROL U. CROWN (1975), Professor: B.A., 1967, University of Kansas; Ph.D., 1975, Washington University ELIZABETH I. EDWARDS (2000), Associate Professor: B.F.A., 1982, Tyler School of Art; M.F.A., 1987, Indiana University
CALVIN L. FOSTER (1976), Professor: B.F.A., 1972, Memphis State University; M.F.A., 1974, Auburn University
GART K. GOLIGHTLY (2002), Assistant Professor: B.B.A., 1984, M.F.A., 1995, Memphis State University MICHAEL D. HAGGE (1996), Associate Professor: B.A., 1974, University of Arkansas at Little Rock; M.P.A., 1979, Webster College; M.C.R.P., 1982, Memphis State University; M.Arch., 1994, Virginia Polytechnic Institute
JAMES E. JACKSON (1999), Professor, Chair: B.F.A., 1977, Memphis College of Art; M.F.A., 1980, Cornell University
LAWRENCE E. JASUD (1981), Associate Professor: B.S.. 1969, Southern Illinois University; M.A., 1980, Ohio State University

EARNESTINE L. JENKINS (2000), Associate Professor: B.A., 1979, Spelman College; M.A., 1986, Memphis State University; Ph.D., 1997, Michigan State University
PAUL E. McKEEGAN (1975), Associate Professor: B.S., 1964, Indiana University of Penn.; M.A., 1969, Kent State University; Ed.D., 1975, Ball State University
LARRY E. McPHERSON (1978), Associate Professor: B.A. 1976, Columbia College Chicago; M.A., 1978, Northern Illinois University
THOMAS EUGENE MASON (1973), Assistant Professor: B.S.C.E., 1969, Michigan Technological University; M.A., 1972, Western Michigan University

GREELY L. MYATT (1989), Professor: B.F.A., 1975, Delta State University; M.F.A., 1980, University of Mississippi
DAVID R. POHL (1990), Associate Professor: A.A., 1979, St. Petersburg J r. College; B.A., 1981, University of South Florida; M.S., 1989, Florida State University
CAROL J. PURTLE (1977), Professor: B.A., 1960, Maryville College; M.A., 1966, Manhattanville College; Ph.D., 1976, Washington University
MICHAEL R. SCHMIDT (1995), Associate Professor: B.F.A., 1992, Ohio University; M.F.A., 1994, North Carolina State University
H. WAYNE SI MPKINS (1974), Associate Professor: B.F.A., 1970, Carnegie-Mellon University; M.F.A., 1974, University of California-Santa Barbara
NILES A. WALLACE (1976), Associate Professor: B.S., 1970, Edinboro State College; M.F.A., 1974, Alfred University
J AMES F. WATKINS (1968), Professor: B.A., 1960, Louisiana College; M.A., 1965, University of Alabama NANCY SHARPE WHITE (1974), Associate Professor: B.A., 1970, Florida Atlantic University; M.F.A., 1974, Alfred University
RANDLE K. WITHERI NGTON (1990), Associate Professor: B.A., 1974, Brigham Young University; M.S., 1979, Pratt Institute, New York

## PROFESSI ONAL STAFF

BRENT DeLATTE (1998), Arts Supervisor in Multimedia/CADD: B.A., 1991, Texas Tech University
LISA M. FRANCISCO-ABIYZ (1990), Art Museum Registrar: B.A., 1980, Indiana University; M.F.A., 1990, Memphis State University
LESLIE L. LUEBBERS (1990), Art Museum Director: B.A., 1967, Wellesley College; M.A.T., 1969, J ohns Hopkins University; M.A., 1987, Institute of Fine Arts, New York University; M.S., 1990, Graduate School of Administration, New York University
BRENDA G. LANDMAN (1971), Associate to the Chair: B.L.S., 2001, University of Memphis
PATRICIA V. PODORSKI (2001), Curator of Education, Institute of Egyptian Art and Archaeology: B.A., 1978, Washington State University; M.A., 1982, Ph.D., 1994, University of California at Berkeley SUSAN L. SANDERS (2002), Visual Resources Curator: B.A., 1999, M.A., 2001, University of Memphis

## COMMUNI CATI ON

MICHAEL LEFF, Ph.D., Chair
DAVID L. ACEY (1972), Assistant Professor: B.S., 1970, M.A., 1972, Memphis State University DAVID L. APPLEBY (1977), Professor: B.A., 1970, Clark University; M.F.A., 1979, Temple University BARBARA COOK (2000), Assistant Professor: B.A., 1995, University of Charleston; M.F.A., 1999, University of New Orleans
ROXANA L. GEE (1976), Associate Professor: B.A., 1971, University of Nebraska; M.A., 1973, Memphis State University
MARGARET ALLISON GRAHAM (1981), Professor: B.A., 1972, Florida State University; M.A., 1975, Ph.D., 1978, University of Florida
KATHERINE G. HENDRIX (1994), Associate Professor: B.A., 1974, California State University, Fresno; M.A., 1978, University of California, Davis; Ph.D., 1994, University of Washington
WALTER G. KI RKPATRICK (1977), Associate Professor: B.A., 1967, University of Montana; M.A., 1969,
Ph.D., 1974, University of Iowa
DAVID GRAY MATTHEWS (1990), Assistant Professor: B.A., 1984, Covenant College; M.A., 1986, Memphis State University; Ph.D., 1993, Pennsylvania State University
ROBERT W. McDOWELL (1982), Associate Professor, Interim Chair: B.B.A., 1978, M.A., 1983, Ed.D., 1991,

Memphis State University
RICHARD R. RANTA (1972), Professor; Dean: B.S., 1965, University of Minnesota; M.A., 1967, Cornell University; Ph.D., 1974, University of Iowa
ANGELA G. RAY (2001), Assistant Professor: B.A., 1986, Transylvania University; M.A., 1987, Royal
Holloway and Bedford New College, University of London; Ph.D., 2001, University of Minnesota
STEVEN J. ROSS (1988), Professor: B.A., 1971, State University of New York-Stony Brook; M.A., 1974, New
York University
PRADEEP SOPORY (1998), Associate Professor: B.E., 1984, University of Kashmir, India; M.A., 1990, University of Southern California; Ph.D., 1999, University of Wisconsin-Madison
KEVIN WRIGHT (2000), Assistant Professor: B.A., 1992, San Francisco State University; M.A., 1995, California State University, Chico; Ph.D., 1999, University of Oklahoma

## JOURNALISM

J AMES W. REDMOND, Ph.D., Chair
M. DAVID ARANT (1992), Professor, Associate Dean, University College: B.A., 1975, Davidson College; M. Div., 1978, Emory University; M.A., 1989, University of South Carolina; Ph.D., 1994, University of North Carolina
E. W. (BILL) BRODY (1982), Professor: B.A., 1977, Eastern Illinois University; M.A., 1978, California State University; Ed.D., 1982, Memphis State University
J. RICK FISCHER (1989), Professor: M.S., 1976, University of Southern California; M.A., 1977, San Jose State University; Ph.D., 1994, Southern Illinois University
ELINOR A. GRUSIN (1988), Professor: B.S., 1962, Memphis State University; M.A., 1982, University of Mississippi; Ph.D., 1987, Ohio University
CYNTHIA B. HOPSON (1995), Associate Professor: B.A., 1985, Clark College; M.S., 1989, Murray State University
CANDACE C. JUSTICE (1992), Assistant Professor: B.A., 1973, University of Mississippi; M.A., 1992, Memphis State University
DAN L. LATTIMORE (1987), Professor, Vice Provost Extended Programs and Dean of University College: B.A., 1966, M.A., 1968, Texas Christian University; M.R.E., 1968, Southwestern Baptist Seminary; Ph.D., 1972, University of Wisconsin
J AMES W. REDMOND (1993), Professor, Chair: B.A., 1968, University of Montana; M.A., 1989, Ph.D., 1993, University of Colorado
DANA S. ROSENGARD (2001), Assistant Professor: B.A., 1982, University of New Hampshire; M.S., 1985, Northwestern University; M.A., 1997, Johnson State College
RONALD EDWARD SPIELBERGER (1968), Associate Professor: B.S., 1963, Memphis State University; M.A., 1965, Ohio State University
ARTHUR A. TERRY (1980), Associate Professor: B.J., 1960, M.A., 1980, University of Missouri
SANDRA H. UTT (1984), Associate Professor: B.S.J., 1968, M.S.J., 1974, West Virginia University; Ph.D.,
1983, Ohio University
JAMES WILLIS (1995), Professor, Hardin Chair of Excellence: B.A., 1968, University of Oklahoma; M.A., 1975, East Texas State University; Ph.D., 1982, University of Missouri

## MUSI C

PATRICIA HOY, D.M.A., Director
LILY AFSHAR (1989), Associate Professor: B.M., 1981, Boston Conservatory; M.M., 1983, New England Conservatory of Music; D.M., 1989, Florida State University
LEONARD GARCIA ALTINO (2002), Assistant Professor: B.M., 1993, New England Conservatory of Music; M.M., 1999, University of Illinois-Urbana

SOH-HYUN ALTINO(2001), Assistant Professor: B.M., 1996, M.M., 1998, D.M.A., 2002, Cleveland Institute of Music
JOHN BAUR (1979), Professor, Director of Graduate Studies: B.M., 1969, M.M., 1970, D.M.A., 1977, College Conservatory of Music, University of Cincinnati
ANGELINE CASE-STOTT (1978), Associate Professor: B.M., 1971, Vanderbilt University; M.M., 1978,
Memphis State University
J OHN J. CHIEGO (1979), Professor: B.A., 1975, Montclair State College; M.M., 1979, Northwestern

University
LAUREN SCHACK CLARK (1999), Director, Community Music School: B.M., 1987, University of Hartford, Hart School; Graduate Diploma, 1990, 1990, Longy School of Music; M.M., 1991, Northwestern University;
D.M.A., 1998, Boston University

JEFF W. CLINE (1998), Associate Professor, Recording Studio Manager: B.S., 1991, Depaul University; M.M., 1995, Northwestern University
J OHN THOMAS COOPER (1998), Assistant Professor: B.A., 1987, M.A., 1989 California State University, Los Angeles; D.M., University of Texas, Austin
RONALD E. CROY (1993), Piano Technician: B.M., 1965, Eastman School of Music, University of Rochester LAWRENCE EDWARDS (1987), Associate Professor: B.A., 1971, Seattle Pacific University; M.S., 1971, Ed.D., 1986, University of Illinois
STEVEN MARK ENSLEY (2000), Opera Coach, Conductor: B.M., 1984, University of North Carolina-Chapel Hill; Diploma, 1986, Franz Schubert Institute, Baden bei Wien, Austria; M.M., 1987, M.F.A., 1991, University of Wisconsin-Madison
BRUCE A. ERSKINE (1976), Associate Professor: B.A., 1974, M.M., 1975, State University of New York at Stony Brook
DAVID H. EVANS (1978), Professor: A.B., 1965, Harvard; M.A., 1967, Ph.D., 1976, University of California, Los Angeles
J ONATHAN FRAZER (2002), Assistant Professor: B.A., 1987, Michigan State University
PAMELA GASTON (1987), Associate Professor: B.M., 1973, M.M., 1974, Pittsburg State University; D.M.A., 1988, University of Missouri Kansas City Conservatory
JAMES GHOLSON (1972), Professor: B.M., 1966, Michigan State University; M.M., 1970, D.M.A., 1975, Catholic University
J OAN C. GILBERT (1975), Professor: B.A.,1965, Oberlin College; M.S., 1967, The J uilliard School of Music TIMOTHY J. GOODWIN (1986), Assistant Professor: B.M., 1981, M.M., 1984, University of Miami
LANCE GREEN (2000), Assistant Professor: F.T.C.L., 1981, Trinity College of Music, London; A.R.A.M., 1998, Royal Academy of Music, London
NICHOLAS HOLLAND (2000), Associate Director of Bands: B.M., 1991, M.M., 1993, East Carolina University PATRICIA HOY (2002), Professor, Director: B.M., 1971, M.M., 1972, University of Redlands; D.M.A., 1991, Northern Arizona University
KAMRAN N. INCE (1992), Associate Professor: B.M., 1982, Oberlin Conservatory; M.M., 1984, D.M.A., 1987, Eastman School of Music
PU-QI JIANG (2000), Associate Professor: Diploma, 1968, Shanghai Conservatory of Music; M.M., 1988, University of Cincinnati
MI CHAEL E. J OHNSON (1995), Assistant Professor: B.M., 1979, University of North Carolina at Chapel Hill; M.S., 1983, Indiana University; D.M., 1987, Florida State University

KENNETH RICHARD KREITNER (1990), Professor: B.A., 1978, Bucknell University; M.A., 1981, Ohio State University; M.A., 1984, Ph.D., Duke University
KIMBERLY MEIER-SI MS (1996), Suzuki String Coordinator: B.M., 1982, Southern Illinois University; M.A., 1984, Western Illinois
J OHN MUELLER (2001), Assistant Professor: B.A., 1981, University of Illinois-Urbana; M.M., 1985, D.M.A., 1998, The Catholic University of America
J ANET PAGE (1998), Assistant Professor: B.M., 1979, Queen's University; M.M., 1982, University of Toronto; Advanced Studies Program, 1982-83, Banff School of Fine Arts; M.A., 1986, University of British Columbia;
Ph.D., 1993, Duke University
J OHN DAVID PETERSON (1981), Professor: B.M., 1967, M.M., 1968, A.M.D., 1970, University of Michigan
DANI EL PHI LLIPS (1999), Assistant Professor: B.M., 1976, Michigan State University; M.M., 1979, University
of Notre Dame
JAMES WI LLIAM RICHENS (1966), Professor: B.S., 1958, Memphis State University; M.M., 1960, Eastman
School of Music, University of Rochester
ALLEN K. RIPPE (1978), Assistant Professor: B.M., 1974, Hartt College of Music; M.M., 1976, University of Michigan
NICOLE ROBI NSON (2000), Assistant Professor: B.A., 1994, M.A., 1997, North Carolina Central University; Ph.D., 2000, Florida State University
RANDAL J AMES RUSHING (1990), Professor, Associate Director of Operations: B.A., 1979, Arkansas Tech. University; M.M.E., 1982, University of North Texas
KONNIE K. SALIBA (1974), Professor: B.M.E., 1959, Illinois Wesleyan University; M.M., 1961, Southern

## THEATRE AND DANCE

ROBERT A. HETHERINGTON, M.A., Chair
GLORIA D. BAXTER (1965), Professor, Coordinator of Graduate Studies: B.A., 1964, Memphis State University; M.A., 1965, Northwestern University
SUSAN C. CHRIETZBERG (1981), Professor: B.S., 1967, M.Ed., 1968, Middle Tennessee State University ANNE B. DELAUTRE (2002), Assistant Professor: B.A., 1979 Marymount Manhattan College; M.A., 1981, New York University
STEPHEN W. HANCOCK (1998), Associate Professor: B.A., 1978, University of Louisville; M.F.A., 1984, The Pennsylvania State University
J OANNA P. HELMING (1976), Professor Emeritus: B.A.,1963, University of Florida; M.A., 1967, Memphis State University
ROBERT A. HETHERI NGTON (1997), Professor, Chair: B.A., 1974, College of Wooster; M.A., 1976,
Northwestern University
DOUGLAS J. KOERTGE (1982), Professor: B.S., 1964, M.S., 1965, Eastern Illinois University; Ph.D., 1973, University of Illinois
HOLLY C. LAU (1991), Associate Professor: B.A., 1974, University of Southern Maine; M.F.A., 1991, Ohio State University
ANITA J O LENHART (1987), Associate Professor: B.F.A., 1981, Eastern Kentucky University; M.F.A., 1985,
Florida State University
MOIRA J. LOGAN (1985), Professor, Associate Dean: B.A., 1969, Vassar College; M.F.A., 1972, Sarah Lawrence College
DAVID A.NOFSI NGER (2005), Assistant Professor: B.A., 1990, Goshen College; M.F.A., 2000, University of Arizona-Tucson
MI CHAEL S. O'NELE (1998), Associate Professor: B.A., 1995, Coe College; M.F.A., 1998, University of Missouri-Kansas City
J OHN J. YORKE (2002), Instructor: B.A., 1994, J uniata College; M.F.A., 1997, University of Memphis

## THE COLLEGE OF EDUCATI ON

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ERNEST A. RAKOW, Ph.D., Associate Dean
MARTHA J. ALBERG, Ph.D., Assistant Dean for P-12 Programs
VIVIAN MORRIS, Ph.D., Assistant Dean
JOHN M. J OHNSON, Ph.D., Director of Assessment
BONNIE J. CUMMI NGS, M.Ed., Recruitment Coordinator
WALDON HAGAN, Ph.D., Advising and Student Services

## COUNSELING, EDUCATI ONAL PSYCHOLOGY, AND RESEARCH DOUGLAS STROHMER, Ph.D., Chair

MICHELLE BUEHL (2003), Assistant Professor: B.A., 1997, Hollins University; M.A., 2002, Ph.D., 2003, University of Maryland
SARA BRIDGES (2001), Associate Professor: B.S., 1990, Indiana University; M.S., 1995, Butler University; Ph.D., 1999, University of Memphis

PAMELA COGDAL (2002), Assistant Professor: B.S., 1981, M.S., 1983, Ph.D., 1989, Southern Illinois University
CORI NNA A. ETHI NGTON (1994), Professor: B.S., 1967, Mississippi State University; M.Ed., 1970, University of Georgia; Ph.D., 1985, Virginia Polytechnic Institute and State University
SHARON HORNE (1998), Assistant Professor: B.A., 1987, Indiana University; M.Ed., 1994, Ph.D., 1998, University of Georgia
YEH HSUEH (2000), Associate Professor: B.A., 1982, Beijing Institute of Aeronautics and Astronautics; Ed.M., 1989, Ed.D., 1997, Harvard University
RICHARD KEITH JAMES (1977), Professor: B.S.E., 1964, M.Ed., 1966, Eastern Illinois University; Ph.D.,
1974, Indiana State University
SUZANNE H. LEASE (1991), Associate Professor: B.A., 1984, Wartburg College; M.A., 1986, Ph.D., 1989,
Southern Illinois University
OWEN RICHARD LIGHTSEY, JR. (1992), Associate Professor: B.S., 1978, M.S., 1982, University of Southern Mississippi; Ph.D., 1992, University of Maryland
DANI EL LUSTIG (2003), Associate Professor: B.A., 1975, University of Wisconsin-Madison; M.S.W., 1979, University of Michigan-Ann Arbor; M.A., 1984, Ph.D., 1995, University of Wisconsin-Madison
SUSAN MAGNUN-J ACKSON (1985), Associate Professor: B.S.E.T., 1984, M.S., 1985, Ph.D., 1996, University of Memphis
NANCY J. NI SHI MURA (1993), Assistant Professor: B.A., 1972, M.A., 1973, University of Washington,
Seattle; Ed.D., 1991, University of Alabama
RONNIE PRIEST (1992), Associate Professor: B.B.A., 1979, Baruch College; M.A., 1984, University of Alabama, Birmingham; Ph.D., 1990, University of Alabama, Tuscaloosa
ERNEST A. RAKOW (1975), Professor, Associate Dean: B.S., 1964, Concordia Teachers College; M.A., 1967, Ph.D., 1974, University of Chicago
N. DEWAI NE RICE (1975), Associate Professor: B.S., 1971, University of Central Arkansas; M.Ed., 1974, Ed.D., 1980, Memphis State University
STEVEN M. ROSS (1974), Professor: B.A., 1969, M.S., 1972, Ph.D., 1974, Pennsylvania State University THOMAS V. SAYGER (1994), Professor: B.S., 1973, Manchester College; M.S., 1982, Ph.D., 1987, Indiana State University
J OHN C. SMART (1994), Professor: B.A., 1963, Wittenberg University; M.A., 1967, University of Tennessee; Ph.D., 1971, University of Kentucky
DAVID STRAUSER (2003), Associate Professor: B.A., 1992, M.S., 1991, Ph.D., 1995, University of Wisconsin-Madison
KAREN WEDDLE-WEST (1989), Associate Professor, Assistant Vice Provost for Graduate Studies: B.S., 1976, M.S., 1977, Ph.D., 1982, University of Tennessee, Knoxville

ANNE BALEST-WHITE (2001), Instructor: B.B.A., 1984, University of Arkansas; M.S., 1990, University of Kentucky; Ph.D., University of Memphis
KATHLYN WIGGINS-J ONES (2003), Instructor: B.S., 1972, Memphis State University; M.S., 1973, University of Wisconsin-Madison; Ph.D., 1984, State University of New York at Buffalo

## HEALTH AND SPORT SCI ENCES

MICHAEL H. HAMRICK, Ed.D., Chair
JOHN AMIS (2001), Associate Professor: B.Sc., 1990, Birmingham University; M.A., 1992, Dalhousie University; Ph.D., 1998, University of Alberta
LINDA H. CLEMENS (1999), Professor: B.S., 1984, Memphis State University; M.S., 1985, Memphis State University; Ed.D., 1994, University of Memphis
DIANE K. COLEMAN (1982), Instructor, Campus School Physical Education Specialist: B.S., 1979, M.Ed., 1981, Memphis State University
BEN DYSON (2001), Assistant Professor: B.Ed., 1987, University of Otago; M.A., 1990, University of Alberta; Ph.D., 1994, Ohio State University
CAROL M. EADY (1987), Professor: B.S.E., 1966, Henderson State University; M.S., 1972, Ph.D., 1977,
Texas Woman's University
EDWARD ELLSWORTH (1969), Assistant Professor: B.A., 1965, Michigan State University; M.S., 1967, University of Tennessee; Ed.S., 1974, University of Mississippi
RICHARD FADGEN (1968), Instructor: B.S., 1959, North Carolina State University; M.S., 1961, Appalachian State University

ANDREW C. FRY (1994), Associate Professor: B.S., 1979, Nebraska Wesleyan University; M.P.E., 1988, University of Nebraska-Lincoln; Ph.D., 1993, Pennsylvania State University
MARY FRY (1994), Associate Professor: B.S., 1984, Texas Wesleyan University; M.S., 1990, University of North Carolina; Ph.D., 1994, Purdue University
WAYNE GUTCH (1980), Instructor: B.S., 1972, University of Tennessee, Martin; M.Ed., 1974, M.S., 1976, Memphis State University
MICHAEL H. HAMRICK (1967), Professor, Chair: B.S., 1966, M.Ed., 1967, Memphis State University; Ed.D., 1973, University of Tennessee
MI CHAEL G. HUFFMAN (1985), Associate Professor: B.S., 1978, M.S., 1980, Memphis State University; Ph.D., 1985, University of Utah
CAROL IRWIN (2001), Instructor: B.A., 1979, University of Northern Colorado; M.A., 1991, Kent State University
RICHARD L. IRWIN (1994), Associate Professor: B.A., 1979, M.A., 1985, Ed.D., 1990, University of Northern
Colorado
HARRIETTE LAVENUE (1967), Assistant Professor, Activity Program Coordinator: B.S., 1960, University of Tennessee, Martin; M.S., 1961, University of Tennessee; Ph.D., 1995, University of Mississippi
YUHUA LI (1994), Assistant Professor: B.S., 1978, Shanghai Institute of P.E.; M.S., 1990, Pennsylvania State University; Ph.D., 1993, Texas A \& M University
LAWRENCE E. LILES (1975), Instructor, Racquetball Coach: B.S., 1974, M.S., 1975, Memphis State
University
BARBARA McCLANAHAN (2002), Assistant Professor: B.S., 1981, M.S., 1983, Ed.D., 1990, University of Memphis; Ph.D., 1997, University of Mississippi
CHARLES J. MAZZONE (2003), Instructor: B.S., 1971, M.Ed., 1972, Memphis State University
JEBOSE O. OKWUMABUA (1988), Associate Professor: B.S., 1976, M.S., 1980, Memphis State University; Ph.D., 1985, University of New Mexico
ROBIN R. ROACH (1981), Associate Professor: B.S., 1976, Memphis State University; M.P.H., 1980, Tulane University; Ed.D., 1989, Vanderbilt University
FRANK ROSATO (1973), Professor: B.S., 1965, Troy State University; M.Ed., 1966, Ed.D., 1973, University of Tennessee
TERRA LISA SMITH (1997), Assistant Professor: B.S., 1985, Cornell University; M.S., 1991, Oklahoma State University; Ph.D., 1997, Oklahoma State University
RICHARD T. UNDERHILL (2002), Instructor: B.S., 1996, University of Memphis
RITA UNDERHILL (2002), Instructor: B.S., 1995, M.Ed., 1997, University of Memphis
SHARON L. VAN OTEGHEN (1977), Professor: B.A., 1961, M.A., 1968, University of Iowa; P.E.D., 1973, Indiana University
STANLEY N. WALLS (1977), Assistant Professor, Coordinator of Undergraduate Studies and Internship Coordinator: B.S., 1973, M.Ed., 1976, Ed.D., 1991, Memphis State University
LAWRENCE W. WEISS (1986), Professor: B.S., 1974, Old Dominion University; M.Ed., 1974, Ed.D., 1979, University of Georgia
PAUL WRIGHT (2002), Assistant Professor: B.S., 1992, M.S., 1998, Ph.D., 2001, University of Illinois at Chicago

## I NSTRUCTION AND CURRICULUM LEADERSHIP

REBECCA ANDERSON, Ph.D., Chair
S. WALI ABDI (1993), Associate Professor: B.S., 1978, M.A. Ed., 1982, Ed.D., 1988, Virginia Polytechnic Institute and State University
KATHERINE A. ABRAHAM (1986), Assistant Professor: B.A., 1967, M.S., 1969, Ph.D., 1979, University of Mississippi
REBECCA S. ANDERSON (1993), Associate Professor, Chair: B.A., 1974, High Point College; B.Ed., 1976, Brandon University; M.A., 1977, Ed.S., 1979, Appalachian State University; Ph.D., 1993, Virginia Polytechnic Institute and State University
BEVERLY ANTHONY (1998), Instructor/Coordinator, Chair: B.P.S., 1991, Memphis State University; M.S., 1994, University of Memphis
DAVID BICARD (2006), Assistant Professor: B.S., 1992, Western Michigan University; M.A., 1998, Columbia University; 2001, Ph.D., Ohio State University
SARA BI CARD (2006), Assistant Professor: B.S., 1996, M.Ed., 1998, University of Southern Mississippi; 2002,

Ph.D., Ohio State University
SALLY BLAKE (2006), Associate Professor: B.S.E., 1971, M.S.E., 1978, Ph.D, 1991, Arkansas State University CAROLE L. BOND (1979), Professor: B.A., 1966, University of Iowa; M.A., 1976, Ph.D., 1979, Arizona State University
JENNI FER ANN BOREK (2001), Assistant Professor: B.A., 1986, M.S., 1996, Southern Illinois UniversityCarbondale; Ph.D., 1996, Saint Louis University
THOMAS J. BUGGEY (1993), Associate Professor: B.S., 1973, Indiana University of Pennsylvania; M.S., 1981, Clarion State College; Ph.D., 1993, Pennsylvania State University
FRAN T. CLARK (1997), Instructor: B.S.Ed., 1970, Southeast Missouri State University; M.S., 1995, Ed.D., 2003, University of Memphis
SANDRA M. COOLEY-NI CHOLS (1999), Assistant Professor: B.S., 1992, University of Southern Mississippi; M.S., 1994, University of Memphis; Ph.D., 1998, University of Southern Mississippi

J OSEPH FARRIS CRABTREE II (1965), Professor: B.S., 1950, Emory and Henry College; M.Ed., 1958, Ed.D., 1965, University of Virginia
BEVERLY CROSS (2006), Associate Professor, Lillian and Morris Chair of Excellence: B.S., 1979, Alabama A\&M University; M.A., 1980, Ph.D., 1992, Ohio State University;
BONNIE SHIELDS CUMMINGS (1983), Instructor/Coordinator: B.S., 1970, M.Ed., 1972, Memphis State University
DUANE M. GIANNANGELO (1972), Professor: B.S., 1964, Edinboro State College; M.Ed., 1967, University of Pittsburgh; Ph.D., 1972, University of Iowa
MI CHAEL M. GRANT (2002), Assistant Professor: B.S., 1994, MINEd., 1996, Clemson University; Ph.D., 2002, University of Georgia
KANTAYLIENIERE Y. HILL-CLARKE (2001), Assistant Professor: B.S., 1993, LeMoyne-Owen College; M.S., 1996, Ed.D., 1998, University of Memphis
MABEL T. HIMEL (1996), Instructor: B.S., 1972, University of Southern Louisiana; M.S., 1973, Ed.D., 1994, University of Memphis
JOHN M. J OHNSTON (1984), Professor: B.S., 1969, University of Texas; M.S., 1974, University of
Tennessee; Certificate of Advanced Study, 1975, University of Chicago; Ph.D., 1978, Ohio State University
SHIRLEY G. KEY (2002), Associate Professor: B.A., 1971, Gusfavus Adolphus College; M.Ed., 1982, Texas
Southern University; Ed.D., 1995, University of Houston
DEBORAH L. LOWTHER (1991), Associate Professor: B.S., 1980, M.A., 1988, University of Texas at El Paso;
Ph.D., 1994, Arizona State University
RAMONA M. MAHOOD (1964), Assistant Professor: B.S., 1955, Utah State University; M.S., 1959, C.A.S., 1971, University of Illinois
SHERYL A. MAXWELL (1994), Associate Professor: A.B., 1965, University of Northern Colorado; M.A.T., 1985, University of Nebraska at Omaha; Ph.D., 1994, University of Virginia
LAURIE MACGI LLIVRAY (2006), Associate Professor: B.A., 1986, Rice University; M.A., 1987, Austin College;
Ed.D., 1992, University of Houston
DEBORAH A. MOBERLY (2000), Assistant Professor; B.S., 1970, Indiana State University; M.S., 1984, Ph.D., 1996, Southern Illinois University-Carbondale
VIVI AN G. MORRIS (1992), Professor: B.A., 1962, M.A., 1969, Alabama A\&M University; Ph.D., 1973,
Peabody College
LINDA PAGE (2006), Instructor: B.S., 1975, Lambuth College; M.Ed., 1981, Memphis State University;
D.E.L., 2005, Union University

MARY RANSDELL (2002), Assistant Professor: B.S., 1982, University of Southern Indiana; M.A., 1986, Indiana State University-Terre Haute; Ed.D., 2001, University of Kentucky-Lexington
J ANNA SIEGEL ROBERTSON (1997), Associate Professor: B.S., 1985, West Chester University; M.A., 1987, Santa Clara University; Ph.D., 1992, University of California, Los Angeles
CELIA K. ROUSSEAU (2002), Assistant Professor: B.S., 1991, University of Memphis: Ed.M., 1992, Harvard Graduate School of Education; Ph.D., University of Wisconsin
J OHN W. SCHIFANI (1975), Professor Emeritus: B.A., 1958, Nichols State University; M.S.W., 1960,
Louisiana State University; Ed.D., 1971, University of Alabama
JERRIE L.C. SCOTT (1996), Professor: B.S., 1965, University of Toledo; M.A., 1974, Ph.D., 1976, University of Michigan
SATOMI I. TAYLOR (1993) Professor: B.A., 1970, Meijigakuin University; M.A., 1988, San Francisco State University; Ph.D., 1992, Virginia Polytechnic Institute and State University
RICHARD N. VAN ECK (1999), Assistant Professor: B.A., 1988, University of Wisconsin; M.A., 1992,

University of North Dakota; Ph.D., 2000, University of South Alabama

## LEADERSHI P <br> LARRY MCNEAL, Ph.D. Chair

MARIE BYRD-BLAKE (2001), Assistant Professor: B.S., Florida State University; M.S., Ed.D., Florida International University
THOMAS E. GLASS (1998), Professor: B.A., 1965, Willamette University; M.E., 1970, Ed.D., 1972, Wayne State University
REGI NALD L. GREEN (1996), Professor: B.S., 1962, Tennessee State University; M.E., 1967, Memphis State University; Ed.D., 1975, University of Missouri, Columbia
BARBARA K. MULLINS-NELSON (1993) Professor: B.S., 1986, Iowa State University; M.S., 1988, Ph.D., 1992, Florida State University
PATRICIA H. MURRELL (1970), Professor: B.A., 1956, Millsaps College; M.Ed., 1966, Ed.D., 1968, University of Mississippi
LARRY MCNEAL (2003), Professor, Chair: B.A., 1975, Dakota Wesleyan; M.A., 1976, University of Iowa; M.S., 1989, Ph.D., 1990, University of Wisconsin

J OHN R. PETRY (1967), Associate Professor: B.A., 1948, M.S., 1953, Hardin-Simmons University; B.D., 1953, M.Div., 1973, Southwestern Baptist Theological Seminary; Ed.D., 1973, Vanderbilt University LINDA H. WESSON (2001), Associate Professor: B.A., 1960, Millsaps College; M.Ed., 1968, Memphis State University; Ph.D., 1986, University of Mississippi

## THE HERFF COLLEGE OF ENGI NEERI NG

RICHARD C. WARDER, JR., Ph.D., P.E., Dean
STEVEN M. SLACK, Ph.D., Associate Dean for Graduate Studies and Research
CHARLES W. BRAY, Ph.D., Associate Dean for Undergraduate Studies
PAUL J. PALAZOLO, Ph.D., Assistant Dean
KATHERINE V. ATKINSON, M.A., Undergraduate Advisor

BI OMEDI CAL ENGI NEERI NG<br>EUGENE C. ECKSTEIN, Ph.D., Chair

JACK BUCHANAN* (1990), Associate Professor: B.S.E.E., 1967, M.S.E.E., 1970, M.D., 1975, University of Kentucky
J OEL BUMGARDNER (2004), Associate Professor: B.S., 1984, M.S.B.M.E., 1989, Ph.D., 1994, University of Alabama at Birmingham
AMY de J ONGH-CURRY (2000), Assistant Professor: B.S.E.E., 1992, M.S., 1993, Ph.D., 1997, University of Memphis
DENNI S DiANGLEO* (1995), Associate Professor: B.S., 1983, University of Waterloo; M.S., 1986, Ph.D., 1993, University of McMaster
FRANK A. DiBIANCA* (1994), Professor: B.S., 1962, Rensselaer Polytechnic Institute; M.S., 1966, Ph.D., 1970, Carnegie-Mellon University
EUGENE C. ECKSTEIN (2000), Professor: S.B.M.E., 1970, S.M.M.E., 1970, Ph.D., 1975, Massachusetts Institute of Technology
WALEED GRABER * (2004), Assistant Professor: B.S., 1981, Ain-Sham University-Egypt; Ph.D., 1991, University College of London-UK; M.S., 1998, University of Tennessee-Memphis
WARREN O. HAGGARD (2004), H. Herff Chair of Excellence and Professor: B.S., 1978, Auburn University; M.S.E., 1981, Ph.D., 1994, University of Alabama at Birmingham

LISA H.K. J ENNINGS (1992), Adjunct Professor: B.A., 1976, University of Tennessee; M.S., 1978, Memphis
State University; Ph.D., 1983, University of Tennessee
GARY KEYES* (2004), Professor: B.S., 1963, Wheaton College; M.S., 1965, Ph.D., 1969, Northwestern University
ERNO LINDNER (1999), Professor: M.S., 1971, Ph.D.., 1985, Technical University of Budapest; D.Sc., 1985, Hungarian Academy of Science
STEVEN M. SLACK (1993), Associate Professor, Associate Dean: B.S., 1983, Carnegie-Mellon University; Ph.D., 1989, University of Washington
YUNZHI (PETER) YANG* (2004), Assistant Professor: B.E., 1992, M.E., 1994, Ph.D., 1997, Sichuan
*University of Tennessee faculty in the joint UoM-UT Biomedical Engineering graduate program

## CI VI L ENGI NEERI NG

MARTIN E. LIPINSKI, Ph.D., Chair
J ERRY LEE ANDERSON (1972), Associate Professor: B.S.C.E., 1966, Tennessee Technological University; M.S., 1967, Ph.D., 1972, Vanderbilt University

DAVID ARELLANO (2005), Assistant Professor: B.S.C.E., 1986, M.S.C.E., 1998, Ph.D., 2005, University of Illinois
CHARLES V. CAMP (1989), Professor: B S.C.E., 1981, M.S., 1986, Auburn University; Ph.D., 1987, Oklahoma State University
MARTIN E. LIPINSKI (1975), Professor, Chair: B.S.C.E., 1964, University of Illinois; Certificate in Traffic Engr., 1965, Yale; M.S.C.E., 1966, Ph.D., 1972, University of Illinois
ROGER W. MEIER (1995) Associate Professor: B.S.C.E., 1979, Virginia Tech; M.S.C.E., University of Colorado; Ph.D., 1995, Georgia Institute of Technology
LARRY W. MOORE (1983), Professor: B.S.C.E., 1973, University of South Alabama; M.S.C.E., 1974, Ph.D., 1983, Mississippi State University
PAUL J. PALAZOLA (2002), Assistant Professor: B.S.C.E., 1974, M.S.C.E., 1976, Memphis State University; Ph.D., 1998, The Georgia Institute of Technology
SHAHRAM PEZESHK (1989), Professor: B.S.C.E., 1982, University of Illinois; M.S.C.E., 1983, University of California at Berkeley; Ph.D., 1989, University of Illinois
ANNA PHILLIPS (1995), Instructor: B.A., 1992, Memphis State University; M.A., 1994, University of Memphis
WILLIAM T. SEGUI (1968), Associate Professor: B.S.C.E., 1960, M.S., 1966, Ph.D., 1971, University of South Carolina
BRI AN A. WALDRON (1999), Assistant Professor: B.S.C.E., 1992, Memphis State University; M.S.C.E., 1994, University of Memphis, Ph.D., 1999, Colorado State University
ORVI LLE E. WHEELER (1978), Herff Professor of Structural Mechanics: B.E., 1954, Vanderbilt University; M.S.C.E., 1956, University of Missouri; Ph.D., 1966, Texas A \& M University

## ELECTRI CAL AND COMPUTER ENGI NEERI NG

DAVID J. RUSSOMANNO, Ph.D., Chair
CHARLES WILSON BRAY (1969), Professor, Associate Dean: B.S., 1960, M.S., 1961, Mississippi State University; Ph.D., 1969, University of Tennessee
MI CHAEL L. DALEY (1988), Professor: B.S.E.E., 1968, University of Massachusetts; M.S.E.E., 1970, Ph.D., 1973, University of Rochester
STEVEN T. GRI FFIN (1982), Associate Professor: B.S.E.E., 1975, Memphis State University; M.S., 1977, Ph.D., 1979, University of Illinois
CARL EDWIN HALFORD (1970), Professor: B.S.E.E., 1966, M.S.E.E., 1967, Ph.D., 1970, University of Arkansas
KHAN F. IFTEKHARUDDIN (2000), Associate Professor: B.Sc., 1989, Bangladesh T.I.; M.S., 1991, Ph.D., 1995, University of Dayton
EDDIE JACOBS (2006), Assistant Professor: B.Sc., 1986, M.S.E.E., 1988, University of Arkansas; Ph.D., 2001, George Washington University
WILLIAM HOWARD J ERMANN (1967), Professor: B.E.E., 1958, M.A., 1962, University of Detroit; Ph.D., 1967, University of Connecticut
CRYSANTHE PREZA (2006), Assistant Professor: B.S.E.E., 1987, B.S.C.S., 1987, M.S.E.E., 1990, M.S.C.S., 1991, D.Sc., 1998, Washington University
DANI EL REHAK, (2006), Visiting Professor: B.A., 1973, M.S., 1975, Carnegie Mellon University; Ph.D., University of Illinois
AARON L. ROBI NSON (2002), Assistant Professor: B.S.EE., 1994, M.S.E.E., 1997, Ph.D., 2001, Florida State University

DAVID J. RUSSOMANNO (1993), Professor, Chair: B.E.E., 1986, Auburn University; M.E., 1989, Ph.D., 1993, University of South Carolina
MOHAMMED YEASIN (2005), Assistant Professor: B.Sc., 1989, Bangladesh Institute of Technology: M.Sc., 1994 Bangladesh University of Engineering and Technology; Ph.D., 1998, Indian Institute of Technology

## ENGI NEERI NG TECHNOLOGY <br> DEBORAH J. HOCHSTEI N, M.S., Chair

THOMAS BANNI NG (2005), Assistant Professor: B.S.I.T., 1982, Southern Illinois University-Carbondale; M.S., 1985 Memphis State Univeristy

ROBERT HEWITT (2003), Assistant Professor: B.S.E.T., 1996, M.S.E.T., 2003, University of Memphis; M.Div., 2003, Mid-America Baptist Theological Seminary

DEBORAH J. HOCHSTEIN (1991), Associate Professor, Chair: B.S., 1976, Georgian Court College, M.S., 1984, University of Akron
HOUSHANG JAVAN (1998), Associate Professor: B.S.E.E., 1965 California State University; M.S.E.E., 1970, University of California; D.Sc., 1980, Washington University
PETER LAU (2003), Assistant Professor: B.A.Sc., 1993, M.A.Sc., 1986, Ph.D., 1990, University of Toronto J ERRY NEWMAN (2006), Assistant Professor: B.S.I.T., 1996 Southern Illinois University-Carbondale; M.S.E.T., 2005, University of Memphis

ALAN W. PROFFITT (2001), Assistant Professor: B.S.E., 1977, Arkansas Tech University; M.S., 1984, University of Arkansas Graduate Institute of Technology; Ph.D., 1996, University of Arkansas at Little Rock THOMAS B. SLACK (1999), Associate Professor: B.S.E., 1977, Arizona State University; M.S.E., 1982, Carnegie Mellon University; M.C.P.M., 1997, George Washington University
SCOTT C. SOUTHALL (1994), Associate Professor: B.S.E.T., 1987, M.S., 1991, Memphis State University CARL RAY WI LLIAMS (1998), Associate Professor: B.S., 1976 Mississippi State University; B.S.I.E., 1976, Mississippi State University; M.B.A., 1983, Memphis State University; M.S., 2004, University of Memphis

## MECHANI CAL ENGI NEERI NG

JOHN I. HOCHSTEIN, Ph.D., Chair
SRIKANT GIR (1987), Assistant Professor: B.S.Ch.E., 1976, Osmania University, India; M.S.Ch.E., 1977, Oklahoma State University; Ph.D., 1992, University of Strathclyde, Scotland
JOHN I. HOCHSTEIN (1991), Professor, Chair: B.S., 1973, Stevens Institute of Technology; M.S.M.E., 1979, Pennsylvania State University; Ph.D., 1984, University of Akron
WILLIAM S. JANNA (1987), Professor: B.S.M.E., 1971, M.S.M.E., 1973, Ph.D., 1976, University of Toledo GLADIUS LEWIS (1987), Professor: B.Sc., 1972, University of London, England; M.Sc., 1974, Council for National Academic Awards, England; Ph.D., 1976, University of Nottingham, England
HSI ANG H. LIN (1985), Professor: B.S.M.E., 1974, National Chung-Hsing University; M.S.M.E., 1980, Ph.D., 1985, University of Cincinnati
J EFFERY G. MARCHETTA (2002), Assistant Professor: B.S.M.E., 1997, M.S.M.E., 1999, Ph.D., 2002
University of Memphis
JIADA MO (1991), Associate Professor: B.S., 1982, M.S., 1989, Beijing University of Aeronautics and Astronautics; Ph.D., 1989, University of Tennessee, Knoxville
EDWARD H. PERRY (1970), Professor: B.S., 1966, M.S., 1967, Ph D., 1970, California Institute of Technology
GANG QI (1998), Associate Professor; B.S., 1982, Inner Mongolia Polytech University; M.S.A.E., 1987, China Agricultural University; Ph.D., 1996, Texas Tech University
TEONG ENG TAN (1984), Associate Professor: B.Sc.E., 1980, M.Sc.E., 1981, University of New Brunswick, Canada; Ph.D., 1984, I owa State University
RICHARD C. WARDER, JR. (1994), Professor, Dean: B.S., 1958, South Dakota School of Mines; M.S., 1959, Ph.D., 1963, Northwestern University

LOEWENBERG SCHOOL OF NURSI NG<br>MARJ ORIE F. LUTTRELL, Ph.D., RN, Dean

SHEILA A. HALL, M.S., Assistant Dean for Students

MARGARET M. AIKEN (1977), Professor: B.A. 1965, Manhattanville College of the Sacred Heart; M S.N., 1977, University of Texas School of Nursing at Austin; Ph.D., 1991, University of Mississippi
LAWRETTE AXLEY (1997), Assistant Professor: B.S.N., 1989, Union University; M.S.N., 1993, University of Tennessee-Memphis; Ph.D., 2003, University of Tennessee-Memphis
TONI BARGAGLIOTTI (1992), Professor: B.S.N., 1976, University of Tennessee-Memphis; M.S.N., 1978, D.N.Sc., 1984, University of California at San Francisco

ANITA BOYKINS (2006), Assistant Professor: B.S.N., 1982, Lewis University; M.S.N., 1987, University of Tennessee-Memphis; D.N.Sc., 2003, University of Tennessee Health Science Center
GLORIA CARR (2002), Instructor: B.S.N., 1992, Union University; M.S.N., 1997, University of TennesseeMemphis
JILL DEPRAMONT (2006), Clinical Assistant Professor: B.S.N., 1983, Dillard University; M.N., 1987, Louisiana State University
HOPE DIXON (2005), Clinical Assistant Professor: B.S.N., 2000, University of Tennessee Knoxville; M.S.N., 2001. Vanderbilt University

LINDA FINCH (2005), Assistant Professor: B.S.N., Memphis State University , 1981; M.S.N., 1983, University of Arkansas Medical Science; Ph.D., 2002, University of Memphis
BRENDA GARNER (1999), Clinical Assistant Professor: B.S.N., 1997, Harding University; M.S.N., 1987, University of Tennessee-Memphis
SUSAN HARRELL (2006), Clinical Assistant Professor: B.S.N., 1988, Northest Louisiana University; M.S.N., 2006, University of Memphis
JOY HOFFMAN (2005) Clinical Assistant Professor: BA in Nursing, 1996, St. Olaf College; M.S.N., 2001, University of Wisconsin - Madison
URMEKA JEFFERSON (2006), Clinical Assistant Professor: B.S.N., 1999, University of Memphis; M.S.N., 2003, Union University
JUDITH E. JENKINS (2003), Clinical Associate Professor: B.S.N., 1969, West Virginia University; M.S.N., 1974, Boston University
ROBERT A. KOCH (1994), Associate Professor: B.S.N., 1991, M.S.N., 1994, University of Tennessee-
Memphis; D.N.Sc., 2001, Louisiana State University Medical Center
NANCY R. LACKEY (2003), Professor, Chair of Excellence: B.S.N., 1964, Indiana University; M.S.N., 1970,
Marquette University; Ph.D., 1978, Texas Women's University
ANITA K. LANGSTON (2004), Clinical Assistant Professor: B.S.N., 1997, University of Tennessee-Knoxville; M.S.N., 2003, Union University

SHIRLEATHA LEE (2005), Clinical Assistant Professor: B.S.N., 2002, University of Tennessee-Martin; M.S.N., 2004, Union University
MARJ ORIE F. LUTTRELL (1988), Dean, Professor: B.S.N., 1966, Northwestern State University; M.S.N., 1977, University of Texas-Galveston; Ph.D., 1986, University of Texas-Austin
JEAN MCIVOR (1998), Clinical Associate Professor: B.S.N., 1980, University of Arkansas, Medical Branch Campus; M.S.N., 1994, University of Tennessee-Memphis
NANCY MELE (2001), Assistant Professor: B.S.N., 1970, Russell Sage College; M.S.N., 1984, Columbia University; D.S.N., 1996, University of Alabama-Birmingham
SUSAN MOORE (2006), Assistant Professor: B.S.N., 1978, University of Arizona; M.S., 1997, California College of Health Sciences; M.S.N., 2002, St. Joseph College of Maine; Ph.D., 2000, Kennedy Western University
TAMARA OTEY (2005), Clinical Assistant Professor: B.S.N., 2000, University of Memphis; M.S.N., 2003, Union University
PAULEITE ROBERTSON (2006), Clinical Assistant Professor: B.S.N., 1982, Memphis State University; M.P.A., 1987, M.S.N., 2005, University of Memphis
DIANE L. RUPPEL (1998), Clinical Assistant Professor: B.S.N., 1976, University of Virginia; M.S.N., 1985, University of Wisconsin-Madison
GAYLE H. SHIBA (1998), Associate Professor: B.S.N., 1973, California State University; M.S.N., 1979, D.N.Sc., 1997, University of California-San Francisco

CLAUDIA A. SIMS (2004), Clinical Assistant Professor: B.S.N., 1985, University of Michigan; M.S.N., 1992,
Medical University of South Carolina
CAROLYN I. SPEROS (1999), Assistant Professor: B.S.N., 1971, Vanderbilt University; M.Ed., 1977, University of Memphis; M.S.N., 1995, D.N.Sc., 2002, University of Tennessee, Memphis
DEVITA STALLINGS-RICE (2005), Clinical Assistant Professor: B.S.N., 2000, Mississippi University for Women; M.S.N., 2003, University of Southern Mississippi

UNI VERSI TY COLLEGE<br>DAN LATTIMORE, Ph.D., Dean

M. DAVID ARANT, Ph.D. Associate Dean for Graduate Studies and Administration

BRODERICK E. NICHOLS, J.D., Assistant Dean for Undergraduate Affairs
DOROTHY M. HALE, M.P.A., College Advisor
TRACY ROBI NSON, M.S., Distance Education Advisor
SARAH J. WILLIAMS, M.A., College Advisor
M. KAREN MILLER-J ACKEIT, B.P.S., Graduation Analyst

PATTI BRADFORD (1978), Assistant Professor: B.F.A., 1972, Mississippi University for Women; M.F.A., 1977, Memphis State University
DIXIE R. CRASE (1966), Professor, Chair: B.S., 1959, Eastern New Mexico University; M.S., 1960, Kansas
State University; Ph.D., 1967, Ohio State University
KERRY A. HI LLIS (2003), Instructor: B.A., 1995, M.A., 2001, University of Memphis
MARGARET M. QUINN (1983), Assistant Professor: B.S., 1970, University of Tennessee, Knoxville; M.E.,
1976, Memphis State University
KAVEH SAFA (2004), Instructor: 1967, Syracuse University; M.A., 1974, New School University
PATRICIA M. STEVENS (1979), Associate Professor: B.S., 1968, University of Tennessee, Martin; M.S., 1972,
Indiana State University; Ed.D., 1988, Mississippi State University
WI LLIAM E. WI NGFIELD (2003), Instructor: B.S., 1965, M.A., 1979, Memphis State University; Ph.D., 1987, Duke University
CAROLYN LITCHFIELD WORMS (1982), Professor: B.S., 1968, Old Dominion University; M.Ed., 1972,
Virginia Commonwealth; Ed.D., 1976, Virginia Polytechnic Institute and State University

## UNI VERSI TY COLLEGE FACULTY COUNCI L

REBECCA S. ARGALL, M.A., Assistant Professor, English
DIXIE R. CRASE, Ph.D., Professor, Family and Consumer Sciences
PHI LLIP T. KOLBE, Ph.D., Associate Professor, Fogelman College of Business and Economics
MARJ ORIE F. LUTTRELL, Ph.D., Associate Professor, Nursing
BARBARA K. MULLINS-NELSON, Ph.D., Professor, Leadership
DOROTHY NORRIS-TIRRELL, Ph.D., Associate Professor, Public Administration
ROBI N ROACH, Ed.D., Associate Professor, Health and Sport Sciences
WANDA RUSHING, Ph.D., Associate Professor, Sociology
RONALD E. SPIELBERGER, M.A., Associate Professor, Journalism
ROBERT R. TAYLOR, Ph.D., Associate Professor, Fogelman College of Business and Economics

MELINDA J ONES, Ph.D., Director

## UNI VERSI TY HONORS PROGRAM ADVI SORY COUNCI L

MARGARET AI KEN, Ph.D., Professor, Nursing
MICHAEL FERKIN, Ph.D., Associate Professor, Biology
STEPHEN HANCOCK, M.F.A., Associate Professor, Theatre
MELI NDA J ONES, Ph.D., Director of University Honors Program
MATTHIAS KAELBERER, Ph.D., Assistant Professor, Political Science
SARAH CLARK MILLER, Ph.D., Assistant Professor, Philosophy
ROSE RUBIN, Ph.D., Professor, Economics
CHRISANN SCHIRO-GEIST, Ph.D., Vice Provost for Academic Affairs
TEONG TAN, Ph.D., Associate Professor, Mechanical Engineering
JIN YANG, M.A., Assistant Professor, J ournalism
WILLIAM WINGFIELD, Ph.D., Instructor, University College
PAUL WRIGHT, Ph.D., Assistant Professor, Health and Sport Sciences

## I NDEPENDENT DEPARTMENTS LI BRARIES

SYLVERNA V. FORD, Ph.D., Dean

BARBARA ANN DENTON (1974), Assistant Professor: B.A., 1961, University of Southern Mississippi; M.S., 1964, Louisiana State University; M.B.A., 1980, Memphis State University
IAN M. EDWARD (1973), Assistant Professor: B.A., 1968, M.S., 1972, Florida State University; M.B.A., 1980, Memphis State University
J OHN EDWARD EVANS (1980), Associate Professor: B.A., 1974, Kansas Wesleyan; M.S., 1977, University of Illinois; Ed.D., 1989, Memphis State University
SYLVERNA V. FORD (2000), Professor, Dean: B.S., 1972, M.L.S., 1974, University of Maryland; Ph.D., 1995, University of Pittsburgh
EDWIN G. FRANK (1994), Associate Professor: B.A., 1976, Memphis State University; M.L.S., 1993, University of Tennessee, M.A., 1999, University of Memphis
MARY K. FREILICH (1985), Assistant Professor: B.A., 1970, M.A., 1971, Purdue University; M.L.S., 1982, State University of New York-Albany
ANNELLE R. HUGGI NS (1981), Associate Professor: B.S., 1969, Central State University; M.L.S., 1970, Vanderbilt University; M.Ed., 1975, Texas A\&M University
ROBERT T. IVEY (1987), Associate Professor: A.B., 1966, M.A., 1968, Ph.D., 1973, M S.L.S., 1976, University of North Carolina-Chapel Hill
ROSS M. J OHNSON (1982), Assistant Professor: B.A., 1976, Memphis State University; M.L.S., 1979, Vanderbilt University
CHRI STOPHER MATZ (2001), Assistant Professor: B.S., University of Oregon; M.L.S., 1998, University of North Carolina, Greensboro
J OYCE A. McKIBBEN (1979), Assistant Professor: B.A., 1971, Eckerd College; M.A.L.S., 1972, University of Kentucky; M.A. 1979, University of Florida
GUY THOMAS MENDI NA (1980), Assistant Professor: B.A., 1967, M.L.S., 1978, University of Texas at Austin; M.A., 1990, Memphis State University
ANNA B. NEAL (1980), Assistant Professor: B.A., 1973, University of Kentucky; M.L.S., 1978, Vanderbilt University; M.M., 1986, Memphis State University
PAMELA RAE PALMER (1973), Associate Professor: B.A.E., 1970, University of Mississippi; M.S., 1972, Louisiana State University; M.A., 1978, Ed.D., 1985, Memphis State University
ELIZABETH H. PARK (1983), Associate Professor: A.B., 1966, Stanford University; M.L.S., 1972, State University of New York at Buffalo; M.S. 1989, Memphis State University
MARGARET ROBINSON (1994), Associate Professor: B.A., 1983, Centenary College; M.L.S., 1992, Indiana University
PERVEEN K. RUSTOMFRAM (1995), Assistant Professor: B.S.W., 1979, Bombay University: M.A., 1984, University of Hyderabad; M.L.S., 1987, University of Tennessee
PHI LIP M. SMITH (1982), Associate Professor: B.M.E., 1970, B.M., 1972, M.A., 1976, University of Kansas; M.L.S., 1981, Ph.D., 1987, Florida State University

JULIA W. SNYDER (2002), Assistant Professor: B.A., 1996, Oberlin College; M.L.S., 1997, University of

Pittsburgh
SAUNDRA WADE WI LLI AMS (1980), Associate Professor: B.A., 1967, University of Arkansas; M.L.S., 1977, Vanderbilt University; M.A.P.A., 1985, Memphis State University

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- The 2005-2006 Undergraduate Bulletin

The 2004-2005 Undergraduate Bulletin

- The 2003-2004 Undergraduate Bulletin
- The 2001-2003 Undergraduate Bulletin

The 1999-2001 Undergraduate Bulletin
The 1997-1999 Undergraduate Bulletin
The 1996-1997 Undergraduate Bulletin

- The 1995-1996 Undergraduate Bulletin
- Undergraduate Admissions
- The Student Handbook

The Graduate School

- Academic Affairs

The Academic Common Market

- Additional Student Information
- Comments

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# THE COLLEGE OF ARTS AND SCIENCES 

Henry A. Kurtz, Ph.D., Dean

Room 107, Scates Hall
(901)678-3067
http://cas.memphis.edu

## PURPOSES

The College of Arts and Sciences has three distinct functions within the framework of the University.

1) Its primary function is to offer a strong liberal arts program designed to help the students prepare themselves for life in their own cultural setting by acquiring the means and desire to continue the processes of intellectual development and character formation throughout their lives. "The purpose of education," wrote John Stuart Mill, "is to make capable and cultivated human beings." "Education has for its object the formation of character," wrote Herbert Spencer. We believe that people are people, no matter what their careers, and that if we can help people to become more capable and sensible, they will have better careers and lives. It is our belief that the best preparation for any profession or vocation is a thorough foundation in those major fields of human interest, which are included in the humanities, the natural sciences, and the social sciences. A program of liberal studies at the University of Memphis aims to provide the students with a store of factual knowledge, to introduce them to varying sets of principles, to stimulate them to think about and evaluate facts and principles, and to encourage them to order their own affairs and those of their society with the talent, insight, and discrimination they develop.
2) The College of Arts and Sciences offers this kind of education to the candidates for its own degrees, and to the students of other colleges of the University, all of whose degree plans call for courses in the arts and sciences.
3) The college offers preparatory courses for students interested in careers in medicine, dentistry, nursing, teaching, law and other professions; specific preprofessional programs, designed to prepare students to qualify for admission to professional schools, are available.

## ORGANI ZATI ON OF THE COLLEGE

## Departments and Divisions

The College of Arts and Sciences comprises the following departments and divisions: Aerospace Studies, Anthropology, Biology, Chemistry, Computer Science, Earth Sciences, English, Foreign Languages and Literatures, History, Mathematical Sciences, Military Science, Naval Science, Philosophy, Physics, Political Science, Psychology, the School of Urban Affairs and Public Policy (including City and Regional Planning, Criminology and Criminal Justice, Health Administration, Public and Nonprofit Administration, Social Work), and Sociology.
The various offerings of the departments and divisions of The College of Arts and Sciences are organized into four groups:

HUMANITIES: English, foreign languages and literatures, history, philosophy. NATURAL SCIENCES: biology, chemistry, computer science, earth science, mathematics, physics. SOCIAL SCIENCES: anthropology, city and regional planning, criminal justice, economics, geography, health administration, political science, psychology, public administration, social work, sociology.
OTHER: African and African American Studies, Environmental Studies, International Studies, Judaic Studies, Legal Thought and Liberal Arts, ROTC programs (Aerospace Studies, Military Science, Naval Science),

## RESI DENCE REQUI REMENTS

University residence requirements are explained in detail in the Graduation from the University section. A transfer student in The College of Arts and Sciences must earn at least 6 semester hours in residence in the major subject and at least 3 semester hours in the minor. These credits may be earned only through regular class enrollment for a letter grade.

## PRE-PROFESSI ONAL TRAI NI NG

Standing committees of the faculty are available to advise students interested in preparing for careers in various professional areas. Committee members representing departments of the University in which preprofessional training is given advise students concerning specific programs required by the various professional schools.
Pre-Medical - The Pre-Professional Advisor, in the Dean $>$ Office, offers advising and career information to students planning on applying to the following health and professional schools: medicine, dentistry, pharmacy, optometry, veterinary medicine, and allied health fields including cytotechnology, dental hygiene, health information management, medical technology, occupational therapy and physical therapy.
Pre-Law - In general, accredited law schools have not adopted specific requirements for pre-law education; they do, however, emphasize certain courses as being conducive to the development of the broad cultural background necessary for the successful study of law. Students enrolling in The College of Arts and Sciences and interested in applying to law school should contact the Pre-Professional Advisor in room 107, Scates Hall for further information.
Teacher Preparation - Students who wish to prepare for teaching careers in the secondary schools of Tennessee will be expected to complete a baccalaureate degree with a major in the intended teaching area, followed by earning a Master of Arts in Teaching degree program through the College of Education. Additional information on licensure requirements may be obtained from the Office of Teacher Education in the College of Education.

## ACADEMI C PROGRAMS

| Department/Divisions | Major <br> Click Major below for Requirements. Click on Tiger Paw for Course Descriptions. |  | Concentration within Major | Degree Offered |
| :---: | :---: | :---: | :---: | :---: |
| Anthropology | *Anthropology | [ | NONE | Bachelor of Arts (B.A.) |
| Biology | *Biology | (1) | NONE | Bachelor of Science (B.S.) |
| Chemistry | *Chemistry | [8] | (1) Biochemistry | Bachelor of Science (B.S.) <br> Bachelor of Science <br> in Chemistry <br> (B.S.Ch.) |
| Computer Science | *Computer Science | 回 | NONE | Bachelor of Science |
| Criminology and Criminal Justice | *Criminology and Criminal Justice | [ | NONE | Bachelor of Arts (B.A.) |
|  |  |  | (1) Environmental and Earth |  |

The College of Arts and Sciences

| Earth Sciences | *Geography | [ | \|Science <br> (2) Geographic <br> Techniques <br> (3) Geography <br> (4) Urban <br> Planning | Bachelor of Arts (B.A.) |
| :---: | :---: | :---: | :---: | :---: |
| Earth Sciences | *Earth Sciences | [ | (1) <br> Geoarchaeology <br> (2) Geography <br> (3) Geology <br> (4) Geophysics | Bachelor of Science (B.S.) |
| Economics | Economics | [2] | NONE | $\begin{aligned} & \text { Bachelor of Arts } \\ & \text { (B.A.) } \end{aligned}$ |
| English | *English | [ | (1) African <br> American <br> Literature <br> (2) Creative Writing <br> (3) English as a <br> Second Language <br> (4) Language and Linguistics <br> (5) Literature <br> (6) Professional Writing | Bachelor of Arts (B.A.) |
| Foreign Languages and Literatures | *Foreign Languages <br> (With single language concentration from the first four or multiple language concentration from tota list.) <br> Click on the specific concentration on the right for course descriptions. |  | (1) French <br> (2) German <br> (3) Latin <br> (4) Spanish <br> (5) Greek <br> (6) Italian <br> (7) J apanese <br> (8) Russian | Bachelor of Arts (B.A.) |
| History | *History | [ | NONE | $\begin{aligned} & \text { Bachelor of Arts } \\ & \text { (B.A.) } \end{aligned}$ |
| Mathematical Sciences | *Mathematical Sciences | [1] | (1) Mathematics <br> (2) Statistics | $\begin{aligned} & \text { Bachelor of Science } \\ & \text { (B.S.) } \end{aligned}$ |
| Philosophy | *Philosophy | [ | NONE | Bachelor of Arts <br> (B.A.) |
| Physics | *Physics | [] | NONE | $\begin{aligned} & \text { Bachelor of Science } \\ & \text { (B.S.) } \end{aligned}$ |
| Political Science | *Political Science | [ | NONE | $\begin{aligned} & \text { Bachelor of Arts } \\ & \text { (B.A.) } \end{aligned}$ |
| Psychology | *Psychology | [ | (1) Behavioral Neuroscience (2) General Psychology | Bachelor of Arts (B.A.) |
| Sociology | *Sociology | [ | NONE | Bachelor of Arts (B.A.) |
| Social Work | *Social Work | 8 | NONE | Bachelor of Arts (B.A.) |


| Interdisciplinary Programs | *African and African American Studies | [1 | (1) Humanities (2) Social and Behavioral Sciences (3) The Arts | Bachelor of Arts (B.A.) |
| :---: | :---: | :---: | :---: | :---: |
|  | *International Studies | 2 | (1) Global Processes <br> (2) Area Studies | Bachelor of Arts <br> (B.A.) |

*Minor available.
The College of Arts and Sciences also offers minors in the following areas not listed above:
Aerospace Studies
Asian Studies
Environmental Studies
Judaic Studies
Legal Thought and Liberal Arts
Military Science
Naval Science
Non-Profit Management
Public Administration
Women's Studies
Individual program requirements described in the University of Memphis 2006-2007 Undergraduate Bulletin are subject to change. Please consult the college level advisor for changes that may occur before the publication of the next issue of the Bulletin.

## COLLEGE and DEGREE REQUI REMENTS

Listed below are the specific college requirements for all degree programs offered in the College of Arts and Sciences. Students pursuing the Bachelor of Science in Chemistry degree should see the specific requirements for that degree.

## Bachelor of Arts (B.A.) (18-19 hours)

These hours are in addition to the University General Education Program requirements.
Foreign Language: 6 hours in a single foreign language at or above the 2000 level or equivalent.

1. If the language chosen was used to meet University admissions requirements, students must take the foreign language placement exam (if they have not already successfully completed a language course at an accredited institution of higher education). For information about the dates and place of placement exams, contact the Department of Foreign Languages and Literatures. On the basis of the results of the placement exam, students should follow these guidelines:
If placed into 1010: complete 1010, 1020, 2010, 2020
If placed into 1020: complete 1020, 2010, 2020
If placed into 2010: complete 2010, 2020
If placed into 2020: complete 2020
If placed into 3301 or higher: language requirement fulfilled
Or complete 6 hours at the 2000 level or above of another language
2. Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.
3. No credit hours are immediately granted on the basis of the placement exam.
4. Satisfactory completion of the language requirement by means of the placement exam will be noted on the students transcript.
5. Students whose first college-level language course is 2010 or higher and who pass this course with a minimum grade of may apply for Credit by Course Placement. The applicable fees are listed in the Miscellaneous Fees section of this Bulletin. Students wishing such credit must make written application to
the chair of the Department of Foreign Languages and Literatures. Credit by Course Placement shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see Credit by Course Placement in Section 5 of this Bulletin.
6. Once a student begins with a lower-division course, all remaining higher-numbered courses in the lower division must be taken in sequence, without skipping. For example, students who begin with LATN 1010 cannot skip LATN 1020 and enroll in LATN 2010.
7. For students whose mother tongue is not English, lower-division credit in the native language will be awarded when the student has successfully completed the English composition requirement for graduation and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make written application to the chair of the Department of Foreign Languages and Literatures.

Humanities: 3 hours of upper-division coursework, in an area outside of the major, to be chosen from one of the following categories. Please note that some courses have prerequisites:

1. Any upper-division literature course in CHIN, CLAS, ENGL, FREN, GERM, GREK, ITAL, JAPN, LALI, LATN, RUSS, or SPAN. Students should consult with their advisor or with the department to determine the appropriate courses.
2. Any upper-division HIST course, except HIST 2030, 3045, 3300, 3863, 3881, 4020, 4022, 4851, 4871, 4998, 4999.
3. Any upper-division PHIL course.
4. Judaic Studies: JDST 3201, 3202, 3661, 3801, 3802, 4671.
5. Political Thought: POLS 3102, 3401, 3402, 4405, 4415, 4416.
6. THEA 4582

Fine Arts Heritage: 3 hours (in a different subject area than University General Education Program requirement) from: ART 1030, ARTH 2101, COMM 1851, COMM 4850, COMM 4858, DANC 1151, DANC 3101, MUS 1030, MUHL 4800, THEA 1030, THEA 4551, THEA 4552.

Mathematics/ Natural Sciences: 3-4 hours of Mathematics or Natural Sciences, in an area outside of the major.

1. Mathematics: one MATH course (not to repeat University General Education Program requirements), or PHIL 1611.
2. Natural Sciences: 3-4 hours (different from the University General Education Program science), selected from: BIOL 1010/1011, BI OL 1020/1021; BIOL 1110/1111, BI OL 1120/1121; CHEM 1010/1011, 1020/1021; CHEM 1110/1111, 1120/1121; ESCI 1003, 1010/1011, 1020/1021, 1040, 1050, 1103, 3221, 3802, 4120 [W], 4122, 4201, 4214, 4231, 4241; PHYS 1010/1001, 1020/1002; PHYS 2010/2011, 2020/2021, 2110/2111, 2120/ 2121; PSYC 3306 (if University General Education Program sequence is not biology); UNHP 3407. NOTE: If a course has a lab, the lab must also be taken to complete this requirement. No more than eight hours from one discipline may be used to fulfill the University General Education Program and B.A. Mathematics/Natural Sciences requirements.

Social Science: 3 hours of a Social Science (in addition to University General Education Program requirements) in an area outside of the major. No more than two courses from one discipline may be used to fulfill the University General Education Program and B.A. Social Science requirements. Coursework to be chosen from: AAAS 2100, ANTH 1100, 1200; CJUS 1100, 2110, 3510; COMM 1780, 4375; ECON 2110, 2120; ESCl 1301, 1401, 3430, 4305, 4307, 4316, 4431; HIST 4871; JOUR 1700, 4700, 4712; POLS 1100, 1301, 1501, 3213, 3216, 3506; PSYC 1200, 3510; SOCI 1111, 2100, CSED 2101, SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923; UNIV 2304; WMST 2100.

NOTE: The College of Arts and Sciences accepts a maximum of two semester hours in physical activity courses toward the fulfillment of its degree requirements.

To qualify for the Bachelor of Arts degree, the student must complete a minimum of 120 semester hours with a grade point average of 2.0 . Of the 120 semester hours required, not more than 42 semester hours in any one subject will be counted toward a degree. A minimum of 42 semester hours must be in courses from the upper division.

## Bachelor of Science (B.S.) (15-16 hours)

These hours are in addition to the University General Education Program requirements.
Foreign Language: 6 hours in a single foreign language, or equivalent. If the language chosen is the same language used to fulfill University admission requirements, courses must be at the 1020 level or above. If a different language is chosen, any six hours will fulfill the requirement.

1. If the language chosen was used to meet University admissions requirements, students must take the foreign language placement exam (if they have not already successfully completed a language course at an accredited institution of higher education). For information about the dates and place of placement exams, contact the Department of Foreign Languages and Literatures. On the basis of the results of the placement exam, students should follow these guidelines:
If placed into 1010: complete 1010, 1020, 2010
If placed into 1020: complete 1020, 2010
If placed into 2010: complete 2010
If placed into 2020 or higher: language requirement fulfilled
Or complete 6 hours at any level of another language
2 Students presenting a language to meet University admission requirements cannot receive credit for 1010
in that language.
2. No credit hours are immediately granted on the basis of the placement exam.
3. Satisfactory completion of the language requirement by means of the placement exam will be noted on the studentes transcript.
4. Students whose first college-level language course is 2010 or higher and who pass this course with a minimum grade of $\geqslant<$ may apply for Credit by Course Placement. The applicable fees are listed in the Miscellaneous Fees section of this Bulletin. Students wishing such credit must make written application to the chair of the Department of Foreign Languages and Literatures. Credit by Course Placement shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see Credit by Course Placement in Section 5 of this Bulletin.
5. Once a student begins with a lower-division course, all remaining higher-numbered courses in the lower division must be taken in sequence, without skipping. For example, students who begin with LATN 1010 cannot skip LATN 1020 and enroll in LATN 2010.
6. For students whose mother tongue is not English, lower-division credit in the native language will be awarded when the student has successfully completed the English composition requirement for graduation and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make written application to the chair of the Department of Foreign Languages and Literatures.

Humanities: 3 hours of upper-division coursework, in an area outside of the major, to be chosen from one of the following categories. Please note that some courses have prerequisites:
1 Any upper-division literature course in CHI N, CLAS, ENGL, FREN, GERM, GREK, ITAL, JAPN, LALI, LATN, RUSS, or SPAN. Students should consult with their advisor or with the department to determine the appropriate courses.
2 Any upper-division HIST course, except HIST 2030, 3045, 3300, 3863, 3881, 4020, 4022, 4851, 4871, 4998, 4999.
3. Any upper-division PHIL course.
4. Judaic Studies: JDST 3201, 3202, 3661, 3801, 3802, 4671.
5. Political Thought: POLS 3102, 3401, 3402, 4405, 4415, 4416.
6. THEA 4582

Mathematics/ Natural Sciences (3-4 hours): MATH 1830 or 1910 is required for all B.S. degree programs.
3-4 hours of Mathematics or Natural Sciences in an area outside of the major, in addition to MATH 1830 or 1910.

1. Mathematics: One course (not to repeat University General Education Program requirements), or PHIL 1611.
2. Natural Sciences: 3-4 hours (different from the University General Education Program science), selected from: any course (plus lab, if applicable) in Biology, Chemistry (except CHEM 1100), Earth Sciences, Physics; ESCI 1010/1011, 1020/1021, 1003, 3221, 4120, 4122, 4201, 4214, 4231, 4241; PSYC 3306 (if the

University General Education Program sequence above is not biology); UNHP 3407. NOTE: If a course has a lab, the lab must be taken to complete this requirement.

Social Science: 3 hours of a Social Science (in addition to University General Education Program requirements) in an area outside of the major. No more than two courses from one discipline may be used to fulfill the University General Education Program and B.S. Social Science requirements. Coursework to be chosen from: AAAS 2100; ANTH 1100, 1200; CJ US 1100, 2110, 3510; COMM 1780; ECON 2110, 2120; ESCI 1301, 1401, 3430, 4305, 4307, 4316, 4431; HIST 4871; J OUR 1700; POLS 1100, 1301, 1501, 3213, 3216, 3506; PSYC 1200, 3510; SOCI 1111, 2100, CSED 2101, SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923, UNIV 2304; WMST 2100.

NOTE: The College of Arts and Sciences accepts a maximum of two semester hours in physical activity courses toward the fulfillment of its degree requirements.

To qualify for the Bachelor of Science degree, the student must complete a minimum of 120 semester hours with a grade point average of 2.0. Of the 120 semester hours required, not more than 42 semester hours in any one subject will be counted toward a degree. A minimum of 42 semester hours must be in courses from the upper division.

## DEPARTMENTAL REQUI REMENTS FOR MAJ ORS AND MI NORS

Listed below are the specific course requirements for all majors and minors offered in The College of Arts and Sciences. A minimum grade of $\boldsymbol{C}$ is required in every course applicable toward a major or minor (including corequisites).
Every student should be aware that the mere completion of courses outlined below with a minimum grade of $\widehat{C}$ does not guarantee classification as a major or minor in the discipline concerned; the student must be recommended by the chair of the department in which the major or minor is sought. If, in the opinion of the department chair, the quality of the students work is not high enough, additional work, the repetition of courses, or other evidence of acceptable scholarship may be required.

## AFRI CAN and AFRICAN AMERICAN STUDI ES Interdisciplinary Studies Office African and African American Studies Major (B.A.)

Program objectives for a B.A. in African and African American Studies are: (a) to develop a strong academic and research program that creates and disseminates new knowledge about Africans and people of African descent; (b) to foster interdisciplinary and/or comparative research and learning in terms of subject matter and methodology related to Africans and people of African descent; (c) to foster the utilization of materials, ideas, and works drawn from Africans and African American scholars, and authors; (d) to develop the critical and analytical tools of inquiry necessary for learning.
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.
C. The Major ( $\mathbf{3 0}$ hours)

1. Major Core (18 hours):

Completion of AAAS 2100, 3100, and 4100; and one course selected from each concentration (9 hours).
2. Concentration ( 12 hours):
a. Humanities: AAAS 4351; ENGL 3325, 3326, 4372, 4373, 4521; HIST 3273, 3274, 3281, 3282, 3881,

4022, 4050-69 (Special Topics related to African American experience), 4273, 4283, 4289, 4871, 4879, 4882; PHIL 3741.
b. Social and Behavioral Sciences: AAAS 4251; ANTH 3232, 3242, 3282, 4051, 4120, 4220, 4352, 4411, 4412; CJUS 3510; ESCl 4431; ECON 3411, 4740; POLS 3304, 3306, 4222, 4415, 4416; SLS 4145; SOCI 3311, 3401, 3420, 3422, 4420, 4442 [W], 4460 [W].
c. The Arts: ARTH 4111, 4112, 4113, 4181; COMM 3361, 4341, 4373, 4375; MUHL 4800, 4801, 4804, 4805, 4806, 4807.

## D. Electives

Electives may be chosen to bring the total number of hours to 120 .

## African and African American Studies Minor

Completion of 18 semester hours including AAAS 2100, 3100, and 12 hours of electives from the following groups, with at least 3 hours from each group. Students may also choose other courses not on the following list as substitutions with the approval of the African and African American Studies advisor:
Humanities: AAAS 4351; ENGL 3325, 3326, 4372, 4373, 4521; HIST 3273, 3274, 3281, 3282, 3881, 4022, 4050-69 (Special Topics related to African American experience), 4273, 4283, 4289, 4871, 4879, 4882; PHIL 3741.
b. Social and Behavioral Sciences: AAAS 4251; ANTH 3232, 3242, 3282, 4051, 4120, 4220, 4352, 4411, 4412; CJUS 3510; ESCl 4431; ECON 3411, 4740; POLS 3304, 3306, 4222, 4415, 4416; SLS 4145; SOCI 3311, 3401, 3420, 3422, 4420, 4442 [W], 4460 [W].
c. The Arts: ARTH 4111, 4112, 4113, 4181; COMM 3361, 4341, 4373, 4375; MUHL 4800, 4801, 4804, 4805, 4806, 4807.

## Typical 4-Year African and African American Studies Sequence

## Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| MATH* $^{*}$ | $3-4$ | Nat. Sci./Math/B.A. | $3-4$ |
| Social/Behavioral Sci.* | 3 | Fine Arts/B.A. | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Elective | 3 | Humanities* | 3 |
| Semester Totals | $15-16$ hrs |  | $15-16$ hrs |

## Sophomore Year

| ENGL 2201 or 2202 | 3 | History* | 3 |
| :--- | :--- | :--- | :--- |
| Social/Behavioral Sci.* | 3 | Social Science/B.A. | 3 |
| AAAS 2100 | 3 | Humanities* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| AAAS core elective | 3 | UD elective | 3 |
| Semester Totals | 16 hrs |  | 16 hrs |


| J unior Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAAS Humanities core elective |  | 3 | AAAS Soc/ | Behav core elective | 3 |
| Elective |  | 3 | AAAS conc | . elective | 3 |
| History* |  | 3 | Integrative |  | 3 |
| COMM 2381 |  | 3 | Humanitie | /B.A. | 3 |
| AAAS conc. elective |  | 3 | Computati | O Intensive | 3 |
| Semester Totals |  | 15 hrs |  |  | 15 hrs |
| Senior Year |  |  |  |  |  |
| Writing Intensive | 3 | AAAS 4100 | 3 |  |  |
| AAAS conc. elective | 3 | Elective | 3 |  |  |
| Elective | 3 | AAAS conc. elective 3 |  |  |  |
| AAAS 3100 | 3 | Elective |  | 4 |  |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## ANTHROPOLOGY

## Department of Anthropology <br> Anthropology Major (B.A.)

Program objectives for a B.A. in Anthropology are: (a) to be well versed in archaeological, biological, and cultural anthropology; (b) to be successful in finding employment that utilizes the knowledge and training developed during their academic program.

## A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.

## C. The Major ( 30 hours)

Completion of 30 semester hours in anthropology courses including ANTH 1100, 1200, 3200, 4065; and 18 additional semester hours, at least 6 of which must be at the 4000 level.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## E. Honors Program

The Department of Anthropology offers an honors program in anthropology to the superior anthropology student who desires a more intensive approach to and knowledge of the discipline, a deeper understanding of research skills, and an opportunity for original criticism and analysis. To be eligible a student must (a) have the approval of the Departmental Honors Committee, (b) be an anthropology major, (c) have attained at least junior standing, (d) have completed successfully ANTH 1100, 1200, and one upper-division anthropology course, (e) maintained a minimum cumulative grade point average of 3.00 in overall studies, (f) maintained a cumulative grade point average of at least 3.25 in anthropology, ( g ) completion of four honors courses in anthropology (at least one of which must be an independent study culminating in a research paper/thesis or research report) and a minimum of six hours in honors courses outside anthropology. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred, $\rangle$ With Honors in Anthropology. Moreover the students diploma and the record at the University of Memphis will reflect this accomplishment. Details of the program are available at the Department of Anthropology office.

## Anthropology Minor

Completion of 18 semester hours in anthropology courses, including ANTH 1100, 1200, 3200, and 4065.

## Typical 4-Year Anthropology Sequence

## Freshman Year

| ANTH 1100 | 3 | ANTH 1200 | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH* $^{*}$ | $3-4$ | Nat. Sci./Math/B.A. | $3-4$ |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Elective | 3 | Humanities* | 3 |
| Semester Totals | $15-16$ hrs |  | $15-16$ hrs |

## Sophomore Year

The College of Arts and Sciences

| ANTH 3200 | 3 | History* | 3 |
| :---: | :---: | :---: | :---: |
| Elective | 3 | Elective | 3 |
| ENGL 2201 or 2202 | 2 | Humanities * | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| History* | 3 | UD elective | 3 |
| Semester Totals | 16 hrs |  | 16 hrs |
| J unior Year |  |  |  |
| UD ANTH | 3 | ANTH 40653 |  |
| COMM 2381 | 3 | UD ANTH 3 |  |
| Social Science/B.A. | 3 | UD elective 3 |  |
| Elective | 3 | Fine Arts/B.A. 3 |  |
| UD ANTH | 3 | Elective. 3 |  |
| Semester Totals | 15 hrs | 15 | hrs |
| Senior Year |  |  |  |
| UD ANTH 3 | 3 | UD ANTH | 3 |
| Humanities/B.A. 3 | 3 Con | Computation Intensi | ve 3 |
| Elective 3 | 3 I | Integrative | 3 |
| Elective 3 | 3 E | Elective | 4 |
| Writing Intensive 3 |  |  |  |
| Semester Totals 1 | 15 hrs |  | 13 hrs |
| Total Hours: 120-122 |  |  |  |
| Total Hours Required for Graduation: 120 |  |  |  |
| *Must satisfy University General Education Program Requirement |  |  |  |

## BI OLOGY

## Department of Biology <br> ADVANCED PLACEMENT

Beginning freshmen who have completed an advanced biology course in high school may apply to the chair of the Department of Biology during the semester preceding enrollment for advanced placement. Freshmen scoring 3 on the Advanced Placement Test will receive credit hours for BIOL 1010/1011, BIOL 1020/1021. Those scoring 4 or higher will receive credit hours for BIOL 1110/1111, BI OL 1120/1121.

## Biology Major (B.S.)

Students who earn a B.S. in Biology should attain the following objectives: (a) possession of a fundamental understanding of biology spanning from the subcellular to the ecosystem level; (b) the ability to compete successfully for admission to graduate and professional programs and for entry level employment that utilizes the knowledge and training acquired during their academic program; (c) development of skills in analysis, synthesis, and quantitative reasoning that are essential in hypothesis testing, critical thinking, interpretation of scientific data, and written and oral communication.
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements.
Note that MATH 1830 or MATH 1910 is required for the B.S. degree.
B. College and Degree (B.S.) Requirements (15-16 hours)

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed above.
C. The Major (48 hours in addition to University General Education Program and B.S. degree

## requirements)

Students must earn a grade of at least $\geqslant \mathrm{C} \geqslant$ in all biology science courses applied toward the major, the minor, and in all required chemistry, physics, and mathematical courses. Students must earn a grade of at least "C" in BIOL 1110/1111 and BIOL 1120/1121, before enrolling in any upper division course.

Any required or elective course applied toward the major or minor may be repeated once to earn a minimum grade of "C." To repeat a course a second time, a student may apply for and receive special permission from the department Undergraduate Studies Committee. Application information is available in the Biology Department office. A student may not repeat a course three times in order to receive a minimum grade of "C."

Completion of 36 hours in biology courses, 16 hours in chemistry courses, and 8 hours in physics courses as outlined: BIOL 1110/1111, BIOL 1120/1121, CHEM 1110/1111 (these courses are included in the University General Education Program and B.S. degree requirements), and BIOL 3072 [C,I ], 3073, 3130, 4100 [W];18 additional upper division hours in biology courses approved by the department; CHEM 1120/1121, 3301/3311, 3302/3312; and PHYS 2010/2011, 2020/2021 or 2110/2111, 2120/2121. Three hours of MATH 4611 or PSYC 3001 or SOCl 3311 may be substituted for three upper-division hours in biology courses.

## D. Electives

Electives may be chosen to bring the total number of hours to 120 .

## Biology Minor

Completion of 18 semester hours in biology courses including BIOL 1110/1111, BIOL 1120/1121 and 10 upper division hours.

## Typical 4-Year Biology Sequence

Freshman Year

| CHEM 1110/1111 | 4 | BI OL1110/1111 | 4 |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1830 or 1910 | $3-4$ | CHEM 1120/1121 | 4 |
| Foreign Language/B.S. | 3 | Foreign Language/B.S. | 3 |
| Semester Totals | $13-14 \mathrm{hrs}$ |  | 14 hrs |

## Sophomore Year

| BIOL 1120/1121 | 4 | BIOL 3130 | 3 |  |
| :--- | :--- | :--- | :--- | :--- |
| CHEM 3311/3301 | 4 | PHYS selection ** | 4 |  |
| COMM 2381 | 3 | CHEM 3312/3302 | 4 |  |
| PHYS selection** | 4 | ENGL 2201 or 2202 | 3 |  |
| Semester Totals | 15 hrs |  | 14 hrs |  |
| J unior Year |  |  |  |  |
| BIOL 4100 [W] | 3 | BIOL 3072/3073 [C,I] | 4 |  |
| Humanities* | 3 | Humanities* | 3 |  |
| UD BIOL | 4 | UD BIOL | 3 |  |
| History* | 3 | History* | 3 |  |
| Social Science/B.S. | 3 | Elective | 3 |  |
| Semester Totals | 16 hrs |  | 16 hrs |  |

## Senior Year

The College of Arts and Sciences

| Social/Behavioral Sci.* | 3 | Social/Behavioral Sci.* | 3 |
| :--- | :--- | :--- | :--- |
| UD BIOL | 4 | UD BIOL | 4 |
| UD BIOL | 3 | UD elective | 3 |
| Humanities/B.S. | 3 | Elective | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 16 hrs |  | 16 hrs |

Total Hours: 120-121
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
**Choose:PHYS 2010/2011 and 2020/2021 or 2110/2111 and 2120/2121
Undergraduate research is strongly encouraged as part of the elective hours.

## CHEMISTRY

## Department of Chemistry

The Department of Chemistry offers courses leading to the B.S. degree with a major in chemistry. The department also offers a program culminating in the professional degree of Bachelor of Science in Chemistry (B.S.Ch.). This program is designed to meet the requirements of the Committee on Professional Training of the American Chemical Society, and is undertaken primarily by students who desire to go directly to positions in the chemical industry, or to enroll for postgraduate study in chemistry.

## SEQUENCE OF COURSES

Students who have a minimum ACT mathematics score of 24 should enroll in CHEM 1110 /1111 if they plan to take more than one year of college chemistry, or plan to major in either a natural science or in civil, mechanical, or electrical engineering. CHEM 1100 is a one-semester course for students of limited preparation in mathematics or high school chemistry whose curriculum calls for the CHEM 1110/1111, 1120/1121 sequence. CHEM 1010/1011, 1020/1021 is a two-semester sequence for students interested in the science of chemistry, but is not credited toward a major in chemistry or physics. It does fulfill the university science requirements of other majors. Credit may not be received for both CHEM 1100 and CHEM 1110 or CHEM 1010 simultaneously.

## ADVANCED PLACEMENT

Beginning students who have had previous high school training in chemistry are invited to apply for advanced placement.

## LABORATORY SAFETY AND COURSE REQUI REMENTS

Laboratory safety is strictly practiced in the Department of Chemistry. Approved eye protection must be worn as required in all chemical laboratories. In addition, to ensure that students enrolled in laboratory courses learn the necessary safety information to safely participate in the laboratory course, all prerequisites and/or corequisites for all laboratory courses are strictly enforced. As a result, when a student enrolls in a laboratory course without prior completion of the necessary prerequisite or corequisite, the student will be dropped from the laboratory course. In addition, when a student simultaneously enrolls in a laboratory course and corequisite course, but subsequently drops or discontinues the corequisite course, the student will be dropped from the laboratory course. In the event any student fails to comply with any safety requirements of the Department of Chemistry, the department has the right to not allow the student to perform laboratory work, or to withdraw the student from the laboratory course, as appropriate.

The requirements listed below are for majors and minors for the Bachelor of Science degrees or for minors for the Bachelor of Arts degrees; for detailed requirements for the Bachelor of Science in Chemistry, a professional degree, see degree requirements described later in this section.
NOTE: Students must complete CHEM 1110/1111, 1120/1121 before enrolling in any upper division course applied toward the major or the minor.

## Chemistry Major (B.S.)

Program objectives for a B.S. in Chemistry and a B.S.Ch. in Chemistry are: (a) to have a satisfactory knowledge and comprehension of core concepts of analytical, organic, elementary physical, and inorganic chemistry; (b) to develop the ability to critically assess and solve problems relating to theoretical and practical aspects of chemistry; (c) to have satisfactory laboratory skills; (d) to have satisfactory presentation
skills to communicate chemical concepts and the results of investigations into chemical phenomena, through oral and written discourse and by way of mathematical sciences (e) to have satisfactory basic computer and computational skills; ( $f$ ) will be satisfactorily prepared for entry level positions in the field, or for admission to graduate or professional school; (g) to demonstrate an understanding of professional ethics and the importance of chemistry in its impact on society.
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements.
B. College and Degree (B.S.) Requirements (15-16 hours)

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements.

## C. The Major (34-40 hours)

1. Core requirements (19 hours): CHEM 1110/111, 1120/1121, (these courses are included in the University General Education Program requirements and must be successfully completed prior to enrolling in the following), CHEM 3201/3211 [C], 3301/3311, 3302/3312, 4604 [W, I ], , PHYS 2110/2111 or 2120/2121 or 2010/2011, 2020/2021 (four hours of physics are included in the B.S. degree requirements.
2. Plus (15-25 hours):

Either
a. CHEM 3411 and six (6) upper division semester hours in chemistry to complete 32 hours in chemistry courses. MATH 1910 (this course is included in the University General Education Program requirements) and two of the following courses: MATH 1920, 2110, 4611, COMP 4001.
or
b. Biochemistry concentration: MATH 1830 or 1910 (included in the University General Education Program requirements), MATH 4611, CHEM 4511/4501, 4512, BIOL 1110/1111, 1120/1121, and either BIOL 3500 or 3130.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## Chemistry Major (B.S. Ch.)

## A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements.
Note the following specifications for the B.S.Ch. degree: Natural Science - CHEM 1110/1111, 1120/1121;
Mathematics - MATH 1910.

## B. College and Degree (B.S.Ch.) Requirements (14 hours)

Foreign Language: 6 hours in a single foreign language, or equivalent. If the language chosen is the same language used to fulfill University admission requirements, course must be at the 1020 level or above. If a different language is chosen, any six hours will fulfill the requirement.

1. If the language chosen was used to meet University admissions requirements, students must take the foreign language placement exam (if they have not already successfully completed a language course at an accredited institution of higher education). For information about the dates and place of placement exams, contact the Department of Foreign Languages and Literatures. On the basis of the results of the placement exam, students should follow these guidelines:
If placed into 1010: complete 1010, 1020, 2010
If placed into 1020: complete 1020, 2010
If placed into 2010: complete 2010
If placed into 2020 or higher: language requirement fulfilled
Or complete 6 hours at any level of another language
2. Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.
3. No credit hours are immediately granted on the basis of the placement exam.
4. Satisfactory completion of the language requirement by means of the placement exam will be noted on the studentes transcript.
5. Students whose first college-level language course is 2010 or higher and who pass this course with a minimum grade of "C" may apply for Credit by Course Placement. The applicable fees are listed in the Miscellaneous Fees section of this Bulletin. Students wishing such credit must make written application to the chair of the Department of Foreign Languages and Literatures. Credit by Course Placement shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see Credit by Course Placement in Section 5 of this Bulletin.
6. Once a student begins with a lower-division course, all remaining higher-numbered courses in the lower division must be taken in sequence, without skipping. For example, students who begin with LATN 1010 cannot skip LATN 1020 and enroll in LATN 2010.
7. For students whose mother tongue is not English, lower-division credit in the native language will be awarded when the student has successfully completed the English composition requirement for graduation and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make written application to the chair of the Department of Foreign Languages and Literatures.

Mathematics (8 hours): MATH 1920, 2110.
To qualify for the Bachelor of Science in Chemistry degree, the student must complete a minimum of 120 semester hours with a grade point average of 2.0. Of the 120 semester hours required, not more than 42 semester hours in any one subject will be counted toward a degree. A minimum of 42 semester hours must be in courses from the upper division.

## C. The Major ( 41 hours)

1. Core requirements ( 32 hours):

Completion of CHEM 1110/1111, 1120/1121 (these courses are included in the University General Education Program requirements and must be successfully completed prior to enrolling in the following), 3201/3211
[C], 3301/3311, 3302/3312, 3411, 4111, 4511, 4604 [W,I], 4901/4902/4903; PHYS 2110/2111, 2120/2121, or 2010/2011, 2020/2021.
2. Plus ( $9-18$ hours)
a. CHEM 3402/3412, 4101 and three (3) upper division semester hours in chemistry to complete 41 hours in chemistry courses.
or
b. Biochemistry concentration

CHEM 4501, 4512, BI OL 1110/1111, 1120/1121, 3500 or 3130, one of the following three courses, CHEM 3402, 4101 or BIOL 3505.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## Chemistry Minor

Completion of 20 semester hours in chemistry courses, including CHEM 1110/1111, 1120/1121 (these courses must be successfully completed prior to enrolling in the following), CHEM 3301/3311, 3302/3312, and four upper division semester hours.

## Typical 4-Year Chemistry (B.S.) Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| Humanities* | 3 | MATH** | 4 |
| Elective | 3 | Foreign Language/B.S. | 3 |
| Foreign Language/B.S. | 3 |  |  |
| Semester Totals | 16 hrs |  |  |
| Sophomore Year |  |  |  |
| COMM 2381 | 3 | Social Science/B.S. | 3 |
| ENGL 2201 or 2202 | 3 | CHEM 3312/3302 | 4 |
| CHEM 3311/3301 | 4 | PHYS selection*** | 4 |
| PHYS selection*** | 4 | Humanities* | 3 |


| MATH (see Math list) | 4 | MATH (see Math list) | 4 |
| :--- | :--- | :--- | :--- |
| Semester Totals | 18 hrs | 18 hrs |  |
| J unior Year |  |  |  |
| CHEM $3211[C]$ | 2 | UD CHEM | 3 |
| CHEM $3201[C]$ | 2 | Humanities/B.S. | 3 |
| UD CHEM | 3 | Writing Intensive | 3 |
| History* | 3 | Social/Behavioral Science* | 3 |
| UD elective | 3 | History* | 3 |
| Semester Totals | 13 hrs |  |  |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| UD CHEM | 3 | CHEM 4604 [W,I] | 3 |
| UD elective | 3 | Elective | 3 |
| Social/Behavioral Science* | 3 | UD elective | 3 |
| Integrative | 3 | Elective | 3 |
| UD elective | 2 |  |  |
| Semester Totals | 14 hrs | 12 hrs |  |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
**MATH 1830 (Biochemistry concentration only, or MATH 1910
*** Choose: PHYS 2010/2011 and 2020/2021 or 2110/2111 and 2120/2121

## Typical 4-Year Chemistry (B.S.Ch.) Sequence

## Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| Humanities* | 3 | MATH 1910 | 4 |
| Elective | 3 | Foreign Language/B.S. | 3 |

Foreign Language/B.S. 3
Semester Totals 16 hrs 14 hrs

## Sophomore Year

| COMM 2381 | 3 | Social Science/B.S. | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202 | 3 | CHEM 3312/3302 | 4 |
| CHEM 3311/3301 | 4 | PHYS 2120/2121 | 4 |
| MATH 1920 | 4 | Humanities* | 3 |
| PHYS 2110 or 2111 | 4 | MATH 2110 | 4 |
| Semester Totals | 18 hrs | 18 hrs |  |

J unior Year

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| CHEM 3411 |  | CHEM 3402 |  | 2 |
| :---: | :---: | :---: | :---: | :---: |
| Social/Behavioral Science* |  | 3 CHEM | CHEM 4604 [W,I] | 3 |
| History* |  | 3 Socia | Social/Behavioral Science* | 3 |
|  |  | History* |  | 3 |
|  |  | CHEM 4901 |  | 1 |
| Semester Totals |  | 13 hrs |  | 15 hrs |
| Senior Year |  |  |  |  |
| CHEM 4111/4101 | 4 | UD CHEM | 3 |  |
| CHEM 4902 | 1 | Elective | 2 |  |
| UD elective | 3 | Elective | 3 |  |
| UD elective | 3 | Elective | 3 |  |
| CHEM 4511 | 3 | CHEM 4903 | 1 |  |
| Semester Totals | 14 hrs |  | 12 hrs |  |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## COMPUTER SCI ENCE

## COMPUTER SCI ENCE <br> Department of Computer Science <br> Computer Science Major (B.S.)

Program objectives for a B.S. in Computer Science are: (a) to develop fundamental understanding of computer science, including knowledge of principles and practical implementations; (b) to be able to write computer programs to solve non-trivial real life problems; (c) to be well prepared for a first career in information technology and computer science; (c) to be well prepared for graduate studies at the Master's, doctoral and post-doctoral level.
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Note the following requirements specified for the Computer Science major: Mathematics - MATH 1910; Natural Science - PHYS 2110/2111, 2120/2121 or CHEM 1110/1111, 1120/1121, or BIOL 1110/1111, BIOL 1120/1121; ECON 2120 is strongly recommended for the Social Science requirement.
B. College and Degree (B.S.) Requirements (15-16 hours)

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed above.
C. The Major ( 57 hours in addition to University General Education Program and B.S. degree requirements)
Completion of MATH 1910, 1920 (these courses are included in the University General Education Program and college B.S. degree requirements), 2701, 3242 [C], 4614; three Natural Science courses and labs (one sequence as mentioned above in part A and a third course from part A); COMP 1900 (4), 2150, 2701 (1), 3160, 3410, 3715, 3825, 4030, 4040 [W], 4081, 4270 [I], 4601, 4882 and two COMP electives. Seniors are required to take the Computer Science Field Test the semester that they plan to graduate.

## D. Electives

Electives may be chosen to bring the total number of semester hours to 120.

## E. Second Major in Computer Science for Engineering Majors ( 33 hours)

Twenty-four (24) semester hours in courses offered through the Department of Computer Science, including COMP 2150, 3160, 3715, 4030, 4081, 4270, six (6) semester hours in upper-division COMP courses, and nine (9) additional hours of computer science related courses. Coursework must be chosen in consultation with approval of an advisor in the Department of Computer Science.

## G. Second Major in Computer Science for Majors in Biology, Chemistry, Mathematical Sciences, Physics, and Psychology ( $\mathbf{3 4}$ hours)

Twenty-eight (28) semester hours in courses offered through the Department of Computer Science, including COMP 1900 (4), 2150, 3160, 3715, 4030, 4081, nine (9) semester hours in upper-division COMP courses, and six (6) additional hours of computer science related courses. Coursework must be chosen with approval of an advisor in the Department of Computer Science.

## Computer Science Minor

Completion of 22 semester hours in computer science courses, including COMP 1900 (4), 2150, 3160, 3715 and 9 additional upper division semester hours.

## Typical 4-Year Computer Science Sequence



| Junior Year   <br> COMP 3825 3 COMP 4601 [W,I] | 3 |  |  |
| :--- | :--- | :--- | :--- |
| MATH $3242[C]$ | 3 | COMP 4030 | 3 |
| COMP $4040[W]$ | 3 | Humanities* | 3 |
| Natural Science* | 4 | Social Science/B.S. | 3 |
| ENGL 2201 or 2202 | 3 | Elective | 2 |
| Semester Totals | 16 hrs |  | 14 hrs |


| Senior Year <br> COMP $4081[W]$ | 3 | Elective | 3 |
| :--- | :--- | :--- | :--- |
| MATH 4614 | 3 | COMP 4882 | 3 |
| COMP 4270 | 3 | COMP elective | 3 |
| COMP elective | 3 | Humanities/B.S. | 3 |
| Semester Totals | 12 hrs |  | 12 hrs |

## CRI MI NOLOGY AND CRI MI NAL J USTI CE

## School of Urban Affairs and Public Policy <br> Department of Criminology and Criminal J ustice <br> Criminology and Criminal J ustice Major (B.A.)

Program objectives for a B.A. in Criminology and Criminal Justice are: (a) to possess a fundamental understanding of criminology and criminal justice discipline; (b) to develop skills in analysis, synthesis, and quantitative reasoning essential to hypothesis testing, critical thinking, interpretation of data, and written and oral communication; (c) to be successful in finding employment that utilizes the knowledge and training developed in the program.
A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements. B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.

## C. The Major ( 37 hours)

Completion of 37 semester hours of criminology and criminal justice including CJUS 1100, 3129 [C], 3130, 3510, 3521,3540 and $4110[1, W]$, plus either (1) 15 additional upper division hours in criminology and criminal justice, or (2) 12 additional upper division hours in criminology and criminal justice and 2110 or 2120 as approved by the departmental advisor. Students will be allowed no more that 6 hours of credit toward the degree in non-classroom courses such as internships and individual directed studies.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## Criminology and Criminal Justice Minor

Completion of 18 hours in criminal justice courses including CJUS 1100, 3521, 3540, and 3510.

## Typical 4-Year Criminology and Criminal Justice Sequence

Freshman Year

| CJUS 1100 | 3 | Nat. Sci./Math/B.A. | $3-4$ |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH* $^{\text {E }}$ | $3-4$ | Humanities* | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Elective | 3 | Social/Behavioral Science* | 3 |
| Semester Totals | $15-16$ hrs |  | $15-16$ hrs |


| Sophomore Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202 | 3 | Social/Behavioral Science* | 3 |
| Elective | 3 | Elective | 3 |
| Humanities* | 3 | Natural Science* | 4 |
| Natural Science* | 4 | CJUS 3521 | 3 |
| History* | 3 | CJUS 3510 | 3 |
| Semester Totals | 16 hrs | 16 hrs |  |

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| History* | 3 | Humanities/B.A. | 3 |
| :--- | :--- | :--- | :--- |
| Social Science/B.A. | 3 | CJUS 3540 | 3 |
| CJUS 3129 [C] | 4 | UD elective | 3 |
| CJUS 3130 | 3 | Fine Arts/B.A. | 3 |
| COMM 2381 | 3 | Elective | 3 |
| Semester Totals | 16 hrs |  |  |
| Senior Year |  |  | 15 hrs |
| UD CJUS | 3 | UD CJUS | 3 |
| UD CJUS | 3 | UD CJUS | 3 |
| UD CJUS | 3 | CJUS 4110 [W,I] | 3 |
| UD elective | 3 | Elective | 3 |
| Elective | 3 |  | 12 hrs |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## EARTH SCI ENCES

## GEOGRAPHY

## Department of Earth Sciences <br> Geography Major (B.A.)

Program objectives are: (a) to acquire knowledge of geographical concepts and their applications; (b) to solve geographical problems; (c) to obtain preparation for entry level employment in the field or advanced study.
A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements. B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.
C. The Major ( 35 hours)

1. Core Requirements ( 20 hours):
a. Environmental and Earth Science: ESCI 1010/1011, 1020/1021 (8)
b. Human: ESCI 1401 or 3430 (3)
c. Regional: ESCI 1301 or any 43 numbered course (3)
d. Geographic Techniques: ESCI $\overline{4502}$ (3)
e. ESCl 4801(3) [I, W]
2. Concentration ( $15-16$ hours):
a. Geography: Choose 15 semester hours of geography with a minimum of 12 upper division hours.
b. Environmental and Earth Science: 15 semester hours, with a minimum of 12 hours selected from ESCl 3221, 4120, 4122, 4201, 4214, 4231, 4241, 4251.
c. Geographic Techniques: 15 semester hours, with a minimum of 12 hours selected from ESCI 4511 (4), 4515, 4521 [C], 4525, 4531.
d. Urban Planning: (1) Required core (9 semester hours): ESCI 3451, 4431, 4551; (2) Guided electives (6 semester hours): two of the following: ESCl 3430, 4201, 4231, 4443, 4531, 4700.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## Typical 4-Year Geography (B.A.) Sequence

| Freshman Year <br> Humanities* | 3 | Nat. Sci./Math/B.A | $3-4$ |
| :--- | :--- | :--- | :--- |
| MATH* $^{*}$ | $3-4$ | Fine Arts/B.A. | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Elective | 3 | Social/Behavioral Science* | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Semester Totals $15-16$ hrs  |  |  |  |


| Sophomore Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ESCI 1301 | 3 | ESCI 1020/1021 | 4 |
| ENGL 2201 or 2202 | 3 | COMM 2381 | 3 |
| ESCI 1010/1011 | 4 | UD elective | 3 |
| Humanities* | 3 | History* | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 16 hrs |  | 16 hrs |


| Junior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ESCI 1401 or 3430 | 3 | History* | 3 |
| ESCI 4502 | 3 | UD ESCl | 3 |
| UD ESCI | 3 | Computation Intensive | 3 |
| UD elective | 3 | Humanities/B.A. | 3 |
| Elective | 3 | Social Science/B.A. | 3 |
| Semester Totals | 15 hrs | 15 hrs |  |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| UD ESCI | 3 | ESC $4801[W, I]$ | 3 |
| UD ESCI | 3 | UD ESCI | 3 |
| UD elective | 3 | UD elective | 3 |
| UD elective | 3 | Elective | 4 |
| Elective | 3 |  |  |

Semester Totals 15 hrs 13 hrs
Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## Geography Minor

Completion of 20 semester hours in geography courses, at least 9 of which must be upper division hours.

## EARTH SCI ENCES

## Department of Earth Sciences

Earth Sciences Major (B.S.)
Program objectives for a B.S. in Earth Sciences are: (a) to attain knowledge of earth science concepts and
their applications; (b) to be capable of solving earth science problems involving observations and measurements; (c) to be well prepared for entry level employment or for entering a graduate program in fields related to Earth Science.

## A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that MATH 1830 or MATH 1910 is required for the B.S. degree.
B. College and Degree Requirements (15-16 hours)

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed above.
C. The Major (40-52)* hours in addition to University General Education Program and B.S. degree requirements
*The Geophysics concentration requires an additional 11 hours of MATH.

1. Core Requirements ( 28 hours): Completion of ESCI 1020/1021 or 1040, 1010/1011 or 1050, MATH 1920* or COMP 1800, BIOL 1020/1021 or CHEM 1120/1121 or PHYS 2020/2021 (4 hours of these courses are included in the B.S. degree requirements); ESCI 2001 or 3311**, ESCI 4120 or 4202 or 4252; two courses from ESCl 4502, 4515, and 4521.

* Required for Geophysics concentration; ** Required for Geology concentration.

2. Concentrations:
a. Geoarchaeology (12 hours): ESCl 4301, 4325, 4352, and additional upper division hours approved by the advisior to total 42 semester hours in Earth Sciences.
b. Geography ( 15 hours): ESCI 3430, 4201, 4304, 4541, 4801, and additional upper division hours approved by the advisior to total 42 semester hours in Earth Sciences.
c. Geology ( 14 hours): ESCI 3512, 3712, 4622, and additional upper division hours as approved by the advisor to a total of 42 semester hours in Earth Sciences.
d. Geophysics (24 hours): ESCI 4101, 4201, 4401, and additional upper division hours approved by the advisior to total 42 semester hours in Earth Sciences; MATH 1920, 2110, 3120.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## Earth Sciences Minor

A minimum of 18 semester hours in geology courses, including ESCI 1050 or ESCI 1103. Six of these hours must be selected from upper division courses.

## Typical 4-Year Geology Concentration Sequence

Freshman Year

| Elective |  | 2 | ESCI 1050 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| ESCI 1040 |  | 4 | MATH 1910 | 4 |
| ENGL 1010 |  | 3 | ENGL 1020 | 3 |
| Elective |  | 3 | Foreign Language/B.S. | 3 |
| Foreign Language/B.S. |  | 3 |  |  |
| Semester Totals |  | 15 hrs |  | 14 hrs |
| Sophomore Year |  |  |  |  |
| CHEM 1110/1111 | 4 |  | M 1120/1121 | 4 |
| ESCI 3311 | 4 |  | 4515 | 3 |
| COMM 2381 | 3 |  | L 2201 or 2202 | 3 |
| Humanities* | 3 |  | al/Behavioral Sciences* | 3 |
|  |  |  | manities* | 3 |
| Semester Totals | 14 h |  |  | 16 hrs |

## J unior Year

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| History* | 3 | History* | 3 |
| :---: | :---: | :---: | :---: |
| PHYS 2010** | 4 | ESCI 4502 | 3 |
| ESCI 3712 | 4 | ESCI 3512 [C] | 4 |
| Humanities/B.S. | 3 | Social/Behavioral Sciences* | 3 |
| Semester Totals | 14 hrs |  | 13 hrs |
| Summer |  |  |  |
| ESCI 4622 [I] | 6 hrs |  |  |
| Senior Year |  |  |  |
| UD ESCl | 4 | Social Science/B.S. 3 |  |
| ESCI 4202 | 3 | UD ESCl 4 |  |
| Elective | 4 | Elective 3 |  |
| UD ESCI | 3 | UD elective 4 |  |
| Semester Totals | 14 hrs | 14 hrs |  |
| Total Hours: 120 |  |  |  |
| Total Hours Required for Graduation: 120 |  |  |  |
| *Must satisfy University General Education Program Requirement |  |  |  |

## ECONOMI CS

## Department of Economics

## The Department of Economics is located in the Fogelman College of Business and Economics. Economics Major (B.A.)

Program objectives can be found in the Business Economics major in the Fogelman College of Business and Economics section.
A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements.

## B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.
C. The Major ( $\mathbf{3 0}$ hours)

Completion of 30 semester hours, including ECON 2110, 2120, 3310, 3320, and 18 additional upper division semester hours in economics courses as approved by the department advisor.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## E. Honors Program

All students who receive a minimum grade of " B " in ECON 2110 or 2120 honors sections are eligible for the honors program. Entry to the program can also be obtained through the recommendation of a member of the faculty to the Economics Departmental Honors Committee. A student must maintain an average grade of at least 3.25 in economics to continue in the program and must have a minimum average grade of 3.5 in economics to graduate with honors in economics.
Honor students take special courses during the junior and senior years, particularly the honors sections of ECON 3310 and 3320, and write a senior research paper. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred With Honors in Economics. Moreover the students diploma and the record at the University of Memphis will reflect this accomplishment. Details of the program are available in the Economics Department office.

## Typical 4-Year Economics Sequence

## Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| MATH* $^{*}$ | $3-4$ | Nat. Sci./Math/B.A. | $3-4$ |
| Humanities* | 3 | Humanities* | 3 |
| Elective | 3 | Social Science/B.A. | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Semester Totals | $15-16$ hrs | $15-16 \mathrm{hrs}$ |  |

## Sophomore Year

| ENGL 2201 or 2202 | 3 | History* | 3 |
| :--- | :--- | :--- | :--- |
| Natural Science* | 4 | Elective | 3 |
| Fine Arts/B.A. | 3 | Natural Science* | 4 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| History* | 3 | COMM 2381 | 3 |
| Semester Totals | 16 hrs | 16 hrs |  |


| J unior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| Humanities/B.A. | 3 | Computational Intensive | 3 |
| Writing Intensive | 3 | Integrative | 3 |
| UD elective | 3 | Elective | 3 |
| UD elective | 3 | ECON 3320 | 3 |
| ECON 3310 | 3 | UD ECON | 3 |
| Semester Totals | 15 hrs | 15 hrs |  |

## Senior Year

| Elective | 3 | UD ECON | 3 |
| :--- | :--- | :--- | :--- |
| UD ECON | 3 | UD ECON | 3 |
| UD ECON | 3 | UD ECON | 3 |
| Elective | 3 | Elective | 4 |
| Elective | 3 |  |  |

Semester Totals 15 hrs 13 hrs
Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## ENGLISH

## Department of English <br> English Major (B.A.)

Program objectives for a B.A. in English are: (a) to develop skills in critical thinking, reading, and writing;
(b) have opportunities to consider the relationships among language, literature, culture, and writing; (c) to
concentrate study of these interrelated areas in one of four endeavors, each with its own particular focus: applied linguistics, creative writing, literature, and professional writing.
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements.
B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.

## C. The Major ( 36 hours)

1. Major Core: Completion of 21 semester hours in English courses (chosen with approval of departmental advisor), including ENGL 1010, 1020; 2201 or 2202 (these courses are included in the University General Education Program requirements), ENGL 3210, 3220, and 3327; one course from ENGL 3501, 3511, 3604, 3701, 4501, 4602 JW], 4604, 4605. Students in the Creative Writing Concentration must take either ENGL 4604 or 4605 . Students in the Professional Writing Concentration must take either ENGL 3604 or 4602 . (See Note 2.)
2. Concentration ( 12 hours)
a. African American Literature: 12 semester hours including ENGL 3325, 3326, 4372, and 4373.
b. Creative Writing Concentration: 12 semester hours including ENGL 3606 [W] and 3607 [W]; 6 hours in ENGL 4601, or 6 hours in ENGL 4603.
c. English As A Second Language Concentration: Choose 12 hours from ENGL 4101-4109 (only in ESL), 4530, 4531, 4532, 4533. With approval of advisor, a maximum of 6 hours in Language and Linguistics courses may be substituted for ESL courses.
d. Language and Linguistics Concentration: Choose 12 hours from ENGL 3501, 3511, 3521, 4501-4521 [I], 4540-4550.
e. Literature Concentration: Choose 6 hours from ENGL 3100-3119 (only in literature) 3211-3215, 3221-$3224,3325-3328,3701$, and 6 hours from 4001 (only in literature), 4230-4472, 4711 [I]. No more than 3 hours of ENGL 3325, 3326, 4372, and 4373 may be applied to the Literature concentration.
f. Professional Writing Concentration: Choose 12 hours including ENGL 3601 [W], 3602, one course from 4618 or 4619, and one course from 4101-09 (only in professional writing), 4602 [W], 4606-4615, 4616, 4618, 4619, 4630.
3. Electives: 3 hours of upper division ENGL courses.

Note the following:
(1) Students should see the English advisor who will explain the advantages of the various concentrations and assist students in developing an appropriate program of studies.
(2) Courses taken to satisfy the core requirements may not be used to satisfy concentration requirements. (3) No more than a total of six (6) hours in ENGL 3100-09, ENGL 4101-09, and 3 hours in ENGL 4900 may be applied to the English major.
(4) Students who wish to satisfy the requirements for both the English major and the endorsement to teach English in high school should consult the College of Education for licensure requirements.
(5) ENGL 3500 and 3603 may not be used to satisfy any requirement for the English major.
(6) ENGL 4900 and 4996 may not be used to satisfy required hours in any concentration.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## E. Honors Program

Honors sections of the required English courses on the freshman and sophomore levels (ENGL 1010, 1020, 2201, 2202) are offered through the University Honors program and are open to qualified students regardless of their major. On the junior and senior level, the Department of English offers an honors track open only to English majors, who are eligible to apply for admission to the program if they have a grade point average of 3.25 in their overall studies and in English. Honors students take special courses during their junior and senior years and write a senior honors thesis. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred With Honors in English. Moreover, the students diploma and the record at the University of Memphis will reflect this distinction. Details of the program are available at the English Department office.

## English Minor

Completion of 12 upper division hours in English (excluding ENGL 3500 and 3603).

## Typical 4-Year English Sequence

## Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| Humanities* | 3 | Nat. Sci./Math/B.A. | $3-4$ |
| MATH* $^{*}$ | $3-4$ | Humanities* | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | $15-16 \mathrm{hrs}$ |  | $15-16 \mathrm{hrs}$ |

## Sophomore Year



## Senior Year

| ENGL core elective | 3 | ENGL elective | 3 |
| :--- | :--- | :--- | :--- |
| ENGL conc. elective | 3 | ENGL conc. elective | 3 |
| Social Science/B.A. | 3 | Humanities/B.A. | 3 |
| Computation Intensive | 3 | Elective | 4 |
| Integrative | 3 |  |  |
| Semester Totals | 15 hrs |  | 13 hrs |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## ENVI RONMENTAL STUDI ES

## I nterdisciplinary Studies Office

## Environmental Studies Minor

The Interdisciplinary Environmental Studies Minor Program is intended to provide all students with the opportunity to obtain a broad-based knowledge of the environmental issues facing our planet, knowledge that spans both the biological-physical threats and solutions as well as behavioral-social-economic
implications. One core course (INTD 2100-Introduction to Environmental Studies) is required of all students.
The Minor: The student must pass INTD 2100 with a minimum grade of " C " and complete 5 additional environmentally related courses ( $15-20$ semester hours) from the two groups of courses listed below as approved by the university's Environmental Research, Issues, and Programs Committee (ERIPC). At least 2
courses must be selected from each group and 5 courses from 4 different departments.
GROUP 1: Environmental Sciences Emphasis: BIOL 3050 [W, C], 4050, 4053, 4054, 4055, 4056, 4057, 4060, 4450, 4640, 4644, 4651, 4740, 4744, 4745, 4900, CHEM 4001, CIVL 4143, 4144, ESCI 3221, 4214, 4231, 4251, 4515, PHYS 4420, INTD 4100-4110.
GROUP 2: Behavioral-Humanistic Emphasis: ANTH 4111, 4220, ECON 3580, ESCI 4201, 4431, HIST 4861,PHIL 3511, 3512, POLS 4200, SOCI 4641, INTD 4120-4130.
NOTE: Some of these courses may have prerequisites. In addition, Special Topics courses may be counted for credit in the interdisciplinary Environmental Studies minor, with the approval of the associate dean for Interdisciplinary Studies. The course may be offered with a regular department, or as either INTD 41004110 or INTD 4120-4130. Students taking ERIPC-approved courses that do not appear in the catalog will be given a letter to present to their graduation analyst indicating that those courses have been approved. Information pertaining to the minor and other environmental initiatives may be obtained in the Interdisciplinary Studies Program office in 107 Scates Hall.

## FOREI GN LANGUAGES

## Department of Foreign Languages and Literatures

## Foreign Languages Major (B.A.)

Program objectives for a B.A. in Foreign Languages are: (a) to develop functional control of the four fundamental language skills: listening, speaking, reading, and writing; (b) to expand and deepen knowledge of ancient and foreign cultures, civilizations, languages and literatures; (c) to increase awareness of the applications of various second languages to career objectives.
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements.

## B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.

## C. The Major (24-33 hours)

Successful completion of one of the following concentrations:

1. A single-language concentration in French, German, Latin, or *Spanish: 24 upper division semester hours.
2. A two-language concentration chosen from French, German, Greek, Italian, J apanese, Latin, Russian, and Spanish: 27 upper division semester hours with a minimum of 9 semester hours in each language.
3. A three-language concentration chosen from French, German, Greek, Italian, J apanese, Latin, Russian, and Spanish: All three language concentrations require prior consultation with the approval of the department chair. Plans will normally include at least 33 upper division semester hours to include at least 12 semester hours in each of two languages plus approved course work in a third language.
NOTE: With the approval of the Head of the Classics Section, up to 6 credit hours in upper division Classics courses may be applied toward a concentration in Greek or Latin.
Foreign Language majors who minor in International Business are encouraged to include Advanced Composition and Conversation ( 6 hours) and two courses for commerce ( 6 hours) as part of their major.

* Students with a single-language concentration in Spanish must take SPAN 4410 and 4510.


## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## E. Foreign Languages Minor

Completion of 18 semester hours consisting of (1) courses numbered 1020, 2010, and either 2020 or 2021 (or their equivalents) in the foreign language in which upper division hours are to be taken, and (2) 9 upper division semester hours in one of the following languages: Chinese, French, German, Greek, Italian, Japanese, Latin, Russian, or Spanish.

## Typical 4-Year French Concentration Sequence

| Freshman Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ENGL 1010 |  | 3 ENGL | 1020 | 3 |
| MATH* |  | 3-4 Nat. S | Sci./Math/B.A. | 3-4 |
| Social/Behavioral Science* |  | 3 Social | /Behavioral Science* | 3 |
| Elective |  | 3 Huma | nities* | 3 |
| FREN 2010 |  | 3 FREN | 2020 | 3 |
| Semester Totals |  | 15-16 hrs |  | 15-16 hrs |
| Sophomore Year |  |  |  |  |
| COMM 2381 | 3 | Elective | 3 |  |
| Elective | 3 | Elective | 3 |  |
| Natural Science* | 4 | Natural Science* | 4 |  |
| ENGL 2201 or 2202 | 23 | FREN 3302 | 3 |  |
| FREN 3301 | 3 | UD FREN | 3 |  |
| Semester Totals | 16 hrs | 16 hrs |  |  |
| J unior Year |  |  |  |  |
| History* | $3 \quad \mathrm{H}$ | History* | 3 |  |
| Humanities* |  | Fine Arts/B.A. | 3 |  |
| Elective |  | UD FREN | 3 |  |
| UD FREN | 3 S | Social Science/B.A. | 3 |  |
| Writing Intensive 3 |  | Elective | 3 |  |
| Semester Totals | 15 hrs | 15 hrs |  |  |
| Senior Year |  |  |  |  |
| Humanities/B.A. | 3 | UD FREN |  |  |
| UD FREN | 3 | UD FREN |  |  |
| UD elective | 3 | Integrative |  |  |
| Computation Intensive 3 |  | Elective |  |  |
| UD elective 3 |  |  |  |  |
| Semester Totals | 15 hrs |  | 13 hrs |  |
| Total Hours: 120-122 |  |  |  |  |
| Total Hours Required for Graduation: 120 <br> *Must satisfy University General Education Program Requirement |  |  |  |  |
| Typical 4-Year Spanish Concentration Sequence |  |  |  |  |
| Freshman Year |  |  |  |  |
| ENGL 1010 |  | 3 ENGL | 1020 | 3 |
| MATH* |  | 3-4 Nat. | Sci./Math/B.A. | 3-4 |
| Social/Behavioral Science*SPAN 2010 |  | 3 Socia | I/Behavioral Science* | 3 |
|  |  | 3 SPAN | 2020 | 3 |

The College of Arts and Sciences


## HISTORY

## Department of History

The Department of History introduces students to the richness and complexity of the human experience through a curriculum that covers all major geographic areas and time periods, and emphasizes both the unity of that experience and the diversity resulting from such factors as cultural, social, and gender differences. We seek to develop not only a knowledge of the past, but also an appreciation of history as an intellectual discipline that employs a wide variety of scholarly methodologies in its effort to understand that past. Students are taught to think and work as historians: to read critically and analytically both primary and secondary sources, to appreciate the complexity of historical issues and multiplicity of historical views, and to investigate a historical question or problem and communicate the results of that investigation. Through this broad preparation, history majors acquire essential knowledge and critical skills, which provide valuable assets for a wide spectrum of professions and occupations as well as the fundamental basis for advanced study. Program objectives for a B.A. in History are: (a) to have a fundamental knowledge of the past; (b) to have the ability to think historically: to comprehend continuity and change over time and to
understand events and ideas in terms of the variety of contexts giving those events and ideas meaning and significance; (c) to possess the ability to locate appropriate primary and secondary sources, assess those sources in a critical and analytical way, and use them to construct a coherent historical argument; to express a high degree of satisfaction with the quality of the education received in that program.
All candidates for graduation at the University of Memphis are required to complete History 2010 or 2020.
History Major (B.A.)
A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements.
B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.

## C. The Major ( 33 hours)

Completion of 33 semester hours in history courses, including HIST 1110, 1120, 2010, 2020, and 21 additional upper division semester hours. Of the 21 upper division hours required for the major, a maximum of 12 may be taken in any one field (United States, Latin American, Ancient/Byzantine, European, Russian, Far Eastern, Middle Eastern, African).

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## E. Honors Program

History majors who have attained junior standing, successfully completed six semester hours of lower division history, and maintained a grade point average of at least 3.25 in overall studies and in history courses taken, are eligible for admission to the honors program in history. Students admitted to the program must take 18 hours of honors work, at least 12 of which must be taken in upper division history courses after admission to the departmental program. These 12 hours must include HIST 4003 or 4999 and 4996. Those who successfully complete the program and the regular B.A. requirements will have their degree conferred "With Honors in History." The student's diploma and the record at the University of Memphis will be similarly endorsed. A detailed description of the program, together with application forms for admission, may be obtained in the History Department office.

## History Minor

Completion of 21 semester hours in history courses, including HIST 1110, 1120, 2010, 2020, and 9 additional upper division semester hours.

## Typical 4-Year History Sequence

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| MATH* | $3-4$ | Nat. Sci./Math/B.A. | $3-4$ |
| HIST 1110 | 3 | HIST 1120 | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Elective 3 | Social/Behavioral Sciences* | 3 |  |
| Semester Totals | $15-16$ hrs |  | $15-16$ hrs |

## Sophomore Year

| ENGL 2201 or 2202 | 3 | COMM 2381 | 3 |
| :--- | :--- | :--- | :--- |
| HIST 2010 | 3 | HIST 2020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Fine Arts/B.A. | 3 | Social/Behavioral Sciences* | 3 |
| Elective | 3 | UD elective | 3 |
| Semester Totals | 16 hrs | 16 hrs |  |


| J unior Year |  |  |  |
| :---: | :---: | :---: | :---: |
| Social Science/B.A. 3 |  | Elective | 3 |
| Humanities/B.A. 3 | 3 E | Elective | 3 |
| Elective 3 | 3 U | UD HIST | 3 |
| UD HIST 3 | 3 U | UD HIST | 3 |
| UD HIST 3 | 3 V | Writing Intensive | 3 |
| Semester Totals 15 | 15 hrs |  | 15 hrs |
| Senior Year |  |  |  |
| UD HIST | 3 | UD HIST 3 | 3 |
| UD HIST | 3 | UD elective 3 | 3 |
| Computation Intensive | ive 3 | UD elective 3 |  |
| Integrative | 3 | Elective 4 | 4 |
| Elective | 3 |  |  |
| Semester Totals | 15 hr |  | 13 hrs |
| Total Hours: 120 |  |  |  |
| Total Hours Required for Graduation: 120 |  |  |  |
| *Must satisfy University General Education Program Requirement |  |  |  |

## I NTERNATI ONAL STUDI ES

## Interdisciplinary Studies Office

The International Studies program provides the opportunity to bring the knowledge of several traditional disciplines to bear upon a focal point of human relationships and problems that cross national and cultural boundaries. The program objectives are designed to serve the student who seeks knowledge of the range of contemporary and possible future problems that confront international society and an understanding of alternative national and cultural perspectives on solutions to those problems. The program also serves the needs of students planning a career in the Foreign Service or related agencies of the federal government and students preparing for employment abroad in the private sector, or in international organizations, private or public.
The program emphasis is on the course work in history, political science, economics, and geography, with contributions from other social science disciplines and art. Within the program, the student is required to concentrate a part of the work in the field of American foreign policy or in one of five areas of the world. Students are encouraged to pursue the study of a foreign language and to seek opportunities for travel and study abroad. The student's program should be planned in consultation with the Director of International Studies.

## International Studies Major (B.A.)

A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements. Note the following is recommended for the International Studies major: Social Science - ECON 2120.
B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.
C. The Major ( 39 hours)

1. Core requirements ( 24 hours)
a. Select 15 hours from: ECON 4350, POLS 1501 or UNHP 1102, POLS 4508, HIST 4260, INTL 4601.
B. Select 3 hours from each group: International Political Processes - ANTH 4414, POLS 3505, 3509, 4317, 4504; I nternational Economic Processes - ECON 3580, 4340, ESC 3430, POLS 4510;
International Development Processes - ESCl 4203, SOCI 2100, 3940, 4641.
2. Concentration (9 hours)
a. Global Processes: Choose 3 courses in at least 2 disciplines

American Foreign Policy - HIST 3803, 3811, POLS 3506, 4506; Global Economics and Management - ECON 4351, FIR 4550, HPRM 4400, MGMT 4510, 4810, MKTG 4530, 4570, 4620, SLS 4135, 4165, 4175;

Global Conflict and Security - CJUS 4190, HIST 3817, JDST/UNIV 4511 or UNHP 4404, JDST/UNIV 4830, POLS 4315, 4511; Transnational Interactions and Issues - ANTH 4413, COMM 4375, ESCl 1401, SOCI 4413, UNIV 2860.
b. Area Studies: Choose 3 courses in at least 2 disciplines

Comparative Approaches and Issues - ANTH/ESCl 3200, CJUS 2110, ENGL 4440, 4511, 4521, ESCI 1301, PADM 4401, POLS 1301, SOCl 4631, UNHP 4250; Africa/ Middle East - ANTH 3242, 4120, HIST 3273, 3274, 3281, 3282 3280, 4272 , 4273, 4288, 4289, 4285, 4286, 4287, JDST/POLS 4820, POLS 3304, 3309; Asia - ECON 3010, ESCl 4307, HIST 3291, 4292, 4294, 4295, PHIL 3721, POLS 4307, 4312; Europe - ENGL 3220, HIST 3122, 3302, 3506, 4145, 4162, 4453, 4461, LALI 4442, 4493, POLS 3302; Latin America - ANTH 3232, HIST 3211, 3212, POLS 3306.
3. Foreign Language ( 6 hours)

In addition to the Bachelor of Arts language requirement, completion of an additional six hours in that same language at the 3000 level or higher.
D. Electives (21-22 hours)

Electives may be chosen to bring the total number of hours to 120.

## International Studies Minor

Completion of 18 semester hours, consisting of (a) POLS 1501, POLS 1301 or UNHP 1102, (b) INTL 4601, (c) one upper division course in a modern foreign language and (d) three upper division courses that count towards the IS major. A maximum of six hours from either study abroad or internship credits may be used towards fulfilling the requirements of the IS minor (subject to approval by the IS director).

## Asian Studies Minor

A minimum of 18 semester hours, including CHIN 2010 and 2020, or JAPN 2010 and 2020, 6 semester hours from CHIN 4301, HIST 3290, 3291, 4292, 4294, 4295, LAL 3401, or PHIL 3721, and 6 semester hours from ECON 3010, GEOG 4306, POLS 4307, 4312, or SOCI 4642.

## Typical 4-Year International Studies Sequence

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| Elective | 3 | Nat. Sci./Math/B.A | $3-4$ |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| MATH* | $3-4$ | Humanities* | 3 |
| POLS 1501 | 3 | ECON 2120, recommended | 3 |
| Semester Totals | $15-16 \mathrm{hrs}$ |  | $15-16 \mathrm{hrs}$ |

Sophomore Year

| History* | 3 | History* | 3 |
| :--- | :--- | :--- | :--- |
| Social Science/B.A. | 3 | Elective | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| UD Foreign Language | 3 | UD Foreign Language | 3 |
| Humanities* 3 COMM 2381 | 3 |  |  |
| Semester Totals | 16 hrs |  | 16 hrs |

## J unior Year

ENGL 2201 or 2202
3
Fine Arts/B.A.
3

The College of Arts and Sciences

| ECON 4350 | 3 | POLS 4508 | 3 |
| :---: | :---: | :---: | :---: |
| Elective | 3 | Elective | 3 |
| HIST 4260 | 3 | Inter. Econ. Processes | 3 |
| Inter. Pol. Processes | 3 | Inter. Dev. Processes | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |
| Senior Year |  |  |  |
| INTL 4601 [W,I] | 3 | INTL conc. elective | 3 |
| INTL conc. elective | 3 | INTL conc. elective | 3 |
| Humanities/B.A. | 3 | Computation Intensive | 3 |
| UD elective | 3 | Elective | 4 |
| Elective | 3 |  |  |
| Semester Totals | 15 hrs |  | 13 hrs |
| Total Hours: 120-122 |  |  |  |
| Total Hours Required for Graduation: 120 |  |  |  |
| *Must satisfy University General Education Program R |  |  | Requirem |

## Bornblum J udaic Studies (B.L.S.)

The Bachelor of Liberal Studies in Bornblum Judaic Studies is granted through University College and the program is administered through the College of Arts and Sciences.
Bornblum Judaic Studies explores the experience of the Jewish people within the contexts of world cultures. Non-theological in its orientation, it provides students the opportunity to study related areas, including the history of the Jewish people, the structures and politics of Jewish communities, the Hebrew and Arabic languages, and the religious, intellectual, and aesthetic traditions of the Jewish people.

## A. LOWER DIVISION CORE

Hebrew Language Core (12 hours): HEBR 1010, 1020, 2010, 2020
Religious Studies Core ( 3 hours): JDST 2850
B. UPPER DIVISI ON CORE ( 12 hours)

JDST 3801, 3802
C. UPPER DIVISION ELECTIVES ( 15 hours)

Jewish Heritage (Choose two or three): ENGL 4661; HIST 3275; JDST 3661, 4841, 4671
Israel (Choose one or two): JDST 4820, 4830, 4840
With the permission of the Director of Bornblum J udaic Studies, students may substitute the following courses for two courses listed under C, or they may be used as part of the electives listed below: JDST 4750-4799, 4990

## D. I NTERDI SCI PLI NARY ELECTIVES (9 Hours)

ANTH 4253; ARTH 4121; HIST 4272, 4320; PHIL 3701, 4711; POLS 3102; SOCI 3860
E. THEMATIC STUDIES ( 6 Hours)

UNIV 35xx, 45xx; it is recommended that two of the following courses be taken to complete the Thematic Studies requirement: UNIV 3850, 3581; JDST 4511

## F. Special Project ( 6 or 9 Hours)

UNIV 4990, 4995
Judaic Studies Minor
The minor in Judaic Studies is designed to provide students in any department in the University with a sense of the origins and foundations of Western values and traditions. There is no Hebrew language requirement for the minor.
REQUI REMENTS FOR J UDAIC STUDIES MINOR
A. Lower Division Core ( $\mathbf{3}$ hours): JDST 2850
B. Upper Division Core ( 3 hours): JDST 3201, 3202, 3801, 3802
C. Upper Division Electives ( 6 hours): J ewish Heritage (3 hours): UNIV 3580; JDST 4551, 4661, 4671, 4511; Israel (3 hours): JDST 4820, 4830, 4840
D. General Electives ( 6 hours)

ARTH 4121; POLS 3102; UNIV 3580; SOCI 3860; ENGL 4461; PHI L 4711
With the permission of the Director of Bornblum J udaic Studies, students may substitute up to two courses in any category listed above. Such courses will have substantial Judaic Studies content.

## LEGAL THOUGHT AND LIBERAL ARTS <br> I nterdisciplinary Studies Office <br> Legal Thought and Liberal Arts Minor

The minor in Legal Thought and Liberal Arts is designed to provide an interdisciplinary liberal arts program for students in any major who intend to enter the legal profession. The minor will be of particular benefit to pre-law students whose majors are more professional in nature and who are not exposed to the broader liberal arts curriculum. Students will be introduced to major intellectual traditions of the West and to ethical, social, and economic issues of significance to our time. The courses in the minor require that students read critically, think logically, and write clearly - attributes required of persons in the legal profession. Students wishing to minor in Legal Thought and Liberal Arts should contact the pre-professional advisor in room 107 Scates Hall.

The Minor: 18 semester hours of required courses and electives:
A. Required Core Course: PHIL 1611 and either ENGL 3604 or 4602.
B. Electives: Select one course from four of the following five groups (each course chosen must be from a different group:

1. Economic Context of the Law: ECON 2110, 2120, 3411, 4130.
2. Historical Context of the Law: HIST 3121, 3506, 3840.
3. Practical Foundations of J urisprudence: CJ US 3510, 4521; POLS 3219, 4212, 4405, 4504, 4521.
4. Theoretical Foundations of Jurisprudence: PHIL 3411, 3511, 3514, 4551; POLS 3401, 3402, 3405; UNIV 3580.
5. Critical Reading and Thinking: any 4000-level English literature (ENGL 4231-4471) course, or ENGL 4602 (if not taken as the core), or any upper-division philosophy course not listed above.

NOTE: Some of these courses may have prerequisites. Students are responsible for obtaining permission from the instructor to enroll in the course if they have not fulfilled those prerequisites.

## MATHEMATI CAL SCI ENCES

Department of Mathematical Sciences
Mathematical Sciences Major (B.S.)
Program objectives for a B.S. in Mathematical Sciences are: (a) to offer modern instructional programs which prepare students for future careers in academics, business, industry, or any scientifically-oriented field; (b) to have our graduated compare favorably in their understanding of the basic mathematical curriculum with students completing similar programs nationally; (c) to have our graduates possess substantial understanding of the role of the computer in modern mathematical sciences, and skill in applying that understanding.
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Note the following requirements specified for the Mathematical Sciences major: Mathematics: MATH 1910; Natural Science: CHEM 1110/1111, 1120/1121, or PHYS 2110/2111, 2120/2121.
B. College and Degree Requirements (15-16 hours)

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed above.

## C. The Major (35-36 hours in addition to University General Education Program and B.S. degree requirements)

## 1. Major Core ( 14 hours):

Completion of MATH 1910 (this course is included in the University General Education Program requirements), MATH 1920, 2110, 2702, and 3242 [C] (majors are encouraged to consider the departmental honors program described below); plus the following courses: CHEM 1110/1111, and 1120/1121 or PHYS 2110/2111, 2120/2121 (these courses are included in the University General Education Program requirements).
2. Concentration ( $21-22$ hours):
a. Mathematics (21-22 hours): COMP 1900 or COMP 4001 and 18 semester hours of upper division courses with departmental approval. The following are examples of approved course selections.
(1) Applied Mathematics: MATH 3120, 4391, 4635, 4721, and six upper division hours from the following: MATH 3221, 4242, 4261, 4350 [W], 4351, 4361, 4392, 4640.
(2) General Mathematics: MATH 3120, 4350 [W], 4261, 4635, and 6 upper division hours chosen from: MATH 3221, 4242, 4351, 4361, 4391, 4411, 4636 [W], 4721.
(3) Graduate Study in Mathematics: MATH 4261, 4350 [W], three courses chosen from: MATH 4242, 4351, 4361, 4411, and one additional course from: MATH 3120, 3221, 4242, 4351, 4361, 4391, 4411, 4635.
(4) Teacher Licensure in Secondary Education: MATH 3221, 3581, 4151, 4261, 4635, and either MATH 4636 [W], or 4637.
NOTE: All approved programs will include no more than 9 semester hours chosen from MATH 4607, 4635, 4636, 4637, 4640. Students are encouraged to work with their advisors to plan their programs.
b. Statistics ( 21 hours): COMP 4001, MATH 4635, 4636 [W], 4640, and one of MATH 4607 or 4637, and 6 additional upper division hours chosen from: MATH 3120, 4242, 4261, 4350 [W], 4351, 4361, 4391, 4551, 4607, 4637, 4721.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## E. Honors Program

The Department of Mathematical Sciences offers an honors program in Mathematics and Statistics for the talented student. The student must satisfy the following course requirements with a minimum GPA of 3.50 in all MATH courses: The major with honors in Mathematical Sciences: 37 semester hours in MATH courses, including MATH 1421, 2421, 2422, 3402, 4402; plus the following courses applicable to the degree: CHEM 1110/1111, 1120/1121, or PHYS 2110/2111, 2120/2121; and completion of one of the two areas of concentration described above.
Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degrees conferred "With Honors in Mathematical Sciences." Moreover, the student siploma and record at the University of Memphis will reflect this distinction.
F. Second Major in Mathematical Sciences for majors in Chemistry, Computer Science, Economics, Engineering, and Physics ( $\mathbf{3 0}$ hours)
Twenty-four (24) semester hours in MATH courses including MATH 1910, 1920, 2110 (4), 3120, 3242, and 6 semester hours in upper division MATH courses approved by the department, and 6 additional hours of mathematically related courses also approved by the department.
Mathematical Sciences Minor
A minimum of 21 semester hours, including MATH 1910 (4), 1920 (4), 2110, plus 9 additional upper division semester hours in MATH courses approved by the department.

## Typical 4-Year Mathematical Sciences Sequence

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| MATH 1910 | 4 | MATH 1920 | 4 |
| Social/Behavioral Sciences* | 3 | Natural Science* | 4 |
| Elective | 3 | Foreign Language/B.S. | 3 |
| Foreign Language/B.S. 3 |  |  |  |
| Semester Totals | 16 hrs |  | 14 hrs |


| Sophomore Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| History* |  | 3 H | History* | 3 |
| ENGL 2201 or 2202* |  | 3 M | MATH 2702 | 3 |
| MATH 2110 |  | 4 C | COMM 2381 | 3 |
| Natural Science* |  | 4 H | Humanities* | 3 |
| Social/Behavioral Sciences* |  | * 3 | Elective | 3 |
| Semester Totals |  | 17 hrs |  | 15 hrs |
| J unior Year |  |  |  |  |
| MATH 3242 [C] | 3 | UD MATH | 3 |  |
| Social Science/B.S. | S. 3 | Humanities | ** 3 |  |
| COMP 4001 | 3 | Writing Int | ntensive 3 |  |
| Humanities/B.S. | 3 | Elective | 3 |  |
| Integrative | 3 | UD MATH | 3 |  |
| Semester Totals | 15 hrs |  | 15 hrs |  |
| Senior Year |  |  |  |  |
| UD MATH | 3 U | UD MATH | 3 |  |
| UD MATH | 3 U | UD MATH | 3 |  |
| Elective | 3 U | UD elective | 3 |  |
| Elective | 3 U | UD elective | 3 |  |
| UD elective | 3 El | Elective | 1 |  |
| Semester Totals | 15 hrs |  | 13 hrs |  |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## PHI LOSOPHY

## Department of Philosophy

## Philosophy Major (B.A.)

Program objectives for a B.A. in Philosophy are: (a) to acquire fundamental knowledge reflecting the subdivisions within the discipline; (b) to express a high degree of satisfaction with the program and instruction within the department; (c) to be able to demonstrate skills which will be beneficial in further study or in their career paths.
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements.
B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.
C. The Major ( 30 hours)

Completion of 30 semester hours in philosophy courses including PHIL 1101 or 1102, 1611, 3001, 3002, 3411 or $3511[\mathrm{~W}]$ and 15 additional upper division semester hours.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## E. Honors Program

This program is open to philosophy majors with a 3.0 overall average and a 3.5 average in philosophy. The student will complete, with a minimum grade of "B", a thesis submitted for credit in PHIL 4891. The thesis topic must be approved by the thesis director before the student registers for PHIL 4891.
Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred With Honors in Philosophy. Moreover, the students diploma and record at the University of Memphis will reflect this distinction.

## Philosophy Minor

Completion of 18 semester hours in philosophy courses, including PHIL 1101 or 1102, 1611, and 12 upper division semester hours. In consultation with the coordinator of undergraduate studies in philosophy, a student may design a minor (18 hours) that applies to the student major area of study.

## Typical 4-Year Philosophy Sequence

| Freshman Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENGL 1010 | 3 | ENGL 1020 |  |  | 3 |
| Foreign Language/B.A. | . 3 | Foreign Language/B.A. |  |  | 3 |
| MATH* | 3-4 | Fine Arts Heritage/B.A. |  |  | 3 |
| PHIL 1101 or 1102 | 3 | Social/Behavioral Sciences* |  |  | 3 |
| Elective | 3 | Nat. Sci./Math/B.A. |  |  | 3-4 |
| Semester Totals | 15-16 hrs |  |  |  | 15-16 hrs |
| Sophomore Year |  |  |  |  |  |
| ENGL 2201 or 22023 |  | Social/Behavioral Sciences* |  | 3 |  |
| History* 3 | 3 | History* |  | 3 |  |
| PHIL 1611 | 3 | Humanities/B.A. |  | 3 |  |
| PHIL 3001 | 3 | PHIL 3002 |  | 3 |  |
| Natural Science* 4 | 4 | Natural Science* |  | 4 |  |
| Semester Totals 16 | 16 hrs |  |  | 16 hrs |  |
| J unior Year |  |  |  |  |  |
| Social Science/B.A. | 3 | Humanities* |  |  |  |
| COMM 2381 | 3 | Elective | 3 |  |  |
| PHIL 3411 or 3511 [W] | ] 3 | UD PHIL | 3 |  |  |
| UD PHIL | 3 | UD elective | 3 |  |  |
| UD PHIL | 3 | Elective | 3 |  |  |
| Semester Totals | 15 hrs |  | 15 hrs |  |  |
| Senior Year |  |  |  |  |  |
| Elective | 3 | UD Elective 3 |  |  |  |
| UD PHIL | 3 | UD PHIL | 3 |  |  |
| Integrative | 3 | UD elective 3 | 3 |  |  |
| Computation Intensive | 3 | Elective | 4 |  |  |
| Elective | 3 |  |  |  |  |
| Semester Totals | 15 h | hrs | 13 hrs |  |  |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## PHYSICS

## Department of Physics <br> Physics Major (B.S.)

Program objectives for a B.S. in Physics are: (a) to demonstrate a broad understanding of the disciplines encompassing the undergraduate physics curriculum as is generally accepted by physics professionals; (b) to be able to successfully demonstrate competence in the application of the concepts and principles of physics, including the necessary background in mathematics and related fields; (c) to be well prepared for entrance into a graduate or professional degree program, or for career choices.
A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements. Note the following requirements specified for the Physics major: Mathematics - MATH 1910; Natural Science - CHEM 1110/1111, 1120/1121.

## B. College and Degree (B.S.) Requirements (18-19 hours)

The College and Bachelor of Science requirements are in addition to the University General Education Program requirements and are listed above.

## C. The Major: ( 44 hours in addition to University General Education Program and B.S. degree requirements)

Completion of PHYS 2110/2111, 2120/2121 (PHYS 2010/2011, 2020/2021 are acceptable, but not recommended), PHYS 2515, 3010, 3011, 3111, 3211, 3610, 3611, 4410, 4510, and six upper division hours of electives; CHEM 1110/1111, 1120/1121 (these courses are included in the University General Education Program requirements); MATH 1910 (this course is included in the University General Education Program requirements), MATH 1920 (this course is included in the B.S. degree requirements), MATH 2110, 3120, or equivalent courses.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## E. Dual-Degree Programs

Highly motivated and talented students may pursue an undergraduate degree (B.S.) in Physics followed by a graduate (M.S.) in either Physics or Biomedical Engineering in a special five-year program. This option requires serious commitment, careful planning with the student's advisor, and summer research work leading toward a Master's thesis. Students interested in pursuing this option should contact an
undergraduate advisor in the Physics department.

## F. Second Major for Engineering Students

A total of twenty-nine (29) semester hours beyond PHYS 2110/2111 and PHYS 2120/2121, many of which will count toward the engineering degree or are already required by the engineering major. Since Biomedical, Civil, Computer, and Mechanical engineering students take different courses to satisfy their degree requirements, the program for the second major in physics is different for each engineering discipline. For details, please contact the Department of Physics or the Physics web site at: http://physics.memphis.edu/Academics/UGProgram.htm

## G. Second Major for the Bachelor of Science Degree

A total of twenty-nine (29) semester hours beyond PHYS 2110/2111 and PHYS 2120/2121, many of which are already required by the primary major. Since the students in each B.S. degree-granting department take different courses to satisfy their degree requirements, the program for the second major in Physics is different for each discipline. For details, please contact the Department of Physics or check the Physics website at: http://physics.memphis.edu/ and click on Undergraduate Studies.

## Physics Minor

Completion of 20 semester hours in physics courses, including PHYS 2110/2111, 2120/2121 (PHYS 2010/2011, 2020/2021 are acceptable but not recommended), PHYS 2115, and nine additional upper division hours.

Typical 4-Year Physics Sequence

| Freshman Year   <br> PHYS 2110/2111 4 PHYS 2120/2121 | 4 |  |  |
| :--- | :--- | :--- | :--- |
| MATH 1910 | 4 | MATH 1920 | 4 |
| Foreign Language/B.S. | 3 | Foreign Language/B.S. | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Elective | 3 | COMM 2381 | 3 |
| Semester Totals | 17 hrs |  | 17 hrs |

## Sophomore Year

| PHYS 2515 | 3 | PHYS 3011 | 3 |
| :--- | :--- | :--- | :--- |
| MATH 2110 | 4 | MATH 3120 | 3 |
| Social/Behavioral Sciences* | 3 | Humanities* | 3 |
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
|  |  | Social/Behavioral Sciences* | 3 |

Semester Totals 14 hrs 16 hrs

| Junior Year   <br> PHYS $3010[C]$ 3 PHYS 3111 [C] | 3 |  |  |
| :--- | :--- | :--- | :--- |
| PHYS 3211 | 3 | Elective | 3 |
| PHYS 3610 | 1 | PHYS 3611 | 1 |
| History* | 3 | History* | 3 |
| UD elective | 3 | Humanities* | 3 |
| ENGL 2201 or 2202 | 3 |  |  |

Semester Totals 16 hrs 13 hrs

| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| PHYS 4410 | 3 | PHYS 4510 [W] | 3 |
| UD PHYS | 3 | UD PHYS | 3 |
| UD elective | 1 | Humanities/B.S. | 3 |
| Elective | 2 | Integrative | 3 |
| Social Science/B.S. | 3 | UD elective | 3 |

Semester Totals 12 hrs 15 hrs

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## POLITI CAL SCI ENCE

## Department of Political Science

 Political Science Major (B.A.)Program objectives for a B.A. in Political Science are: (a) to demonstrate a broad understanding of the discipline; (b) to be able to engage in critical thinking and analysis, understand events and ideas in terms
of a variety of contexts that give those events and ideas meaning and significance, use logic and evidence to construct and defend a position, and communicate their argument in written and oral form; (c) to possess the ability to locate appropriate primary and secondary sources, assess those sources in a critical and analytical way, and use them to construct a coherent argument.
A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements. B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.

## C. The Major ( 36 hours)

For the purposes of defining undergraduate requirements for the political science major and minor, the department employs four subfields, with the following courses in each:
American Government and Politics: POLS 1100, 3211, 3213, 3215, 3216, 3217, 3218, 3219, 3220, 3405, 3601. 4200, 4222, 4223, 4226, 4701.

Comparative Politics: POLS 1301, 3302, 3304, 3306, 3309, 4305, 4307, 4312, 4315, 4317, 4820.
International Relations: POLS 1501, 3505, 3506, 4504, 4506, 4508, 4510, 4511.
Political Theory: POLS 1101, 1102, 3102, 3401, 3402, 4211, 4212, 4401, 4405, 4415, 4416.
Students must complete POLS 1100 and 4101.
Students must complete at least 6 hours in each of the four subfields listed above.
No more than 9 hours of internship (POLS 4230, 4231), mock trial (POLS 4709), research and study abroad (POLS 4399), and independent study (POLS 4702) combined may be counted toward the 36 hours required for a major in Political Science.
At least 15 hours in political science must be earned in residence at the University of Memphis.
NOTE: Students who have successfully completed an equivalent social statistics course prior to declaring a Political Science major are exempted from the requirement to take POLS 4101, and must substitute another upper-division course in Political Science.
NOTE: The department offers Pre-Law advising for those interested in careers in law. Also, any major in Political Science may earn a second major in International Studies. Political Science courses in International Relations and Comparative Politics fulfill requirements for both the Political Science major and the interdisciplinary major in International Studies.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## E. Honors Program

The department offers an honors program to qualified majors who choose to pursue a more sophisticated knowledge of the discipline, a more rigorous level of analysis, and a deeper understanding of politics. Students who have completed 55 hours of course work (with at least 9 hours in Political Science) and have a minimum over-all grade point average of 3.0 (with a minimum in Political Science of 3.25), or who can present equivalent qualifications, are invited to apply for admission to the program. The program requires 18 hours of honors course work, 12 or more of which must be upper-division Political Science courses, and minimum final grade point averages of 3.00 overall, 3.25 in Political Science, and 3.25 in honors coursework. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degrees conferred $\rangle$ With Honors in Political Science. Moreover, the students diploma and the record at the University of Memphis will reflect this distinction. Details of the program are available in the Political Science Office.

## Political Science Minor

To complete the minor in Political Science, a student must earn 18 hours in political science discipline to the following conditions: a) students must complete at least 3 hours each in three of the four area listed above; b) students must complete at least 9 hours in courses at the 3000 -level or higher; c) no more than 6 hours of internship (POLS 4230, 4231), mock trial (POLS 4709), research and studies abroad (POLS 4399), and independent study (\{POLS 4702) combined may be counted toward the 18 hours required for a minor in Political Science.

## Typical 4-Year Political Science Sequence

## Freshman Year

The College of Arts and Sciences

| MATH* | $3-4$ | Nat. Sci./Math/B.A.* | $3-4$ |
| :--- | :--- | :--- | :--- |
| POLS 1100 | 3 | POLS 1501 | 3 |
| Elective | 3 | POLS 1101 | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Semester Totals | $15-16 \mathrm{hrs}$ | $15-16 \mathrm{hrs}$ |  |


| Sophomore Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202 | 3 | Fine Arts/B.A. | 3 |
| History* | 3 | Natural Science* | 4 |
| Natural Science* | 4 | POLS 4212 or 4405 | 3 |
| POLS 1301 | 3 | Social Science/B.A. | 3 |
| POLS 1102 | 3 | COMM 2381 | 3 |
| Semester Totals | 16 hrs |  | 16 hrs |


| J unior Year |  |  |  |
| :---: | :---: | :---: | :---: |
| Humanities/B.A. | 3 | UD POLS | 3 |
| Elective | 3 | UD POLS | 3 |
| UD POLS | 3 | UD POLS | 3 |
| UD POLS | 3 | Integrative | 3 |
| POLS 4101 [C] | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| Elective | 3 | Writing Intensive | 3 |
| Elective | 3 | UD elective | 3 |
| Elective | 3 | UD elective | 3 |
| UD elective | 3 | Elective | 4 |
| UD elective | 3 |  |  |

Semester Totals 15 hrs 13 hrs
Totals Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## PSYCHOLOGY

## Department of Psychology

Psychology Major (B.A.)
Program objectives for a B.A. in Psychology are: (a) to provide an introduction and basic grounding in scientific psychology, to allow students to make a preliminary assessment of interest in further training in the field; (b) to obtain a strong background in psychology as a basis for graduate study in the field.
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements.
B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program
requirements and are listed above.
C. The Major ( 35 hours in addition to University General Education Program requirements)

1. Completion of PSYC 1200 (or 1101 and 1102), 3000 (4) [W], 3001 (4) [C], 4101 [I]. In addition, all majors must take the Psychology Field Test during their senior year.
2. Concentrations ( 18 hours):
a. Behavioral Neuroscience: PSYC 3101, 3306, 3507, 4505, 4506, and 4997 (Thesis), and 3 additional hours in PSYC courses.
b. General Psychology: Completion of at least one course each from the PSYC 3100, 3300, and 3500 series; and 12 additional hours in PSYC courses.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## E. Honors Program

The Honors Psychology Program requires twelve to eighteen hours of Honors work in the major. Students who complete the program with a 3.25 cumulative grade point average will earn degrees that include the distinction With Honors in Psychology. However, all students who have a 3.25 cumulative grade point average can take advantage of a variety of educational opportunities through the Psychology Honors Program. These include enrolling in psychology honors classes (when offered); negotiating honors contracts for individually selected psychology classes; and, conducting an honors thesis in psychology. Students who do not meet the 3.25 cumulative GPA requirement can also obtain specific instructor permission to enroll in an honors class, negotiate an honors contract, or conduct an honors thesis.
Psychology Honors Classes. (1) PSYC 1200 honors section of General Psychology. (Students who wish to enroll in this course during their first year can do so either by meeting the requirements for the University Honors Program or by instructor permission); (2) PSYC 4032 honors section of Research Methodology; (3) PSYC 4305 Mind, Brain, and Intelligence, Honors; (4) PSYC 4016 Social Psychological Applications to Clinical Psychology, Honors; (5) PSYC 404X Honors Special Topics; (6) periodically offered honors sections of other courses in the psychology curriculum.
Psychology Honors Contracts. Student can ask the instructor of any psychology course to negotiate an honors contract, in which the instructor and student agree on additional honor-level requirements for the course.
Psychology Honors Senior Thesis. Students can ask a psychology faculty member to serve as adviser for PSYC 4996 (Honors Senior Thesis), typically completed during the student $\geqslant$ s last semester. Before enrolling in PSYC 4996, it is recommended that the student complete at least one semester of PSYC 4504 (Directed Research) under the same faculty adviser who will oversee work in the honors thesis.
Please see the department honors coordinator for more detailed information about the Psychology Honors Program. Psychology majors may also be eligible to participate in the University Honors Program, described elsewhere in this catalog. Some psychology honors courses overlap with courses offered through the University Honors program.

## Psychology Minor

Completion of 20 semester hours in psychology, including PSYC 1200, 3000, 3001 (or equivalent), and 9 additional hours.

## Typical 4-Year Psychology Sequence

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| MATH* $^{*}$ | $3-4$ | Nat. Sci./Math/B.A. | $3-4$ |
| PSYC 1200 | 3 | PSYC 1300 (suggested) | 3 |
| Elective | 3 | Humanities* | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Semester Totals | $15-16 \mathrm{hrs}$ |  | $15-16 \mathrm{hrs}$ |

## Sophomore Year

PSYC 3000 [W] 4 PSYC 3001 [C] 4

The College of Arts and Sciences


## PUBLI C ADMI NI STRATI ON

## School of Urban Affairs and Public Policy

## Division of Public and Nonprofit Administration

## Public Administration Minor

For a minor in Public Administration, the student must complete 18 hours in Political Science and Public Administration, including POLS 1100, PADM 3601, and PADM 4221. Additionally, the student should complete 9 hours from among the following: POLS 3211, POLS 3213, PADM 4101, POLS 4222, POLS 4224, PADM 4226, PADM 4231, PADM 4412, or PADM 4710-19.

## Nonprofit Management Minor

The Division of Public and Nonprofit Administration offers an interdisciplinary minor in Nonprofit Management which includes courses that address competencies necessary for work in nonprofit organizations. The minor is open to students majoring in any department in the University or to special students who wish to enroll in order to take such a program.
Students who complete this minor and specified co-curricular activities will be eligible for certification in Nonprofit Management and Leadership by American Humanics, a certification program that builds competencies in nonprofit administration through coursework, internships, volunteer opportunities, student association leadership activities and professional development workshops.
The Minor: 18 semester hours of required courses and electives.

1. Nonprofit Management and Program Planning (3 hours): PADM/POLS 4226, ANTH 4412
2. Accounting and Financial Management ( 3 hours): ACCT 2010 or PADM 4227
3. Human Resource Development and Supervision (3 hours): POLS 3601/ PADM 3601; MGMT 3110
or MGMT 3215
4. Communication Skills ( 3 hours): COMM 4342, COUN 4621, MGMT 4420 or SWRK 3902
5. Nonprofit Context ( 3 hours): ANTH 4412, ART 3411, CSED 3302, EDPR 2111, EDSV 3350, PADM 4412, PSYC 3103, SOCl 4923, or SWRK 2911
6. Nonprofit Organizations ( 3 hours): PADM 4231or SWRK 4830/4831

## SOCI AL WORK

## School of Urban Affairs and Public Policy Division of Social Work

The main goal of the baccalaureate social work program is to prepare students for entry level generalist practice. A secondary goal is to provide a strong foundation for students who wish to pursue social work education at the graduate level. Social service and life experiences may not be substituted for any social work course. The social work program is accredited by the Council on Social Work Education.

## Social Work Major (B.A.)

Program objectives for a B.A. in Social Work are: a) apply critical thinking skills within the context of professional social work practice; (b) understand the value base of the profession and its ethical standards and principles, and practice accordingly; (c) practice without discrimination to needs of diverse clientele; (d) apply strategies of advocacy and social change that advance social and economic justice.

## A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Students majoring in Social Work must take SOCI 3422 to fulfill part of the University General Education American Heritage requirement.

## B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.
Students majoring in Social Work must take PHIL 1611 to fulfill the B.A. Mathematics/Natural Sciences requirement prior to taking SOCI 3311 and SWRK 3930.
C. The Major ( 38 hours in addition to University General Education Program requirements) Completion of SWRK 2910, 2911, 3902, 3903, 3904, 3906, 3920, 3930, 4830, 4831(4), 4840(2) [1], 4841 (2) [I]. BIOL 1010/1011, BI OL 1020/1021, ANTH 1200 (included in the University General Education Program requirements), and SOCI 3311 [C] are required.
NOTE: Successful student progression requires each student to earn a minimum grade of C in all required courses for the social work major. Students repeating two required classroom courses for the major or field instruction will have an academic review by division faculty in the term following the second course repetition. Although students may declare a social work major at any point in their matriculation, students should have a minimum of 40 hours completed including ENGL 1020, ANTH 1200, and two courses from the following list: SOCl 1111; PSYC 1200; POLS 1100; or ECON 2120 before entering the introductory social work courses, SWRK 2910 and SWRK 2911.

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## Social Work Minor

Completion of 18 semester hours in sociology and social work courses including SOCI 1111, SWRK 2910, and 2911, and 9 additional upper division hours in social work courses.

## Typical 4-Year Social Work Sequence

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| MATH* $^{*}$ | $3-4$ | PHIL 1611 | 3 |
| ANTH 1200 | 3 | Humanities* | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Elective | 3 | Social/Behavioral Sciences* | 3 |
| Semester Totals | $15-16$ hrs |  | 15 hrs |



Total Hours: 120-120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## SOCI OLOGY

## Department of Sociology

## Sociology Major (B.A.)

Program objectives for a B.A. in Sociology are: (a) an understanding of and competence in the major theories, statistical techniques, and methodological approaches of sociology; (b) development of theoretical, substantive, and methodological knowledge to conduct research projects or participate in applied research projects; (c) participation in an internship or discipline related experiences; (d) preparation for employment in a sociology-related field or advanced study in sociology or other graduate field.
A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements. B. College and Degree (B.A.) Requirements (18-19 hours)

The College and Bachelor of Arts requirements are in addition to the University General Education Program requirements and are listed above.
C. The Major ( $\mathbf{3 0}$ hours)

Completion of 30 semester hours in sociology, including SOCI 1111, 3311 [C], 3322, 4210 or 4211, 4998
[W,I] for Honors students, or 4999 [W,I] .

## D. Electives

Electives may be chosen to bring the total number of hours to 120.

## E. Honors Program

The Honors Program in Sociology requires 18 hours of honors work, at least 12 hours of which must be upper-division sociology courses. To complete the Honors Program, a student must have a minimum overall final grade point average of 3.00 in Sociology, and a 3.25 grade point average in honors course work. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred $\geqslant$ With Honors in Sociology. $\rangle$ Moreover, the students diploma and the record at the University of Memphis will reflect this distinction. Please see the department's Faculty Honors Advisor for more details on the program.

## Sociology Minor

Completion of 18 semester hours in sociology, including SOCI 1111.

## Typical 4-Year Sociology Sequence

## Freshman Year

| SOCI 1111 | 3 | Humanities* | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH* $^{\text {F }}$ | $3-4$ | Nat. Sci./Math/B.A. | $3-4$ |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| Elective | 3 | Social/Behavioral Sciences* | 3 |
| Semester Totals | $15-16$ hrs | $15-16$ hrs |  |

Sophomore Year

| ENGL 2201 or 2202 | 3 | SOCI $3311[C]$ | 3 |
| :--- | :--- | :--- | :--- |
| History* | 3 | Humanities* | 3 |
| Elective | 3 | History* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 16 hrs | 16 hrs |  |


| Junior Year <br> SOCI 3322 | 3 | SOCI 4210 or 4211 | 3 |
| :--- | :--- | :--- | :--- |
| UD SOCI | 3 | UD SOCI | 3 |
| Elective | 3 | UD SOCI | 3 |
| UD elective | 3 | UD elective | 3 |
| COMM 2381 | 3 | Fine Arts/B.A. | 3 |

Semester Totals 15 hrs 15 hrs

| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| UD SOCI | 3 | SOCI 4999 W,I] | 3 |
| Humanities/B.A. | 3 | UD SOCl | 3 |
| Elective | 3 | UD SOCI | 3 |
| Writing Intensive | 3 | Elective | 4 |
| Social Science/B.A. | 3 |  |  |
| Semester Totals | 15 hrs | 13 hrs |  |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## WOMEN'S STUDI ES <br> I nterdisciplinary Studies Office

This minor is designed to expose students to multidisciplinary approaches to racially diverse women仓s lives. Students therefore take courses from both the humanities and social sciences, and study issues of racial diversity as well as gender.
A. The Minor

18 semester hours, 9 hours from the core and 9 hours from the list of approved electives.
B. Core (9 hours)

HIST 3881 or SOCI 4460; PHIL 3452; WMST 2100.
C. Electives ( 9 hours)

Select one course from each of the following groups:

1. Womens Issues Across Time and Place: ANTH 3511, 4551; HIST 4289, 4831, 4851; SOCI 3432.
2. Cultural Studies: COMM 4373, 4856; ENGL 3325, 3326, 4372, 4373, 4451; SLS 4125.
3. Diversity Among Women: HIST 4882; PHIL 3741; POLS 4415, 4416; SOCI 3401, 3420, 3422, 4420.

With approval from the Director of Women studies, a special topics course may be substituted for an elective in each group.

## AEROSPACE STUDI ES

The Department of Aerospace Studies provides a four-year program of instruction for all qualified U.S. citizens, male and female, divided into two phases, each of two years duration. The first, termed the General Military Course, offers instruction in the foundation of leadership and Aerospace-age citizenship. The second, termed the Professional Officer Course, builds upon these foundations in developing upperclassmen who are to become Air Force officers and serve on active duty upon graduation and commissioning. Students may apply for the two-year or four-year program, or they may enroll one year before applying for the two-year program.
Instruction in Aerospace Studies has been an important phase of the curriculum at the University of Memphis since 1951. Active duty Air Force personnel, approved by the University president, are detailed by the Department of the Air Force to administer the instructional program. Air Force officers serve under appointment by the University as Professor or Assistant Professor of Aerospace Studies.

## THE GENERAL MI LITARY COURSE (GMC)

The two-year (4 semesters) General Military Course consists of one hour a week of classroom instruction and one and one-half hours a week in Leadership Laboratory. Textbooks are furnished by the Air Force without charge. Air Force uniforms are furnished and must be properly worn and kept in good condition. Cadets who successfully complete the GMC may apply for admission to the Professional Officer Course. THE PROFESSI ONAL OFFICER COURSE (POC)
The Professional Officer Course provides instruction and systematic training to selected eligible students who desire to qualify as officers in the United States Air Force while pursuing their academic studies at the University. Successful completion of the requirements for the POC and for a baccalaureate degree leads to a commission in the United States Air Force as a Second Lieutenant. To be eligible for selection to the POC, a student must have at least two years remaining at the University (undergraduate, graduate, or a combination). Final selection is based on academic standing, leadership potential, percentile score on the Air Force Officer Qualifying Test, and physical qualifications. All eligible POC members receive an incentive payment of up to $\$ 1,700$ per semester which is applied toward University tuition and textbook costs. In addition, members are furnished ROTC course textbooks without charge, receive a subsistence allowance of $\$ 200.00$ per month and are issued uniforms provided by the Air Force.
THE TWO-YEAR PROGRAM
All students who meet qualifying criteria may apply for selection to the Professional Officer Course under the Two-Year Program if they are not in the Four-Year Program. Processing of applications for the POC
begins in the fall of each year. Application may be submitted through March 15. If selected, the student will attend a five-week field training program during the summer preceding entry into the POC. Graduates of the five-week field training are enrolled in the POC with the same status as cadets in the four-year program.

## LEADERSHIP LABORATORY

This lab is designed around a microcosm of the U.S. Air Force. It gives the cadets the opportunity to develop their leadership potential while allowing the staff to make evaluations based on actual managerial and leadership situations.

## AI R FORCE ROTC COLLEGE SCHOLARSHIP PROGRAM

Scholarships paying full tuition and fees, book allowance, and transportation to Memphis and a tax free subsistence allowance of $\$ 200.00$ per month are available to entering freshmen and University students who are competitive academically and will enroll in the Air Force ROTC program. Details concerning qualifications and applications can be obtained from the Department of Aerospace Studies. NOTE: Several loan funds are also available to students enrolled in AFROTC. For more information, contact the department staff.

## FIELD TRAI NING

Field Training is offered during the summer months at selected Air Force bases throughout the United States. Students in the four-year program participate in four weeks of Field Training (AERO 3211), usually between their sophomore and junior years. Students applying for entry into the two-year program must successfully complete five weeks of Field Training (AERO 3212) prior to enrollment in the Professional Officer Course.

## AEROSPACE STUDIES MINOR

Upon successful completion of 18 semester hours in Aerospace Studies with a minimum grade of C, a cadet may apply for a minor in Aerospace Studies.

## SUPPLEMENTAL COURSES PROGRAM

The AFROTC Supplemental Courses Program (SCP) exists to enhance the career utility and officer performance of persons commissioned through AFROTC. The program consists of required and recommended college/university-taught courses. Cadets must successfully complete the required supplemental courses in addition to all Aerospace Studies courses.
General Military Course (GMC): Scholarship cadets must successfully complete a course in English composition. Additionally, they are encouraged to take a course in speech. Four-year scholarship cadets must satisfactorily complete the English composition course by the end of the GMC. GMC cadets receiving scholarships of less than four years duration will have two academic years to complete the English composition course. Failure to satisfactorily complete the required supplemental course in the specified period of time will result in termination of scholarship entitlements.
Non-scholarship four-year GMC cadets, two-year program applicants, and persons not required to complete the GMC need not take the GMC supplemental courses before POC entry. However, successful completion of GMC supplemental courses may enhance their chances for POC selection.
Professional Officer Course: cadets must successfully complete a course in mathematical reasoning before commissioning. Ideally, this course should include the acquisition of a specific skill, for example, statistics, computer science, or calculus.

## MI LITARY SCI ENCE

The Department of Military Science provides a four-year program of instruction designed to provide qualified college men and women with practical experience in the art of organizing, motivating and leading others. The program is divided into two courses each of two years duration. The first, called the Basic Course, offers instruction in leadership skills, soldiering skills, and the role and use of armed forces. The second, called the Advanced Course, builds on the Basic Course, offers practical leadership experience, and prepares the student for commissioning as an Army officer. Students may apply for the four year program, which can be completed in three years with department permission, or for the two-year program. Department faculty and staff are active duty Army personnel detailed by Department of the Army and approved by the University president. The Army officers are appointed by the University as Professor or Assistant Professor of Military Science. Students interested in enrolling in any Military Science course should contact the Department of Military Science.

## THE BASIC COURSE

The Basic Course, two years in duration, consists of two semesters of one hour per week of classroom
instruction and two semesters of two hours per week of classroom instruction. Courses are designed to be taken in the following order: ARMY 1100, 1110, 1115, 1120, 2100, 2105, 2115, 2120. All textbooks are furnished, without charge, by the department.
All offered courses count as elective credit toward the total university required hours for a degree. ARMY 2115/2120 meets the physical activity portion of the University General Education Program Fitness and Wellness requirement.
The Basic Course is designed for incoming freshmen. All other students are eligible to enter and may compress the Basic Course requirements into one year, with department permission. There is NO MILITARY OBLIGATION for enrolling in the Basic Course. Unless specified in the course description, students in the Basic Course are not required to wear uniforms or attend leadership laboratory.
Students who successfully complete the Basic Course may apply for entry into the Advanced Course.

## THE ADVANCED COURSE

The Advanced Course prepares qualified, selected male and female students for commissioning as Army officers while they continue to pursue academic degrees. Upon graduation, students may then serve in the Regular Army, Army Reserve, or Army National Guard in a variety of career fields.
To be eligible for the Advanced Course, the student must have completed the Basic Course or equivalent, (see 2-year program), be enrolled in the university full time, have at least two years remaining at the university (undergraduate or graduate), and be a U.S. citizen. Final selection is based on demonstrated academic performance, leadership potential, a qualifying score on the Officer Selection Battery of Tests, and physical qualifications.
The Advanced Course is two years in duration. During each of four semesters, the student attends three hours per week of classroom instruction and two hours per week of leadership laboratory. It is composed of ARMY 3100, 3111, 3115, 3121, 4100, 4110, 4111, 4115, and 4121, in sequence. All students receive a monthly subsistence allowance of $\$ 200.00$, tax free, while enrolled in classes. All textbooks, uniforms, and equipment are furnished, without charge, by the department.
Students are given the opportunity to develop their leadership skills through the leadership laboratory, field training, and the Advanced Camp. The leadership laboratory is designed around a cadet structure that parallels a U.S. Army unit. Field training exercises are conducted over a weekend and are an extension of the laboratory. Students are also required to attend a six-week Advanced Camp during the summer between their two years in the Advanced Course. Advanced Camp is held at a U.S. Army post. Students are paid for the six weeks at the rate of one-half the pay of a Second Lieutenant and are furnished quarters and rations as well as transportation to and from the post.
All required courses count as elective credit toward the total university required hours for a degree. Completion of the Advanced Course meets the Fitness and Wellness University General Education Program requirement.

## THE TWO-YEAR PROGRAM

The Two-Year Program provides the opportunity to those students who did not enroll in the Four-Year Program to enroll in the Advanced Course. There are three methods for students to receive placement credit for the Basic Course and enter directly into the Advanced Course.
Students who meet qualifying criteria may receive credit for the Basic Course by attending the six-week Basic Camp at Fort Knox, Kentucky, during the summer. NO MILITARY OBLIGATION is incurred by the student by attending the Basic Camp. Students are paid for the six weeks at the rate of one-half the pay of a Second Lieutenant and are furnished quarters and rations as well as transportation to and from, or a mileage allowance for use of their own automobile. Successful completion of the Basic Camp will make the student eligible to enter the Advanced Course. Interested students should contact the Department of Military Science anytime during the academic year preceding the summer they desire to attend the camp. Students who have completed Army Basic Combat Training and Advanced Individual Training or who have completed a minimum of three years of Army J unior ROTC in high school may be granted credit for the Basic Course by the Professor of Military Science and would then be eligible for entry into the Advanced Course, provided all other requirements are met. These students, as well as Basic Camp graduates,
selected for enrollment in the Advanced Course are enrolled with the same status as cadets in the FourYear Program.

## THE MI NOR

A minor in Military Science can be obtained through meeting the following requirements: 19 semester hours consisting of ARMY 2105, 3100, 3111, 3115, 3121, 4100, 4111, 4115 and 4121.
SCHOLARSHI P PROGRAM
Scholarships paying tuition, maintenance fee and other fees, a book allowance, and a tax-free
subsistence allowance of $\$ 200.00$ per month are available to university freshmen and sophomores who are competitive academically and who will enroll in the Army ROTC program. Applications are taken from December to February each academic year. Details concerning qualifications can be obtained from the Department of Military Science.

## SI MULTANEOUS MEMBERSHI P PROGRAM

The Simultaneous Membership Program is a voluntary program under which qualified cadets in the Advanced Course may concurrently join an Army National Guard unit. The program is designed to provide cadets with additional opportunities for leadership development and, at the same time, provide them with practical unit experience as Second Lieutenant. Cadets serve in an officer-trainee capacity and participate in regular unit drills held one weekend per month and two weeks per summer. Cadets are paid for all drills at the rate of a sergeant. This pay is in addition to the regular monthly subsistence for Army ROTC cadets. Details concerning qualifications and information on availability of allocations can be obtained from the Department of Military Science.

## PROFESSI ONAL MI LITARY EDUCATI ON

Professional Military Education is a component of the academic preparation for students desiring to pursue a commission as an Army officer. It consists of two essential parts, a baccalaureate degree and completion of university-taught, undergraduate courses from each of five designated fields of study. The fields of study are written communications, human behavior, military history, computer literacy, and math reasoning. Military Science students enrolled in the Advanced Course are also encouraged to take management and national security studies. Students may substitute approved alternative courses for any of these requirements. This is a requirement for students enrolled in the Advanced Course only, though applicable courses taken during enrollment in the Basic Course or before enrollment may still meet the requirement. Related required and elective courses taken for university degree requirements may also satisfy the requirement. Some of the Professional Military Education required courses may be waived by the Professor of Military Science if they would interfere with a student s required curriculum for award of a particular university degree.

## SPONSORED ACTIVITIES

The Department of Military Science sponsors the following voluntary extracurricular activities to provide students in both the Basic Course and Advanced Course with additional opportunities to develop leadership in conjunction with extending the student $\geqslant$ s knowledge of military skills:

1. The Army ROTC Tiger Color Guard-Members develop skill in standard drill and military ceremonies. The team provides color guards at the University of Memphis athletic events and drills competitively against ROTC teams of other colleges and universities. The team is open to individuals enrolled in any Military Science course.
2. U of M Ranger Company-Members develop skills associated with patrolling, mountaineering, survival training, and other similar activities. The Ranger Company is an adventure-type unit under the direction of Army ROTC Advanced Course cadets. Membership is open to all interested full-time students.

## NAVAL SCI ENCE

The Department of Naval Science provides a four-year program of instruction leading to a commission as an officer in the U.S. Navy or Marine Corps. The program is known as the Naval Reserve Officer Training Corps (NROTC) and is voluntary in that students may withdraw from the program at any time during the freshman year. At the start of the sophomore year, scholarship NROTC students enter into an agreement with the Department of the Navy that specifies active duty service after college work is completed.

## REQUI REMENTS

The general requirements for enrollment in the NROTC College Program are to:

1. be a citizen of the United States
2. be physically qualified
3. possess personal characteristics and potential requisite to be a Naval/Marine Corps Officer
4. not be a conscientious objector
5. meet other requirements as specified by the U.S. Navy.

## THE FOUR-YEAR PROGRAM

The four-year program is geared to students who enter the NROTC program as freshmen. Students are introduced to the field of naval science, which encompasses a broad variety of subjects ranging from basic seamanship to fleet operations. Topics covered during the first half of the four-year program include principles of naval ships systems, naval leadership and management, seapower, and maritime affairs. The
second half of the four year program (junior and senior years) is devoted to navigation and naval operations, naval weaponry, naval leadership and ethics, and, for Marine Corps Option Students, Amphibious Warfare and a study of warfare through the ages. In addition to specified courses, students will also meet with their NROTC unit weekly for orientation experiences to service life. Four-week summer training cruises are also part of the naval science program.

## THE TWO-YEAR PROGRAM

The two-year program is for interested students who are eligible and qualify to participate in NROTC in their junior and senior years. Students should apply for enrollment through the Professor of Naval Science before the spring semester of the sophomore year. If accepted into the two-year program, students will attend the six-week Naval Science Institute at Newport, Rhode Island, during the summer between the sophomore and junior years. Upon return to campus, students will participate in the NROTC program. NAVAL SCI ENCES MI NOR
Completion of 18 semester hours in the following: NAVY 1101, 1105, 2401, 4402 (9 hours total); and select three courses from the following electives: NAVY 2205, 3301, 3302, 3310, 4207, 4410.
FINANCI AL BENEFITS AND NROTC SCHOLARSHI PS
All NROTC students receive required uniforms and naval science textbooks when they begin the program as freshmen. In their junior year as two-year program students, they will also receive a tax-free subsistence allowance of $\$ 200$ a month. NROTC scholarship students will also receive tuition, cost of textbooks, instructional fees and $\$ 200$ a month. Students receive pay and are reimbursed for associated travel expense while participating in summer training experiences. Students interested in the Naval ROTC programs should contact the Professor of Naval Science.

Last Updated: 6/12/15

# THE FOGELMAN COLLEGE OF BUSI NESS AND ECONOMI CS 

J ohn J. Pepin, Ph.D., Dean Room 432, Fogelman Business and Economics Building (901) 678-2432<br>http:// fcbe.memphis.edu

V. Carol Danehower, D.B.A. Associate Dean for Academic Programs<br>FAB Room 426<br>(901) 678-5402

| ACADEMIC PROGRAMS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Departments/School | Click Major below for Requirements. <br> Click Tiger Paw for Course Descriptions. |  | Concentration Within Major | Degree Offered |
| School of Accountancy | *Accounting | * | NONE | Bachelor of Business Administration (B.B.A.) |
| Economics | *Economics | * | Financial Economics | Bachelor of Business Administration (B.B.A.) |
| Finance | *Finance | * | (1) Business Finance <br> (2) Real Estate <br> (3) Risk Management \& Insurance | Bachelor of Business Administration (B.B.A.) |
| Management | *Hospitality and Resort Management | * | NONE | Bachelor of Business Administration (B.B.A.) |
| Management | *Management | * | NONE | Bachelor of Business Administration (B.B.A.) |
| Management Information Systems | $\begin{aligned} & * \text { Management Information } \\ & \text { Systems } \\ & \hline \end{aligned}$ | * | NONE | Bachelor of Business Administration (B.B.A.) |
|  | *Logistics/Supply Chain Management | * | NONE | Bachelor of Business Administration (B.B.A.) |
| Marketing and Supply Chain Management | *Marketing Management | * | NONE | Bachelor of Business Administration (B.B.A.) |
|  | *Sales | * | NONE | Bachelor of Business Administration (B.B.A.) |
| Interdisciplinary Program | *International Business | $\begin{array}{\|l\|} \hline \text { See } \\ \text { Advisor } \end{array}$ | NONE | Bachelor of Business Administration (B.B.A.) |

Individual program requirements described in the University of Memphis 2006-2007 Undergraduate Bulletin are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this Bulletin. *Minor available. Minor also available in Pre-Professional Business Administration (See International Business Major).

## PURPOSE

The function of The Fogelman College of Business and Economics is to provide the basic education at the
undergraduate level necessary to prepare a person to enter the profession of business. A significant characteristic of the college is that it provides for concentration in the departments of economics and business, not as a substitute for, but as a part of, a broad liberal education. The undergraduate and graduate programs of the college are fully accredited by the AACSB International (Association to Advance Collegiate Schools of Business International).

## MISSI ON AND OBJ ECTIVES OF THE UNDERGRADUATE PROGRAM FOGELMAN COLLEGE OF BUSI NESS AND ECONOMICS

The Fogelman College of Business and Economics strives to provide a learning environment that fosters scholarship, intellectual curiosity, and collegiality. The mission of the undergraduate degree program is to prepare students for meaningful and responsible participation in a broad range of career opportunities in business, government, and institutional settings, or for advanced professional or graduate education. The College is dedicated to helping students acquire the competencies and attitudes for a lifetime of learning as they face the challenges of the future.
The objectives of the undergraduate curriculum at the Fogelman College of Business and Economics are to help students acquire the following knowledge and skills:

## KNOWLEDGE

Knowledge of cultural, global, and ethical environment within which businesses operate; an appreciation of the impact of business decisions on society, the enterprise, and individuals; knowledge of mathematics and quantitative methods necessary to effectively analyze business decisions; an understanding of the role and impact of diversity in organizations; and understanding of the management of information and information technology; foundation knowledge in each of the functional departments of business and in-depth understanding of one or more specializations; an awareness of the relationship between academic theory and practice to promote informed decisions under conditions of uncertainty.
SKILLS
Ability to integrate knowledge from various disciplines to define business problems and research solutions; critical thinking and decision-making skills essential to solving business problems; communication skills to effectively participate in the business environment and larger society; proficiency in relevant computer applications; ability to contribute within a team environment to enhance organizational effectiveness; ability to analyze ethical situations within the context of the global business environment.

## Honors Program

ADMISSION
Lower Division: Incoming freshmen whose minimum score of 26 on the ACT or its equivalent on other tests are invited to participate and are eligible to enroll in the designated honors sections of this college's lower division courses.
Transfer or students presently enrolled in the University of Memphis are eligible to enroll in the designated honors sections of this college's lower division courses if they have a minimum 3.00 grade point average or the recommendation of a faculty member.
Upper Division: To be eligible to enroll in the designated honors sections of this college's upper division courses, students must have a minimum 3.25 grade point average in course work taken in the Fogelman College of Business and Economics and a 3.00 overall grade point average.
RETENTION
The participating honors student must maintain a minimum 3.00 grade point average in lower division and upper division honors courses, have a minimum 3.25 grade point average in all courses taken in the
Fogelman College of Business and Economics, and a minimum overall grade point average of 3.00 to
continue in the college's Honors Program.
REQUIREMENTS
To qualify for "Honors in Business," in addition to an Honors Thesis, a student must complete successfully a minimum of 18 semester hours from the following:

1. No more than 6 hours from Honors Sections in: ACCT 2010, 2020; ISDS 2710, 3711[C], MIS 2755; or ECON 2110, 2120.
2. At least 12 hours from Honors Sections in: ACCT 3130, FIR 3410; ISDS 3510; MGMT 3110, MGMT 4710 [I]; MKTG 3010; MGMT 3510 [W].
In some circumstances, additional contract work and enrollment in a non-honors section of a required upper division course may be accepted as upper division honors credit. A maximum of 6 hours of upper division honors credit may be contracted.
A minimum grade of " B " (3.0) is required in each honors course for it to count toward fulfilling the honors course requirement, but regular credit for the course will be earned if the grade is lower than a "B" (3.0).

THESIS
During their senior year, prospective honors graduates must complete successfully an honors thesis, which, in addition to the 18 hours of honors course work, will qualify them to graduate "With Honors in Business." Students will select a major advisor and submit a thesis proposal. This proposal must be approved by the advisor and the Director of the College Honors Program. Upon completing the thesis, the student must submit it for approval to the advisor and the College Director.
CERTIFICATE OF ACHIEVEMENT
Students who complete a minimum of 12 hours in Honors course work with a minimum of 3.25 grade point average and a minimum of " B " (3.0) in each of the Honors courses will receive a Certificate of
Achievement.
DESIGNATION OF 'WITH HONORS IN BUSINESS"
Students who complete 18 hours (meeting the restrictions listed) with an acceptable Honors Thesis and a minimum 3.25 grade point average in all courses taken in The Fogelman College of Business and Economics, and in all Honors courses taken in this college, with a minimum overall grade point average of 3.00 will have earned the designation of "With Honors in Business" which will appear on the transcript and diploma.

## ORGANIZATION OF THE COLLEGE

The Fogelman College of Business and Economics comprises six academic units: School of Accountancy; Department of Economics; Department of Finance, Insurance, and Real Estate; Department of
Management; Department of Marketing and Supply Chain Management; Department of Management Information Systems. These academic units offer a variety of majors and minors, the detailed requirements for which are listed later in this section. The interdisciplinary International Business Program centered in this college offers an undergraduate major in International Business; requirements are listed in the section pertaining to academic department requirements. In addition there are seven research units: Sparks Bureau of Business and Economic Research, Center for Manpower Studies, Fed Ex Center for Supply Chain
Management, Center for Economic Education, Robert Wang Center for International Business, The
Methodist LeBonheur Center for Healthcare Economics, and the Center for Managing Emerging
Technologies.

## Academic Advising

Every student entering The Fogelman College of Business and Economics will receive advice in the college's Advising Office. The advisor will assist the student in the selection of appropriate courses and provide the opportunity for meaningful discussion regarding career goals, past academic experience and future academic growth and progress as it relates to the student's development. This assistance, however, does not in any way relieve the student of the primary responsibility of studying the Bulletin and fulfilling all the requirements for the degree.

## Intent to Graduate

Intent to graduate forms are filed with the Graduation Analyst in The Fogelman College of Business and Economics. Students must schedule an appointment before the established application deadline published in the Schedule of Classes. Deadlines are strictly enforced. At this time, an audit of the prospective graduate's academic record is conducted, and the applicant will be provided with an official graduation agreement indicating the remaining degree requirements.

## RESI DENCE REQUI REMENTS

Residence requirements for a degree in business administration are as follows: (1) the senior year must be completed at the University of Memphis, (2) a minimum of 33 hours of upper division business courses must be taken at the University of Memphis, and (3) 12 of the 33 upper division business administration hours must be in the major field.
A student transferring credits from a two-year (lower division) college must complete a minimum of 60 semester hours in an accredited senior institution.
Students with transfer credit are required to maintain a 2.0 GPA on all courses taken at the University of Memphis.
MI NOR. To earn a minor in this college, a transfer student majoring in one of the other colleges of the university or in this college must earn at the University of Memphis a minimum of 6 upper division business administration hours of the total number of hours required for that minor.
See University Residence Requirements in the Graduation from the University section.

## TRANSFER CREDIT

The official evaluation and acceptance of transfer credit is the responsibility of the Office of Admissions. The Undergraduate Advising Office of The Fogelman College of Business and Economics, however, will be happy to answer inquiries regarding the applicability of transfer course work for the completion of the B.B.A. degree.

If a student transfers credit in required business courses that are classified as upper division in this college, but were taken as lower division credit or taken at a two-year (lower division) institution, these courses must be repeated or validated by examination. Validated courses are not considered U of M credit and will not count toward hours of residency.

## B.B.A. DEGREE REQUI REMENTS

1. To qualify for the Bachelor of Business Administration (B.B.A.) degree, the student must complete a minimum of 120 semester hours with a minimum overall grade point average of 2.00 and meet additional grade point average requirements described below.
2. No grade below a " C " and a minimum grade point average of 2.25 (ACCT majors-2.5) is necessary in these lower division courses: MATH 1830, ISDS 2710, ECON 2110, 2120, ACCT 2010, 2020, MIS 2749, 2755. A minimum grade of " C " and a minimum grade point average of a 2.25 is necessary for these upper division courses: ACCT 3130, FIR 3410, MGMT 3110, 3510 [W], 4710 [I], ISDS 3510, 3711[C], MKTG 3010, and the International Business course.
3. B.B.A. students may apply no more than two semester hours of physical activity courses to the minimum degree requirements of 120 semester hours.
4. All courses used to satisfy specific degree requirements of this college must be taken on a "letter grade" OR "credit by examination" basis. Hours earned on a "credit/no credit" basis are accepted only in courses that are not required for the student's degree. Courses taken on an "audit" basis cannot be used to satisfy college requirements.
5. In the B.B.A. degree, the following courses are used to meet University General Education Program computation and writing intensive and integrative requirements. Credit by exam is not available for these courses:
Computation Intensive: ISDS 3711.
Writing Intensive: MGMT 3510.
Integrative: MGMT 4710.
6. A surcharge of $\$ 20$ per credit hour for 3000 and 4000 level courses and for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).

NOTE: The Fogelman College of Business and Economics accepts a maximum of two semester hours in physical activity courses toward the fulfillment of its degree requirements.

## General Requirements

The college curriculum is organized into a lower division and an upper division:
THE LOWER DIVISION (LD) comprises the freshman and sophomore years, the first four semesters of university work. Courses offered in the lower division are numbered from 1000 through 2999, and the student must register consistently for all lower division requirements until they are completed.
ADMISSI ON TO DEGREE PROGRAM:
To continue into the upper division business courses, all students seeking a degree in the Fogelman College of Business and Economics must (1) complete the following courses with a minimum grade of " C " and a minimum 2.25 G.P.A. (2.5 G.P.A. for Accounting majors): MATH 1830, ECON 2110, 2120, ISDS 2710, ACCT 2010, 2020, MIS 2749, 2755; (2) have accumulated 60 hours of course work including the required 9 hours of English; MATH 1830; ECON 2110, 2120; ACCT 2010, 2020; ISDS 2710, and MIS 2749, 2755. THE UPPER DIVISION (UD) comprises all junior and senior years of undergraduate work; courses offered in the upper division are numbered 3000 through 4999. Students must have junior standing and have met specific course prerequisites with a minimum grade of "C" to be eligible for all 3000-and 4000-level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of "C" in each; (2) minimum of 2.25 GPA ( 2.5 for ACCT majors) in all required lower division business courses and MATH 1830, and (3) 60 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).

RETENTION:
To graduate from the Fogelman College of Business and Economics, all students must have a minimum grade of a "C" and a 2.25 G.P.A. in the following courses: ACCT 3130, FIR 3410, MGMT 3110, 3510 [W], 4710[I], MKTG 3010, ISDS 3510, 3711[C] and the International Business course. All major courses require a minimum grade of " C " .

## Enrollment Priority

Neither admission by the University of Memphis and The Fogelman College of Business and Economics nor completion of the minimum requirements guarantees admission to any specific course offered by the college. Limited resources may require that enrollment in business classes be based on ranking by Grade Point Average with exceptions being made for graduating seniors.

## I. THE MAJ OR

Each student, with the assistance of an advisor in the college, not later than the beginning of the junior year, will select a major and, if available, an area of concentration within the major. The specific courses required by each department for the satisfaction of its major are listed in the section following. A major requires a minimum of 21 hours beyond upper division core requirements, and courses used to satisfy one major may not be used toward a second major. A minimum grade of "C" must be earned for each required course for the major.

## II. COURSES NOT APPLI CABLE TOWARD B.B.A. DEGREE

Transitional Academic Studies (DSP) courses may not be used to fulfill the minimum number of hours required for the B.B.A. degree.

## III. THE MI NOR

A student whose major is within The Fogelman College of Business and Economics is not required to have a minor; however, such an option is available. A minimum grade of "C" must be earned for each required course in the lower division and upper division business administration core curriculum and in each course required for the minor.
A student whose major is within one of the other colleges of the university may take a minor in one of the academic departments. (See Residence Requirements for The Fogelman College of Business and Economics.)

## ACADEMIC DEPARTMENT REQUIREMENTS FOR MAJ ORS AND MI NORS

## ACCOUNTING

## School of Accountancy

The mission of the bachelor's degree program in Accountancy is to serve the needs of students, the accounting profession, and the general business community through teaching, research and service. Within this mission, the department offers students a balanced integrative approach to business education. In this interdisciplinary view, students must have a broad University General Education Program grounded in nonbusiness courses, a strong supporting business acumen, and an interrelated view of accounting to the other departments of business. Specifically, accounting classes synthesize accounting with the financing, investing, and operating functions so that students can develop their critical thinking skills and apply them to making decisions on accounting and other business problems. Overall, the B.B.A. with a major in Accounting is built on the foundation of technical, interpersonal, and communication skills. This focus allows enhancement of careers and leadership to businesses and government units that would strengthen the economic development of communities, state, and nation. Program objectives for the B.B.A. in Accounting are: (a) to obtain knowledge of the cultural, global, and ethical environment of business; (b) to appreciate the impact of business decisions on society; (c) to understand the role of information technology and proficiency in relevant computer applications; (d) to possess the ability to integrate knowledge from different disciplines to define problems and research solutions; (e) to possess critical thinking and decisionmaking skills essential to solving business problems; (f) to obtain effective oral and written communication skills; ( g ) the ability to contribute effectively within a team environment and the foundation knowledge in each functional area of business; (h) to acquire relevant technical accounting skills and ability to utilize related computer technology.

Accounting (B.B.A.)
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that MATH 1830 (Mathematics requirement) and ECON 2110 and 2120 (Social/Behavioral Sciences requirement) are specified for the B.B.A. degree.

## B. College and Degree (B.B.A.) Requirements ( 42 hours)

Lower Division Business Core Curriculum ( 15 hours)
No grade below and 2.25 GPA ( 2.5 for accounting majors) in MATH 1830, ECON 2110, ECON 2120 and the following lower division courses
ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
MIS 2749 Introduction to Business Microcomputer Applications (3)
MIS 2755 Introduction to Management Information Systems (3)
Upper Division Business Core Curriculum ( 27 hours)
No grade below "C" and 2.25 GPA in the following courses:
ACCT 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
Choose One:
MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350
International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business
Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce
(3); HPRM 4400 International Hospitality (3); MIS 4310 Global Information Technology (3); ECON 4351

International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.
Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

## C. The Major ( 27 hours)

27 upper division semester hours in Accounting courses as follows: ACCT 3011, 3110, 3120, 3310, 3510, 4020, 4240, and 6 hours of accounting elective.

## D. Electives ( 10 hours)

Lower division or upper division courses to bring the total of hours earned to 120 .

## Accounting Minor

For students whose major is in another college of the University (15 hours): ACCT 2010, 2020, 3110, 3310; plus one of the following: 3120, 3510.
For students whose major is in a department in The Fogelman College of Business and Economics (12 hours): ACCT 3110, 3120, 3310, 3510.

## Typical 4-Year Accounting Sequence:

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| Natural Science* | 4 | Natural Science* | 4 |
| Humanities* | 3 | Humanities* | 3 |
| Elective | $1-3$ | MIS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | $14-16 \mathrm{hrs}$ | 16 hrs |  |

## Sophomore Year

| ENGL 2201 or | 3 | MIS 2755 | 3 |
| :--- | :--- | :--- | :--- |
| 2202 | 3 | History* | 3 |
| History* | 3 | ECON 2120 | 3 |
| ECON 2110 | 3 | COMM 2381 | 3 |
| ISDS 2710 | 3 | 15 |  |
| Semester Totals | 15 |  | hrs |



Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## BUSI NESS ECONOMI CS <br> Department of Economics

The Business Economics program has two major objectives. The first objective is to provide majors and minors with a solid foundation and the analytical and critical thinking skills needed to make effective decisions. The second objective is to promote and develop economic literacy in other student populations in the Fogelman College of Business and Economics, the University of Memphis and the local and regional community. Economic literacy and the application of economic thinking to the everyday world realizes the program's goal of providing these populations with the tools to make more effective personal and public choices. Program objectives for the B.B.A. in Business Economics are: (a) to obtain knowledge of the cultural, global, and ethical environment of business; (b) to appreciate the impact of business decisions on society; (c) to understand the role of information technology and proficiency in relevant computer applications; (d) to possess the ability to integrate knowledge from different disciplines to define problems and research solutions; (e) to possess critical thinking and decision-making skills essential to solving business problems; (f) to obtain effective oral and written communication skills; (g) the ability to contribute effectively within a team environment and the foundation knowledge in each functional area of business; (h) to acquire a solid background in economic theory and analysis and the ability to identify and convey real-world economic issues.

Certificate in Data Analysis and Programming Using SAS® Software
SAS® (Statistical Analysis Software) certificate program is open to all undergraduate students, and consists
of the following three-course sequence. The program is designed to prepare students for the data analysis and programming needs of major employers, as well as the needs of students entering graduate school in a wide variety of disciplines.

ECON 4510 Introduction to Data Structures and Cleaning (3)
ECON 4520 Programming Concepts and Techniques (3)
ECON 4530 From Data to Information (3)

## Business Economics Major (B.B.A.)

A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that MATH 1830 (Mathematics requirement) and ECON 2110 and 2120 (Social/Behavioral Sciences requirement) are specified for the B.B.A. degree.

## B. College and Degree (B.B.A.) Requirements ( 42 hours)

Lower Division Business Core Curriculum ( 15 hours)
No grade below and 2.25 GPA ( 2.5 for accounting majors) in MATH 1830, ECON 2110, ECON 2120
and the following lower division courses
ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
MIS 2749 Introduction to Business Microcomputer Applications (3)
MIS 2755 Introduction to Management Information Systems (3)
Upper Division Business Core Curriculum ( 27 hours)
No grade below "C" and 2.25 GPA in the following courses:
ACCT 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
Choose One:
MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350
International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); MIS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.
Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

## C. The Major ( $\mathbf{2 4}$ hours)

A minimum of 24 upper-division semester hours as follows:

1. For students choosing the Business Economics major with no concentration: ECON 3310, 3320, and six upper-division economics courses ( 18 hours) selected with the approval of the department advisor.
2. For students choosing the Business Economics major with a concentration in Financial Economics: ECON 3310, 3320, and three upper-division economics courses (9 hours) and three upper-division FIR course (9 hours) selected with the approval of the department advisor.

## D. Electives ( 13 hours)

Lower division or upper division courses to bring the total of hours earned to 120 .

## E. Honors Program

All students who receive a minimum grade of B (3.0) in ECON 2110 or 2120 honors sections are eligible for the program. Entry to the program can also be obtained through the recommendation of a member of the faculty to the Department of Economics Honors Committee. A student must maintain a grade point average of at least 3.25 in economics to continue in the program and must have a minimum grade point average of 3.5 in economics to graduate with honors in economics. Honor students write a senior research paper. At commencement they are awarded the special distinction "With Honors in Economics." Details of the
program are available at the department office.
Business Economics Minor
For students whose major is in another college of the University: 18 semester hours in economics courses, including ECON 2110, 2120, and 12 additional upper division hours in courses as approved by the department chair.
For students whose major is in another department in The Fogelman College of Business and Economics: Nine additional upper division hours in economics approved by the department chair.

## Typical 4-Year Business Economics Sequence:

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Humanities* | 3 | Humanities* | 3 |
| Elective | $1-3$ | MIS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 14-16 hrs |  | 16 hrs |

## Sophomore Year

| ACCT 2010 | 3 | ACCT 2020 | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202 | 3 | MIS 2755 | 3 |
| History* | 3 | History* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| J unior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ECON 3310 | 3 | ECON 3320 | 3 |
| ACCT 3130 | 3 | ECON elective | 3 |
| ISDS $3711[C]$ | 3 | FIR 3410 | 3 |
| MGMT 3110 | 3 | MGMT 3510 [W] | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

## Senior Year

| ECON elective | 3 | ECON elective | 3 |
| :--- | :--- | :--- | :--- |
| ECON elective | 3 | ECON elective | 3 |
| Elective | 3 | Intl Business elective | 3 |
| ISDS 3510 | 3 | MGMT $4710[1]$ | 3 |
| ECON Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## FI NANCE <br> Department of Finance, I nsurance and Real Estate

The primary objective of the Finance program is to provide the basic concepts, principles and analytical tools essential for business decisions in the fields of finance. The curriculum is designed to provide a broad background for effective functioning within the discipline:
Finance majors study the environment, theory and techniques of decisions on the acquisition of funds by business firms, including the applied areas of investment, financial institutions, real estate, and risk management and insurance. Program objectives for the B.B.A. in Finance are: (a) to obtain knowledge of the cultural, global, and ethical environment of business; (b) to appreciate the impact of business decisions on society; (c) to understand the role of information technology and proficiency in relevant computer applications; (d) to possess the ability to integrate knowledge from different disciplines to define problems and research solutions; (e) to possess critical thinking and decision-making skills essential to solving business problems; (f) to obtain effective oral and written communication skills; (g) the ability to contribute effectively within a team environment and the foundation knowledge in each functional area of business;
(h) to acquire a solid background in financial theory and techniques.

Finance Major (B.B.A.)
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that MATH 1830 (Mathematics requirement) and ECON 2110 and 2120 (Social/Behavioral Sciences requirement) are specified for the B.B.A. degree.
B. College and Degree (B.B.A.) Requirements (42 hours)

Lower Division Business Core Curriculum (15 hours)
No grade below $\geqslant \mathrm{C} \geqslant$ and 2.25 GPA ( 2.5 for accounting majors) in MATH 1830, ECON 2110, ECON 2120
and the following lower division courses
ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
MIS 2749 Introduction to Business Microcomputer Applications (3)
MIS 2755 Introduction to Management Information Systems (3)
Upper Division Business Core Curriculum (27 hours)
No grade below "C" and 2.25 GPA in the following courses:
ACCT 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
Choose One:
MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); MIS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair.
Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.
C. The Major ( 24 hours)

1. Core requirements: A minimum of 24 upper division semester hours in courses as follows: FIR 3710, 3720, 4440, and one of the following concentrations.
2. Concentrations ( 15 hours)
a. Business Finance: FIR 4610 and 12 hours from the following: at least three courses from FIR 3770, 4550, 4710, 4720, 4770, 4911; no more than one course from FIR 3310, 4870, ECON 4112, 4120, MIS 3775
b. Real Estate: FIR 3310, 4320, 4350, two courses from FIR 4310, 4340, 4911, ECON 4112, ESCl 4515
c. Risk Management and I nsurance: FIR 3810, 4870, and three courses from FIR 4720, 4810, 4820,

## 4911, ECON 4112, 4740

## D. Electives ( 13 hours)

Lower division or upper division courses to bring the total of hours earned to 120 . Note:

## Business Finance Minor

For students whose major is in another department in The Fogelman College of Business and Economics: 9 upper division hours in finance approved by the department chair.
For students whose major is within another college of the University: (24 hours) ACCT 2010 and 2020;
ECON 2110, 2120, 3610; FIR 3410, 3710. Three additional upper division hours approved by the department chair.

## Real Estate Minor

For students whose major is in another department in The Fogelman College of Business and Economics: (9 hours) FIR 3310, and six additional upper division hours in real estate approved by the department chair. For students whose major is within another college of the University: (21 hours) ACCT 2010, 3011, 3130; ECON 2110; FIR 3310, and six additional upper division hours in real estate approved by the department chair.

## Risk Management and Insurance Minor

For students whose major is in another department in The Fogelman College of Business and Economics: (9 hours) FIR 3810, 4870, and three additional upper division hours in insurance approved by the department chair.
For students whose major is within another college of the University: (21 hours) ACCT 2010, 3011; ECON 2110; ISDS 2710; FIR 3810, 4870, and three additional upper division hours in insurance or finance approved by the department chair.

## Typical 4-Year Business Finance Concentration Sequence:

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Humanities* | 3 | Humanities* | 3 |
| Elective | $1-3$ | MIS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 14-16 hrs |  | 16 hrs |

## Sophomore Year

| ACCT 2010 | 3 | ACCT 2020 | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202* | 3 | MIS 2755 | 3 |
| History* | 3 | History* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Junior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| FIR 3410 | 3 | FIR 3710 | 3 |
| ACCT 3130 | 3 | FIR 3720 | 3 |
| ISDS 3711[C] | 3 | ISDS 3510 | 3 |
| MGMT 3110 | 3 | MGMT 3510 [W] | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| FIR 4440 | 3 | FIR 4610 | 3 |
| FIR elective | 3 | FIR elective | 3 |
| FIR elective | 3 | Intl Business elective | 3 |
| FIR elective | 3 | MGMT 4710 [I] | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## Typical 4-Year Real Estate Concentration Sequence:

## Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| Natural Science* | 4 | Natural Science* | 4 |
| Humanities* | 3 | Humanities* | 3 |
| Elective | $1-3$ | MIS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | $14-16$ hrs | 16 hrs |  |

## Sophomore Year

| ACCT 2010 | 3 | ACCT 2020 | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202* | 3 | MIS 2755 | 3 |
| History* | 3 | History* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Junior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| FIR 3410 | 3 | FIR 3710 | 3 |
| ACCT 3130 | 3 | FIR 3720 | 3 |
| ISDS 3711[C] | 3 | ISDS 3510 | 3 |
| MGMT 3110 | 3 | MGMT 3510 [W] 3 |  |
| MKTG 3010 | 3 | FIR 3310 | 3 |
| Semester Totals | 15 hrs | 15 hrs |  |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| FIR 4440 | 3 | Elective | 3 |
| FIR 4320 | 3 | FIR 4350 | 3 |
| FIR elective | 3 | Intl Business elective | 3 |
| FIR elective | 3 | MGMT $4710[I]$ | 3 |
| Elective | 3 | Elective | 3 |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## Typical 4-Year Risk Management and Insurance Concentration Sequence:

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| Natural Science* | 4 | Natural Science* | 4 |
| Humanities* | 3 | Humanities* | 3 |
| Elective | $1-3$ | MIS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | $14-16 \mathrm{hrs}$ | 16 hrs |  |

## Sophomore Year

| ACCT 2010 | 3 | ACCT 2020 | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202* | 3 | MIS 2755 | 3 |
| History* | 3 | History* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Junior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| FIR 3410 | 3 | FIR 3710 | 3 |
| ACCT 3130 | 3 | FIR 3720 | 3 |
| ISDS 3711[C] | 3 | ISDS 3510 | 3 |
| MGMT 3110 | 3 | MGMT 3510 [W] | 3 |
| Elective | 3 | FIR 3810 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| FIR 4440 | 3 | Major elective | 3 |
| Major elective | 3 | FIR 4870 | 3 |
| MKTG 3010 | 3 | Intl Business elective | 3 |
| Major elective | 3 | MGMT $4710[I]$ | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## Department of Management

The primary goal of the Hospitality and Resort Management (HPRM) program is to produce graduates who have the knowledge and skills necessary for them to be successful in the increasingly competitive hospitality business environment. HPRM is committed to expanding the general business knowledge, specific hospitality skills, and overall technical competence of both students and faculty who matriculate and educate within this program. Program objectives for the B.B.A. in Hospitality and Resort Management are: (a) to obtain knowledge of the cultural, global, and ethical environment of business; (b) to appreciate the impact of business decisions on society; (c) to understand the role of information technology and proficiency in relevant computer applications; (d) to possess the ability to integrate knowledge from different disciplines to define problems and research solutions; (e) to possess critical thinking and decisionmaking skills essential to solving business problems; (f) to obtain effective oral and written communication skills; (g) the ability to contribute effectively within a team environment and the foundation knowledge in each functional area of business; ( h ) to acquire a solid background in the application of management theory and concepts to the hospitality business.

## Hospitality and Resort Management Major (B.B.A.)

A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that MATH 1830 (Mathematics requirement) and ECON 2110 and 2120 (Social/Behavioral Sciences requirement) are specified for the B.B.A. degree.
B. College and Degree (B.B.A.) Requirements ( 42 hours)

Lower Division Business Core Curriculum ( 15 hours)
No grade below $\geqslant$ and 2.25 GPA ( 2.5 for accounting majors) in MATH 1830, ECON 2110, ECON 2120
and the following lower division courses
ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
MIS 2749 Introduction to Business Microcomputer Applications (3)
MIS 2755 Introduction to Management Information Systems (3)
Upper Division Business Core Curriculum ( 27 hours)
No grade below "C" and 2.25 GPA in the following courses:
ACCT 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
Choose One:
MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); MIS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair. Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

## C. The Major ( $\mathbf{2 8}$ hours)

A minimum of 25 semester hours including HPRM 2010, 2050, 3330, 4111 (1), 4315, 4320, 4400, 4600, 4700, and additional 3 hours selected with the approval of the advisor from: HPRM 2003 (1), 2004 (1), 2006 (1), 2007 (1), 2999 (1), 3010, 3600, 4322, 4331, 4340, 4350, 4401, 4910 (1-6).

## D. Electives ( 12 hours)

Lower division or upper division courses to bring the total of hours earned to 120. CSED 2301 is suggested as an elective.

## Typical 4-Year Hospitality and Resort Management Sequence:

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Humanities* | 3 | HPRM 2050 | 3 |
| HPRM 2010 | 3 | MIS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 16 hrs |  | 16 hrs |

## Sophomore Year

| ACCT 2010 | 3 | ACCT 2020 | 3 |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| ENGL 2201 or 2202* | 3 | MIS 2755 | 3 |  |  |  |
| Humanities* | 3 | Elective | 3 |  |  |  |
| ECON 2110 | 3 | ECON 2120 | 3 |  |  |  |
| ISDS 2710 | 3 | COMM 2381 | 3 |  |  |  |
| Semester Totals | 15 hrs |  |  |  |  | 15 hrs |


| Junior Year   <br> HPRM 3330 3 HPRM 4315 | 3 |  |  |
| :--- | :--- | :--- | :--- |
| HPRM 4400 | 3 | HPRM 4320 | 3 |
| ISDS 3711[C] | 3 | FIR 3410 | 3 |
| MGMT 3110 | 3 | ACCT 3130 | 3 |
| MKTG 3010 | 3 | MGMT 3510 [W] | 3 |
| Semester Totals | 15 hrs | 15 hrs |  |


| Senior Year |  |  |  |
| :---: | :---: | :---: | :---: |
| HPRM 4111 | 1 | HPRM 4700 | 3 |
| HPRM elective | 3 | HPRM 4600 | 3 |
| Elective | 3 | History* | 3 |
| ISDS 3510 | 3 | MGMT 4710 [I] | 3 |
| History* | 3 | Elective | 3 |
| Semester Totals | 13 hrs |  | 15 hrs |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## I NTERNATI ONAL BUSI NESS <br> Interdisciplinary Program

The International Business major prepares undergraduate business students for entry-level careers in international business fields through a broad, interdisciplinary curriculum that combines theoretical and practical international business study with course work in the liberal arts, including foreign language and area studies. Program objectives for the B.B.A. in International Business are: (a) to obtain knowledge of the cultural, global, and ethical environment of business; (b) to appreciate the impact of business decisions on society; (c) to understand the role of information technology and proficiency in relevant computer applications; (d) to possess the ability to integrate knowledge from different disciplines to define problems and research solutions; (e) to possess critical thinking and decision-making skills essential to solving business problems; (f) to obtain effective oral and written communication skills; (g) the ability to contribute
effectively within a team environment and the foundation knowledge in each functional area of business; ( h ) a solid background in the business issues, challenges, and opportunities in international business.
For further information concerning this program, contact the International Business advisor (Wang Center), or The Fogelman College of Business and Economics Advising Office.
International Business Major (B.B.A.)
A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that MATH 1830 (Mathematics requirement) and ECON 2110 and 2120 (Social/Behavioral Sciences requirement) are specified for the B.B.A. degree.

## B. College and Degree (B.B.A.) Requirements ( 42 hours)

Lower Division Business Core Curriculum ( 15 hours)
No grade below and 2.25 GPA ( 2.5 for accounting majors) in MATH 1830, ECON 2110, ECON 2120 and the following lower division courses
ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
MIS 2749 Introduction to Business Microcomputer Applications (3)
MIS 2755 Introduction to Management Information Systems (3)
Upper Division Business Core Curriculum ( 27 hours)
No grade below "C" and 2.25 GPA in the following courses:
ACCT 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
Choose One:
MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350
International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business
Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); MIS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair. Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

## C. The Major (21-27 hours)

Foreign Language: 6 semester hours in one modern foreign language at or above the 2000 level or equivalent.
A minimum of 15 semester hours from the following: BA 4911, ECON 4350, 4351; FIR 3720, 4440, 4550;
HPRM 4400; ISDS 4510, 4511; MGMT 4510, 4810; MKTG 3610, 4080, 4470, 4530.

## D. Electives ( $\mathbf{1 0 - 1 6}$ hours)

Lower division or upper division courses to bring the total of hours earned to 120 . See International Business advisor for recommended electives in global and area studies.

## International Business Minor

For students whose major is in another department in The Fogelman College of Business and Economics: 12 hours from the following courses with the approval of the International Business advisor: ECON 4350, 4351; FIR 3720, 4400, 4550; HPRM 4400; ISDS 4510, 4511; MGMT 4510, 4810; MKTG 3610, 4080, 4470, 4530. For students whose major is in another college of the University: The student will take a minimum of 18 hours in The Fogelman College of Business and Economics, at least 9 hours of which must be chosen from the following: ECON 4350, 4351; FIR 3720, 4440, 4550; HPRM 4400; ISDS 4510, 4511; MGMT 4510, 4810; MKTG 3610, 4080, 4470, 4530; ECON 4350 (ECON 2120); ECON 4351 (ECON 2110); FIR 3720 (FIR 3410), FIR 4440 (3410), FIR 4550 (FIR 3410); ISDS 4510 (MGMT 3110, ISDS 3510, MKTG 3610); MGMT 4510 (MGMT 3510); MGMT 4810 (MGMT 3110, 3510); MKTG 4080 (ISDS 3711, MKTG 3010), MKTG 4530 (MKTG 3010). The necessary prerequisites for the above courses are in parentheses.

## Pre-Professional Business Administration Minor

The Fogelman College of Business and Economics offers a pre-professional minor ( 30 hours) for students whose major is in another college of the University. Requirements are as follows: ACCT 2010, 2020, 3130; ECON 2110, 2120; ISDS 2710, MIS 2749; FIR 3410; MGMT 3110; MKTG 3010. Accounting, economics, and junior standing are prerequisites for 3000 level courses.

## Typical 4-Year International Business Sequence:

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Foreign Language | 3 | Foreign Language | 3 |
| Elective | $1-3$ | MIS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | $14-16$ hrs | 16 hrs |  |

## Sophomore Year

| ACCT 2010 | 3 | ACCT 2020 | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202* | 3 | MIS 2755 | 3 |
| Foreign Language | 3 | Foreign Language | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

## J unior Year

| MGMT 3510 [W] | 3 | ISDS 3510 | 3 |
| :--- | :--- | :--- | :--- |
| ACCT 3130 | 3 | MKTG 3010 | 3 |
| ISDS 3711[C] | 3 | Elective | 3 |
| MGMT 3110 | 3 | Humanities* | 3 |
| Humanities* | 3 | FIR 3410 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| Major elective | 3 | Major elective | 3 |
| Major elective | 3 | History* | 3 |
| History* | 3 | Intl Business elective | 3 |
| Major elective | 3 | MGMT $4710[1]$ | 3 |
| Elective | 3 | Major elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## LOGI STI CS/ SUPPLY CHAI N MANAGEMENT

## Department of Marketing and Supply Chain Management

Logistics/Supply Chain Management majors study the functions that comprise supply chain management
including logistics, purchasing/sourcing, operations, and transportation. Logistics procedures and strategies, warehousing, inventory management, and order processing are covered. Emphasis on analysis of the competitive environment, distribution network alternatives, and customer service aspects provide a background in each functional area to enable students to pursue their areas of interest. Program objectives for a B.B.A. in Logistics/Supply Chain Management are: (a) to obtain knowledge of the cultural, global, and ethical environment of business; (b) to appreciate the impact of business decisions on society; (c) to understand the role of information technology and proficiency in relevant computer applications; (d) to possess the ability to integrate knowledge from different disciplines to define problems and research solutions; (e) to possess critical thinking and decision-making skills essential to solving business problems; (f) to obtain effective oral and written communication skills; (g) the ability to contribute effectively within a team environment and the foundation knowledge in each functional area of business; (h) to acquire a solid background in the process of logistics management and understanding of the numerous distribution functions.

## Logistics/ Supply Chain Management Major (B.B.A.)

## A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that MATH 1830 (Mathematics requirement) and ECON 2110 and 2120 (Social/Behavioral Sciences requirement) are specified for the B.B.A. degree.

## B. College and Degree (B.B.A.) Requirements ( 42 hours)

Lower Division Business Core Curriculum ( 15 hours)
No grade below and 2.25 GPA ( 2.5 for accounting majors) in MATH 1830, ECON 2110, ECON 2120
and the following lower division courses
ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
MIS 2749 Introduction to Business Microcomputer Applications (3)
MIS 2755 Introduction to Management Information Systems (3)
Upper Division Business Core Curriculum ( 27 hours)
No grade below "C" and 2.25 GPA in the following courses:
ACCT 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
Choose One:
MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350
International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business
Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce
(3); HPRM 4400 International Hospitality (3); MIS 4310 Global Information Technology (3); ECON 4351

International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the
topic pertains to international business and has been approved in advance by the department chair.
Transfer students are referred to the section Transfer Credit in the College of Business and Economics
description.

## C. The Major ( $\mathbf{2 4}$ hours)

A minimum of 24 upper division semester hours in marketing courses as follows: MKTG 3610, 3620, 3630, 3650, ISDS 4510, 4511 and 6 semester hours chosen by the student from the following courses: at least one course from MKTG 4470, 4570, ISDS 3760, 4512; no more than one course from MKTG 4911, METH 4462, 4464, 4466.

## D. Electives ( 13 hours)

Lower division or upper division courses to bring the total of hours earned to 120 .
Logistics/ Supply Chain Management Minor
For students whose major is in another college of the University (27 hours): MKTG 3010, 3610, 3620, 3630, 3650, ISDS 3510, 3711, 4510, 4511.
For students whose major is in another department in the Fogelman College of Business and Economics ( 15
hours): MKTG 3610, 3620, 3650, ISDS 4511 and 3 semester hours chosen by the student from the following: MKTG 3630, 4470, 4570, ISDS 3760, 4510, 4512, MIS 4760.

## Typical 4-Year Logistics/ Supply Chain Management Sequence:

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Humanities* | 3 | Humanities* | 3 |
| Elective | $1-3$ | MIS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 14-16 hrs |  | 16 hrs |

## Sophomore Year

| ACCT 2010 | 3 | ACCT 2020 | 3 |
| :---: | :---: | :---: | :---: |
| ENGL 2201 or 2202* | 3 | MIS 2755 | 3 |
| History* | 3 | History* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| J unior Year <br> MKTG 3610 | 3 | MKTG 3620 | 3 |
| :--- | :--- | :--- | :--- |
| ISDS 3510 | 3 | MIS 3765 | 3 |
| ISDS 3711[C] | 3 | MGMT 3510 [W] | 3 |
| MGMT 3110 | 3 | FIR 3410 | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Senior Year   <br> MKTG 3630 3 ACCT 3130 | 3 |  |  |
| :--- | :--- | :--- | :--- |
| ISDS 4510 | 3 | ISDS 4511 | 3 |
| Major elective | 3 | Intl Business elective | 3 |
| Major elective | 3 | MGMT 4710 [I] | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## MANAGEMENT

## Department of Management

An effective manager must have competence in many disciplines, an understanding of a wide variety of relationships, and the ability to analyze evolving management requirements. Regardless of the functional specialty, the professional manager must also be a leader of people who knows how to organize and motivate groups of people serving the goals of the organization. Program objectives for a B.B.A. in

Management are: (a) to obtain knowledge of the cultural, global, and ethical environment of business; (b) to appreciate the impact of business decisions on society; (c) to understand the role of information technology and proficiency in relevant computer applications; (d) to possess the ability to integrate knowledge from different disciplines to define problems and research solutions; (e) to possess critical thinking and decision-making skills essential to solving business problems; (f) to obtain effective oral and written communication skills; $(\mathrm{g})$ to acquire the ability to contribute effectively within a team environment and the foundation knowledge in each functional area of business; ( h ) to acquire a solid background in management concepts, theories, and principles applicable to profit and not-for-profit organizations.

Effective adaptation of management to such emergent conditions as the continued growth of science and technology, populations, and large-scale organization demands a thorough grasp of management process theory including planning, organizing, directing, and controlling of operations.

The Management major is designed to provide students with a basic understanding of management concepts, theories and principles, which will be useful in all kinds of organizations. All management majors take courses in management principles, business communication, human resources , management, organizational behavior, international management, and strategic management. These courses and others are designed to develop knowledge of organizations and administrative processes and enhance skills in interpersonal relations, written and oral communication, and work project development and completion. The Management is intended to promote the development of general knowledge and skills that can be applied in virtually any organizational setting and which will continue to be important in the future. In addition to required core courses in management, students select among several more specialized courses to complete their majors.

## Management Major (B.B.A.)

## A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that MATH 1830 (Mathematics requirement) and ECON 2110 and 2120 (Social/Behavioral Sciences requirement) are specified for the B.B.A. degree.

## B. College and Degree (B.B.A.) Requirements ( 42 hours)

Lower Division Business Core Curriculum ( 15 hours)
No grade below and 2.25 GPA ( 2.5 for accounting majors) in MATH 1830, ECON 2110, ECON 2120
and the following lower division courses
ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
MIS 2749 Introduction to Business Microcomputer Applications (3)
MIS 2755 Introduction to Management Information Systems (3)
Upper Division Business Core Curriculum ( 27 hours)
No grade below "C" and 2.25 GPA in the following courses:
ACCT 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
Choose One:
MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350
International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business
Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce
(3); HPRM 4400 International Hospitality (3); MIS 4310 Global Information Technology (3); ECON 4351

International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the
topic pertains to international business and has been approved in advance by the department chair.
Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

## C. The Major ( 24 hours)

A minimum of 24 upper division semester hours including MGMT 3215, 4420, 4461, and either MGMT 4510 or MGMT 4810.

The additional 12 hours of the 24 hour minimum for the major can be selected from the following: MGMT $4240,4251,4260,4461,4510,4810,4820,4910,4110-19,4911$, a maximum of 6 hours from the following courses: MKTG 4410, HPRM 4315, HPRM 3330, HPRM 4350.

## D. Electives ( 13 hours)

Lower division or upper division courses to bring the total of hours earned to 120.

## Management Minor

For students whose major is in another department in The Fogelman College of Business and Economics (12 hours): MGMT 3215, 4420, and 6 upper division semester hours in management.
For students whose major is within another college of the University (18 hours): MGMT 3110, 3215, 4420; and 9 upper division semester hours in management.

## Typical 4-Year Management Sequence:

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Humanities* | 3 | Humanities* | 3 |
| Elective | $1-3$ | MIS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | 14-16 hrs |  | 16 hrs |

## Sophomore Year

| ACCT 2010 | 3 | ACCT 2020 | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202* | 3 | MIS 2755 | 3 |
| History* | 3 | History* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| J unior Year |  |  |  |
| :---: | :---: | :---: | :---: |
| MGMT 3510 | 3 | MGMT 4420 | 3 |
| ACCT 3130 | 3 | MGMT elective | 3 |
| ISDS 3711[C] | 3 | FIR 3410 | 3 |
| MGMT 3110 | 3 | MGMT 3215 | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| MGMT 4510 or 4810 | 3 | MGMT elective | 3 |
| MGMT elective | 3 | MGMT elective | 3 |
| MGMT 4461 | 3 | Intl Business elective | 3 |
| ISDS 3510 | 3 | MGMT $4710[1]$ | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## MANAGEMENT I NFORMATI ON SYSTEMS

## Department of Management I nformation Systems

Managers and non-managers alike depend upon information for decision making. To be useful that information must be understandable, timely, thorough, focused on the decision at hand, and in the hands of the appropriate individual. Accomplishing all this is the challenge of Management Information Systems. It requires a knowledge of individual and/or group behavior, the process of perception (how people select and interpret information), the decision tools they need, computers and communication technology, systems design, managing data, and the impact individual decisions have on the organization. Program objectives for a B.B.A. in Management Information Systems are: (a) to obtain knowledge of the cultural, global, and ethical environment of business; (b) to appreciate the impact of business decisions on society; (c) to understand the role of information technology and proficiency in relevant computer applications; (d) to possess the ability to integrate knowledge from different disciplines to define problems and research solutions; (e) to possess critical thinking and decision-making skills essential to solving business problems; (f) to obtain effective oral and written communication skills; (g) the ability to contribute effectively within a team environment and the foundation knowledge in each functional area of business; (h) to acquire the knowledge and skills required to organize and deliver information for effective management decision making.

Management Information Systems includes several specialized areas including Expert Systems, Telecommunications, Information Systems, Management and Planning, Statistics, System Development, Data Base Management, and general applications of computers to business.

Many Management Information Systems courses require substantial hands-on experience in computer labs. Therefore, the department does not allow credit by examination for upper division courses.
Management I nformation Systems Major (B.B.A.)
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that MATH 1830 (Mathematics requirement) and ECON 2110 and 2120 (Social/Behavioral Sciences requirement) are specified for the B.B.A. degree.

## B. College and Degree (B.A.) Requirements (42 hours)

Lower Division Business Core Curriculum (15 hours)
No grade below $\geqslant \mathrm{C} \geqslant$ and 2.25 GPA ( 2.5 for accounting majors) in MATH 1830, ECON 2110, ECON 2120 and the following lower division courses
ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
MIS 2749 Introduction to Business Microcomputer Applications (3)
MIS 2755 Introduction to Management Information Systems (3)
Upper Division Business Core Curriculum (27 hours)
No grade below "C" and 2.25 GPA in the following courses:
ACCT 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
Choose One:
MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); MIS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair. Transfer students are referred to the section Transfer Credit in the College of Business and Economics
description.
C. The Major ( 27 hours)

Completion of MIS 2770 and a minimum of 24 upper division hours, including MIS 3745, 3770, 3775, 3790, 3885 and 4800. The additional six hours will be satisfied by two of the following: MIS 3755, 3780, 4310, 4760, 4911, or COMP 4262.
MIS 2770 must be completed prior to taking any upper division courses in the major.

## D. Electives ( $\mathbf{1 0}$ hours)

Lower division or upper division courses to bring the total of hours earned to 120 .
Management I nformation Systems Minor
For students whose major is in another department in the Fogelman College of Business and Economics ( 15 hours): MIS 2770, 3770, 3775, 3790, 4800.
For students whose major is within another college of the University (21 hours): MIS 2749, 2755, 2770, 3770, 3775, 3790 and 4800.

## Typical 4-Year Management Information Systems Sequence:

## Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| Natural Science* | 4 | Natural Science* | 4 |
| Humanities* | 3 | Humanities* | 3 |
| Elective | $1-3$ | MIS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | $14-16$ hrs | 16 hrs |  |

## Sophomore Year

| ACCT 2010 | 3 | ACCT 2020 | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202* | 3 | MIS 2770 | 3 |
| History* | 3 | History* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| MIS 2755 | 3 | ISDS 2710 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Junior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| MIS 3745 | 3 | MIS 3770 | 3 |
| MIS 3775 | 3 | MIS 3790 | 3 |
| ISDS 3711[C] | 3 | FIR 3410 | 3 |
| MGMT 3110 | 3 | MKTG 3010 | 3 |
| COMM 2381 | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| MIS major elective | 3 | MIS major elective | 3 |
| ACCT 3130 | 3 | MIS 4800 | 3 |
| MIS 3885 | 3 | Intl Business elective | 3 |
| MGMT 3510 | 3 | MGMT $4710[$ I] | 3 |
| Elective | 3 | ISDS 3510 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## MARKETI NG MANAGEMENT

## Department of Marketing and Supply Chain Management

The objective of the Marketing and Supply Chain Management Department is to provide a broad view of the marketing process and to develop an understanding of all the factors involved in the marketing of goods and services.
Marketing Management majors study the practical application of marketing concepts, including procedures for developing promotion, pricing, distribution, and sales management strategies. Additionally, instruction is provided in market research, buyer behavior issues, and a variety of market programming topics. Program objectives for a B.B.A. in Marketing Management are: (a) to obtain knowledge of the cultural, global, and ethical environment of business; (b) to appreciate the impact of business decisions on society; (c) to understand the role of information technology and proficiency in relevant computer applications; (d) to possess the ability to integrate knowledge from different disciplines to define problems and research solutions; (e) to possess critical thinking and decision-making skills essential to solving business problems; (f) to obtain effective oral and written communication skills; (g) the ability to contribute effectively within a team environment and the foundation knowledge in each functional area of business; (h) to acquire a solid background in the application of marketing concepts including promotion, pricing, distribution, and sales management strategies.

## Marketing Management Major (B.B.A.)

A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that MATH 1830 (Mathematics requirement) and ECON 2110 and 2120 (Social/Behavioral Sciences requirement) are specified for the B.B.A. degree.

## B. College and Degree (B.B.A.) Requirements ( 42 hours)

Lower Division Business Core Curriculum ( 15 hours)
No grade below and 2.25 GPA ( 2.5 for accounting majors) in MATH 1830, ECON 2110, ECON 2120 and the following lower division courses
ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
MIS 2749 Introduction to Business Microcomputer Applications (3)
MIS 2755 Introduction to Management Information Systems (3)
Upper Division Business Core Curriculum ( 27 hours)
No grade below "C" and 2.25 GPA in the following courses:
ACCT 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
Choose One:
MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); MIS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair. Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

## C. The Major ( 24 hours)

A minimum of 24 upper division semester hours in marketing courses as follows: MKTG 3012, 3140, 3610,

4080, 4901, and either MKTG 3410 or 4470, and six semester hours chosen by the student from the following: MKTG 3320, 4230, 4240, 4530, 4911, 4920-29.

## D. Electives ( 13 hours)

Lower division or upper division courses to bring the total of hours earned to 120.

## Marketing Management Minor

For students whose major is in another college of the University: (24 hours) ACCT 2010; ECON 2120; and MKTG 3010, 3012, 3140, 3610, and six semester hours chosen by the student from the following: MKTG 3320, 3410, 4230, 4240, 4470, 4530, 4920-29.
For students whose major is in another department in The Fogelman College of Business and Economics ( 12 hours): MKTG 3012, 3140, 3610, and three semester hours chosen by the student from the following: MKTG 3320, 3410, 4230, 4240, 4470, 4530, 4920-29.

## Typical 4-Year Marketing Management Sequence:

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| Natural Science* | 4 | Natural Science* | 4 |
| Humanities* | 3 | Humanities* | 3 |
| Elective | $1-3$ | MIS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | $14-16$ hrs |  | 16 hrs |

## Sophomore Year

| ACCT 2010 | 3 | ACCT 2020 | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202* | 3 | MIS 2755 | 3 |
| History* | 3 | History* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| J unior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| MGMT 3510 [W] | 3 | MKTG 3012 | 3 |
| ACCT 3130 | 3 | MKTG 3140 | 3 |
| ISDS 3711[C] | 3 | MKTG major elective | 3 |
| MGMT 3110 | 3 | FIR 3410 | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| MKTG 3610 | 3 | MKTG major elective | 3 |
| MKTG 4080 | 3 | MKTG 4901 | 3 |
| MKTG 3410 or 4470 | 3 | Intl Business elective | 3 |
| ISDS 3510 | 3 | MGMT 4710 [I] | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

Total Hours: 120-122

Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## SALES <br> Department of Marketing and Supply Chain Management

The objective of the Sales program is to provide a broad view of the marketing process and to develop an understanding of all the factors involved in the marketing of goods and services.
Sales majors are taught practical and theoretical sales and sales management skills. Particular emphasis is placed on interpersonal communication techniques and on the practical application of the marketing
concepts as they apply to sales and sales management. Program objectives for a B.B.A. in Sales are: (a) to obtain knowledge of the cultural, global, and ethical environment of business; (b) to appreciate the impact of business decisions on society; (c) to understand the role of information technology and proficiency in relevant computer applications; (d) to possess the ability to integrate knowledge from different disciplines to define problems and research solutions; (e) to possess critical thinking and decision-making skills essential to solving business problems; (f) to obtain effective oral and written communication skills; (g) the ability to contribute effectively within a team environment and the foundation knowledge in each functional area of business; ( h ) to acquire a knowledge of sales theory and concepts and the application of sales skills, emphasizing interpersonal communication.

## Sales Major (B.B.A.)

A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that MATH 1830 (Mathematics requirement) and ECON 2110 and 2120 (Social/Behavioral Sciences requirement) are specified for the B.B.A. degree.
B. College and Degree (B.B.A.) Requirements ( 42 hours)

Lower Division Business Core Curriculum ( 15 hours)
No grade below and 2.25 GPA ( 2.5 for accounting majors) in MATH 1830, ECON 2110, ECON 2120
and the following lower division courses
ACCT 2010 Fundamentals of Accounting I (3)
ACCT 2020 Fundamentals of Accounting II (3)
ISDS 2710 Business Statistics (3)
MIS 2749 Introduction to Business Microcomputer Applications (3)
MIS 2755 Introduction to Management Information Systems (3)
Upper Division Business Core Curriculum ( 27 hours)
No grade below "C" and 2.25 GPA in the following courses:
ACCT 3130 Legal, Social, and Political Environment of Business (3)
FIR 3410 Business Finance (3)
MGMT 3110 Organization and Management (3)
MGMT 4710 Strategic Management (3) [I] (Enrollment usually limited to graduating seniors)
MKTG 3010 Principles of Marketing (3)
MGMT 3510 Business Communication (3) [W]
ISDS 3510 Production and Operations Management (3)
ISDS 3711 Analytical Tools for Business Decisions (3) [C]
Choose One:
MGMT 4810 International Management (3); MKTG 4530 International Marketing (3); ECON 4350 International Economics (3); FIR 4550 International Finance (3); MGMT 4510 International Business Communication and Negotiation (3); MKTG 4570 Global Transportation, Tourism and Electronic Commerce (3); HPRM 4400 International Hospitality (3); MIS 4310 Global Information Technology (3); ECON 4351 International Monetary Economics: Theory and Policy (3); one course from FIR 4110-4119 (3) when the topic pertains to international business and has been approved in advance by the department chair. Transfer students are referred to the section Transfer Credit in the College of Business and Economics description.

## C. The Major ( 24 hours)

A minimum of 24 upper division semester hours in marketing courses as follows: MKTG 3410, 3650, 4410, 4411, 4470, and 9 semester hours chosen by the student from the following: MKTG 3012, 3140, 3320, 3610, 4080, 4230, 4240, 4901.

## D. Electives (13 hours)

Lower division or upper division courses to bring the total of hours earned to 120.

## Sales Minor

For students whose major is in another college of the University (24 hours): ACCT 2010; ECON 2120; MKTG 3010, 3410, 4410, 4470, and 6 semester hours chosen by the student from the following courses: MKTG 3012, 3140, 3320, 3610, 4240.
For students whose major is in another department in The Fogelman College of Business and Economics ( 12 hours): MKTG 3410, 4410, 4470, and 3 semester hours chosen by the student from the following courses: MKTG 3012, 3140, 3320, 3610, 4240.

## Typical 4-Year Sales Sequence:

## Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| Natural Science* | 4 | Natural Science* | 4 |
| Humanities* | 3 | Humanities* | 3 |
| Elective | $1-3$ | MIS 2749 | 3 |
| MATH 1710 (if needed) | 3 | MATH 1830 | 3 |
| Semester Totals | $14-16$ hrs | 16 hrs |  |

## Sophomore Year

| ACCT 2010 | 3 | ACCT 2020 | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202 | 3 | MIS 2755 | 3 |
| History* | 3 | History* | 3 |
| ECON 2110 | 3 | ECON 2120 | 3 |
| ISDS 2710 | 3 | COMM 2381 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| J unior Year |  |  |  |
| :---: | :---: | :---: | :---: |
| MKTG 3410 | 3 | MGMT 3510 [W] | 3 |
| ACCT 3130 | 3 | MKTG 4470 | 3 |
| ISDS 3711[C] | 3 | MKTG major elective | 3 |
| MGMT 3110 | 3 | FIR 3410 | 3 |
| MKTG 3010 | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Senior Year   <br> MKTG 4410 3 MKTG major elective | 3 |  |  |
| :--- | :--- | :--- | :--- |
| MKTG 3650 | 3 | MKTG 4411 | 3 |
| MKTG elective | 3 | Intl Business elective | 3 |
| ISDS 3510 | 3 | MGMT 4710 [I] | 3 |
| Elective* | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

Total Hours: 120-122
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## Last Updated: 6/12/15

# THE COLLEGE OF COMMUNICATION AND FINE ARTS 

RICHARD R. RANTA, Ph.D., Dean

Room 232, Communication Fine Arts Building
(901) 678-2350
http://www.people.memphis.edu/~ccfa/

## ACADEMI C PROGRAMS

| Department/ School | MajorClick below for Major Requirements. Click on Tiger Paw for course Descriptions. |  | Concentration Within Major | Degree Offered |
| :---: | :---: | :---: | :---: | :---: |
| Art | Architecture | \% | NONE | Bachelor of Fine Arts (B.F.A.) |
|  | Art | \% | (1) Art Education <br> (2) Studio Arts <br> (3) Graphic Design <br> (4) Interior Design <br> (5) Photography | Bachelor of Fine Arts (B.F.A.) |
|  | Art History | \% | NONE | Bachelor of Arts (B.A.) |
| Communication | Communication | \% | (1) Broadcast and Electronic Media <br> (2) Communication <br> (3) Film and Video Production | Bachelor of Arts (B.A.) |
| J ournalism | Journalism | \% | (1) Advertising <br> (2) Broadcast News <br> (3) Internet J ournalism <br> (4) Newspaper/Magazine <br> (5) Public Relations | Bachelor of Arts (B.A.) |
| Music | Music | $\%$ | (1) Composition <br> (2) Jazz and Studio <br> Performance <br> (3) Jazz and Studio <br> Composition/Arranging <br> (4) Music History <br> (5) Performance <br> (6) Sacred Music <br> (7) Music Education <br> (Choral) (Instrumental) | Bachelor of Music (B.M.) |
|  | Music Industry |  | (1) Music Business <br> (2) Recording Technology | Bachelor of Music (B.М.) |
|  |  |  | (1) Design and Technical |  |


| Theatre and <br> Dance | Theatre | Production |
| :--- | :--- | :--- | :--- |
| (2) Performance |  |  |

Bachelor of Fine Arts (B.F.A.)

Individual program requirements described in the University of Memphis 2006-2007 Undergraduate Bulletin are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this Bulletin.

## PHI LOSOPHY

The College of Communication and Fine Arts is focused ultimately upon visual and audible symbols, whose rational and emotional values it is the mission of the college to create and explore. In the belief that perception is largely shaped by experience, The College of Communication and Fine Arts offers a range of symbolically rendered experiences, both individual and collective, in the hope of broadening and sensitizing the perceptions of its students.

The kind of symbolic experience that communicates emerges when, in Ruskin's phrase, "the hand, the head and the heart of man go together." Students in The College of Communication and Fine Arts receive individual and small group instruction toward this end. In the hope of furthering the capacity to impose a pattern on experience and to recognize the patterns offered by others, students of the college are exposed additionally to courses drawn from a broad base of the liberal arts.

The faculty of the college represents a diversity of academic and artistic backgrounds and interests, reflected not only in its teaching, but also in research and creative activities. It is a faculty united in the attempt to maintain the highest standards in both classroom and studio work, standards that find their limits at last only in the mystery and wonder of the human experience from which they rise.

## PURPOSES

The College of Communication and Fine Arts has four primary functions. First, it offers courses of study aimed at preparing its students to work toward careers in the fine or applied arts, communications, or the performing arts, whether as practitioners, teachers, artists, or consultants. Second, the college affords broad exposure and instruction in fine arts and communication to students of other colleges in the university whose degree programs may be enhanced by such exposure. Third, with a view toward individual professional growth as well as general cultural enhancement, the college vigorously promotes both scholarly research and artistic production on the part of its faculty. Finally, the college seeks to enrich the cultural atmosphere of both the university and the community at large through a continuing variety of public programs, to include art exhibitions, media presentations, dramatic productions, concerts, recitals, lectures, seminars, debates, workshops, festivals, and the like.

Through the diversity of these constituent elements, the college reflects the unity and challenge facing the communicative artist and scholar. Ultimately it is our goal to foster a more intense and profound awareness of the broad range of human experience from which the college derives its pertinence and vitality.

## ORGANI ZATI ON

The College of Communication and Fine Arts comprises five academic departments: Art, Communication, Journalism, Music, and Theatre and Dance. The requirements for the majors and minors offered by these departments are listed later in this section.

## RESI DENCE REQUI REMENTS

University residence requirements are explained in detail in the Graduation from the University section. A transfer student in The College of Communication and Fine Arts must earn at least 6 semester hours in residence in the major subject and a minimum of 3 semester hours in the minor. These credits may be earned only through regular class enrollment for a letter grade.

## TEACHER PREPARATI ON

Students enrolled in a degree program of The College of Communication and Fine Arts who wish to prepare themselves for teaching careers in the secondary schools of Tennessee may meet the state licensure requirements while pursuing their chosen majors.

## Admission to the Teacher Licensure Program

Students who plan to pursue an undergraduate program of studies which leads to K - 12 Teacher Licensure must submit a formal application to the College of Education Teacher Education Program (TEP).
Students are encouraged to apply for admission to TEP as they enter the college. LEAD 2010, Teaching and Schools in Urban Settings, is designed to be the first professional course taken by students seeking licensure. Admission proceedings will be discussed in this course within the context of responsibility for one's own professional development, and the developmental nature of teaching knowledge, skills, and dispositions.

## Prerequisites for Formal Admission to the TEP are as follows:

1. Admission application completed and returned.
2. Minimum grade of " C " in all ENGL 1010, 1020, COMM 2381, EDPR 2111, LEAD 2010, all courses in the major, and all professional education courses.
3. Satisfactory scores on the Pre-Professional Skills Test (PPST) according to the criteria established by the Tennessee State Board of Education and the College of Education, and the University of Memphis.
4. Minimum of 25 semester hours completed.
5. Overall minimum GPA of 2.5 .
6. Submission of a professional portfolio prior to satisfactory completion of a personal interview.

Conditional TEP Admission.

1. Students who do not meet the admissions criteria will be allowed to obtain Conditional Admission only if their deficiencies can be remediated within one semester. Conditional Admission status can be secured for one semester only.
2. Conditionally approved students will be allowed to enroll in professional education courses during the next enrollment period. If at the end of the semester, they are not able to meet the criteria for admission they will be disapproved.

## DEGREE REQUI REMENTS

## Degrees Offered

A student may earn a Bachelor of Fine Arts, Bachelor of Music, or Bachelor of Arts degree, by majoring in one of the five departments that constitute the College of Communication and Fine Arts. The following is an outline by department of all majors and concentration areas offered by the departments in the College of Communication and Fine Arts.

A minimum grade of "C" is required in every course applicable toward a major or minor.
Every student should be aware that the mere completion of courses with a minimum grade of " C " does not guarantee classification as a major or minor in the discipline concerned; the student must be recommended by the chair of the department in which the major or minor is sought. If, in the opinion of the chair, the quality of the student's work is not high enough, additional work, the repetition of courses, or other evidences of superior scholarship may be required.

Credit in the College of Communication and Fine Arts may be granted for validated learning from experience or non-traditional instruction. Guidelines for this procedure may be obtained in the office of the Dean of the College of Communication and Fine Arts.

## BACHELOR OF FI NE ARTS DEGREE REQUI REMENTS

- In ARCHITECTURE
- In ART
- In THEATRE


## ARCHITECTURE <br> Department of Art

NOTE: Before enrolling in any Architecture course, all applicants seeking admission to the B.F.A. with a major in Architecture must complete and submit to the Architecture Program an application form, a writing assignment, and a portfolio of five representative works. These three components comprise the Incoming Evaluation for Architecture and will be reviewed by a faculty committee. Applicants are accepted on the basis of potential in the field of architecture. Contact the Architecture Program for details and deadline. Program objectives for a B.F.A. in Architecture are: (a) to engage students in the processes and professional standards of architecture and design; (b) to develop a foundation for advanced study at the M.Arch. level; (c) to develop skills for active participation in society.

Students transferring from another major or another institution who intend to pursue a B.F.A. degree with a major in Architecture must complete the areas Incoming Evaluation prior to enrolling in Architecture courses. Transfer students seeking advanced standing in the Architecture major should submit a portfolio of work representing previously completed Architecture studio work. The review committee will determine if the portfolio work is equivalent to comparable courses at the University of Memphis. Placement in the major is dependent upon the review. Even if admitted to advanced standing, the student may be required to remedy previous course deficiencies.

## Architecture (B.F.A.)

A. University General Education Program (41 hours) See Graduation from the University link for the University General Education Program requirements. Note the following are specified by the department for this program: Mathematics: MATH 1830; Social/Behavioral Sciences: ANTH 1200 and SOCI 1111; Natural Science: PHYS 2010/2011 and ESCI 1020/1021; Humanities: ARTH 2101 and 2102, HIST 2010 and 2020.

## B. The Major (87 hours)

1. Major Core (32 hours)

ARCH 1111, 1112, 1113, 1120, 1211, 1212, 1411, 2412, 2611, 2711.
2. The Major

## Entrance - Completion of Major Core (28 hours)

[Candidacy Review and Portfolio Requirements - A Candidacy Review is required of all students intending to major in Architecture. Admission to the University of Memphis and completion of the major core do not guarantee placement in the program. Admission is selective and is based on a portfolio evaluation reflecting professional standards and expectations of the major. A portfolio that includes but is not limited to works from the major core courses is required as part of the application. Guidelines and application forms for admission to the Architecture major are available in the department office and from faculty advisors. Consultation with a faculty advisor is recommended before or during portfolio preparation. Students may submit portfolios for review no earlier than the semester that entrance requirements are being completed. Transfer students must meet entrance requirements of the major. After review, the department notifies the student of one of the following: (1) acceptance, (2) one semester acceptance on a probationary basis, (3) recommendation to correct the deficiencies and reapply, (4) recommendation to pursue studies in another area of art, or (5) denial of admission.] Permission to enroll in any 3000-4000 level Architecture course is based upon this review.
3. Completion of Major (49 hours) - ARCH 2311, 2612, 2712, 3312 [C], 3313, 3421, 3431, 3713, 3714, 4441, 4715, 4716, 4930 [W,I].
C. Electives ( 6 hours)

Architecture, Art and Art History electives complete the 87 semester hours of course work. See advisor for
details.

## Typical 4-Year Architecture Sequence

## Freshman Year

| ARCH 1120 | 3 | ARCH 1112 | 3 |
| :--- | :--- | :--- | :--- |
| ARCH 1211 | 3 | ARCH 1212 | 3 |
| ARCH 1111 | 3 | ARCH 1411 | 3 |
|  |  | ARCH 1113 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| ANTH 1200 | 3 | MATH 1830 | 3 |
| Semester Totals | 15 hrs |  | 18 hrs |

## Sophomore Year

| ARCH 2412 | 3 | ARCH 2712 | 5 |
| :--- | :--- | :--- | :--- |
| ARCH 2711 | 5 | ARCH 2612 | 3 |
| ARCH 2412 | 3 | ARCH 2311 | 4 |
| PHYS 2010/2011 | 4 | ESC 1020/1021 | 4 |
| COMM 2381 | 3 | ENGL 2201 or 2202 | 3 |
| Semester Totals | 18 hrs | 18 hrs |  |

J unior Year

| ARCH 3312 [C] | 3 | ARCH 3313 | 3 |
| :--- | :--- | :--- | :--- |
| ARCH 3421 | 3 | ARCH 3431 | 4 |
| ARCH 3713 | 4 | ARCH 3714 | 3 |
| ARCH/ARTH elective | 3 | ARTH 2102 | 3 |
| ARTH 2101 | 4 |  |  |
| Semester Totals | 17 hrs |  | 14 hrs |


| Senior Year   <br> SOCI 1111 3 ARCH elective | 3 |  |  |
| :--- | :--- | :--- | :--- |
| ARCH 4715 | 5 | ARCH 4716 | 5 |
| ARCH 4441 | 3 | ARCH 4930 | 3 |
| HIST 2010 | 3 | HIST 2020 | 3 |
| Semester Totals | 14 hrs |  | 14 hrs |

Total Hours: 128
Total Hours Required for Graduation: 128
*Must satisfy University General Education Program Requirement

## ART <br> Department of Art

The Bachelor of Fine Arts in Art with a major in Art is a professional degree offering students the specialized
training available in art schools, combined with the benefits of a broad liberal arts education. Program objectives for the B.F.A. in Art are: (a) to develop a BFA student who is capable of critical and analytical reasoning as a practicing art professional; (b) to provide students with a foundation for graduate or professional education; (c) to prepare students to join the community of artists at the local, national and international levels; (d) to acquire the knowledge to work comprehensively in the discipline or related discipline. The Department of Art welcomes qualified individuals who aspire to become practicing artists and designers. Professional art and design education is available in five concentration options: (1) Art Education; (2) Ceramics/Painting/Printmaking/Sculpture; (3) Graphic Design; (4) Interior Design; (5) Photography. The Department also welcomes students considering a minor in Art or in Photography. Please see the Minors section following the listing of concentration requirements for the B.F.A. in Art.

Special requirements for the Art major are divided into five groups:
general education
foundation in art
art history
concentration area
electives to bring the total credit hours to 120 hours.
Advanced Placement Credit: Prior to registration, Advanced Placement portfolios should be reviewed in the Department of Art for consistency with the performance standards required of enrolled students. An A.P. portfolio with a score of three (3), four (4), or five (5) points on the General Portfolio or on the Drawing Portfolio will be reviewed for the possible award of three credit hours. If a student submits separate portfolios from the junior and senior years, a maximum of six credit hours may be awarded. For a grade of three (3) points on the Drawing Portfolio or three (3), four (4), or five (5) points on the General Portfolio, three hours of unassigned studio elective credit may be awarded. For a grade of four (4) or five (5) points in the Drawing Portfolio, three hours of credit in Art 1311 (Beginning Drawing) will be considered. Unassigned A.P. credit may be used to satisfy a University credit.
Advising: Student advising in the Department of Art is an essential support service that aids students in clarifying academic goals consistent with their interests, abilities, and resources. Academic advisors assist Art majors in the selection of appropriate courses and provide meaningful discussion regarding career goals, past academic experience, and future academic progress. Freshmen, transfer and returning students are encouraged to contact the Art Office (room 201, Jones Hall) to request an academic advisor. Assistance from an advisor does not relieve a student of the responsibility of studying the appropriate catalog (Bulletin) and fulfilling all degree requirements.
Transfer students with more that 40 semester hours should see the CCFA Graduation Analyst (room 232, CFA Building) before seeing an Art advisor.
Before taking courses from another institution intended to apply towards the University of Memphis graduation, the student must obtain permission from the CCFA Dean.
NOTES for Graphic Design Students: Before enrolling in any Graphic Design course, all applicants seeking admission to the B.F.A. with a concentration in Graphic Design must complete and submit to the Department of Art an application form, a writing assignment, and a portfolio of five representative works. These three components comprise the Incoming Evaluation for Graphic Design and will be reviewed by a faculty committee. Applicants are accepted on the basis of potential in the field of graphic design. Contact the Department of Art for details and deadline.
Students transferring from another concentration or another institution who intend to pursue a B.F.A. degree with a concentration in Graphic Design must complete the areas Incoming Evaluation prior to enrolling in Graphic Design courses. Transfer students seeking advanced standing in the Graphic Design concentration should submit a portfolio of work representing previously completed Graphic Design studio work. The review committee will determine if the portfolio work is equivalent to comparable courses at the University of Memphis. Placement in the concentration is dependent upon the review. Even if admitted to advanced standing, the student may be required to remedy previous course deficiencies.
NOTES for Interior Design Students: Majors, non-majors and transfer students must follow the established sequence of Interior Design courses. All students must participate in Concentration Review. Students transferring from an interior design program at another school or university must submit a portfolio of work for evaluation and placement in the program prior to enrolling the University of Memphis Interior Design courses. Portfolio submissions must be received at least two weeks before the beginning of any semester. Portfolios received after this period will not be accepted for review. Students who have not completed the prerequisite(s), but intend to take a specific Interior Design course, may petition for
enrollment by submitting a portfolio of work related to the prerequisite requirements to the course instructor for evaluation. The portfolio must be submitted no later than two weeks prior to the end of the previous semester.
Art (B.F.A.)
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that the Humanities category is satisfied for art students who meet all B.F.A. in Art requirements by taking ARTH 2101 and 2102 and an approved literature course.

## B. The Major ( 79 hours)

1. Major Core (Foundation in Art) (12 hours)

ART 1210, 1215, 1311, 1314.

## 2. Concentrations

[Art majors must be formally accepted into a concentration. Admission to the University and completion of foundation art courses do not guarantee placement in a concentration. Admission is selective and is based on a portfolio evaluation that reflects professional standards and meets concentration expectations. Space availability may also affect admission decisions. A concentration entrance application and a portfolio should be submitted upon completion of foundation courses (ART 1210, 1215, 1311, 1314) plus additional concentration-specific courses (see concentration areas for these courses). The portfolio includes, but is not limited to, artwork from these courses. Guidelines and application forms for concentration admission are available in the department office and from faculty advisors. Consultation with a faculty adviser is recommended before or during portfolio preparation. Transfer students must meet concentration entrance requirements. After review, the department notifies the student of one of the following: (1) acceptance, (2) one semester acceptance on a probationary basis, (3) recommendation to correct deficiencies and reapply,
(4) recommendation to pursue studies in another area of art, or (5) denial of admission.]
a. Art Education ( 72 hours):
(1) Entrance ( 15 hours) - ART 3313 [C], 3411, 2351, 2511, and 2523. Students may submit portfolios for review no earlier than the semester that the entrance requirements are being completed.
(2) Art History ( 6 hours) -2 upper division art history courses.
(3) Completion of Concentration ( 39 hours) - ART 2301, 3313 [C], 3414 (1 hour), 3416 (1), 3423, 4321, 4418 (1), 4427, 4441; EDPR 2111; LEAD 2010; SPED 2000; ICL 4912 (9).
(4) Art Electives (7-10 hours) - A studio specialty of three or four courses in the same field is also required; see adviser for details. All required 2000 level art courses must be completed before enrollment in 4000 level studio classes. Art electives complete the 79 semester hours of professional course work.
Note: See the introduction to the College of Communication and Fine Arts requirements at the Teacher Preparation section.
b. Ceramics, Painting, Printmaking, and Sculpture ( 72 hours):

The four fields are interdependent and share the following requirements:
(1) Entrance ( 9 hours) - Three courses selected from ART 2301, 2331, 2351, 2511, 2523, 2701. Students may submit portfolios for review no earlier than the semester that the entrance requirements are being completed.
(2) Art History ( 6 hours) - ARTH 4155 or 4157 plus 3 hours in upper division art history courses.
(3) Completion of Concentration ( 46 hours) - Remaining lower division courses (see Entrance), plus upper division studio courses: ART 3313 [C], 3314, 4610 [I], 4622, (1), and 9 other courses from:
Ceramics: ART 3522, 3524, 4521, 4522.
Painting: ART 3332, 4321, 4322, 4331, 4332.
Printmaking: ART 2352, 3351, 3352, 4351, 4352, 4353, 4354.
Sculpture: ART 3511, 3512, 4511, 4512.
Independent Studies: ART 4621, Professional Art Practices: ART 4650 [W].
All 2000 level art courses must be completed before enrollment in 4000 level studio courses.
(4) Art Electives ( 6 hours) - Art electives complete the 79 semester hours of professional course work.
c. Graphic Design ( 67 hours):
(1) Entrance (12 hours) - ART 2213, 2219, 2223, 3313 [C]. Students may submit portfolios for review no earlier than the semester that the entrance requirements are being completed. Enrollment in 3000 or 4000 level graphic design courses is based upon this review.
(2) Art History ( 9 hours) - ART 4224 plus 2 upper division art history courses. COMM 4850 may be substituted for one art history course.
(3) Completion of Concentration (37 hours) - ART 2701, 3213 [C], 3219, 3222, 3227, 4211, 4221, 4222,

4223, 4232 or 4233,4235 [I], 4622 (1), and one of the following: ART 4223, 4230, 4232, 4233.
(4) Art Electives ( 9 hours) - Art electives complete the 79 hours of professional course work.
d. Interior Design (67 hours)
(1) Entrance (9 hours) - ART 1233, 1234, and 1235. Student may submit portfolios for review no earlier than the semester that entrance requirements are being completed. Permission to enroll in any 3000 or 4000 level Interior Design course is based upon this review.
(2) Art History (9 hours) - ART 3103, 3104, and three hours in an upper division art history course.
(3) Completion of Concentration (37 hours) - ART 2235, 2236, 2238, 3234, 3235 [C], 3236, 3238, 3250, 4238, 4239, 4240, 4250 (1), 4251 [I].
(4) Art Electives ( 12 hours) - Art electives complete the total of 79 semester hours of professional course work. Six of these hours must be in upper division courses.
e. Photography ( 67 hours):
(1) Entrance (18 hours) - ART 2301, 2331, 2351, 2511, 2523, 2701, 2702, and 3701. Students may submit portfolios for review no earlier than the semester that the entrance requirements are being completed.
Enrollment in 3000 or 4000 level studio courses is based upon this review.
(2) Art History (9 hours) - ARTH 4155 or 4157, plus 4721 and 4722.
(3) Completion of Concentration (30 hours) - ART 4353, 4610 [I], 4701, 4702 [I], 4703, 4704, 4711, (6), and 4712 [I] (6).
(4) Art Electives (10 hours) - Art electives complete the 79 semester hours of course work.
3. Graduation

For the B.F.A. in Art, a total of 120 semester hours is required, 85 of which must be in professional course work that includes ARTH 2101 and 2102. A minimum of 42 upper division semester hours is required for the degree and a minimum grade of " C " is required for all courses in the Art major.

## Art Minor

Completion of 24 semester hours in art courses, 9 of which must be from the upper division. Courses selected for the minor are to be approved by the advisor who will be assigned by the department chair.
Photography Minor
Completion of 18 semester hours as follows: ART 2701, 2702, 3701, 4701, 4702 [I ], and ARTH 4721.

## Typical 4-Year Art Education Concentration Sequence

## Freshman Year

| ART 1210 | 3 | ART 1215 | 3 |
| :--- | :--- | :--- | :--- |
| ART 1311 | 3 | ART 1314 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| COMM 2381 | 3 | Social/Behavioral Sciences* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Semester Totals | 16 hrs | 16 hrs |  |

## Sophomore Year

| ART 3313 | 3 | ART 2523 | 3 |
| :--- | :--- | :--- | :--- |
| ART 2301 | 3 | ART 2351 | 3 |
| ART 2511 | 3 | ARTH 2102 | 3 |
| ARTH 2101 | 3 | ART 3414 | 1 |
| EDPR 2111 | 3 | ART 3411 | 3 |
|  |  | LEAD 2010 | 3 |

Semester Totals 15 hrs 16 hrs

## Junior Year

| ART elective | 3 A | ARTH elective | 3 |
| :---: | :---: | :---: | :---: |
| ART 3423 | 3 A | ART elective | 3 |
| SPED 2000 | 3 A | ART 3416 | 1 |
| MATH 1420 | 3 E | ENGL 2201 or 2202 | 3 |
|  |  | History* | 3 |
| Semester Totals | 15 hrs |  | 16 hrs |
| Senior Year |  |  |  |
| ART elective |  | 3 ART 4441 | 3 |
| ART elective |  | 1 ICL 4912 | 9 |
| ART 4418 |  | 1 |  |
| ART 4427 |  | 3 |  |
| History* |  | 3 |  |
| Social/Behavioral Sciences* |  | * 3 |  |
| Semester Totals |  | 14 hrs | 12 hrs |

Total Hours: 120
Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## Typical 4-Year I nterior Design Concentration Sequence

## Freshman Year

| **ART 1233 | 3 | **ART 1314 | 3 |
| :---: | :---: | :---: | :---: |
| **ART 1311 | 3 | **ART 1215 | 3 |
| **ART 1210 | 3 | **ART 1235 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| ART 2101 | 3 | ARTH 2102 | 3 |
| Semester Tot | 15 |  |  |

**NOTE: Portfolio application for Interior Design Concentration entry required in the semester that starred courses are completed

## Sophomore Year

| ART 1234 | 3 | ART 2235 | 3 |
| :--- | :--- | :--- | :--- |
| ART 2236 | 3 | ART 3235 | 3 |
| ART 3103 | 3 | ART 3236 | 3 |
| ART 2238 | 3 | ART 3104 | 3 |
| COMM 2381 | 3 | MATH 1420 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

## J unior Year

| ART 3234 | 3 | ART 3250 | 3 |
| :--- | :--- | :--- | :--- |
| ART 3238 | 3 | ART elective | 3 |
| ARTH elective | 3 | ARTH elective | 3 |
| History* | 3 | ART 4239 | 3 |
| ENGL 2201 or 2202 | 3 | Natural Science* | 4 |

## Senior Year

| ART 4238 | 3 | ART 4251[I] | 3 |
| :--- | :--- | :--- | :--- |
| ART 4240 | 3 | Social/Behavioral Sciences* | 3 |
| ART 4250 | 1 | ART elective | 3 |
| Natural Science* | 4 | ART elective | 3 |
| Social Science* | 3 | History* | 3 |
| Semester Totals | 14 hrs |  | 15 hrs |

Total Hours: 120
Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## ART HISTORY

## Department of Art

## Art History Major (B.A.)

Program objectives for a B.A. in Art History are: (a) to understand the scope of art in human culture; (b) to acquire the ability to write about art clearly and meaningfully; (c) to acquire knowledge of diverse visual cultures; (d) to acquire the ability to read, write and understand the major terms and concepts of art history; (e) to conduct original research in the discipline.

## A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements.

## B. Bachelor of Arts (B.A.) (18-19 hours)

These hours are in addition to the University General Education Program requirements.
Foreign Language: 6 hours in a single foreign language at or above the 2000 level or equivalent.

1. If the language chosen was used to meet University admissions requirements, students must take the foreign language placement exam (if they have not already successfully completed a language course at an accredited institution of higher education). For information about the dates and place of placement exams, contact the Department of Foreign Languages and Literatures. On the basis of the results of the placement exam, students should follow these guidelines:
If placed into 1010: complete 1010, 1020, 2010, 2020
If placed into 1020: complete 1020, 2010, 2020
If placed into 2010: complete 2010, 2020
If placed into 2020: complete 2020
If placed into 3301 or higher: language requirement fulfilled
Or complete 6 hours at the 2000 level or above of another language
2. Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.
3. No credit hours are immediately granted on the basis of the placement exam.
4. Satisfactory completion of the language requirement by means of the placement exam will be noted on the student $>$ s transcript.
5. Students whose first college-level language course is 2010 or higher and who pass this course with a minimum grade of $\geqslant$ C may apply for Credit by Course Placement. The applicable fees are listed in the Miscellaneous Fees section of this Bulletin. Students wishing such credit must make written application to the chair of the Department of Foreign Languages and Literatures. Credit by Course Placement shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see Credit by Course Placement in Section 5 of this Bulletin.
6. Once a student begins with a lower-division course, all remaining higher-numbered courses in the lower division must be taken in sequence, without skipping. For example, students who begin with LATN 1010 cannot skip LATN 1020 and enroll in LATN 2010.
7. For students whose mother tongue is not English, lower-division credit in the native language will be awarded when the student has successfully completed the English composition requirement for graduation
and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make written application to the chair of the Department of Foreign Languages and Literatures.

Humanities: 3 hours of upper-division coursework, in an area outside of the major, to be chosen from one of the following categories. Please note that some courses have prerequisites:

1. Any upper-division literature course in CHIN, CLAS, ENGL, FREN, GERM, GREK, ITAL, JAPN, LALI, LATN, RUSS, or SPAN. Students should consult with their advisor or with the department to determine the appropriate courses.
2. Any upper-division HIST course, except HIST 2030, 3045, 3300, 3863, 4020, 4022, 4851, 4871, 4881, 4998, 4999.
3. Any upper-division PHIL course.
4. Judaic Studies: JDST 3201, 3202, 3661, 3801, 3802, 4671.
5. Political Thought: POLS 3102, 3401, 3402, 4405, 4415, 4416.
6. THEA 4582 [W,I]

Fine Arts Heritage: 3 hours (in a different subject area than University General Education Program requirement) from: ART 1030, ARTH 2101, COMM 1851, COMM 4850, COMM 4858 [W], DANC 1151, DANC 3101, MUS 1030, MUHL 4800, THEA 1030, THEA 4551, THEA 4552.

Mathematics/ Natural Sciences: 3-4 hours of Mathematics or Natural Sciences, in an area outside of the major.

1. Mathematics: one MATH course (in a different subject area than University General Education Program requirements), or PHIL 1611.
2. Natural Sciences: 3-4 hours (not to repeat University General Education Program science), selected from: BIOL 1010/1011, BIOL1020/1021; BI OL 1110/1111, BIOL 1120/1121; CHEM 1010/1011, 1020/1021; CHEM 1110/1111, 1120/1121; ESCI 1003, 1010/1011, 1020/1021, 1040, 1050, 1103, 3221, 3802, 4120 [W], 4122, 4201, 4214, 4231, 4241; PHYS 1010/1001, 1020/1002; PHYS 2010/2011, 2020/2021, 2110/2111, 2120/2121; PSYC 3306 (if University General Education Program sequence is not biology); UNHP 3407. NOTE: If a course has a lab, the lab must also be taken to complete this requirement.

Social Science: 3 hours of a Social Science (in addition to University General Education Program requirements) in an area outside of the major. No more than two courses from one discipline may be used to fulfill the University General Education Program and B.A. Social Science requirements. Coursework to be chosen from: AAAS 2100, ANTH 1100, 1200; CJ US 1100, 2110, 3510; COMM 1780, 4375 [W]; ECON 2110, 2120; ESCl 1301, 1401, 3430, 4316, 4431; HIST 4871; JOUR 1700, 4700, 4712 [I]; POLS 1100, 1301, 1501, 3213, 3216, 3506; PSYC 1101, 1102, 3510; SOCI 1111, 2100, CSED 2101, SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923; UNIV 2304; WMST 2100.

To qualify for the Bachelor of Arts degree, the student must complete a minimum of 120 semester hours with a grade point average of 2.0. Of the 120 semester hours required, not more than 42 semester hours in any one subject will be counted toward a degree. A minimum of 42 semester hours must be in courses from the upper division.

## C. The Major ( 42 hours)

Completion of 36 semester hours in art history courses, including ARTH 2101, 2102, 4195, and one upper division course each from five of the following art history categories: Ancient, Medieval, Renaissance, Baroque, Modern European, American, and non-European art, plus 12 hours upper division ARTH electives. A minimum of 6 hours in studio art is also required.

## D. Electives (18-19 hours)

Completion of courses to bring the total number of hours to 120 semester hours.

## Art History Minor

Completion of 18 semester hours in Art History, including ARTH 2101, 2102, and 12 semester hours from the ARTH 4000-level courses.

## Typical 4-Year Art History Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ARTH 2101 | 3 | ARTH 2102 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Humanities* | 3 | Humanities* | 3 |
| Foreign Language/B.A. (or elective)** | 3 | Foreign Language/ B.A. (or elective)** | 3 |
| Elective | 3 | Studio elective | 3 |
| Semester Totals | hrs |  |  |

Sophomore Year

| ARTH elective | 3 | ARTH elective | 3 |
| :--- | :--- | :--- | :--- |
| ARTH elective | 3 | ARTH elective | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| MATH* | 3 | Elective | 3 |
| ENGL 2201 or 2202 | 3 | History* | 3 |
| COMM 2381 | 3 |  |  |
| Semester Totals | 18 hrs | 15 hrs |  |


| Junior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ARTH elective | 3 | ARTH elective | 3 |
| Elective | 3 | ARTH elective | 3 |
| Social/Behavioral Sciences* 3 | Social/Behavioral | Sciences* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Semester Totals | 13 hrs |  |  |


| Senior Year |  |  |  |
| :---: | :---: | :---: | :---: |
| ARTH elective | 3 | ARTH 4195 [I] | 3 |
| ARTH elective | 3 | Social Science/B.A. | 3 |
| Nat. Sci./Math/B.A. | 3-4 | Humanities/B.A. | 3 |
| UD elective | 3 | UD elective | 3 |
| Studio elective | 3 | Elective | 3 |
| History* | 3 | Elective (if needed) | 1 |

Semester Totals 15-16 hrs 16 hrs
Total Hours: 120-121
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
**Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.

## COMMUNI CATI ON

## The Department of Communication

## Communication Major (B.A.)

Program objectives for a B.A. in Communication are: (a) to understand communication processes and practices; (b) to analyze and interpret the dynamics of messages; (c) to appreciate the aesthetic
dimensions of communication; (d) to recognize the value of diverse views and communication forms; (e) to evaluate the consequences of communication acts.
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. B. Bachelor of Arts (B.A.) (18-19 hours)

These hours are in addition to the University General Education Program requirements.
Foreign Language: 6 hours in a single foreign language at or above the 2000 level or equivalent.

1. If the language chosen was used to meet University admissions requirements, students must take the foreign language placement exam (if they have not already successfully completed a language course at an accredited institution of higher education). For information about the dates and place of placement exams, contact the Department of Foreign Languages and Literatures. On the basis of the results of the placement exam, students should follow these guidelines:
If placed into 1010: complete 1010, 1020, 2010, 2020
If placed into 1020: complete 1020, 2010, 2020
If placed into 2010: complete 2010, 2020
If placed into 2020: complete 2020
If placed into 3301 or higher: language requirement fulfilled
Or complete 6 hours at the 2000 level or above of another language
2. Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.
3. No credit hours are immediately granted on the basis of the placement exam.
4. Satisfactory completion of the language requirement by means of the placement exam will be noted on the student stranscript.
5. Students whose first college-level language course is 2010 or higher and who pass this course with a minimum grade of may apply for Credit by Course Placement. The applicable fees are listed in the Miscellaneous Fees section of this Bulletin. Students wishing such credit must make written application to the chair of the Department of Foreign Languages and Literatures. Credit by Course Placement shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see Credit by Course Placement in Section 5 of this Bulletin.
6. Once a student begins with a lower-division course, all remaining higher-numbered courses in the lower division must be taken in sequence, without skipping. For example, students who begin with LATN 1010 cannot skip LATN 1020 and enroll in LATN 2010.
7. For students whose mother tongue is not English, lower-division credit in the native language will be awarded when the student has successfully completed the English composition requirement for graduation and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make written application to the chair of the Department of Foreign Languages and Literatures.

Humanities: 3 hours of upper-division coursework, in an area outside of the major, to be chosen from one of the following categories. Please note that some courses have prerequisites:

1. Any upper-division literature course in CHIN, CLAS, ENGL, FREN, GERM, GREK, ITAL, JAPN, LALI, LATN, RUSS, or SPAN. Students should consult with their advisor or with the department to determine the appropriate courses.
2. Any upper-division HIST course, except HIST 2030, 3045, 3300, 3863, 4020, 4022, 4851, 4871, 4881, 4998, 4999.
3. Any upper-division PHIL course.
4. Judaic Studies: JDST 3201, 3202, 3661, 3801, 3802, 4671.
5. Political Thought: POLS 3102, 3401, 3402, 4405, 4415, 4416.
6. THEA 4582 [W,I]

Fine Arts Heritage: 3 hours (in a different subject area than University General Education Program requirement) from: ART 1030, ARTH 2101, COMM 1851, COMM 4850, COMM 4858 [W], DANC 1151, DANC 3101, MUS 1030, MUHL 4800, THEA 1030, THEA 4551, THEA 4552.

Mathematics/ Natural Sciences: 3-4 hours of Mathematics or Natural Sciences, in an area outside of the major.

1. Mathematics: one MATH course (not to repeat University General Education Program requirements), or

PHIL 1611.
2. Natural Sciences: 3-4 hours (different from the University General Education Program science), selected from: BI OL 1010/1011, BI OL 1020/1021; BIOL 1110/1111, BI OL 1120/1121; CHEM 1010/1011, 1020/1021; CHEM 1110/1111, 1120/1121; ESCI 1003, 1010/1011, 1020/1021, 1040, 1050, 1103, 3221, 3802, 4120 [W], 4122, 4201, 4214, 4231, 4241; PHYS 1010/1001, 1020/1002; PHYS 2010/2011, 2020/2021, 2110/2111, 2120/2121; PSYC 3306 (if University General Education Program sequence is not biology); UNHP 3407. NOTE: If a course has a lab, the lab must also be taken to complete this requirement.

Social Science: 3 hours of a Social Science (in addition to University General Education Program requirements) in an area outside of the major. No more than two courses from one discipline may be used to fulfill the University General Education Program and B.A. Social Science requirements. Coursework to be chosen from: AAAS 2100, ANTH 1100, 1200; CJUS 1100, 2110, 3510; COMM 1780, 4375 [W]; ECON 2110, 2120; ESCl 1301, 1401, 3430, 4316, 4431; HIST 4871; J OUR 1700, 4700, 4712 [I]; POLS 1100, 1301, 1501, 3213, 3216, 3506; PSYC 1101, 1102, 3510; SOCI 1111, 2100, CSED 2101, SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923; UNIV 2304; WMST 2100.

To qualify for the Bachelor of Arts degree, the student must complete a minimum of 120 semester hours with a grade point average of 2.0 . Of the 120 semester hours required, not more than 42 semester hours in any one subject will be counted toward a degree. A minimum of 42 semester hours must be in courses from the upper division.

## C. The Major (33-37 hours)

1. Major Core (6 hours)

All students must take COMM 1780 and 2381 (included in the University General Education Program). A 2.0 cumulative GPA is required for all courses completed in the major. In addition, all students must fulfill the requirements for one of the following concentrations:
2. Concentrations ( $24-28$ hours):
a. Broadcast and Electronic Media (27-28 hours): one of COMM 3003 [W], 4360 [W] or 4850; COMM 3800, 4857; three of: COMM 4810, 4811, 4812, 4831, or 4871; two of: COMM 3321, 3322, 3330 [C], 3371, 4011, 4013, or 4854; one of: COMM 3820, 3821, or 3823; and three additional hours in Communication.
b. Communication ( 27 hours): COMM 3001 or 3002,3003 [W], 3321,3330 [C], 4381 [I]; and 15 additional hours in Communication.
c. Film and Video Production ( 25 hours): one of COMM 3003 [W], 4360 [W], or 4850, COMM 3823, 3824, 3842; three of 4822, 4824; 4825, 4841, 4842, 4891, 4960, or 4970; one of: (Selection may not include course used to satisfy core) COMM 3003 [W], 4220-29, 4850, 4851, 4853, 4854, 4856, 4857, or 4858 [W].

## D. Electives (2-20 hours)

Completion of courses to bring the total to 120 semester hours.

## E. Honors Program

To be eligible for admission to the Communication Honors program a student must meet the following requirements: (1) declare a major in Communication, (2) have completed 12 hours of Communication coursework, (3) have Department of Communication faculty member as an adviser, and (4) make an honors application to the adviser. Applications may be obtained from the director of the honors program or from the department office.
To be awarded departmental honors at graduation with the designation With Honors in Communication, a student must fulfill the following requirements: (1) maintain a 3.5 GPA in communication coursework, (2) maintain a 3.5 GPA overall, (3) complete all Department of Communication major requirements, (4) complete an independent thesis or an independent film/video project sponsored by a Department of Communication faculty member consisting of six hours over two semesters: three hours in research preparation (COMM 3330 [C], 4381 [I], or 4891), and three hours in completing the thesis project (COMM 4999), and (5) successful defense of the thesis.

## Communication Minor

Any student wishing to minor in any area in the Department of Communication should see the department chair who will assign an appropriate advisor. The minor must consist of at least 18 hours of approved coursework, 9 of which must be upper division. Coursework for all minors will be determined by the student in conference with the advisor with the approval of the department chair.

## Typical 4-Year Broadcast and Electronic Media Concentration Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| COMM 1780 | 3 | COMM 2381 | 3 |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Humanities* | 3 | Humanities* | 3 |
| Foreign Language/B.A. (or elective)** | 3 | Foreign Language/B.A. (or elective) | 3 |
| Elective | 3 | COMM 3800 | 3 |
| Semester Totals | 15 hrs | 15 hrs |  |

## Sophomore Year

| COMM core | 3 | COMM 4857 | 3 |
| :--- | :--- | :--- | :--- |
| COMM conc. elective | 3 | COMM conc. elective | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| MATH* $^{*}$ | 3 | Elective | 3 |
| History* | 3 | History* | 3 |
| ENGL 2201 or 2202 | 3 |  |  |

Semester Totals $18 \mathrm{hrs} \quad 15 \mathrm{hrs}$

| Junior Year   <br> COMM conc. elective 3 COMM conc. elective | 3 |  |  |
| :--- | :--- | :--- | :--- |
| Elective | 3 | COMM conc. elective | 3 |
| Social/Behavioral Sciences* | 3 | Social/Behavioral Sciences* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| Semester Totals | 13 hrs |  | 13 hrs |

## Senior Year

| COMM conc. elective | 3 | COMM conc. elective | 3 |
| :--- | :--- | :--- | :--- |
| Fine Arts Heritage/B.A. | 3 | Social Science/B.A. | 3 |
| Nat. Sci./Math/B.A. | $3-4$ | Humanities/B.A. | 3 |
| UD elective | 3 | UD elective | 3 |
| Elective | 3 | Elective | 3 |
|  |  | Elective (if needed) | 1 |

Semester Totals 15-16 hrs 16 hrs
Total Hours: 120-121
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
**Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.

## Typical 4-Year Film and Video Production Concentration Sequence

## Freshman Year

COMM 1780
ENGL 1010
Humanities*

COMM 2381
ENGL 1020
Humanities*

3
33

The College of Communication and Fine Arts

| Foreign Language/B.A. (or elective)** | 3 | Foreign Language/B.A. (or elective)** | 3 |
| :--- | :--- | :--- | :--- |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

## Sophomore Year

| COMM conc. elective | 3 | COMM 3824 | 4 |
| :--- | :--- | :--- | :--- |
| COMM 3823 | 4 | COMM conc. elective | 3 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| MATH* | 3 | Elective | 3 |
| History* | 3 | History* | 3 |
| ENGL 2201 or 2202 | 3 |  |  |
| Semester Totals | 19 hrs | 16 hrs |  |


| Junior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| COMM 3842 | 4 | COMM conc. elective | 3 |
| Elective | 3 | UD elective | 3 |
| Social/Behavioral Sciences* 3 Social/Behavioral Sciences* | 3 |  |  |
| Natural Science* | 4 | Natural Science* | 4 |
| Semester Totals | 14 hrs |  | 13 hrs |

## Senior Year

| COMM conc. elective | 3 | COMM conc. elective | 3 |
| :--- | :--- | :--- | :--- |
| Fine Arts Heritage/B.A. | 3 | Social Science/B.A. | 3 |
| Nat. Sci./Math/B.A. | $3-4$ | Humanities/B.A. | 3 |
| UD elective | 3 | UD elective | 3 |
| Elective | 3 | UD elective | 3 |
|  |  | Elective (if needed) | 1 |

Semester Totals
15-16 hrs
16 hrs
Total Hours: 120-121
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
**Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.

## Typical 4-Year Communication Concentration Sequence

## Freshman Year

| COMM 1780 | 3 | COMM 2381 | 3 |
| :---: | :---: | :---: | :---: |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Humanities* | 3 | Humanities* | 3 |
| Foreign Language (or elective)** | 3 | Foreign Language (or elective)** | 3 |
| Elective | 3 | COMM conc. elective | 3 |
| Semester Totals |  |  |  |



Total Hours: 120-121
Total Hours Required for Graduation: 120

* Must satisfy University General Education Program Requirement
**Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.


## J OURNALI SM

## The Department of J ournalism

The J ournalism major at the University of Memphis offers preparation for careers in advertising, broadcast news, Internet journalism, newspaper/magazine, and public relations. The journalism student is required to take career-oriented skills courses to enhance writing, editing, and graphic abilities, as well as theory courses to broaden the student's philosophical understanding. Program objectives for a B.A. in J ournalism are: (a) to think critically, creatively and independently; (b) to conduct research and evaluate information by methods appropriate to the communications professions in which they work; (c) to write correctly and clearly in forms and styles appropriate for the communications professions, audiences and purposes they serve; (d) to critically evaluate one's own work and that of others for accuracy and fairness, clarity, appropriate style and grammatical correctness.
J ournalism graduates typically work as newspaper or television reporters and photographers, editors and anchors, advertising executives, public relations professionals, and freelance writers and producers. No matter which concentration is selected, each student journalist requires a strong background in liberal arts and an understanding of the social sciences to augment his or her professional skills. Consequently, no more than 40 hours of journalism courses may be included in the 120 hours required for graduation. The
remainder of the student's course work must follow the guidelines provided by the university to qualify for a Bachelor of Arts degree.
Practical experience is available on The Helmsman newspaper, radio station WUMR, and Insightcampus TV newscast productions. Additionally, journalism students may participate in one of the following activities:
University Public Information Office, Athletic Publicity Office, Alumni Publicity Office. Qualified majors will be chosen for senior-year internships with Memphis newspapers, magazines, advertising and public relations agencies, and broadcasting stations.
J OUR 2121, which requires typing proficiency, is a prerequisite for journalism majors taking more advanced writing courses in the program. Students must pass the Journalism Department's English Proficiency Test before enrolling for JOUR 2121. Prerequisite journalism courses, including JOUR 2121, must be completed with a minimum grade of "C" before moving on to any course in the program to which the prerequisites are applied. A grade point average of 2.0 is required to declare and maintain a journalism major. JOUR 1700 and JOUR 2121 must be completed within the first calendar year as a major. Students who fail to comply with the above criteria may be permanently dropped from the program. Additionally, students must have a 2.0 grade point average in journalism classes to graduate.

Students majoring in journalism may select only one concentration. Of the 120 hours required for graduation, 80 hours must be other than journalism or journalism skills related courses. Of these 80 hours, at least 65 hours must be in liberal arts. Twelve semester hours in a secondary area of emphasis, outside the Department of J ournalism, approved by the student's advisor, is recommended.
In order to be in compliance with the Accrediting Council on Education in Journalism and Mass
Communications accreditation standards, UofM will accept no more than 12 semester hours or the
equivalent in journalism courses for transfer from community colleges to be applied toward the degree.
Journalism Major (B.A.)
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. B. Bachelor of Arts (B.A.) (18-19 hours)

These hours are in addition to the University General Education Program requirements.
Foreign Language: 6 hours in a single foreign language at or above the 2000 level or equivalent.

1. If the language chosen was used to meet University admissions requirements, students must take the foreign language placement exam (if they have not already successfully completed a language course at an accredited institution of higher education). For information about the dates and place of placement exams, contact the Department of Foreign Languages and Literatures. On the basis of the results of the placement exam, students should follow these guidelines:
If placed into 1010: complete 1010, 1020, 2010, 2020
If placed into 1020: complete 1020, 2010, 2020
If placed into 2010: complete 2010, 2020
If placed into 2020: complete 2020
If placed into 3301 or higher: language requirement fulfilled
Or complete 6 hours at the 2000 level or above of another language
2. Students presenting a language to meet University admission requirements cannot receive credit for 1010 in that language.
3. No credit hours are immediately granted on the basis of the placement exam.
4. Satisfactory completion of the language requirement by means of the placement exam will be noted on the student s transcript.
5. Students whose first college-level language course is 2010 or higher and who pass this course with a minimum grade of $\geqslant$ may apply for Credit by Course Placement. The applicable fees are listed in the Miscellaneous Fees section of this Bulletin. Students wishing such credit must make written application to the chair of the Department of Foreign Languages and Literatures. Credit by Course Placement shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language. For additional information, see Credit by Course Placement in Section 5 of this Bulletin.
6. Once a student begins with a lower-division course, all remaining higher-numbered courses in the lower division must be taken in sequence, without skipping. For example, students who begin with LATN 1010 cannot skip LATN 1020 and enroll in LATN 2010.
7. For students whose mother tongue is not English, lower-division credit in the native language will be awarded when the student has successfully completed the English composition requirement for graduation and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make written application to the chair of the Department of

Foreign Languages and Literatures.
Humanities: 3 hours of upper-division coursework, in an area outside of the major, to be chosen from one of the following categories. Please note that some courses have prerequisites:

1. Any upper-division literature course in CHI N, CLAS, ENGL, FREN, GERM, GREK, ITAL, JAPN, LALI, LATN, RUSS, or SPAN. Students should consult with their advisor or with the department to determine the appropriate courses.
2. Any upper-division HIST course, except HIST 2030, 3045, 3300, 3863, 4020, 4022, 4851, 4871, 4881, 4998, 4999.
3. Any upper-division PHIL course.
4. Judaic Studies: JDST 3201, 3202, 3661, 3801, 3802, 4671.
5. Political Thought: POLS 3102, 3401, 3402, 4405, 4415, 4416.
6. THEA 4582 [W,I]

Fine Arts Heritage: 3 hours (in a different subject area than University General Education Program requirement) from: ART 1030, ARTH 2101, COMM 1851, COMM 4850, COMM 4858 [W], DANC 1151, DANC 3101, MUS 1030, MUHL 4800, THEA 1030, THEA 4551, THEA 4552.

Mathematics/ Natural Sciences: 3-4 hours of Mathematics or Natural Sciences, in an area outside of the major.

1. Mathematics: one MATH course ( not to repeat University General Education Program requirements), or PHIL 1611.
2. Natural Sciences: 3-4 hours (different from the University General Education Program science), selected from: BI OL 1010/1011, BI OL 1020/1021; BI OL 1110/1111, BI OL 1120/1121; CHEM 1010/1011, 1020/1021; CHEM 1110/1111, 1120/1121; ESCI 1003, 1010/1011, 1020/1021, 1040, 1050, 1103, 3221, 3802, 4120 [W], 4122, 4201, 4214, 4231, 4241; PHYS 1010/1001, 1020/1002; PHYS 2010/2011, 2020/2021, 2110/2111, 2120/2121; PSYC 3306 (if University General Education Program sequence is not biology); UNHP 3407. NOTE: If a course has a lab, the lab must also be taken to complete this requirement.

Social Science: 3 hours of a Social Science (in addition to University General Education Program requirements) in an area outside of the major. No more than two courses from one discipline may be used to fulfill the University General Education Program and B.A. Social Science requirements. Coursework to be chosen from: AAAS 2100, ANTH 1100, 1200; CJUS 1100, 2110, 3510; COMM 1780, 4375 [W]; ECON 2110, 2120; ESCI 1301, 1401, 3430, 4316, 4431; HIST 4871; J OUR 1700, 4700, 4712 [I]; POLS 1100, 1301, 1501, 3213, 3216, 3506; PSYC 1101, 1102, 3510; SOCI 1111, 2100, CSED 2101, SOCI 3112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923; UNIV 2304; WMST 2100.

To qualify for the Bachelor of Arts degree, the student must complete a minimum of 120 semester hours with a grade point average of 2.0. Of the 120 semester hours required, not more than 42 semester hours in any one subject will be counted toward a degree. A minimum of 42 semester hours must be in courses from the upper division.

## C. The Major ( 43 hours)

1. Major Core (12-15 hours)

Completion of JOUR 1700, 2121, and 4700. Advertising, Broadcast News, Internet J ournalism and Public Relations students will take one of the following: J OUR 4702 [I], 4708 [I], 4712 [I] or 4716 [I].
Newspaper/Magazine students will take two of the following: J OUR 4702 [I], 4708 [I], 4712 [I] or 4716 [I].
2. Concentrations (21-30 hours)
a. Advertising (30-31 hours): JOUR 3300, 3324, 3900, 4326 [C], 4327, 4328 [W,I], 4900; J OUR 3400 or 4330 or COMM 3801; MKTG 3010, 3012.
b. Broadcast News ( 24 hours): J OUR 3120 [W], 3625 [W], 4500, 4629, 4639 [C], 4655; COMM 3801. c. Internet J ournalism (27 hours): JOUR 3120 [W], 3500, 3526, 3900, 4124 [W,C], 4500, 4550, 4560, and one of the following: 3324, 4120 [W], 4130, 4900.
d. Newspaper/Magazine (21 hours): J OUR 2123, 3120 [W], 3130, 3526, 4120 [W], 4124 [W,C], 4140. e. Public Relations (30-31 hours): J OUR 3400, 3410 [C], 3421 [W], 3900, 4420, 4440 [I]; MGMT 3110; MKTG 3010; one course from among: JOUR 3120 [W], 3130, 3625 [W]; and one course from among: JOUR 3300, 4430, 4500, or COMM 3801.

## D. Electives (21 hours)

Completion of courses to bring the total to 120 semester hours.

## J ournalism Minor

Any student wishing to minor in any area in the department of Journalism should see the department chair who will assign an appropriate advisor. The minor must consist of at least 18 hours of approved
coursework, 9 of which must be upper division. Coursework for all minors will be determined by the student in conference with the advisor with the approval of the department chair.

## Typical 4-Year Journalism Sequence

| Freshman Year |  |  |  |
| :---: | :---: | :---: | :---: |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| American Heritage* | 3 | COMM 2381 | 3 |
| JOUR 1700 | 3 | J OUR 2121 | 3 |
| Foreign Language/B.A. | 3 | Humanities* | 3 |
| Social/Behavioral Sciences* | 3 | Social Science/B.A. | 3 |
| Semester Totals |  |  | 15 hrs |

## Sophomore Year

| Humanities* | 3 | Jour core elective | 3 |
| :--- | :--- | :--- | :--- |
| Natural Science* | 4 | History* | 3 |
| Social Science* | 3 | Natural Science* | 4 |
| Foreign Language/B.A. | 3 | Foreign Language/B.A. | 3 |
| ENGL 2201 or 2202 | 3 | MATH* $^{*}$ | 3 |
| Semester Totals | 16 hrs | 16 hrs |  |

## J unior Year

| Nat. Sci./Math/B.A. | 3 | Jour conc. elective | 3 |
| :--- | :--- | :--- | :--- |
| Jour conc. elective | 3 | Jour conc. elective | 3 |
| Elective | 3 | Elective | 3 |
| Jour conc. elective | 3 | Fine Arts Heritage/B.A. | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |

## Senior Year

Jour conc. elective 3 Jour conc. elective 3
JOUR $4700 \quad 3 \quad$ Elective 1

Jour conc. elective 3 Elective 3
Humanities/B.A. 3 Jour conc. elective 3
Jour conc. elective 3 Jour core elective 3
Semester Totals $15 \mathrm{hrs} \quad 13 \mathrm{hrs}$
Total Hours: 120. Internship elective highly recommended last semester to enhance employability and complete minimum of 120
hours for degree
Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## MUSI C

## Rudi E. Scheidt School of Music

Program objectives for a B.M. in Music are: (a) to be prepared for entrance into accredited graduate programs in music; (b) to be prepared to pursue graduate studies in music performance; (c) to be prepared to pursue careers in the music profession.
The Bachelor of Music with a major in Music is a professional degree, the requirements for which provide the student with an opportunity for specialization in the traditional disciplines of music and music education. A minimum grade of " C " is required in every graded course applicable toward the major. The student must maintain an overall grade point average of 2.0. Exception: Music Education concentration: overall grade point average of 2.5 and a minimum grade of " C " in each professional education and music course. The specific degree requirements are divided into four groups: (1) University General Education Program, (2) basic music courses, (3) courses required for the specific emphasis chosen by the student, (4) electives to bring the total of semester hours taken to 120 ( 124 hours for Music Education choral emphasis, 125 hours for Music Education instrumental emphasis). All students must complete a minimum of 42 hours at the upper division level. Transfer students must complete a minimum of 30 semester hours of music and/or music education courses at the upper division level at the University of Memphis.
Admission: All applicants seeking admission as freshman music majors or as transfer students must complete and submit to the Admissions Office of the University of Memphis an appropriate formal application form. In addition to academic considerations, admission to the music degree program requires a personal interview and an audition. The audition consists of (1) performance in the student $s$ major applied area, (2) a music theory examination and (3) a piano placement exam. Candidates are accepted on the basis of accomplishment, potential and suitability for the concentration they wish to pursue. Students seeking admittance as music majors in the fall term should apply no later than J une 1, and those seeking admittance in the spring term should apply no later than December 1. Additional information on specific audition requirements and on interview/audition appointments may be obtained through the office of the School of Music or at http://music.memphis.edu/.

## Music Major (B.M.)

A. University General Education Program ( 35 hours in addition to 6 hours of Music History) See Graduation from the University link for the University General Education Program requirements. Six hours of Humanities are satisfied by taking MUHL 3301 [W] and 3302 [W]for Music majors (excluding Jazz concentrations) or MUHL 3303 [W] and 4806 for J azz and Studio Performance and Jazz Composition and Arranging concentrations. Students in Music Education must take PSYC 1200 for one of the Social/Behavioral Sciences requirements.
B. The Major (85-90 hours)

1. Major Core ( 39-43 hours)
a. Completion of MUTC 1008, 1010, 1009, 1011, 2008, 2010, 3008 [C], 3009 (16 hours)
b. Theory elective (one from the following): MUTC 3101 (required for Music Education), 3102 [W], 3109, 3201, 4205, 4206, 4207; J azz take MUTC 2103 (3 hours)
c. MUHL 3301 [W], 3302 [W]; J azz take MUHL 3303 [W], 4806 (6 hours)
d. History Elective (one from the following):

MUHL 4008, 4009, 4010, 4013, 4800, 4801, 4805, 4806, or 4807 (Music Education is exempt) (3 hours);
e. MUSE 3700 ( 2 hours);
f. MUAP 1105, 1106, 2107, 2108 (4) with two exceptions: Music Education instrumental majors are not required to take MUAP 2108 and J azz majors must take MUAP 1105, 1106, 1116, and a proficiency examination administered by the jazz faculty. All undergraduate Music majors, irrespective of concentration, must take a piano placement examination before enrolling in the School of Music. This evaluation will place students in the appropriate course in the class-piano sequence. All piano proficiency requirements as appropriate to the concentration must be passed before graduation (or, for Music Education majors, before student teaching). Students already proficient in piano may be permitted to bypass the class-piano sequence and enroll in MUSE 3101, which will satisfy this requirement and any student may choose to take the departmental Piano Proficiency Examination in lieu of coursework. Since the requirements for this exam vary according to the area of concentration, contact the Coordinator of Class Piano for specific details.
g. MUID 1001 (1)
h. Ensemble Requirement: All Music majors must take a minimum of eight (8) semesters of ensemble. The specific requirements for this are determined by each division and degree program. Please consult with your adviser for the specific outline for your applied area and degree program exceptions.
i. Concert Attendance: All Music majors are required to attend a minimum of 100 concerts or recitals in the four-year program (suggested 25 per year). Records will be maintained in by the School of Music on the number of events attended by each student and an annual report will be filed with the Director.
2. Concentration ( 42 hours except Music Education, see below)
a. Jazz and Studio Performance

MUAP $1 \times x 1$, (1), $1 \times x 2$ (10), 3012-14 (8), 3103 (4), 4xx2 (4), 4895, MUTC 3201, 3825, 3826, 3827
b. Jazz and Studio Composition/Arranging

MUAP 1312, (pianists take 1101) (4), MUTC 2501, 2504 (2), 2511 (2), 3201, 3825, 4106, 4503, 4896 [I] (4), MUAP $1 \times x 2$ (5), 3012-14 (6), 3103 (2), 3501 (2).
c. Performance. Instruction in performance leading to the Bachelor of Music in Music with a concentration in Performance is provided for the following areas: Trumpet, Horn, Trombone, Tuba, and Euphonium (Brass Instruments); Piano, Harpsichord, and Organ (Keyboard Instruments); Percussion; Violin, Viola, Violoncello, Bass, Guitar, and Harp (String Instruments), Flute, Oboe, Clarinet, Saxophone, and Bassoon (Woodwind Instruments); and Voice.
Individual instruction in major performance area (24 hours)
Instruction in secondary performance area, repertory, and/or pedagogy: ( 6 hours)
For brass instruments: MUHL 4020 (3) Solo Brass Literature; MUSE 4514 (3) Brass Pedagogy.
For woodwind instruments: 2-4 hours in secondary woodwind instrument(s) and MUSE 4521 (3) Woodwind Pedagogy; option of MUAP 2201 (1) Historical Techniques for Woodwind Instruments, or MUAP 4263 (1) Reed Making.
For percussion: MUHL 4030 (3) Percussion Repertory and MUSE 4520 (3) Percussion Pedagogy.
For bowed strings: 6 hours chosen from MUHL 4500 String Repertory, MUAP 4004 (2) Orchestral Excerpts, MUHL 4008 The Symphony, MUHL 4022 Early Chamber Music, MUHL 4011 String Quartet Literature, MUSE 4506 Introduction to Suzuki Talent Education for Strings, and/or up to 2 hours of an approved secondary string instrument.
For guitar: MUHL 4015 (3) Guitar Literature and MUSE 4251 (3) Guitar Pedagogy.
For voice: MUSE 4523 (2) Vocal Pedagogy; MUHL 4002 (2) Song Repertory I and MUHL 4003 (2) Song Repertory II.
For piano: MUHL 4001 (2) Piano Repertory, MUSE 4501 (2) Piano Pedagogy I, and MUSE 4505 (2)
Collaborative Piano Techniques.
Junior Recital (1 hour)
MUAP 4999 [I]. Artist Recital (4 hours)
Small Ensembles (4-6 hours)
Four semesters of small ensembles, chosen from those listed under Small Ensembles and Chamber Music in consultation with the major advisor, is required. Piano (and Harpsichord) performance students must take a minimum of four (4) semesters of MUAP 3301, Chamber Music for Keyboard, as part of the music core requirements for ensembles.
For students in voice, demonstrated proficiency equivalent to the second semester university level courses in French, German, or Italian.
For Piano and Harpsichord performance students, the following is to be taken in lieu of the four hours of class piano: Functional Keyboard Skills (1), secondary keyboard instrument (two semesters of one credit each) (2), and one music elective (1).
Music Electives - as needed to satisfy 120 hours degree requirement.
d. Sacred Music:

Individual Instruction in Voice or Organ (14)
MUSA 4104, 4105 Sacred Music in History and Practice I \& I I (6)
MUSE 4701 Choral Conducting (3)
MUAP 4999 [I]. Artist Recital (4)
For students in Voice:
MUSE 4211 Vocal Diction (2)
Small Ensembles (4)
Music Electives (6)
For students in Organ:
Individual Instruction in Voice (4)

MUHL 4005 History and Literature of the Organ (3)
Music Electives (2)
e. Composition:

Individual instruction in applied music to include two semesters of piano (8)
MUTC 2501 Composition (3)
MUTC 2502 Composition minimum two semesters (6)
MUTC 4501 Composition (minimum three semesters) (9)
MUTC 4511 Intermediate Electronic Music (2)
MUTC 4512 Advanced Electronic Music (2)
Choose one of the following courses: MUTC 4205 Sixteenth Century Counterpoint (2) or MUTC 4206
Eighteenth Century Counterpoint (2)
MUTC 4209 Advanced Orchestration (3)
MUTC 4102 Compositional Processes of the 20th Century (3)
MUTC 4599 [I] Senior Composition Recital (3)
f. Music History:

Individual instruction in applied music (10)
MUHL 4259 Studies in Bibliography (3)
Electives (11)
Advanced Music History (9)
Foreign Language: 6 semester hours in addition to requirements for admission (6)
MUHL 4999 [I]: Senior Project in Music History (3)
g. Music Education: (47-48 hours)

Core: (29 hours)
MUSE 1101 Class Instruction in Brass Instruments (1)
MUSE 1103 Class Instruction in Percussion Methods (1)
MUSE 1104 Class Instruction in Woodwind Instruments (1)
MUSE 1116 Class Instruction in Stringed Instruments (1)
EDPR 2111 Development Across the Life Span (3)
MUSE 2002 Foundations of Music Education (3)
MUAP 3999 J unior Recital (1)
SPED 2000 Intro to Exceptional Learners (3)
MUSE 4999 Seminar in Music Education (3)
MUSE 4911 Student Teaching in Music (9)
MUSE 4213 Materials and Methods of General Music (3)
Instrumental Emphasis: (22 hours)
MUSE 1112 Class Instruction in Voice (1)
MUSE 4215 J azz Ensemble Techniques (1)
MUSE 4700 Instrumental Conducting (3)
Applied Music: at least 2 hours at the upper division level (12)
MUSE 4403 Materials and Methods of Instrumental Music, 6-12 (3)
Choral Emphasis: (21 hours)
MUSE 1112 Class Instruction in Voice (1)
(Not required of students enrolled in applied voice)
MUSE 1119 Guitar for the Classroom Teacher (1)
MUSE 4211 Vocal Diction I (2)
MUSE 4701 Choral Conducting (3)
Applied Music: at least 2 hours at the upper division level (12)
MUSE 4405 Materials and Methods of Choral Music, (7-12) (3)

## C. Electives (0-12 hours)

Completion of elective courses to bring the total to a minimum of 120 semester hours (124 or 125 for students in the Music Education concentration depending on emphasis). Courses will be chosen by the student in consultation with the advisor and major professor.

## Music Minor

Students wishing to minor in music should contact the School of Music Audition Coordinator to declare Music as their minor and schedule appropriate placement test. The minor in Music consists of 21 credit hours and is available to any student who completes the following requirements: Applied Music individual
instruction (4 hours); 2 semesters appropriate ensembles (2 hours); MUTC 1008 and MUTC 1009 ( 6 hours); choose one from MUHL 3301 [W], 3302 [W], 3303 [W] (3 hours); upper division electives ( 6 hours). In addition, all music minors are required to attend a minimum of 25 concerts or recitals.

## Typical 4-Year Jazz and Studio Performance Concentration Sequence

| Freshman Year |  |  |  |
| :---: | :---: | :---: | :---: |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP 3012/4 | 1 | MUAP 3012/4 | 1 |
|  |  | MUAP 1116 | 1 |
| Semester Totals | 15 hrs |  | 16 hrs |
| Sophomore Year |  |  |  |
| ENGL 2201 or 2202 | 3 | MATH* | 3 |
| MUTC 2008 | 3 | History* | 3 |
| MUTC 2010 | 1 | MUAP 2107 | 1 |
| MUAP (applied music) | 2 | MUTC 3008 [C] | 3 |
| MUTC 3825 | 3 | MUTC 3009 | 1 |
| MUTC 2103 | 3 | MUTC 3201 | 3 |
| MUAP 3012/4 | 1 | MUAP (applied music) | 2 |
| MUAP 3103 | 1 | MUAP 3012/4 | 1 |
|  |  | MUAP 3013 | 1 |
| Semester Totals | 17 hrs |  | 18 hrs |


| J unior Year |  |  |  |
| :---: | :---: | :---: | :---: |
| Social/Behavioral Sciences* | * 3 | Social/Behavioral Sciences* | 3 |
| MUSE 3700 | 2 | Humanities* | 3 |
| MUAP 3103 | 1 | MUHL 3303 [W] | 3 |
| MUTC 3826 | 3 | MUAP (2nd instrument) | 1 |
| COMM 2381 | 3 | MUAP 3012/4 | 1 |
| MUAP (applied music) | 2 | MUTC 3xxx | 2 |
| MUAP 3012/4 | 1 | History* | 3 |
|  |  | MUAP 3103 | 1 |
| Semester Totals | 15 hrs |  | 15 hrs |
| Senior Year |  |  |  |
| MUID 3827 E | Elective | 3 |  |
| Music elective 2 M | MUAP 4895 | 5 |  |


| MUID 1001 | 1 | MUHL 4806 | 3 |
| :--- | :--- | :--- | :--- |
| MUAP 3012/4 | 1 | MUAP 4xx2 | 2 |
| MUAP 4xx2 | 2 | MUAP 3012/4 | 1 |
| MUHL elective | 3 |  |  |
| Semester Totals | 12 hrs |  | 12 hrs |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## Typical 4-Year Jazz Composition and Arranging Concentration Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUTC 2501 | 3 |
|  |  | MUAP 1116 | 1 |
| Semester Totals | 14 hrs |  | 16 hrs |
| Sophomore Year |  |  |  |
| ENGL 2201 or 2202 | 3 | MATH* | 3 |
| MUTC 2008 | 3 | Music elective | 3 |
| MUTC 2010 | 1 | MUAP 3103 | 1 |
| MUAP (applied music) | 2 | MUTC 3008 [C] | 3 |
| MUTC 3825 | 3 | MUTC 3009 | 1 |
| MUTC 2103 | 3 | MUTC 3201 | 3 |
| MUAP 3012/4 | 1 | MUAP 3012/4 | 1 |
| Semester Totals | 17 hrs | 15 hrs |  |


| Junior Year   <br> Social/Behavioral Sciences*   <br> MUSE 3700 2 Social/Behavioral Sciences* | 3 |  |  |
| :--- | :--- | :--- | :--- |
| MUAP 1312 | 2 | History* | 3 |
| MUTC 2511 | 2 | MUHL 3303 [W] | 3 |
| COMM 2381 | 2 | MUAP 1312 | 2 |
| MUTC 2504 | 3 | MUAP 3012/4 | 1 |
| MUAP 3012/4 | 2 | MUTC 3501 | 2 |
| Semester Totals | 1 |  |  |
|  | 15 hrs | 14 hrs |  |


| Senior Year   <br> History* 3 Music elective | 3 |  |  |
| :--- | :--- | :--- | :--- |
| MUTC 4503 | 3 | MUAP 4896 | 4 |


| MUID 1001 | 1 | MUHL 4806 | 3 |
| :--- | :--- | :--- | :--- |
| MUAP 3012/4 | 1 | MUTC 4106 | 3 |
| MUHL elective | 3 | MUAP 3012/4 | 1 |
| MUAP 3103 | 1 | Music elective | 3 |
| Music elective | 3 | PHED* | 2 |
| Semester Totals | 15 hrs | 14 hrs |  |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## Typical 4-Year Performance Concentration Sequence

## Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| Natural Science* | 4 | Natural Science* | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 3 | MUAP (applied music) | 3 |
| MUAP (large ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUID 1001 | 1 |  | 16 hrs |
| Semester Totals | 17 hrs |  |  |


| Sophomore Year <br> ENGL 2201 or 2202 | 3 | Small ensemble | 1 |
| :--- | :--- | :--- | :--- |
| MUTC 2008 | 3 | MATH* $^{*}$ | 3 |
| MUTC 2010 | 1 | History* | 3 |
| MUAP (applied music) | 3 | MUTC 3008 [C] | 3 |
| MUAP 2107 | 1 | MUTC 3009 | 1 |
| MUAP (ensemble) | 1 | MUAP 2108 | 1 |
| MUAP (small ensemble) | 1 | MUAP (applied music) | 3 |
| History* | 3 | MUAP (ensemble) | 1 |
| Semester Totals | 16 hrs |  | 16 hrs |


| J unior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| Social/Behavioral Sciences* | 3 | Social/Behavioral Sciences* | 3 |
| Small ensemble | 1 | MUTC** | 3 |
| MUHL 3301 [W] | 3 | MUHL 3302 [W] | 3 |
| MUAP (ensemble) | 1 | MUAP (applied music) | 4 |
| COMM 2381 | 3 | MUAP (ensemble) | 1 |
| MUAP (applied music) | 4 | MUAP 3999 | 1 |
| Semester Totals | 15 hrs | 15 hrs |  |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| MUHL elective | 3 | MUAP 4999 [I] | 4 |
| Music elective | 3 | Music elective | 3 |
| MUAP (ensemble) | 1 | Music elective | 3 |
| MUSE 3700 | 2 | Upper division elective | 3 |
| MUAP (applied music) | 4 | MUAP (ensemble) | 1 |
| Semester Totals | 13 hrs | MUAP (small ensemble) | 1 |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207
***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Sacred Music (Organ) Concentration Sequence

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| Natural Science* | 4 | Natural Science* | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP 1331 | 2 | MUAP 1331 | 2 |
| MUAP (large ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUID 1001 | 1 |  |  |
| Semester Totals | 16 hrs |  |  |


| Sophomore Year <br> ENGL 2201 or 2202* | 3 | Elective | 2 |
| :--- | :--- | :--- | :--- |
| History* | 3 | History* | 3 |
| MUTC 2008 | 3 | MATH* $^{*}$ | 3 |
| MUTC 2010 | 1 | MUAP (large ensemble) | 1 |
| MUAP 1331 | 2 | MUTC 3008 [C] | 3 |
| MUAP (large ensemble) | 1 | MUTC 3009 | 1 |
| MUAP 1610 | 1 | MUAP 2108 | 1 |
| MUAP 2107 | 1 | MUAP 1331 | 2 |
| Semester Totals | 16 hrs |  |  |


| Junior Year |  |  |  |
| :--- | :---: | :--- | :--- |
| Social/Behavioral Sciences* | 3 | Social/Behavioral Sciences* | 3 |
| COMM 2381 | 3 | MUHL 4005 | 3 |
| MUHL 3301 [W] | 3 | MUHL $3302[\mathrm{~W}]$ | 3 |
| MUAP 4331 | 2 | MUAP 4331 | 2 |
| MUAP (ensemble) | 1 | MUAP (ensemble) | 1 |

MUSE 3700

Semester Totals

2 Music elective

14 hrs

| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| MUSA 4104 | 3 | MUAP 4999 [I] | 4 |
| Music elective | 3 | MUHL elective ${ }^{* * *}$ | 3 |
| MUAP ensemble | 1 | Ensemble | 1 |
| Music elective | 2 | MUAP 1611 | 2 |
| MUAP4331 | 2 | MUSA 4105 | 3 |
| MUHL 4005 | 3 |  |  |
| Semester Totals | 14 hrs |  |  |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Sacred Music (Choral) Concentration Sequence

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| Natural Science* | 4 | Natural Science* | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP 1611 | 2 | MUAP 1611 | 2 |
| MUAP (large ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUID 1001 | 1 |  |  |
| Semester Totals | 16 hrs |  |  |

## Sophomore Year

| ENGL 2201 or 2202* | 3 | MUSE 4211 | 2 |
| :--- | :--- | :--- | :--- |
| History* | 3 | History* | 3 |
| MUTC 2008 | 3 | MATH* $^{*}$ | 3 |
| MUTC 2010 | 1 | MUAP (large ensemble) | 1 |
| MUAP 1611 | 2 | MUTC 3008 [C] | 3 |
| MUAP (large ensemble) | 1 | MUTC 3009 | 1 |
| MUAP 2107 | 1 | MUAP 2108 | 1 |
|  |  | MUAP 1611 | 2 |

Semester Totals 14 hrs 16 hrs

## J unior Year

Social/Behavioral Sciences* 3

COMM 2381
MUHL 3301 [W]

3 Music elective 3
3 MUHL 3302 [W] 3

| MUAP 4611 | 2 | MUAP 4611 | 2 |
| :--- | :--- | :--- | :--- |
| MUAP (ensemble) | 1 | MUAP (ensemble) | 1 |
| MUAP (small ensemble) | 1 | MUSE 4701 | 3 |
| MUSE 3700 | 2 | MUAP (small ensemble) | 1 |
| Semester Totals | 15 hrs | 16 hrs |  |

## Senior Year

| MUSA 4104 | 3 | MUAP 4999 [I] | 4 |
| :--- | :--- | :--- | :--- |
| Music elective | 3 | MUHL elective*** | 3 |
| Music elective | 2 | MUAP (small ensemble) | 1 |
| Theory elective** | 3 | Music elective | 3 |
| MUAP 4611 | 2 | MUSA 4105 | 3 |
| MUAP (ensemble) | 1 | Ensemble | 1 |

Small ensemble 1
Semester Totals $15 \mathrm{hrs} \quad 15 \mathrm{hrs}$
Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207
***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Composition Concentration Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP (large ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUID 1001 | 1 | MUTC 2501 | 3 |
| Semester Totals | 12 hrs |  |  |
| Sophomore Year |  |  | 14 hrs |
| English 2201 or 2202 | 3 | MUTC 2502 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| MUTC 2008 | 3 | MATH* | 3 |
| MUTC 2010 | 1 | MUAP (large ensemble) | 1 |
| MUAP (applied music) | 2 | MUTC 3008 [C] | 3 |
| MUAP (large ensemble) | 1 | MUTC 3009 | 1 |
| MUAP 2502 | 3 | MUAP 2108 | 1 |
| MUAP 2107 | 1 | MUAP (applied music) | 2 |
| Semester Totals | 18 hrs | 18 |  |

J unior Year

| History* | 3 | History* | 3 |
| :--- | :--- | :--- | :--- |
| COMM 2381 | 3 | MUTC 4505 or 4506 | 2 |
| MUHL 3301 [W] | 3 | MUHL 3302 [W] | 3 |
| MUTC 4209 | 3 | MUTC 4511 | 2 |
| MUAP (large ensemble) | 1 | MUAP (large ensemble) | 1 |
| MUTC 4501 | 3 | MUTC 4501 | 3 |
| MUSE 3700 | 2 |  |  |
| Semester Totals | 18 hrs | 14 hrs |  |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| Social/Behavioral Sciences* | 3 | MUTC 4599 [I] | 4 |
| MUTC 4501 | 3 | MUHL elective** | 3 |
| MUTC 4512 | 2 | MUAP (large ensemble) | 1 |
| Theory elective | 3 | MUTC 4102 | 3 |
| MUAP (large ensemble) | 1 | Social/Behavioral Sciences* | 3 |
| Semester Totals | 12 hrs | 14 hrs |  |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
**Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Music History Concentration Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP (small ensemble) | 1 | MUAP (ensemble) | 1 |
| MUID 1001 | 1 |  |  |
| Semester Totals | 16 hrs |  |  |
| Sophomore Year |  |  | 15 |
| ENGL 2201 or 2202 | 3 | MATH* |  |
| History* | 3 | MUTC 2108 | 1 |
| MUTC 2008 | 3 | History* | 3 |
| MUTC 2010 | 1 | MUAP (ensemble) | 1 |
| MUAP (applied music) | 2 | MUTC 3008 [C] | 3 |
| MUAP (large ensemble) | 1 | MUTC 3009 | 1 |
| MUAP 2107 | 1 | MUAP (applied music) | 2 |


| Foreign Language | 3 | Foreign Language |  |
| :--- | :---: | :--- | :--- | :--- |
| Semester Totals | 17 hrs |  |  |
| S hrs |  |  |  |
| J unior Year |  |  |  |
| Social/Behavioral Sciences* | 3 | Social/Behavioral Sciences* | 3 |
| MUHL 3301 [W] | 3 | Concentration elective | 3 |
| MUAP (applied music) | 2 | MUHL 3302 [W] | 3 |
| MUSE 3700 | 2 | Concentration elective | 2 |
| MUAP (ensemble) | 1 | MUAP (ensemble) | 1 |
| MUTC elective** | 3 | MUHL elective*** | 3 |
| Semester Totals | 14 hrs |  | 15 hrs |

## Senior Year

| Concentration Elective | 2 | MUHL 4999 [I] | 3 |
| :--- | :--- | :--- | :--- |
| MUHL elective | 3 | MUHL elective*** | 3 |
| MUHL elective | 3 | MUAP (ensemble) | 1 |
| MUHL elective | 3 | Concentration elective | 2 |
| MUAP (ensemble) | 1 | Concentration elective | 2 |
|  |  | Theory elective | 3 |

Semester Totals 12 hrs 14 hrs
Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
**Choose one from MUTC 3101, 3201, 3202, 4205, 4206, 4207
***Choose one from MUHL 4008, 4009, 4010, 4013

## Typical 4-Year Music Education (Instrumental) Concentration Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| COMM 2381 | 3 | American Heritage* | 3 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP ensemble | 1 | MUAP (ensemble) | 1 |
| MUID 1001 | 1 | PSYC 1200/SOCl 1111 | 3 |
| Semester Totals | 15 hrs |  | 17 hrs |


| Sophomore Year   <br> ENGL 2201 or 2202   <br> Natural Science* 4 Matural Science* | 4 |  |  |
| :--- | :--- | :--- | :--- |
| MUTC 2008 | 3 | MUSE 1116 | 3 |
| MUTC 2010 | 1 | MUAP (small ensemble) | 1 |


| MUAP (applied music) | 2 | MUTC 3008 [C] | 3 |
| :--- | :--- | :--- | :--- |
|  |  | MUSE 1112 | 2 |
| MUAP (large ensemble) | 1 | MUTC 3009 | 1 |
| MUAP 2107 | 1 | MUAP (applied music) | 2 |
| MUSE 2002 | 3 | Ensemble | 1 |
| Semester Totals | 18 hrs | 18 hrs |  |


| J unior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| MUSE 4215 | 1 | MUSE 4403 | 3 |
| MUHL 3301 [W] | 3 | EDPR 2111 | 3 |
| MUAP (applied music) | 2 | MUHL 3302 [W] | 3 |
| MUTC 3101 | 3 | MUSE 4700 | 2 |
| MUAP (ensemble) | 1 | MUAP (ensemble) | 1 |
| MUSE 3700 | 2 | MUAP (applied music) | 2 |
| SPED 2000 | 3 |  |  |
| MUSE 1112 | 2 | MUSE 1101 | 1 |
| MUSE 1104 | 1 | MUAP 3999 | 1 |
| Semester Totals | 19 hrs |  | 16 hrs |

Senior Year

| MUSE 1103 | 1 | MUSE 4999 | 3 |
| :--- | :---: | :---: | :---: |
| MUSE 4205 | 2 |  |  |
| Natural Science* | 4 |  |  |
| Social/Behavioral Sciences* | 3 | MUSE 4911 | 9 |
| History* | 3 |  |  |
| MUSE 4405 | 3 |  |  |
| MUAP (ensemble) | 1 |  |  |

Semester Totals $17 \mathrm{hrs} \quad 12 \mathrm{hrs}$
Total Hours: 125
Total Hours Required for Graduation: 125
*Must satisfy University General Education Program Requirement

## Typical 4-Year Music Education (Choral) Concentration Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| COMM 2381 | 3 | History* | 3 |
| MUTC 1008 | 3 | MUTC 1009 | 3 |
| MUTC 1010 | 1 | MUTC 1011 | 1 |
| MUAP 1105 | 1 | MUAP 1106 | 1 |
| MUAP (applied music) | 2 | MUAP (applied music) | 2 |
| MUAP (ensemble) | 1 | MUAP (ensemble) | 1 |
|  |  | PSYC 1200 | 3 |

The College of Communication and Fine Arts
Semester Totals $14 \mathrm{hrs} \quad 17 \mathrm{hrs}$


Total Hours: 124
Total Hours Required for Graduation: 124
*Must satisfy University General Education Program Requirement

## MUSI C I NDUSTRY

## Rudi E. Scheidt School of Music

The Bachelor of Music degree in Music Industry is designed for students whose interests and abilities indicate a strong potential for significant achievement in the music industry. Program objectives for a B.M. in Music Industry are: (a) to develop competencies in performance, analysis, composition/improvisation, history/repertory, technology and synthesis; (b) to be prepared to pursue graduate studies in music industry; (c) to be prepared to pursue careers in the music industry or related fields.
Two concentrations are available: Music Business and Recording Technology

Admission: Admission is based on selective procedures, and admission to the University does not guarantee placement in the Music Industry Program. Stringent quality control is essential; therefore, an assessment is required of all students desiring to enter the program. Entrance requirements vary by concentration.
Specific admissions criteria may be obtained through the office of the Director, School of Music. Through
the admissions procedure, preliminary estimates of student commitment and potential success can be made. Upon admission, the student will be assigned an advisor.
Retention: The students progress and continued potential will be reviewed twice yearly by the appropriate Music Industry faculty. Permission to continue in the program will be based upon this evaluation. Retention criteria may be obtained through the office of the Director, School of Music.
Piano Proficiency: Students in Music Business or Recording Technology have no piano proficiency requirement.
Ensembles: Students in Music Business or Recording Technology must complete two (2) credit hours of ensemble.
Concert Attendance: All students Music Business and Recording Technology are required to attend a minimum of 50 concerts or recitals during their four-year program. Records will be maintained in the School on the number of events attended by each student and a report will be filed with the Director of the School each year.
Experiential Learning: Credit may be awarded for validated learning from experience or non-traditional instruction. Students who wish to apply for credit for experiential learning may obtain guidelines for this procedure from the Dean of the College of Communication and Fine Arts. (See Fees and Charges, for related fee information.)
Graduation from the Program: A minimum of 120 hours is required for graduation; a minimum grade of " C " and a grade point average of 2.5 are required in every graded course applicable to the major.

## Music I ndustry Major (B.M.)

## A. University General Education Program ( $\mathbf{3 5}$ hours)

See Graduation from the University link for the University General Education Program requirements. Note the following B.M. degree with a major in Music Industry program specifications: (1) Music Business must complete ECON 2110 and 2120 to fulfill the Social/Behavioral Sciences requirement; (2) must take MATH 1830 for the Mathematics requirement, and complete with a minimum grade of "C"; (3) PHYS 2110/2111 and PHYS 2120/2121 (Natural Science requirement) are preferred. The Humanities category is satisfied for students who meet all B.M. requirements.

## B. The Major ( 85 hours)

1. Major Core (29 hours)

MUTC 1012, 1013, 2012, 2013; MUHL 3303 [W]; MUAP 1105 (1), 1116 (2), 1xxxx (applied instruction) (4); MUID 3103; choose one: MUHL 4801, 4804, 4805, 4806, 4807; 50 concert/recital attendance requirements prior to graduation.
2. Concentration ( 56 hours)
a. Music Business

ACCT 2010; COMM 4812, MUID 1001 (1), 2201 (2), 3xxx, 3602, 4603, 4820, 4840, 4850, 4898 [I], 4899;
FIR 3011, J OUR 3400, 3900; MGMT 3110, 3510; MKTG 3010.
b. Recording Technology

MUID 2201 (2), 3602, 3800 (4), 3801, 4603, 4800 (4); 4802 (4), 4803 (4), 4811 (1), 4830, 4840, 4898 [I]; COMM 3823 (4); COMP 4001, EETH 1811, 2821; JOUR 3900, 4900.
C. Electives ( $0-3$ hours)

Elective courses may be chosen to bring the total number of hours to 120 .

## Typical 4-Year Music Business Concentration Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1830 | 3 | MUTC 1013 | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| MUTC 1012 | 3 | MUAP 1116 | 1 |
| Applied music | 1 | MUID 2201 | 2 |
| MUID 1001 | 1 | MUAP (applied music) | 1 |

MUAP 11051

Semester Totals 16 hrs 14 hrs

| Sophomore Year <br> MUTC 2012 | 3 | COMM 2381 | 3 |
| :--- | :--- | :--- | :--- |
| History* | 3 | History* | 3 |
| ENGL 2201 or 2202 | 3 | MUTC 2013 | 3 |
| MUAP (applied music) | 1 | Applied music | 1 |
| Ensemble | 1 | ECON 2110 | 3 |
| ECON 2120 | 3 | Ensemble | 1 |
| ACCT 2010 | 3 |  |  |
| Semester Totals | 17 hrs |  | 14 hrs |


| J unior Year <br> MKTG 3010 | 3 | MUID $3 \times x x$ | 3 |
| :--- | :--- | :--- | :--- |
| MUID 3602 | 3 | FIR 3011 | 3 |
| JOUR 3900 | 3 | MUID 3103 | 3 |
| MUHL 3303[W] | 3 | MUID 4603 | 3 |
| MGMT 3110 | 3 | JOUR 3400 | 3 |
|  |  | ISDS 2710 | 3 |

Semester Totals 15 hrs 15 hrs

| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| MUID 4840 | 3 | MUID 4850 | 4 |
| COMM 4812 | 3 | MUID Xxx | 3 |
| MUHL** | 3 | MUID 4898 [I] 4 |  |
| MUID 4899 | 3 | MGMT 3510 | 3 |
|  | 3 | MUID 4820 | 3 |
| Semester Totals | 12 hrs | 17 hrs |  |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
** Choose one: MUHL 4801, 4804, 4805, 4806, 4807

## Typical 4-Year Recording Technology Concentration Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1830 | 3 | MUID 2201 | 2 |
| Natural Science* | 4 | Natural Science* | 4 |
| MUTC 1012 | 3 | MUAP 1116 | 1 |
| MUAP 1105 | 1 | EETH 1811 | 3 |
| MUAP (applied music) | 1 | MUTC 1013 | 3 |

MUAP (applied music) 1

| Semester Totals | 15 hrs |  | 17 hrs |
| :--- | :--- | :--- | :--- |
| Sophomore Year |  |  |  |
| MUTC 2012 | 3 | History* | 3 |
| ENGL 2201 or 2202 | 3 | Ensemble | 1 |
| EETH 2821 | 3 | MUTC 2013 | 3 |
| MUAP (applied music) | 1 | MUID 3801 | 2 |
| MUID 3800 | 4 | MUAP (applied music) | 1 |
| Music ensemble | 1 | MUID 4800 | 4 |
| Semester Totals | 15 hrs | 14 hrs |  |


| Junior Year <br> COMM 2381 | 3 | Social/Behavioral Sciences* | 3 |
| :--- | :--- | :--- | :--- |
| JOUR 3900 | 3 | JOUR 4900 | 3 |
| COMM 3823 | 4 | History* | 3 |
| MUID 4802 | 4 | MUID 4803 | 4 |
| MUID 4811 | 1 | MUID 3103 | 3 |
|  |  | MUID 4811 | 1 |
| Semester Totals | 15 hrs | 16 hrs |  |


| Senior Year <br> MUID 4840 | 3 | Social/Behavioral Sciences* | 3 |
| :--- | :--- | :--- | :--- |
| COMP 4001 | 3 | MUHL 3303 [W] | 3 |
| MUHL** | 3 | MUID 4603 | 3 |
| MUID 4603 | 3 | MUID 4898 [I] | 4 |
| MUID 3602 | 3 |  |  |
| Semester Totals | 15 hrs |  | 13 hrs |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
** Choose one: MUHL 4801, 4804, 4805, 4806, 4807

## THEATRE

## Department of Theatre and Dance

The Bachelor of Fine Arts degree is a program specifically designed for students whose certain interests and abilities strongly suggest the potential for pursuing careers as artists in the resident, professional, community, or academic theatre. To expand the student's creative powers and deepen the commitment to a vocation in the theatre, the B.F.A. program offers the student (1) a basic probing of all the arts and crafts of the theatre; (2) an exploration in depth of one area of special interest; (3) the opportunity to participate creatively as a theatre artist through extensive production experience.
Two concentrations are offered: (1) Performance, and (2) Design and Technical Production. A Dance minor is offered. Students entering the B.F.A. program will elect one of these two concentrations. The University of Memphis is an accredited institutional member of the National Association of Schools of Theatre.

Admission and Retention Criteria: Admission to the B.F.A. program is by application. To remain in good standing as a major, the student must be evaluated through the audition and interview, or portfolio and interview process. Following their audition and interview, or portfolio and interview, applicants will be notified as to whether they have been accepted into the program, accepted for one more semester on a probationary basis, or advised to pursue another degree.
(1) Performance: Retention in the Performance concentration is based on a required audition and interview, typically twice yearly. In addition to the interview, the student is expected to present an audition consisting of a group dance audition, and presentation of a song and two monologues from plays of distinctly different styles or periods. The total time of the song and monologues may not exceed five minutes.
(2) Design and Technical Production: Retention in the Design and Technical Production concentration is based on an annual required portfolio review and interview. In addition to the interview, the student is expected to present a portfolio of artistic and production work. This may consist of items including photographs, sketches, costume plates, elevations, lighting plots, ground plans, and audio designs. The fact must be emphasized that admission to the B.F.A curriculum does not imply a student's permanent tenure in the program. Beyond the audition interview or portfolio review, the student's active participation in the co-curricular activities of the department will be assessed by the theatre and dance faculty. Artistic growth, development of technical facility, and continuing commitment to creative excellence on the part of the student will be evaluated. Permission to continue in the program will be based on this evaluation. Internship (THEA 4541): The intent of this requirement and course is to provide the student experience in a full-time theatre production situation. Off-campus participation (usually following the junior year) is an essential element of the B.F.A. program. Details are to be planned in advance in conference with the student's advisor.
Transfer of Credit: In certain cases students may be admitted to an advanced level of the B.F.A. program. Such admission will be based upon a departmental advisor's evaluation of previous course work and theatre experience. Even if admitted to an advanced standing, the student will be required to remedy previous course deficiencies.
Advising: Upon application to the B.F.A. program, each student will be assigned a faculty advisor. For this degree, 120 semester hours are required for graduation. A minimum grade of " C " is required in all departmental courses applicable to the major. The student must maintain an overall grade point average of 2.0. A 2.0 cumulative GPA is required for all courses completed in the major.

## Theatre Major (B.F.A.)

A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements. Note that THEA 1030 and THEA 4549 are specified for the Humanities requirement.
B. The Major ( 79 hours)

1. Major Core (29 hours)

Completion of THEA 1561, 2501, 2511, 2531, 3412, 4 hours of THEA 3601-3609, 4541* (1), 4551, 4582 [W,I], 4591 [C].
2. Concentrations (48-56 hours)
a. Performance (48 hours): THEA 2532, 3212 , 3213, 3505, 3506, 3531, 3532, 3551 (2), 4221, 4457, 4531, 4532 , remaining courses are electives approved by the student $s$ advisor.
b. Design and Technical Production: THEA 2512, 3511, 3561, 3562; two courses from among 3601-3609 (2), 4554, 4552, 4558; two courses from 4555, 4556, 4557, 4595; two courses from among 4561, 4562, 4563, 4596; remaining courses are electives approved by the student $>$ s advisor.

## Theatre Minor

Any student wishing to minor in Theatre should see the department chair who will assign an advisor. The minor must consist of a minimum of 18 hours of approved coursework, 9 of which must be upper division. Coursework for all minors will be determined by the student in conference with the advisor with the approval of the department chair.

## Dance Minor

Any student wishing to minor in Dance should see the department chair who will assign an advisor. The minor must consist of a minimum of 18 hours of approved coursework, 9 of which must be upper division. Coursework for all minors will be determined by the student in conference with the advisor with the approval of the department chair.

## Typical 4-Year Design and Technical Production Concentration Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH* $^{*}$ | 3 | COMM 2381 | 3 |
| History* | 3 | History* | 3 |
| THEA 1030 | 3 | THEA 1561 | 3 |
| THEA 3601-9 | 1 | THEA 3601-9 | 1 |
| THEA 2511 | 3 | THEA 2512 | 3 |
| Semester Totals | 16 hrs |  | 16 hrs |

## Sophomore Year

| Natural Science* | 4 | Natural Science* | 4 |
| :--- | :--- | :--- | :--- |
| Social/Behavioral Sciences* | 3 | Social/Behavioral Sciences* | 3 |
| THEA 2501 | 3 | THEA 4549 | 3 |
| ENGL 2201 or 2202 | 3 | THEA 2531 | 3 |
| THEA 3561 | 3 | THEA 3511 | 3 |
| Semester Totals | 16 hrs | 16 hrs |  |


| J unior Year |  |  |  |
| :---: | :---: | :---: | :---: |
| THEA 45xx** | 3 | THEA 45xx** | 3 |
| THEA 4554 | 3 | THEA 4558 | 3 |
| THEA 3562 | 3 | THEA 4551 | 3 |
| THEA 3412 | 3 | Elective | 3 |
| Elective | 3 | THEA 3601-9 | 1 |
| THEA 3601-9 | 1 |  |  |

Semester Totals 16 hrs 13 hrs

## Senior Year

| THEA 45xx** | 3 | THEA 3601-9 | 1 |
| :--- | :--- | :--- | :--- |
| THEA 4552 | 3 | THEA 4591 [C] | 3 |
| Elective | 3 | THEA 45xx** | 3 |
| THEA 4582 [W,I] | 3 | Elective | 3 |
| THEA 4541 | 1 | Elective | 3 |

THEA 3601-9 1
Semester Totals 14 hrs 13 hrs
Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
**Technology course A or B/Design Studio A or B

## Typical 4-Year Performance Concentration Sequence

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| MATH* | 3 | COMM 2381 | 3 |

The College of Communication and Fine Arts

| History* | 3 | History* | 3 |
| :--- | :--- | :--- | :--- |
| THEA 1030 | 3 | THEA 2531 | 3 |
| THEA 3601-9 | 1 | THEA 3601-9 | 1 |
| THEA 2511 | 3 | THEA 1561 | 3 |

Semester Totals 16 hrs 16 hrs

## Sophomore Year

| ENGL 2201 or 2202 | 3 | Social/Behavioral Sciences* | 3 |
| :--- | :--- | :--- | :--- |
| THEA 3212 | 3 | Elective | 3 |
| THEA 2501 | 3 | THEA 3213 | 3 |
| THEA 2532 | 3 | THEA 3601-9 | 1 |
| THEA 3601-9 | 1 | THEA 3531* | 3 |
| THEA 3412 | 3 | THEA 3505 | 3 |
| Semester Totals | 16 hrs | 16 hrs |  |

## J unior Year

| THEA 3551 | 2 | THEA 4531 | 3 |
| :--- | :--- | :--- | :--- |
| THEA 3506 | 3 | THEA 4532 | 3 |
| THEA 3532 | 3 | THEA 4221 | 3 |
| THEA 4557 | 3 | THEA 4549 | 3 |
| Elective | 3 | Elective | 3 |
| Semester Totals | 14 hrs |  | 15 hrs |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| Elective | 3 | Social/Behavioral Sciences* | 3 |
| Natural Science* | 4 | Natural Science* | 4 |
| THEA 4552 | 3 | THEA 4591 [C] | 3 |
| THEA 4582 [W,I] | 3 | Elective | 3 |
| THEA 4541 | 1 |  |  |
| Semester Totals | 14 hrs |  | 13 hrs |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

# THE COLLEGE OF EDUCATION 

RIC HOVDA, Ph.D., Dean<br>Room 215, E.C. Ball Hall (901) 678-4265<br>http://coe.memphis.edu/

MARTHA J. ALBERG, Ph.D. Assistant Dean for P-12 Programs

## PURPOSES

The College of Education is dedicated to preparing students for careers in a variety of professional and related occupational areas. In helping the university pursue its three broad objectives of teaching, public service, and research, the College of Education is committed to the following missions. The first mission of the College of Education is to prepare teachers, other licensed school personnel, and educationally related professionals who are qualified and competent in both practice and theory. The second mission is to conduct educational and educationally related research and to engage in the dissemination of the outcomes of that research. The third mission of the college is tightly interwoven with the two preceding missions, that is: to provide teaching, research and service that extends beyond the confines of the campus and to make educational delivery available in its urban setting and at other outreach locations.

The departments in the college value the pursuit and practice of quality teaching and research in a multicultural setting. Specifically, the college actively seeks to foster the advancement of knowledge and pedagogy involved in educational training in school and non-school settings. With a priority on urban related studies, both faculty and students are engaged in timely, diverse experiences of a scholarly nature.

This mission and vision for the College of Education is embodied in the theme of Educational Leaders. The college seeks to prepare leaders who demonstrate a thorough knowledge of the learning process, skill in instructional planning and delivery, and a disposition to create dynamic learning environments that incorporate multi-cultural knowledge into instructional design and delivery. Multiple performance assessment measures are used to identify what teacher candidates know and can do and their impact on P12 students based on eleven learning outcomes derived from the Interstate New Teacher Assessment Support Consortium (INTASC) standards for teacher preparation.

## ORGANI ZATI ON OF THE COLLEGE

Four academic departments make up the College of Education: Counseling, Educational Psychology and Research; Instruction and Curriculum Leadership; Health and Sport Sciences; and Leadership. Two departments offer undergraduate degrees, and all departments offer a variety of graduate degree programs.
In addition, there are several research and service units in the college: The Office of Teacher Education, Advising and Student Services, The Center for the Study of Higher Education, The Reading Center, The Center for Research in Educational Policy, Bureau of Sport and Leisure Commerce, Human Performance Laboratory, Exercise Biochemistry Laboratory, Motor Behavior Laboratory, Exercise and Sport Nutrition Laboratory, Wellness Evaluation and Resource Unit, The Barbara K. Lipman Early Childhood School and Research Institute, and the University Campus School.

## Academic Advising

Student advising in the College of Education is an essential support service provided to assist students in the process of clarifying academic goals consistent with their interests, abilities, values, and resources. Advisors provide academic, career, and professional information to assist students in developing realistic
personal and career goals. Advisors also provide information about university support services and resources available to students.

The Office of Teacher Education, Advising and Student Services serves all College of Education teaching and non-teaching majors and all graduate students seeking teacher licensure, including the evaluation of coursework relative to requirements for Tennessee teacher licensure. COE advisors assist students in becoming familiar with programs offered in the College and guide them through the beginning phases of their programs. Later, faculty advisors/mentors or program coordinators in specific majors assist the student until graduation. This assistance does not relieve the student of the primary responsibility of studying the Bulletin and fulfilling all degree requirements.
Art and Music majors are advised in the College of Communication and Fine Arts. Information concerning the Teacher Education Program and student teaching for these majors can be obtained there.

## AREAS OF PROFESSI ONAL TRAI NI NG

The College of Education offers a wide selection of general and specialized programs that are designed to prepare students for a variety of careers. In programs where candidates are specializing in a professional area, awarding a degree or recommending for a professional license does not merely attest to the accumulation of the specified number of hours in the classroom or other professional setting, but also to the demonstration of professional knowledge, skills, and dispositions. Faculty have the responsibility to both the public and the profession to award a degree or license only when the candidate has demonstrated a satisfactory level of professional knowledge, skills, and dispositions as judged by the program faculty. Further, candidates must exhibit integrity and character consistent with the standards of ethical principles set forth by appropriate professional associations and Tennessee law.

## Careers in Teaching

One of the most important professions in a society is teaching its children and young people. Preparing students to become excellent teachers is a primary goal of the College of Education. A career in teaching offers a wide range of specialization choices and opportunities in pre-kindergarten, kindergarten, elementary, middle school, and senior high schools.
The College of Education offers undergraduate programs leading to licensure in early childhood, elementary, special education, and physical education.
Students who wish to prepare for endorsements in secondary education will be expected to complete a baccalaureate degree in the appropriate teaching area followed by a fifth-year Master of Arts in Teaching or licensure program through the College of Education.
Preparation for the various teaching areas includes a professional education component that emphasizes both a comprehensive knowledge base and an extensive skills requirement to ensure pedagogical competency. To meet these objectives, there are provisions for significant laboratory and field experiences culminating in enhanced student teaching in the student $\geqslant$ s final year.

## B.S. Ed. REQUI REMENTS (TEACHER LI CENSURE)

## Professional Studies for Educators

Professional studies in the College of Education consist of both generic courses taken by all persons planning careers as educators and specialized studies related to specific professional practice settings. All teacher education students will study knowledge and skills in human development, basic instruction, technology, foundations, cultural diversity, and children with special needs. Students must also know and display dispositions expected of educators. Required courses for knowledge and skills include EDPR 2111, LEAD 2010 (music education students do not take this course), ICL 4800 [I], SPED 2000, and student teaching. Necessary skills in assessment, behavior management and specialized instructional methods are incorporated in courses delivered by their respective specialty areas. Specific requirements are listed in the section of the Bulletin addressing each major.

## Accreditation

The College of Education holds membership in the American Association of Colleges for Teacher Education. Its undergraduate programs, as well as all graduate degree programs through the doctoral
degree for the preparation of teachers and related school personnel, are approved by the Tennessee State Department of Education. The College is fully accredited by the National Council for Accreditation of Teacher Education (NCATE).

## Licensure Areas

Areas of licensure that are available at the completion of undergraduate education programs include: Special Education
Modified K-12 (460)
Comprehensive K-12 (461)
Physical Education K-12 (420)
Elementary K-6 (499)
Elementary (Middle Grades 4-8) (440)
Early Childhood PrK-3 (467)
Visual Arts (427)
Music Inst. K-12 (429)
Music Voc./Gen K-12 (428)
Recommendation for teacher licensure in any of the following teaching areas is contingent upon the completion of a baccalaureate degree in the appropriate academic area followed by completion of the Master of Arts in Teaching degree or licensure program:
Elementary K-6 (499); Middle Grades 4-8 (440)
Early Childhood Pre K-3 (467)
Special Education
Modified K-12 (460)
Comprehensive K-12 (461)
Early Childhood Pre K-1 (465)
Physical Education K-12 (420)
Secondary (Enhanced Student Teaching)
English 7-12 (407)
French K-12 (491)
German K-12 (492)
Spanish K-12 (495)
Russian K-12 (494)
Latin K-12 (493)
Other Foreign Language (496)
Mathematics 7-12 (413)
Biology 7-12 (415)
Chemistry 7-12 (416)
Physics 7-12 (417)
Earth Science 7-12 (418)
History 7-12 (421)
Government 7-12 (423)
Geography 7-12 (422)
Economics 7-12 (424)
Psychology 9-12 (426)
Sociology 9-12 (425)
Vocational Subject Areas
Business Education (474)
Business Technology (475)
Marketing (471) [only issues jointly with Economics (424)]
Consumer Homemaking. 5-12 (450)
Care/Guidance of Children 9-12 (451)
Food Management Production 9-12 (453)
Students who intend to enter the Master of Arts in Teaching program should consult their major advisor and the College of Education Advisor for information about this program to ensure that the general education curriculum, pre-professional studies, and teacher licensure requirements are completed.
Non-I nitial Endorsements at the Graduate Level

Speech/Language Pre K-12 (464)
Counselor K-12 (487)
School Administrator
Beginning Administrator K-12 (A Standard) (480)
Professional Administrator PreK-12 (483)
School Psychologist (089)
Library Information Specialist (073)
English as a Second Language (490)
Special Teacher of Reading K-8 (075)
Special Teacher of Reading 7-12 (076)

## Old Licensure Areas Operating through August 2005

Special Teacher of Reading K-8 (075)
Special Teacher of Reading 7-12 (076)

## Admission to Teacher Education Program

Students who plan to pursue an undergraduate program of studies leading to teacher licensure must submit a formal application to the College of Education Teacher Education Program (TEP). Students are encouraged to apply for admission in their sophomore year.
Prerequisites for formal admission to the Teacher Education Program are as follows:

1. Complete a minimum of 40 semester hours.
2. Complete and submit the TEP application. Applications can be downloaded from the following site: http://coe.memphis.edu/TCED/tepadmissions.asp.
3. Complete with a grade of C- or above ENGL 1010, ENGL 1020, LEAD 2010 (music education majors do not take LEAD 2010), EDPR 2111, an appropriate course in speech, and the general education required Math course(s).
4. Take and submit satisfactory scores (according to criteria established by the Tennessee State Board of Education and the College of Education, the University of Memphis) on the Pre-Professional Skills Test (PPST). Students scoring a 22 or above on the Enhanced ACT do not have to take the PPST. Passing scores for the PPST: Reading 174, Writing 173, and Mathematics 173.
5. Earn and maintain a GPA of no less than 2.50. An undergraduate student whose cumulative grade point average drops below 2.50 will not be admitted/retained in the Teacher Education Program.
6. Interview successfully with College of Education faculty and P-12 teachers/administrators. You must have taken the PPST and have a 2.40 GPA to be interviewed.
7. Obtain recommendations from two college or university professors. Recommendation forms are included with the TEP application.

Candidates who do not meet the regular Teacher Education Program (TEP) Admissions criteria may apply for alternative admission based on the following policy:

## Alternative Admission Based on PPST Scores

1. The candidates must meet the minimum cut-off scores for two of the three subtests or they cannot appeal.
2. The appealed PPST subtest score cannot vary more than 3\% (5 points) from the acceptable minimum score.
3. Candidates who do not meet the minimum requirements must meet the following guidelines to submit an appeal based on PPST:
a. Must have a GPA of 2.50
b. Must have taken the PPST subtest in question twice
c. If appealing the Reading or Writing Test, the student must have at least a 3.00 average in ENGL 1010 and 1020
d. If appealing the Mathematics Test, the student must have a 3.00 average in all required mathematics courses in the general education curriculum.
e. All of the above courses must be taken at an accredited college.
4. Candidates MUST have take all relevant core courses as described above for their appeals to be considered.
5. Candidates who have the required grade point average and the required grades in the specified courses may be approved by the Director of Teacher Education without further appeal committee action.

## Alternative Admission Based on Grade Point Average

Candidates appealing to be admitted to TEP because their grade point average has fallen below 2.5 must meet the following requirements in order to appeal:

1. Must have passed all sections of the PPST
2. Must provide, as part of their appeal, a plan describing the courses they will repeat or take to raise their grade point average to the 2.50 minimum and a proposed timeline. No restricted courses can be included in the plan.
Special Notes:
3. Candidates may not appeal for alternative admission if they have less that a 2.50 grade point average and have not met the minimum requirements of the PPST. These students will be advised individually regarding a remediation plan to improve their grade point average and/or PPST performance. In some instances, the candidate may be counseled out of the program.
4. Candidates who submit passing scores on the required Praxis II content knowledge exam for their licensure area may be afforded special consideration for admission to TEP if they have not passed two of the Praxis I exams after two attempts.

## Retention

Candidates may be referred for retention throughout their program of studies. If candidates' graded point average drops below the required 2.50, they will not be allowed to take any restricted courses in
subsequent semesters and will lose their TEP admission status. Referrals can be made for academics, but also for teacher dispositions related to ethical or attitudinal problems. The NEA Code of Ethics as well as other professional association codes of ethics guide the retention process. Candidates may be referred for counseling or to review before the TEP Retention Committee.

## Pre-Student Teaching Clinical Experiences

Students pursuing teacher licensure complete, as a part of their program, a variety of required clinical experiences incorporated into professional education courses. Students will be expected to have experiences in a variety of settings and with pupils who reflect differences in age, socioeconomic backgrounds, and cultural heritage.
Clinical experiences include both laboratory experiences (typically fulfilled on campus) and field experiences (typically fulfilled in PreK-12 public schools). The early childhood programs require field experiences in PreK3 grades. Other licensure programs require placements in a variety of grades ( $K-12$ ). When available, field experiences take place in Professional Development Schools with clinically trained cooperating teachers. The amount of time spent in a clinical experience varies according to the specific requirement being met. Fulfillment of these experiences requires that students make available out-of-class time between 7:00 a.m. and 4:00 p.m. All students are required to complete the number of field experience hours expected in their licensure area.
Completion of field experiences will occur in sites arranged and approved by the University of Memphis College of Education Office of Teacher Education.

## Student Teaching

Students who pursue degree programs at the University of Memphis that lead to teacher licensure must complete their student teaching requirements in placements arranged, coordinated, and approved by the Student Teacher Placement Coordinator of the College of Education. Student teaching assignments are full day in length for 15 weeks.
Student teaching is offered only during the fall and spring semesters in area schools. No student teaching assignments for initial licensure are made during the summer semester. Under the direction of cooperating teachers and university supervisors, opportunities are provided for observation of sound teaching practices and for realistic experiences culminating in assumption of full-time teaching responsibilities.
All students seeking initial licensure are required to complete a professional semester consisting of a minimum of 15 weeks of student teaching and an associated seminar. NO OTHER COURSES MAY BE TAKEN DURING THE PROFESSI ONAL SEMESTER.
Students who have completed all or part of their student teaching experiences before enrolling at the University of Memphis, and who desire to receive this institutionss recommendation for licensure, should expect to complete a minimum of six semester hours of credit in student teaching at the University of Memphis.

Grades in student teaching are reported as "S" (satisfactory) or "U" (unsatisfactory).
Requirements for enrollment in student teaching are:

1. File an application the semester before student teaching.
2. Gain full admittance to and good standing in the Teacher Education Program one semester before student teaching.
3. Attain classification as a senior with a minimum grade point average of 2.50 .
4. Complete of all prerequisite professional education courses.
5. Earn a minimum grade of " C " in University General Education Program courses, each required professional education course, and each course in the major.
6. Submit passing scores on the Content Knowledge Exam for the specific area of licensure being sought. Submit scores or registration forms for the Principles of Learning and Teaching and any other required specialty exams of the PRAXIS II before or during student teaching. Failure to submit score reports will result in the grade of IP for student teaching. Satisfactory scores on PRAXIS II examinations are required for teacher licensure in Tennessee.
7. Submit background checks per school district policy, if required.

## Graduation

To be recommended for graduation and licensure, students must complete the requirements listed below:

1. Minimum of 120 semester hours, including at least 45 hours of upper division courses.
2. Overall minimum GPA of 2.50 .
3. A minimum GPA of 2.50 in all courses taken at the University of Memphis, excluding all credit transferred from other institutions.
4. Minimum grade of " C " in each required professional education course and each course in the major. 5. Submit scores for all Praxis II licensure exams.

For Tennessee Teacher Licensure, students must obtain satisfactory scores in Principles of Learning and Teaching and Specialty Area Examinations of the PRAXIS II, according to the criteria established by the Tennessee State Board of Education.
Any courses taken in excess of those needed to fulfill the requirements of professional education courses and major and minor endorsement areas, are considered to be general electives and are included only in the calculation of the overall GPA. In those areas where students are required to take elective courses, the student, in consultation with and approval of the major advisor, designates where the elective courses are to be applied.

## MAJ ORS

In addition to completing the degree requirements listed above for teacher licensure, B.S.Ed., students must complete requirements for the Human Development and Learning, Integrative Studies, Physical Education Teacher Education, or Special Education major. Following the requirements for these majors are the requirements for the non-licensure degree and majors offered through other departments in the college.

## Careers in Related Occupational and Professional Areas

Career options are available in related occupational and professional areas of Dietetics, Food Systems Management, Exercise Science, Physical Education, Leisure Management, and Sport Management through the Department of Health and Sport Science. A non-licensure degree for business/industry, available through the Department of Instruction and Curriculum Leadership, prepares individuals to become trainers and educational leaders in non-school settings. For additional information consult the College of Education Office of Advising and Student Services or the appropriate academic department.

## B.S.ED REQUI REMENTS

## B.S.Ed. REQUI REMENTS (NON-LI CENSURE)

Non-licensure B.S.Ed. programs include the majors offered through the Department of Health and Sport Sciences: Health and Human Performance, and Sport and Leisure Studies. Students may also complete a non-licensure major in the Department of Instruction and Curriculum Leadership. Degree requirements for these majors include the following:

## Graduation

In addition to specific course requirements listed below, students must complete the following:

1. Minimum of 120 semester hours of which at least 45 hours must be upper division and at least 45-51 hours must be liberal content courses.
2. Overall minimum GPA of 2.00 .
3. A minimum GPA of 2.00 in all credits earned at the University of Memphis excluding all credit transferred from other institutions.
4. A minimum GPA of 2.25 in all courses required for fulfilling the completion of the major.
5. For the Health and Human Performance and Sport and Leisure Management majors, a minimum GPA of
2.50 in the major (including major core, and concentration requirements) is required for fulfilling the completion of the major.
6. For the Health and Human Performance and Sport and Leisure Management majors, a minimum grade of " C " in all courses required in the major core and concentration, and a 2.00 average for all guided elective courses.
NOTE: Any courses taken in excess of those needed to fulfill the requirements of the major are considered to be general electives and are included only in the calculation of the overall GPA. In those areas where students are required to take elective courses, the student in consultation with and approval of the major advisor, designates where the elective courses are to be applied.

## ACADEMI C PROGRAMS

| Department | Major <br> Click below for Major Requirements. Click on Tiger Paw for Course Descriptions |  | Concentration Within Major | Degree Offered |
| :---: | :---: | :---: | :---: | :---: |
| Health and Sport Sciences | Health and Human Performance | (2) | 1. Dietetics <br> 2. Exercise and Sport Science | Bachelor of Science in Education (B.S. Ed.) |
|  | Physical Education Teacher Education | [ |  | Bachelor of Science in Education (B.S.Ed.) |
|  | Sport and Leisure Management | [ |  | Bachelor of Science in Education <br> (B.S. Ed.) |
| Instruction and Curriculum Leadership | Human Development and Learning | 回 |  | Bachelor of Science in Education <br> (B.S. Ed.) |
|  | Special Education |  |  | Bachelor of Science in Education <br> (B.S. Ed.) |
|  | Integrative Studies |  | Early and Middle Grades (Licensure) Society Services (Non-Licensure) |  |

Individual program requirements described in the University of Memphis 2006-2007 Undergraduate Bulletin are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this Bulletin.

## Health and Human Performance

Department of Health and Sport Sciences
Health and Human Performance (B.S.Ed.)
Program objectives for a B.S.Ed. in Health and Human Performance are: (a) to demonstrate critical thinking
skills, specifically in the areas of evaluating evidence and understanding sources; (b) to demonstrate proficiency in written and oral communication and computer utilization; (c) to use knowledge of functional anatomy and biomechanics to analyze and evaluate movement and to prescribe exercises to prevent injuries and enhance performance; (d) to recognize risk factors (i.e., cardiovascular, metabolic, musculoskeletal) and their relationship to physical activity, nutrition and other lifestyle behaviors; identify risk factors, which may require consultation with medical or allied health professionals (e) to demonstrate an understanding of principles and research-based guidelines for nutrition, body composition, and weight management when analyzing current status and prescribing desirable changes; (f) to demonstrate understanding of the basic principles of program planning, management, evaluation, and administration of health and wellness programs and facilities; (g) to be able to formulate research questions, collect and analyze data, and make appropriate conclusions based on data results.

## A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Note the following are specified by the department for this major: Natural Science (8 credit hours as a 2 lecture/lab sequence): Dietetics concentration must take CHEM 1110/1111 and 1120/1121; Exercise and Sport Science concentration may select from the following: BIOL 1110/1111, BIOL 1120/1121 or CHEM 1010/1011, 1020/1021, 1110/1111, 1120/1121 or PHYS 2010/2011, 2020/2021.

## B. The Major ( 79 hours)

1. Major Core: Minimum grade of "C" required in all major core and concentration courses: BIOL 2010/2011 (4), BI OL 2020/2021 (4), NUTR 2202; HMSE 4999 [I]. A satisfactory (S) grade required for: EXSS 4605 (9) or NUTR 4605, plus one of the following concentrations and electives to bring the total for the degree to 120 hours.

## 2. Concentrations

a. Dietetics ( 57 hours): NUTR 2302, 3002, 3502, 4102, 4112, 4332, 4602, 4802, 4812, CHEM 3311/3301 (1), 3312/3302 (1), EXSS 3700, BIOL 1230/1231, POLS 1100, 3213, ACCT 2010, MKTG 3010, EDPR 4541 [C].
b. Exercise and Sport Science ( 51 hours): SLS 3005 [C], and either SLS 3650 or 4205 or 4500; HPRO 2100, EXSS 2010 (2), 2020 (2), 3050, 3405, 3505, 3506 (1), 3603, 3703, 3803, 3450 [W], 3800, 4000, 4015, 4020, 4603.
C. Electives ( $3-6$ hours) selected in consultation with advisor to bring the total number of credit hours to 120.

In some of the above courses, variable hours of supervised laboratory/field experience will be required.

## Typical 4-Year Dietetics Concentration Sequence

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| MATH* | 3 | Humanities* | 3 |
| History* | 3 | PSYC 1200 | 3 |
| Humanities* | 3 | POLS 1100 | 3 |
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| Semester Totals | 16 hrs |  | 16 hrs |
| Sophomore Year |  |  |  |
| ENGL 2201 or 2202 | 3 | COMM 2381 | 3 |
| History* | 3 | CSED/SOCI 2101 | 3 |
| BIOL 2010/2011 | 4 | BIOL 2020/2021 | 4 |
| NUTR 2202 | 2 | ACCT 2010 | 3 |
| NUTR 2302 | 3 | Elective | 3 |
|  | 3 |  |  |
| Semester Totals | 16 hr |  | 16 hrs |


| J unior Year |  |  |  |
| :---: | :---: | :---: | :---: |
| EXSS 3700 | 3 | NUTR 3002 | 3 |
| MKTG 3010 | 3 | NUTR 3502 | 3 |
| CHEM 3311/3301 | 4 | CHEM 3312/3302 | 4 |
| POLS 3213 | 3 | BIOL 1230/1231 | 4 |
| Semester Totals | 13 hrs |  | 14 hrs |
| Senior Year |  |  |  |
| EDPR 4541 [C] | 3 | NUTR 41123 |  |
| NUTR 4102 | 3 | NUTR 43323 |  |
| NUTR 4802 | 3 | NUTR 46023 |  |
| Elective | 2 | NUTR 46053 |  |
| NUTR 4812 | 3 H | HMSE 4999 [I] 3 |  |
| Semester Totals | 14 hr |  | hrs |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## Typical 4-Year Exercise \& Sport Science Concentration Sequence

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :---: | :--- | :--- |
| Humanities* | 3 | HPRO 2100 | 3 |
| MATH* | 3 | Humanities* | 3 |
| Social/Behavioral Sciences* | 3 | Natural Sciences* | 4 |
| Natural Sciences* | 4 | Social/Behavioral Sciences* | 3 |

Semester Totals $16 \mathrm{hrs} \quad 16 \mathrm{hrs}$

| Sophomore Year - |  |  |  |
| :--- | :--- | :--- | :--- |
| History* | 3 | BIOL 2020/2021 | 4 |
| BIOL 2010/2011 | 4 | COMM 2381 | 3 |
| Elective | 3 | History* | 3 |
| ENGL 2201 or 2202 | 3 | EXSS 2010 | 2 |
| NUTR 2202 | 3 | Elective | 3 |
|  |  | EXSS 2020 | 2 |

Semester Totals 16 hrs 17 hrs

| Junior Year |  |  |  |
| :---: | :--- | :--- | :--- |
| EXSS 3050 | 3 | EXSS 3405 | 3 |
| EXSS 3800 | 3 | EXSS 3603 | 3 |
| EXSS 3803 | 3 | EXSS 3703 | 3 |

The College of Education

| SLS 3005 | 3 | EXSS 3505 | 3 |
| :---: | :---: | :---: | :---: |
| SLS ** | 3 | EXSS 3506 | 1 |
|  |  | EXSS 3450 [W] | 3 |
| Semester Totals | 15 hrs |  | 16 hrs |
| Senior Year |  |  |  |
| EXSS 4000 | 3 | EXSS 4605 | 9 |
| EXSS 4603 | 3 | HMSE 4999 [I] | 3 |
| EXSS 4020 | 3 |  |  |
| EXSS 4015 | 3 |  |  |
| Semester Totals | 12 hrs |  | 12 hrs |
| Total Hours: 120 |  |  |  |
| Total Hours Required for Graduation: 120 |  |  |  |
| *Must satisfy University General Education Program |  |  |  |

## HUMAN DEVELOPMENT AND LEARNI NG

## Department of Instruction and Curriculum Leadership

 Human Development and Learning Major (B.S.Ed.)Program objective for a B.S.Ed. in Human Development and Learning are: (a) to promote child development and learning; (b) to build family and community relationships; (c) to observe, document, and assess young children and families; (d) to teach and learn, to design, implement and evaluate experiences that promote positive development and learning for all children.
Successful completion of B.S.Ed. requirements with a major in Human Development and Learning will qualify a person to apply for licensure in Early Childhood Education (PreK-3). This major is also available to students who are not seeking licensure in which case guided electives will be chosen with faculty advisor approval in lieu of the Professional Semester.
A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements. Mathematics, 3 hours (MATH 1420); Humanities, 9 hours (ENGL 2201 or ENGL 2202; ART 1030 or COMM 1851 or DANC 1151 or MUS 1030 or THEA 1030; CLAS 2481 or HIST 1110); History, 6 hours [HIST 2010, HIST 2020 (Note: Students may substitute ONE of the following courses for ONE of these history courses: ANTH 3282, ESCl 3401, POLS 4212)]; Social/Behavioral Sciences, 6 hours (ESCl 1301 or ESCl 1401, POLS 1100); Natural Science (select from 2 areas), 8 hours (BIOL 1020/1021, CHEM 1010/1011, CHEM 1020/1021, BIOL 1010/1011, PHYS 1001/1010, PHYS 1020/1021, ESCI 1010/1011, ESCI 1020/1021, ESCI 1040, ESCl 1050, ESCl 1102).
B. Related Liberal Studies (12 hours): EDPR 2111; LEAD 2010; EXSS 3306; SOCI 1111.
C. The Major (34 hours)

1. Core (24 hours): EDPR 4301*; ECED 3555* [C], 4510*, 4540*; SPED 2000*, 4900*; CCFA 3001*; IDT 3600.
2. Select one course from each of the following three areas: Race and Ethnicity: SOCl 3401, 3422, 4420, or 4442 [W]; Family and Culture: ANTH 3511, 4411; HIST 4831, 4863 [W]; or SOCI 3831; Gender: SOCl 3432 or 4460 [W].
3. Elective if needed.
D. Professional Education ( 33 hours)
4. Early Childhood Education (Grades PreK-3 Licensure) must take ICL 3000, 4800* [I], 4901*, 4902* and 4903; ELED 4240* [W]; ECED 4500*, 4540*, 4515*, 4520*, 4525* (1 and 2 hour sections), 4530*. 2. Early Childhood Education (Grades PreK-3 Non-Licensure): must take ICL 3000, ELED 4240* [W], ECED

4500*, 4515*, 4520*, 4525* 1 and 2 hours sections), 4530*, and additional guided electives to complete 33 hours of Professional Education requirement.

Typical 4-Year Human Development and Learning: PreK-3 Teacher Licensure Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| Humanities* | 3 | MATH 1420 | 3 |
| Natural Science* | 4 | POLS 1100 | 3 |
| SOCI 1111 | 3 | Natural Science* | 4 |
| ESCI 1301 or 1401 | 3 | Humanities* | 3 |
|  |  | Elective | 1 |

Semester Totals 16 hrs 17 hrs

| Sophomore Year   <br> LEAD 2010 3 ECED $3555[C]$ | 3 |  |  |
| :--- | :--- | :--- | :--- |
| EDPR 2111 | 3 | Family \& Culture selection | 3 |
| ENGL 2201 or 2202 | 3 | Gender elective | 3 |
| COMM 2381 | 3 | IDT 3600 | 3 |
| SPED 2000 | 3 | EDPR 4301 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |


| Junior Year <br> EXSS 3306 | 3 | History* | 3 |
| :--- | :--- | :--- | :--- |
| ICL 3000 | 3 | SPED 4900 | 3 |
| ECED 4515 | 3 | Gender selective | 3 |
| ECED 4500 | 3 | ECED 4520 | 3 |
| ECED 4510 | 3 | ECED 4525 | 1 |
|  | 2 | CCFA 3001 | 3 |

Semester Totals 15 hrs 16 hrs

| Senior Year   <br> ELED 4240 [W] 3 ICL 4902 | 3 |  |  |
| :--- | :--- | :--- | :--- |
| ECED 4525 | 2 | ICL 4901 | 3 |
| Race \& Ethnicity <br> Selective | 3 | ICL 4903 | 3 |
| ECED 4530 3 ICL 4800 [I] 3 <br> ECED 4540 3  <br> History 3  |  |  |  |
| Semester Totals 17 hrs  |  |  |  |

Total Hours: 120
Total Hours Required for Graduation: 120

## I NTEGRATI VE STUDI ES

## Department of Instruction and Curriculum Leadership I ntegrative Studies (B.S.Ed.)

Program objectives for a B.S.Ed. in Integrative Studies are: (a) to understand how learning occurs, how students construct knowledge and acquire skills, and knows how to provided learning opportunities that support their intellectual, social, and personal development; (b) to adapt instructional techniques to students of diverse cultural and language backgrounds and to students who have exceptional learning needs.
A. University General Education Program (41hours)

See Graduation from the University link for the University General Education Program requirements. NOTE: The following University General Education Program requirements are specified by the department for this major: Mathematics (3 hours): MATH 1420; Humanities (9 hours) ENGL 2201 or ENGL 2202; ART 1030 or MUS 1030 or THEA 1030; CLAS 2481 or HIST 1110; History (6 hours) HIST 2010, HIST 2020, HIST 2030; Social/Behavioral Sciences (6 hours) ESCl 1301 or ESCl 1401; POLS 1100; Natural Sciences (8 hours) BIOL 1010/1011; BI OL 1020/1021; CHEM 1010/1011; CHEM 1020/1021; PHYS 1010/1011; PHYS 1020/1002; ESCI 1010/1011 and ESCI 1020/1021; ESCI 1040 \& 1050 or 1103.
B. Major (8 hours): EDPR 2111; EXSS 3306; LEAD 2010.
C. Concentrations (71-74 hours):

1. Society Services (Non-Licensure) (41 hours). EDPR 3121; SPED 2000; PSYC 1200; SOCI 1111; PETE 3604; ICL 4001; IDT 3600; ENGL 3500, 3401; MATH 1480; Natural Science: any 2 courses in two areas not taken under general education choices; History: Choose one course from the following courses: ANTH 3511; ANTH 4411; HIST 4831; HIST 4863 [W]; HIST 4871; SOCI 4631[W]; SOCI 3422; SOCI 4442;; Fine Arts: Select one from type not taken under general education choices: CCFA 3001 or MUSE 4601 or THEA 4503.

Professional Education (30 hours). ICL 4800 [I]; Choose 6 hours from the following: ECED 3555 [C], 4515; EDPR 3300, 3301; PSYC 3103; CSED 3401; LEAD 3350. Choose 6 hours from the following: EDPR 4541 [C]; SWRK 2911; SOCI 4842; CSED 4101; COUN 4621; ICL 4121. Choose 6 hours from the following: SLS 3103, 3205, 3305, 4105; MGMT 3110, 3215; MKTG 3010, 31404230 . Choose 9 hours from the following: SOCI 3401, 3422, 3432, 3831, 4420, 4442, 4460; ANTH 3511, 4411; HIST 4831, 4863. Minimum 20 clock hours of clinical experience related to designated field of preparation recommended.
2. Early/Elementary Grades-- Leading to K-6 Licensure (41 hours) : PSYC 1200; SOCI 1111; EDPR 3121; SPED 2000; IDT 3600; ICL 4001; ENGL 3500, 3401; MATH 1480; Science; any 2 courses in two areas not taken under general education choices; History Selection; Choose one course from the following courses; ANTH 3511; ANTH 4411; HIST 4831; HIST 4863 [W]; HIST 4871; SOCI 3422; SOCI 4442; SOCl 4631[W] Fine Arts: Select one from type not taken under General Education; CCFA 3001 or MUSE 4601 or THEA 4503.

Professional Education ( 30 hours): ELED 4240 [W] and ELED 4241; 4 courses are to be taken concurrently with 50 clock hours of active clinical experience: ELED 4351, 4352, 4353, 4354; ICL 4901, ICL 4904, and ICL 4800.
3. Elementary/Middle Grades -- Leading to Middle Grades 4-8 Licensure (48-51 hours)

There are 6 unique selections. The Teacher candidate picks one.
(1) Mathematics \& Science: MATH 1710, MATH 1720,, MATH 1910, MATH 2702, MATH 3221, MATH 3242, MATH 4611, MATH 4082, PHYS 1010/1001, PHYS 1020/1002, BIOL 1110/1111, BIOL 1120/1121, CHEM 1110/1111, CHEM 1120/1121, IDT 3600.
(2) Mathematics \& Social Studies: MATH 1710, MATH 1720, , MATH 2702, MATH 3221, MATH 3242, MATH 4611, MATH 4082, HIST 1110, HIST 1120, HIST 2010, HIST 2030, HIST 3823, World History 3000 level or above, ANTH 3000 level or above, SOCl 3000 level or above, IDT 3600.
(3) Mathematics \& Language Arts: MATH 1710, MATH 1720, MATH 1910, MATH 2702, MATH 3221, MATH 3242, MATH 4611, MATH 4082, ENGL 1010, ENGL 2201 or 2202, ENGL 3500, ENGL 3604 [W], ENGL 4501 or 4531, American Literature 3000 level or above, Fine Arts Selective, COMM 2381, IDT 3600.
(4) Science \& Social Studies: HIST 1110, HIST 1120, HIST 2010, HIST 2030, HIST 3823, World History 3000 level or above, ANTH 3000 level or above, SOCl 3000 level or above, PHYS 1010/1001, PHYS 1020/1002, BIOL 1110/1111, BIOL 1120/1121, CHEM 110/111, CHEM 1120/1121 ESCI 1040, IDT 3600.
(5) Science \& Language Arts: ENGL 1010, ENGL 2201 or 2202, ENGL 3500, ENGL 3604, ENGL 4501 or 4531, American Literature 3000 level or above, Fine Arts Selective, COMM 2381, PHYS 1010/1001, PHYS 1020/1002, BIOL 1110/1111, BIOL 1120/1121, CHEM 110/111, CHEM 1120/1121 ESCI 1040, IDT 3600., (6) Social Studies \& Language Arts : ENGL 1010, ENGL 2201 or 2202, ENGL 3500, ENGL 3604, ENGL 4501 or 4531, American Literature 3000 level or above, Fine Arts Selective, COMM 2381, HIST 1110, HIST 1120, HIST 2010, HIST 2030, HIST 3823, World History 3000 level or above, ANTH 3000 level or above, SOCI 3000 level or above, IDT 3600.
Professional Education ( 30 hours): The Candidate will complete professional education courses appropriate for each licensure area pair as follows: (1) Mathematics \& Science: SPED 2000, ICL 4002, ICL 4004, ICL 4005, EDPR 3121, ELED 4241, ICL 4913, ICL 4800 [I].
(2) Mathematics \& Social Studies : SPED 2000, ICL 4002, ICL 4004, ICL 4006. EDPR 3121, ELED 4241, ICL 4913, ICL 4800 [I].
(3) Mathematics \& Language Arts : SPED 2000, ICL 4002, ICL 4003, ICL 4004, EDPR 3121, ELED 4241, ICL 4913, ICL 4800 [I].
(4) Science \& Social Studies: SPED 2000, ICL 4002, ICL 4005, ICL 4006, EDPR 3121, ELED 4241, ICL 4913, ICL 4800 [I].
(5) Science \& Language Arts : SPED 2000, ICL 4002, ICL 4003, ICL 4005, EDPR 3121, ELED 4241, ICL 4913, ICL 4800 [I].
(6) Social Studies \& Language Arts : SPED 2000, ICL 4002, ICL 4003, ICL 4006, EDPR 3121, ELED 4241, ICL 4913, ICL 4800 [I].

## Typical 4-Year I ntegrative Studies

Early and Middle Grades K-6 Licensure Sequence

| Freshman Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ENGL 1010 | 3 | ENGL 1020 3 |  |  |
| HIST 1110 or CLAS 2481 | 3 | Fine Arts selection 3 |  |  |
| POLS 1100 | 3 | SOCI 1111 |  |  |
| Natural Science* | 4 | Natural Science* |  |  |
| PSYC 1200 | 3 | ESCI 1301 or 1401 |  |  |
| Semester Totals | 16 hrs | 16 hrs |  |  |
| Sophomore Year |  |  |  |  |
| ENGL 2201 or 2202 | 3 | MATH 142 |  | 3 |
| Natural Science selection | 3 | Natural Scie | ience selection | 3 |
| COMM 2381 | 3 | HIST 2020 |  | 3 |
| LEAD 2010 | 3 | IDT 3600 |  | 3 |
| EDPR 2111 | 3 | Social Scie | nce selection | 3 |
| SPED 2000 | 3 | PETE 3604 |  | 2 |
| Semester Totals | 18 hrs |  |  | 17 hrs |
| J unior Year |  |  |  |  |
| EXSS 3306 | ELED 4241 |  | 3 |  |
| ICL 4001 | Fine Arts selection |  | 3 |  |
| ENGL 3401 | MATH 1480 |  | 3 |  |
| ENGL 3500 | EDPR 3121 |  | 3 |  |
| History 20103 | ELED 4240 |  | 2 |  |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ELED 4351 | 4 | ICL 4903 | 6 |
| ELED 4352 | 4 | ICL 4901 | 3 |
| ELED 4353 | 2 | ICL 4800 | 3 |
| ELED 4354 | 2 |  |  |
| Semester Totals | 12 hrs | 12 hrs |  |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## Typical 4-Year I ntegrative Studies

Middle Grades 4-8 Licensure Sequence Math \& Science

Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| MATH 1710 | 3 | COMM 2381 | 3 |
| HIST 2010 | 3 | MATH 1720 | 3 |
| ART 1030 or other choice | 3 | HIST 2020 | 3 |
| POLS 1100 | 3 | PHYS 1010/1011 | 4 |

Semester Totals 15 hrs 16 hrs

| Sophomore Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202 | 3 | MATH 1910 | 3 |
| PHYS 1020/1021 | 4 | ICL 4002 | 3 |
| LEAD 2010 | 3 | BIOL 1110/1111 | 4 |
| MATH 1830 | 3 | CLAS 2481 or HIST 1110 | 3 |
| SPED 2000 | 3 | EDPR 3302 | 3 |
| Semester Totals | 16 hrs |  | 16 hrs |

## J unior Year

| EDPR 2111 | 3 | MATH 3242 | 3 |
| :--- | :--- | :--- | :--- |
| MATH 2702 | 3 | ICL 4005 | 3 |
| ESC 1301 or 1401 | 3 | ICL 4004 | 3 |
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| BIOL 1120/1121 | 4 | EDPR 3121 | 3 |

Semester Totals 17 hrs 16 hrs

## Senior Year

ELED 42413 ICL $4913 \quad 9$

IDT $3600 \quad 3$ ICL $4800 \quad 3$
MATH 32213
MATH 46113
MATH 46112

EXSS 33062 Semester Totals 14 hrs 12 hrs
Total Hours: 122
Total Hours Required for Graduation: 122
*Must satisfy University General Education Program Requirement

## Typical 4-Year I ntegrative Studies <br> Middle Grades 4-8 <br> Math \& Social Studies Licensure Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1710 | 3 | COMM 2381 | 3 |
| HIST 2010 | 3 | MATH 1720 | 3 |
| ART 1030 or other choice | 3 | HIST 2020 | 3 |
| POLS 1100 | 3 | Nat. Science/Lab 4 |  |
| Semester Totals | 15 hrs |  | 16 hrs |

## Sophomore Year

| ENGL 2201 or 2202 | 3 | ICL 4002 | 3 |
| :--- | :--- | :--- | :--- |
| EDPR 2111 | 3 | EDPR 3302 | 3 |
| Nat. Science/Lab | 4 | LEAD 2010 | 3 |
| MATH 1910 | 3 | ESCI 1301 or 1401 | 3 |
| SPED 2000 | 3 | HIST 1110 | 3 |
| Semester Totals | 16 hrs |  | 15 hrs |



| Senior Year   <br> ELED 4241   <br> MATH 4611 3 ICL 4913 9 |  |  |  |
| :--- | :--- | :--- | :--- |
| HIST 4800 | 3 |  |  |
| H223 | 3 |  |  |

SOCI $3 x x x-4 x x x 3$
IDT 36003

Semester Totals $15 \mathrm{hrs} \quad 12 \mathrm{hrs}$

Total Hours: 121
Total Hours Required for Graduation: 121
*Must satisfy University General Education Program Requirement
Typical 4-Year Integrative Studies
Middle Grades 4-8
Math \& Language Arts Licensure Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1710 | 3 | COMM 2381 | 3 |
| HIST 2010 | 3 | MATH 1720 | 3 |
| ART 1030 or other choice | 3 | HIST 2020 | 3 |
| POLS 1100 | 3 | Nat. Science/Lab | 4 |
| Semester Totals | 15 hrs | 16 hrs |  |


| Sophomore Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202 | 3 | ICL 4002 | 3 |
| MATH 1830 | 3 | EDPR 3302 | 3 |
| CLAS 2481 or HIST 1110 | 3 | MATH 1910 | 3 |
| LEAD 2010 | 3 | Nat. Science/Lab 4 |  |
| EDPR 2111 | 3 | ENGL 3604 | 3 |
| SPED 2000 | 3 |  |  |
| Semester Totals | 18 hrs |  | 16 hrs |


| Junior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| EDPR 3121 | 3 | MATH 3242 | 3 |
| MATH 2702 | 3 | ICL 4003 | 3 |
| ESCI 1301 or 1401 | 3 | ICL 4004 | 3 |
| ENGL 3500 | 3 | MATH 4611 | 3 |
| ENGL 4501 or 4531 | 3 | MATH 3221 | 3 |

Semester Totals $15 \mathrm{hrs} \quad 15 \mathrm{hrs}$

Senior Year
ELED $4241 \quad 3 \quad$ ICL $4913 \quad 9$
$\begin{array}{llll}\text { MATH 4xxx } & 3 & \text { ICL } 4800 & 3\end{array}$
EXSS 33062
Am. Lit. 3xxx-4xxx 3
IDT 3600

Total Hours: 121
Total Hours Required for Graduation: 121
*Must satisfy University General Education Program Requirement
Typical 4-Year I ntegrative Studies
Middle Grades 4-8
Science \& Social Studies Licensure Sequen
Freshman Year
ENGL 1010
MATH 1420
POLS 1100
HIST 2010
ART 1030 or other choice 3


ANTH 3xxx-4xxx 3 Semester Totals 16 hrs 12 hrs

Total Hours: 123

Total Hours Required for Graduation: 123
*Must satisfy University General Education Program Requirement

## Typical 4-Year I ntegrative Studies <br> Middle Grades 4-8 <br> Science \& Language Arts Licensure Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| MATH 1420 | 3 | COMM 2381 | 3 |
| POLS 1100 | 3 | HIST 1110 | 3 |
| HIST 2010 | 3 | HIST 2030 | 3 |
| ART 1030 or other choice | 3 | PHYS 1010/1011 | 4 |

Semester Totals $15 \mathrm{hrs} \quad 16 \mathrm{hrs}$

Sophomore Year

| ENGL 2201 or 2202 | 3 | ESC 1301 | 3 |
| :--- | :--- | :--- | :--- |
| PHYS 1020/1021 | 4 | EDPR 3302 | 3 |
| LEAD 2010 | 3 | BIOL 1110/1111 | 4 |
| EDPR 2111 | 3 | ENGL 3604 | 3 |
| SPED 2000 | 3 | Elective | 3 |
| Semester Totals | 16 hrs |  | 16 |
| J unior Year |  |  |  |
| EDPR 3121 | 3 | EXSS 3306 | 2 |
| ICL 4002 | 3 | ICL 4005 | 3 |
| ENGL 3500 | 3 | ICL 4003 | 3 |
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| ENGL 4501 or 4531 | 3 | BIOL 1120/1121 | 4 |

Semester Totals 16 hrs $\quad 16$ hrs

| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ELED 4241 | 3 | ICL 4913 | 9 |
| IDT 3600 | 3 | ICL 4800 | 3 |
| Am. Lit. 3xxx-4xxx | 3 |  |  |
| ESCI 1040 | 4 |  |  |
| Semester Totals | 13 hrs | 12 hrs |  |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## Typical 4-Year I ntegrative Studies

Middle Grades 4-8

## Social Studies \& Language Arts Licensure Sequence

| Freshman Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENGL 1010 |  | 3 E | ENGL 1020 | 3 |  |
| MATH 1420 |  | 3 | COMM 2381 | 3 |  |
| HIST 2010 |  | 3 H | HIST 1110 | 3 |  |
| ART 1030 or other choice |  | 3 | HIST 2030 | 3 |  |
| POLS 1100 |  | 3 | POLS 1301 | 3 |  |
| Semester Totals |  | 15 hrs |  | 15 hrs |  |
| Sophomore Year |  |  |  |  |  |
| ENGL 2201 or 2202 | 3 | ESCl 1301 |  |  | 3 |
| Elective | 3 | EDPR 3302 |  |  | 3 |
| HIST 1120 | 3 | ENGL 3604 |  |  | 3 |
| LEAD 2010 | 3 | Nat. Science/Lab |  |  | 4 |
| EDPR 2111 | 3 | World History 3xxx-4xxx |  |  | 3 |
| SPED 2000 | 3 |  |  |  |  |
| Semester Totals | 18 hrs |  |  |  | 16 hrs |
| J unior Year |  |  |  |  |  |
| ELED 3121 | 3 | HIST 3823 |  | 3 |  |
| ICL 4002 | 3 | ICL 4003 |  | 3 |  |
| ENGL 3500 | 3 | ICL 4006 |  | 3 |  |
| ENGL 4501 or 4531 | 3 | SOCI selection |  | 3 |  |
| Nat. Science/Lab | 4 | EXSS 3306 |  | 2 |  |
| Semester Totals | 16 hrs |  | 14 hrs |  |  |
| Senior Year |  |  |  |  |  |
| ELED 4241 | 3 | ICL 4913 | 3 |  |  |
| IDT 3600 | 3 | ICL 4800 | 3 |  |  |
| Am Lit. 3xxx-4xxx 3 |  |  |  |  |  |
| ANTH 3xxx-4xxx 3 |  |  |  |  |  |
| Elective 2 | 2 |  |  |  |  |
| Semester Totals | 14 hrs |  | 12 hrs |  |  |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## Typical 4-Year Society Services Concentration Sequence

Freshman Year
ENGL 10103 ENGL 1020 3
Fine Arts Selection 3 COMM 23813

| POLS 1100 | 3 | SOCI 1111 | 3 |
| :---: | :---: | :---: | :---: |
| Natural Science * | 4 | Natural Science* | 4 |
| PSYC 1200 | 3 | MATH 1420 | 3 |
| Semester Totals | 16 hrs |  | 16 hrs |
| Sophomore Year |  |  |  |
| ENGL 2201 or 2202 | 3 | ENGL 3401 | 3 |
| Natural Science selection | 3 | Natural Science selection | 3 |
| HIST 2020 | 3 | ESCI 1301 or 1401 | 3 |
| PETE 3604 | 2 | HIST 2010 | 3 |
| EDPR 2111 | 3 | LEAD 2010 | 3 |
| SPED 2000 | 3 | History selection | 3 |
| Semester Totals | 17 hrs |  | 18 hrs |
| J unior Year |  |  |  |
| Society Services selection | 3 | Society Services selection | 3 |
| ICL 4001 | 3 | Fine Arts selection | 3 |
| ENGL 3500 | 3 | MATH 1480 | 3 |
| Selection A | 3 | EDPR 3121 | 3 |
| Society Services | 3 | EXSS 3306 | 2 |
| Semester Totals | 15 hrs |  | 14 hrs |

## Senior Year

| IDT 3600 | 3 | Society Services <br> selection | 3 |
| :--- | :--- | :--- | :--- |
| Society Services <br> selection | 3 | Society Services <br> selection | 3 |
| Society Services <br> selection | 3 | ICL 4800 | 3 |
| CLAS 2481 or HIST 1110 | 3 | Selection B | 3 |
| Semester Totals | 12 hrs | 12 hrs |  |

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement

## PHYSI CAL EDUCATI ON TEACHER EDUCATI ON

Department of Health and Sport Sciences
Physical Education Teacher Education Major (B.S.Ed.)
A. University General Education Program (41 hours)

Program objectives for a B.S.Ed. in Physical Education Teacher Education are: (a) to identify critical elements of motor skill performance, and combine motor skills into appropriate sequences for the purpose
of improving learning; (b) to demonstrate competent motor skill performance in a variety of physical activities; (c) to describe performance concepts and strategies related to skillful movement and physical activity (e.g., fitness principles, game tactics, skill improvement principles); (d) to describe and apply bioscience (anatomical, physiological, and biomechanical) and psychological concepts to skillful movement, physical activity, and fitness; (e) to understand and debate current physical education/activity issues and laws based on historical, philosophical, and sociological perspectives; (f) to demonstrate knowledge of approved state and national content standards and local program goals.
See Graduation from the University link for the University General Education Program requirements. Note the following is specified by the department for this major: Social/Behavioral Sciences: PSYC 1200.
B. The Major ( 79 hours)

Successful completion of B.S. Ed. Requirements with a major in Physical Education Teacher Education will qualify a graduate to apply for licensure in Physical Education ( $\mathrm{K}-12$ ). Minimum grade of " C " is required in all major courses: BIOL 2010/2011 (4); BIOL 2020/2021 (4); EDPR 2111; EXSS 3700 (4), 3405, 3853; HPRO 2100; IDT 3600; LEAD 2010; PETE 2001 (2), 2002 (2), 2003 (2), 2006 (2), 2009 (2), 3307; 3308 (2), 3800, 3903 [W], 4200 (4), 4300 (4), 4400 [C], 4800 [I], 4909 (9); SPED 2000; and one of the following: PHED 1711, 1712, 1713, 1722, or 2703.

## Typical 4-Year Physical Education Teacher Education Sequence

| Freshman Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ENGL 1010 |  | 3 E | ENGL 1020 | 3 |
| Natural Science* |  | 4 N | Natural Science* | 4 |
| MATH* |  | 3 H | History* | 3 |
| Social/Behavioral Sciences* |  | * PS | PSYC 1200 | 3 |
| Humanities* |  | 3 H | Humanities* | 3 |
| Semester Totals |  | 16 hrs |  | 16 hrs |
| Sophomore Year |  |  |  |  |
| PETE 2001 | 2 | PETE 200 | 062 |  |
| PETE 2009 | 2 | PETE 2002 | 022 |  |
| PETE 2003 | 2 | EDPR 211 | 113 |  |
| BIOL 2010/2011 | 4 | BIOL 202 | 20/2021 4 |  |
| ENGL 2201 or 2202 | 023 | LEAD 2010 | 10 |  |
| PETE 3308 | 3 | SPED 200 | 2000 |  |
| Semester Totals | 16 hrs |  | 17 hrs |  |
| J unior Year |  |  |  |  |
| HPRO 2100 | 3 | PETE 4200 | 4 |  |
| PETE 3903 [W] | 3 | EXSS 3700 | 3 |  |
| PETE 3800 | 3 | COMM 2381 |  |  |
| EXSS 3307 | 3 | History* | 3 |  |
| PETE 3853 | 3 | IDT 3600 | 3 |  |
| Semester Totals | 15 hrs | 16 hrs |  |  |
| Senior Year |  |  |  |  |
| PHED 1711 | 2 | PETE 4909 | 9 |  |
| PETE 4300 | 4 | PETE 4800 | 3 |  |

## SPECI AL EDUCATI ON

## Department of Instruction and Curriculum Leadership

Students who complete the B.S. Ed. degree with a major in Special Education will:

1. Apply effective teaching techniques applicable for students of varying ability levels.
2. Modify teaching strategies based on knowledge of culturally and educationally diverse populations.
3. Utilize appropriate assessment procedures to identify the needs of students with disabilities, and modify instruction to accommodate those needs.
4. Effectively communicate ideas and information in both oral and written form.
5. Demonstrate competence in content and pedagogy.
6. Use higher level thinking and problem-solving skills as both students and teachers.
7. Establish on-going professional relationships with teachers, parents, administrators, and university personnel.
8. Assume leadership roles within the profession.
9. Initiate innovative procedures within the classroom and research the results of those procedures.
10. Create a positive classroom climate through the implementation of effective management and organizational techniques.
11. Integrate appropriate technology into instructional programs.

Successful completion of B.S.Ed. requirements with a major in Special Education will qualify a person to apply for licensure in Special Education, both Modified (K-12) and an additional licensure in either ELED (K6) or Comprehensive (K-12), depending on the career path of the candidate. All candidates must complete requirements for one of the above combinations and may be able to satisfy requirements for all three licensure areas. Consult an advisor in the College of Education.
This major is also available to students who are not seeking licensure in which case guided electives will be chosen with advisor approval in lieu of the Professional Semester and additional related licensure area. These electives will reflect a cohesive, non-school specialization with a full semester internship in a nonschool setting.

## Special Education Major (B.S.Ed.)

A. University General Education Program (41 hours)

See Graduation from the University link for the University General Education Program requirements.
The following University General Education Program requirements are specified by the department for this major: Mathematics: 1420 is recommended; Social/Behavioral Sciences: CSED 2101 is recommended; PSYC 1200 is required.
B. Related Liberal Studies ( 15 hours):

EDPR 2111; IDT 3600; HMSE 2102; LEAD 2010; ENGL 3500.
C. The Major ( 36 hours):

Major core for Modified (K-12) licensure and non-licensure: SPED 2000, 3201*, 3401*, 3501*, 3802
(corequisite), 3803 (corequisite), 4601*; 4900; ECED 4500; ELED 4240 [W], 4241; ENGL 4531.

* 30 hours Practicum required in each: corequisite 3800/3801/3802/3803
D. Guided Electives ( 12 hours Comprehensive or Elementary: 10 hours Non-licensure):

All candidates with a major in Special Education must choose one of the following career paths to complete requirements for an additional related licensure area, or a specialty area (non-licensure only):

1. Comprehensive ( $\mathrm{K}-12$ ): preparation of special education teacher for general and independence curriculum: SPED 4000/4001 (corequisites), 4513; ELED 3251 [C].
2. Elementary ( $\mathrm{K}-6$ ): preparation of special education teacher for general curriculum: ELED 4351/4352 [C]/4353/4354 (corequisites).
3. Non-Licensure Specialty Area ( 10 hours): electives that reflect a cohesive, non-school specialization chosen with advisor approval.

## E. Professional Education (18-19 hours):

1. Modified licensure (K-12)
a. Modified methods/practicum (corequisites): SPED 3800/3801
b. Professional Semester: ICL 4800 [I]; enhanced student teaching in Modified (K-12) ICL 4905 (5) and either Comprehensive (K-12) ICL 4906 (3), and ICL 4904 or 4907 (2); or Elementary (K-8) ICL 4904 (4) and ICL 4901 (1).
2. Non-Licensure Specialty Area: ICL 4800 [I], EDSV 4950 (9) full semester non-school internship.
*NOTE: SPED 3800, 3801, 3802, and 3803 must be taken as Corequisites. The Prerequisites for this sequence are admission to TEP and SPED 2000, 3201, 3401, 3501; ELED 3251 [C], 4241 or 4352.

## Typical 4-Year Special Education K-12 Licensure Sequence

## Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| Humanities* | 3 | Math 1420 | 3 |
| History* | 3 | Natural Science* | 4 |
| Natural Science* | 4 | History* | 3 |
| PSYC 1200 | 3 | Social/Behav Sciences* | 3 |
| Semester Totals | 16 hrs |  | 16 hrs |


| Sophomore Year <br> COMM 2381 | 3 | ENGL 3500 | 3 |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202* | 3 | ELED 4240 | 3 |
| SPED 2000 | 3 | SPED 3201 | 3 |
| LEAD 2010 | 3 | SPED 3501 | 3 |
| EDPR 2111 | 3 | HMSE 2102 | 3 |
| Humanities/Fine Arts* | 3 |  |  |
| Semester Totals | 18 hrs |  | 15 hrs |


| J unior Year |  |  |  |
| :---: | :---: | :---: | :---: |
| ECED 4500 | 3 | ELED 3251 [C] | 3 |
| SPED 3401 | 3 | SPED 3800 | 3 |
| ELED 4241 | 3 | SPED 3801 | 3 |
| ENGL 4531 | 3 | SPED 3802 | 3 |
| IDT 3600 | 3 | SPED 3803 | 3 |
| Semester Totals | 15 hrs |  | 15 hrs |
| Senior Year |  |  |  |
| SPED 4513 | 3 | ICL 4800 | 3 |
| SPED 4601 | 3 | ICL 4905 | 5 |


| SPED 4000 | 3 | ICL 4906 | 3 |
| :--- | :--- | :--- | :--- |
| SPED 4001 | 3 | ICL 4904 or 4907 | 2 |
| SPED 4900 | 3 |  |  |
|  |  |  | 13 hrs |

Total Hours: 123 with two licensure areas
120 Non- licensure
Total Hours Required for Graduation: 123 with two licensure areas 120 Non- licensure

## SPORT AND LEI SURE MANAGEMENT

## Department of Health and Sport Sciences

## Sport and Leisure Management Major (B.S.Ed.)

Program objectives of the B.S.Ed. in Sport and Leisure Management are: (a) to become involved in the profession and committed to the academic, service, and social mission of the profession; (b) to demonstrate an awareness of the critical role of diversity to the delivery of inclusive sport and leisure services; (c) to demonstrate effective leadership within the sport and leisure profession; and (d) to behave in accordance with the ethical standards of the sport and leisure profession. Students majoring in Sport and Leisure Management must complete SLS 2105 with a grade of "C-" or higher prior to enrolling in additional SLS coursework.
A. University General Education Program ( 41 hours)

See Graduation from the University link for the University General Education Program requirements. The following are recommended or required for the major: Social/Behavioral Sciences: CSED 2101 is recommended; ECON 2110 is required.
B. The Major ( 79 hours)

1. Core requirements ( 52 hours). (Minimum grade of "C-" required in all major courses); HMSE 4999 [I]; SLS 2105 (4), 3005 [C], $3104,3105,3204,3205,3605,3650,4135,4155,4205,4500,4605$ (9-12).
2. SLS electives (12-15 hours). Includes all SLS courses not required in the major core.
3. Choose 12-15 hours from the following courses: HMSE 4305, COMM 3322, 3342, 4011, CSED 2106, 3206, ECON 2120, 3023, 4350, FIR 3011, 3130, ISDS 2710, JOUR 1700, MGMT 3110, 3510, MKTG 3010, 3410, 4230, 4410, 4470.
4. Electives ( $0-6$ hours) to bring the total number of hours to 120 .

Typical 4-Year Sport and Leisure Management Sequence


## The College of Education

| SLS 3105 | 3 | SLS 3204 | 3 |
| :--- | :--- | :--- | :--- |
| SLS 3650 | 3 | SLS 4155 | 3 |
| Elective | 3 | SLS 4205 | 3 |
| Elective | 3 | SLS 4500 | 3 |
| Semester Totals | 15 hrs | 15 hrs |  |

## Senior Year

SLS 3205 Elective 3
SLS 36053 HMSE 4999 [I] 3
SLS $4135 \quad 3 \quad$ SLS $4605 \quad 9$

Elective 3
Elective 3

Semester Totals 15 hrs 15hrs

Total Hours: 120
Total Hours Required for Graduation: 120
*Must satisfy University General Education Program Requirement
Last Updated: 6/12/15

# THE HERFF COLLEGE OF ENGI NEERING 

RICHARD C. WARDER, JR., Ph.D., P.E., Dean

Room 201-D, Engineering Building (901) 678-2171
http://www.engr.memphis.edu

## PURPOSES

The mission of the Herff College of Engineering is to provide quality teaching, research, and service programs to the citizens of the state, region and nation. The College provides undergraduate programs in civil, computer, electrical, mechanical, and industrial and systems engineering, and in computer, electronics, and manufacturing engineering technology. Graduate programs are offered in all of the disciplines listed above and biomedical engineering. Each curriculum is designed to prepare students for practice of the profession in industry, government, or academic institutions. Considerable effort is directed toward breadth as well as depth to provide programs of highest quality.

## ORGANI ZATI ON

The Herff College of Engineering is organized into the Departments of Biomedical Engineering, Civil Engineering, Electrical and Computer Engineering, Mechanical Engineering, and Engineering Technology. With the exception of Biomedical Engineering, each department offers a choice of specialized four-year programs leading to baccalaureate degrees. Graduate programs are offered in all of the engineering disciplines listed above.

Freshman students entering the Herff College of Engineering will be advised by the College Academic Advisor, who will assist students with class schedules and facilitate changes of major and other academic needs. After students accumulate an appropriate number of hours, their advising will be transferred to a faculty member in the department of their major.

## ACADEMI C PROGRAMS

| Department | Major <br> Click Major below for Requirements. Click on Tiger Paw for Course Descriptions |  | Concentration Within Major | Degree Offered |
| :---: | :---: | :---: | :---: | :---: |
| Biomedical Engineering | Biomedical Engineering | \% | NONE | Bachelor of Science in Biomedical Engineering (B.S.B.E.) |
| Civil Engineering | Civil Engineering** | \% | 1. Construction Engineering <br> 2. Environmental Engineering <br> 3. Geotechnical Engineering <br> 4. Structural Engineering <br> 5. Transportation Engineering | Bachelor of Science in Civil Engineering (B.S.C.E.) |

The Herff College of Engineering

| Electrical and Computer Engineering | Electrical Engineering** | \% | Engineering <br> 2. Electrophysics <br> 3. Systems and Signals | Bachelor of Science in Electrical Engineering (B.S.E.E.) |
| :---: | :---: | :---: | :---: | :---: |
|  | Computer Engineering | \% | NONE | Bachelor of Science in Computer Engineering (B.S.C.P.) |
| Mechanical Engineering | Mechanical Engineering** | \% | 1. Biomedical Systems <br> 2. Energy Systems <br> 3. Mechanical Systems | Bachelor of Science in Mechanical Engineering (B.S.M.E.) |
| Engineering Technology | *Computer Engineering Technology*** | \% | NONE | Bachelor of Science in Engineering Technology (B.S.E.T) |
|  | $* E l e c t r o n i c s ~ E n g i n e e r i n g ~$ Technology*** | \% | NONE | Bachelor of Science in Engineering Technology (B.S.E.T.) |
|  | *Manufacturing Engineering Technology*** | ${ }^{\text {s }}$ | NONE | Bachelor of Science in Engineering Technology (B.S.E.T.) |

*Minor available.
**Note: Accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).
***Note: Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). Contact: Accreditation Director,
Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202 (410)347-7700, Fax (410)625-2238.
Individual program requirements described in the University of Memphis 2006-2007 Undergraduate Bulletin are subject to change. Please consult the college level advisor for changes that may occur before publication of the next issue of this Bulletin.

## DEGREE REQUI REMENTS

Students must satisfy all university, college and departmental degree requirement for the degree desired. University requirements may be found in the Graduation from the University section of this Bulletin. The College requires that a minimum of 31 hours of the hours required by the University for residency be taken as upper division hours in courses in the Herff College of Engineering. Specific departmental requirements are subject to change and students should consult their advisor regularly to learn of changes that occur.

## ACCELERATED BS/ MS PROGRAM IN BI OMEDI CAL ENGI NEERI NG

Qualified students are allowed to earn a Bachelores degree in an approved undergraduate discipline and a Master s degree in Biomedical Engineering (BME) in five years. Students with high school advanced placement credits may require less time. Students will join research teams organized through the J oint Graduate Program in Biomedical Engineering, which is shared by the University of Memphis and The University of Tennessee Health Science Center. Students may apply once they have reached sophomore standing and have completed one semester of course work. In addition to an application form, students must submit one letter of reference and a copy of their transcript to the BME department. Each applicant will be required to complete an interview with a pre-graduate advisor in the BME department. In order to remain in the program past the junior year, students must maintain a minimum GPA of 3.25. Students in their senior year will become eligible to apply for combination senior status, allowing them to take graduate courses in BME. To continue in this program past the B.S., students must submit a Change of Status application with Graduate Admissions. Further information may be found at:
http://engr.memphis.edu/threetwo.html.

## BI OMEDI CAL ENGI NEERI NG <br> Department of Biomedical Engineering

Biomedical Engineering is a broad field that encompasses many areas related to improving human health such as implant devices, tissue engineering/regeneration, and biosensors and imaging technologies for the prevention, detection, diagnosis, and treatment of diseases. The program integrates physical, chemical, mathematical, and computational sciences and engineering with biology and medicine. The curriculum is designed to prepare graduates for professional practice and to provide a foundation for lifelong learning and professional growth. The course of study begins with a strong foundation in mathematics, physics, chemistry, biology, and engineering sciences. Departmental courses during these years illustrate how such foundations are combined in many areas of biomedical engineering. The upper division years include a block of twenty-six hours (noted as BIOM and Technical electives in the typical sequence below) to allow students, with advisor's assistance, the means to study in a focused portion of the discipline and its supporting fields. The elective hours must be upper division courses. Concepts and efforts in engineering design occur throughout the curriculum and culminate in a senior group project.

The educational objectives* of the Biomedical Engineering undergraduate program are:

1. graduates will be prepared for employment as biomedical engineers in industries serving or related to health professions;
2. graduates will be prepared to pursue professional studies;
3. graduates will engage in activities that provide continuing self-development in biomedical engineering and related careers.

* adopted 2 February 2006

The diversity encountered in the profession requires the successful biomedical engineer to have technical and non-technical skills, especially for communication and team efforts. Courses in the humanities and social sciences enhance non-technical skills, and explore the engineer's relationship with, and responsibility to, society. Studies in the sciences and other engineering disciplines enable quicker, sure communication and evaluation when total solutions are sought by multidisciplinary efforts. Materials in engineering ethics and professionalism are essential because our graduates and the field expect to enrich life and provide solutions with known benefits and defined risks.

This curriculum equips typical Biomedical Engineering graduates of the University of Memphis with the skills and perspectives required for success in a variety of professional roles. These include the ability to conduct project design work, to manage projects, to interact successfully with the public, and to pursue advanced study, engineering, business, medicine, law, or other fields if so desired.

## Biomedical Engineering (B.S.B.E.)

A. University General Education Program ( 36 hours)

See Graduation from the University link for University General Education Program requirements. Note the following requirements are specified for this program: Communication: ENGL 3603 instead of COMM 2381; Mathematics: MATH 1910 (students who have not had MATH 1730 or its equivalent must take it before enrolling MATH 1910). Social/Behavioral Sciences: ECON 2110 must be taken in addition to 3 hours from the other specified choices; Natural Science: PHYS 2110/2111, 2120/2121. History: American history waived for B.S.B.E. students who have completed one unit of American history in high school.
B. College and Degree Requirements (29 hours)

Mathematics (11 hours): MATH 1920, 2110, and 3120.
Natural Science (8 hours): CHEM 1110/1111; BIOL 1110/1111.
Collateral Courses (10 hours): CIVL 2131; MECH 2332; EECE 2201/2203 or EECE 2283/2281.
C. The Major (63 hours)

1. Completion of 37 hours from BIOM 1710, 1720, 2710 (4), 2720, 3710, 4760, 4780; CHEM 1120/1121; BIOL 1120/1121, 3730 (4); MECH 3320.
2. 26 hours of BIOM and technical electives approved by the advisor. At least six hours must be satisfied with BIOM electives. The remaining 20 hours of electives may be chosen from upper division courses in BIOL, BIOM, CHEM, EECE, MATH, MECH and PHYS. Courses at this level in other departments can be chosen with permission of the chair or the chair's designee. Some courses to meet this goal are: BIOM 4720 (4), 4730 (4), 4750 (4), 4702, 4205; CHEM 3301 (1), 3311; EECE 3202, 3211, 3213 (1), 3221, 3240, 4270 (4); MATH 3242, 4391, 4721; BI OL 3130, 4511; MECH 3310, 3322, 3325 (1), 3331, 3335 (1).

## Typical 4-Year Biomedical Engineering Sequence

## Freshman Year

| ENGL 1010 | 3 | PHYS 2110/2111 | 4 |
| :---: | :---: | :---: | :---: |
| CHEM 1110/1111 | 4 | CHEM 1120/1121 | 4 |
| MATH 1910 | 4 | MATH 1920 | 4 |
| BIOM 1710 | 3 | BIOM 1720 | 3 |
|  |  | ENGL 1020 | 3 |
| Semester Totals | 14 hrs |  | 18 hrs |
| Sophomore Year |  |  |  |
| BIOL 1110/1111 | 4 | MATH 3120 | 3 |
| MATH 2110 | 4 | BIOL 1120/1121 | 4 |
| PHYS 2120/2121 | 4 | CIVL 2131 | 3 |
| BIOM 2720 | 4 | BIOM 2710 | 3 |
|  |  | ENGL 2201 or 2202 | 3 |
| Semester Totals | 16 hrs |  | 16 hrs |
| J unior Year |  |  |  |


| EECE 2201/2203 | 3 | MECH 3320 | 3 |
| :---: | :---: | :---: | :---: |
| ECON 2110 | 3 | ENGL 3603 | 3 |
| BIOL 4730 | 4 | BIOM 3710 | 3 |
| MECH 2332 | 3 | Tech Elec | 3 |
| BIOM Elec | 3 | Tech Elec | 3 |
|  |  | Social/Behav Sciences* | 3 |
| Semester Totals | 17 hrs |  | 18 hrs |
| Senior Year |  |  |  |
| BIOM 4760 | 3 | BIOM 47803 |  |
| Humanities* 3 | 3 | Tech Elec 4 |  |
| BIOM Elec 3 | 3 | Tech Elec 3 |  |
| Tech Elec 4 | 4 | Humanities* 3 |  |
| Tech Elec 3 | 3 |  |  |
| Semester <br> Totals | 16 hrs |  |  |

Total Hours: 128
Total Hours Required for Graduation: 128
*Must satisfy University General Education Program Requirement
GRADUATION: To qualify for the degree of Bachelor of Science in Biomedical Engineering, the student must satisfy University and College requirements, obtain a minimum 2.0 grade point average on all work completed, and obtain a minimum grade of " C -" in all engineering, mathematics, physics, biology, and chemistry courses used to satisfy degree requirements. Waiver of departmental graduation requirements for exceptional circumstances will be granted only upon approval of both the department chair and the Dean of the College of Engineering (or designee).

## CI VI L ENGI NEERI NG

## Department of Civil Engineering

The Civil Engineering program is designed to equip students with the knowledge and skills required to identify and solve the technical problems of society in a practical and ethical way. The faculty are committed to teaching, inspiring, and mentoring students who will meet the following objectives: (1) graduates will meet or exceed the expectations of civil engineering employers in industry, private practice or consultation, and government service; (2) graduates will effectively interface with other engineers, professionals from other disciplines, and the public to solve civil engineering problems; (3) graduates will be prepared to pursue graduate studies both in engineering and other professional fields when pursued. Civil engineering graduates will engage in a broad range of self-development activities that benefit the civil engineering profession and the community. The civil engineering program is greatly enhanced by a diverse student body spanning a wide ranges of ages, backgrounds, and nationalities.

The Civil Engineering program of study provides an integrated educational experience that combines study in basic and engineering science, the humanities, and the social sciences with practical experience in laboratory experimentation, problem solving, and engineering design. Students may pursue a general course of study or may elect to specialize in water resources or one of the following concentrations; environmental, structural, foundation, transportation, or construction engineering.
GRADUATI ON: To qualify for the degree of Bachelor of Science in Civil Engineering, a student must satisfy general university and college requirements, have a minimum grade of " C " in all civil engineering courses that are applied toward the degree, and complete the course sequence outlined below. For credits transferred from another institution, only those civil engineering course with a minimum grade of " C " may be applied toward the degree. Waiver of departmental graduation requirements for exceptional circumstances will be granted only upon approval of both the department chair and the Dean of the College of Engineering (or designee).
COURSE ENROLLMENT: The degree program in Civil Engineering includes a series of engineering science and professional courses taught at the upper division level. These courses are based on a background of communications, physical science, mathematics, and engineering science courses required during the freshman and sophomore years. All of the courses required during the freshman and sophomore years are prerequisites to junior standing in the Civil Engineering Department. Students shall not enroll in any upper division courses in civil engineering before the semester in which they complete all of the lower division requirements. Exceptions to this policy can be made only by the department chair acting upon the recommendation of the student $\geqslant \mathrm{s}$ advisor.
HONORS PROGRAM: Students are eligible for the honors program in Civil Engineering if they have an minimum overall GPA of 3.25 with a junior or senior standing or have received approval of the departmental honors committee. The honors program in civil engineering requires 12 hours of upper division honors courses. Those students who complete the program and the regular B.S.C.E. requirements will be recognized at the commencement ceremony by having their degree conferred 食With Honors in Civil Engineering. Moreover, the student $\geqslant$ s diploma and record at the University of Memphis will reflect this accomplishment. Details concerning this program and honors course offerings are available in the Department of Civil Engineering.

## Civil Engineering Major (B.S.C.E.)

## A. University General Education Program (36 hours)

See Graduation from the University link for University General Education Program requirements. Note the following requirements are specified for this program: Communication: ENGL 3603 instead of COMM 2381; Mathematics: MATH 1910 (students who have not had MATH 1730 or its equivalent must take it before enrolling MATH 1910). Natural Science: PHYS 2110/2111, 2120/2121. History: waived for B.S.C.E. students who have completed one unit of American history in high school.
B. College and Degree Requirements ( 28 hours)

Mathematics: MATH 1920, 2110, and 3120; Natural Science: CHEM 1110/1111; and one of the following:
CHEM 1120/1121, BIOL 1110/1111, GEOL 1040, or GEOL 1103.
Collateral Courses: EECE 2201 or MECH 3311; MECH 2332.

## C. The Major ( 64 hours)

1. Completion of CIVL 1101, 1112, 2101, 2112, 2131, 2131, 3103, 3121 [C], 3131 or 4135, 3137, 3140 (4), 4151 (4), 3161, 3180, 3181, 3182 (1), 3322, 3325 (1), 4111, 4199 [W, I].
2. Twelve hours of civil engineering electives approved by an advisor and selected from Group 1 and Group 2 electives, with no more than 6 hours from Group 1.
a. Group 1 Electives: CIVL 4122, 4171, 4172, and an approved upper-division civil, electrical, or mechanical engineering course;
b. Group 2 Electives: CIVL 4131, 4135 or 3131, 4136, 4140, 4143, 4144, 4149, 4152, 4162, 4163, 4164, 4180, 4190, 4191, and 4900-10.
A student may select courses from the following concentrations to satisfy civil engineering elective requirements. If the student declares a concentration, a minimum of 9 hours from that concentration area is required.
3. Construction Engineering: CIVL 4164, 4171, 4172, 4191
4. Environmental Engineering: CIVL 4140, 4143, 4144, 4149, 4180, 4191.
5. Geotechnical Engineering: CIVL 4152, 4171, 4191.
6. Structural Engineering: CIVL 4131, 4135 or 3131, 4136, 4152, 4191, 4122.
7. Transportation Engineering: CIVL 4162, 4163, 4164, 4191.

## Typical 4-Year Civil Engineering Sequence

## Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| MATH 1910 | 4 | MATH 1920 | 4 |
| CIVL 1101 | 3 | CIVL 1112 | 3 |
| CHEM 1110/1111 | 4 | PHYS 2110/2111 | 4 |
|  |  |  | Physical Science |

Semester Totals 14 hrs 18 hrs

## Sophomore Year

| ENGL 2201 or 2202 | 3 | CIVL 2112 | 3 |
| :--- | :--- | :--- | :--- |
| MATH 2110 | 4 | Social/Behavioral Sciences* | 3 |
| PHYS 2120/2121 | 4 | EECE or MECH | 3 |
| CIVL 2101 | 3 | MATH 3120 | 3 |
| CIVL 2131 | 3 | MECH 2332 | 3 |
| Semester Totals | 17 hrs | 15 hrs |  |


| J unior Year |  |  |  |
| :---: | :---: | :---: | :---: |
| Social/Behavioral Sciences* | 3 | CIVL 3131 or 4135 | 3 |
| CIVL 3322 | 3 | CIVL 3161 | 3 |
| CIVL 3180 | 3 | CIVL 3140 | 4 |
| CIVL 3121[C] | 3 | ENGL 3603 | 3 |
| Humanities* | 3 | CIVL 3137 | 3 |
| CIVL 3103 | 3 | CIVL 3182 | 1 |
|  |  | CIVL 3325 | 1 |
| Semester Totals | 18 hrs |  | 18 hrs |

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| CIVL 3181 | 3 | ClVL 4111 | 3 |
| :--- | :--- | :--- | :--- |
| CIVL 4151 | 4 | ClVL 4199 [W,I] | 3 |
| CIVL elective (Grp 1 or 2) | 3 | ClVL elective (Grp 1 or 2) | 3 |
| CIVL elective (Grp 2) | 3 | ClVL elective (Grp 2) | 3 |
| Humanities* 3  <br> Semester Totals 16 hrs  <br> Total Hours: 128 hrs   <br> Total Hours Required for Graduation: 128 <br> *Must satisfy University General Education Program  Requirement |  |  |  |

## COMPUTER ENGI NEERING

## Department of Electrical and Computer Engineering

The primary goal of the Computer Engineering major is to educate engineering professionals with expertise in computer engineering to meet the rapidly increasing needs of industry and government in the West Tennessee and the Mid-South region. The program educational objectives are that Computer Engineering graduates will have a quality added education that:
(1) prepares graduates capable of thinking critically as well as analyzing and designing hardware, software, and system-integration aspects of computer-based systems; (2) prepares graduates to succeed in graduate programs in computer engineering, computer science, electrical engineering, or software engineering if pursued. Prepares graduates to succeed in other professional programs such as law, medicine, or business if pursued; (3) prepares graduates to be competent computer engineering professionals, capable of working independently and in teams and undertaking leadership roles in their communities, global society, as well as in the computer and information systems industries.
GRADUATION: The minimum requirements for the degree of Bachelor of Science in Computer Engineering are given below. The student must satisfy university and college requirements. The student must obtain a minimum grade of " $C$ " in all EECE courses and in MATH 1910, 1920, 2110, 2701, 3120; CHEM 1110/1111; COMP 2150; PHYS 2110/2111, 2120/2121, or any equivalents to these courses used to satisfy degree requirements. No transfer credit with a grade less than a minimum grade of " C " may be used to satisfy a requirement for the Bachelor of Science in Computer Engineering. In addition, no transfer credit may be used to satisfy EECE 2201 or any upper division EECE course unless the credit was earned at an ABET accredited program. Waiver of departmental graduation requirements for exceptional circumstances will be granted only upon approval of both the department chair and the Dean of the College of Engineering (or designee).
HONORS PROGRAM: : Students are eligible for the honors program in computer engineering if they have and maintain a cumulative GPA of 3.4 with at least junior standing and have received approval of the departmental honors committee. The honors program in computer engineering requires a minimum of 8 hours of honors courses in computer engineering and must include honors sections of EECE 4279 and EECE 4280 [W], along with the completion of an honors thesis. (EECE 4999). Those students who complete the program and the regular B.S .C.P. requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Computer Engineering." Moreover, the student's diploma and record at the University of Memphis will reflect this accomplishment. Details concerning this program and honors course offerings are available in the Department of Electrical and Computer Engineering.
MI NORS: Students satisfying the requirements for the Bachelor of Science in Computer Engineering may also satisfy requirements for a minor offered by a department in one of the other colleges. Requirements for a minor are specified by the appropriate college and department. Students should submit application for the minor to the appropriate department chair. Candidates for graduation who satisfy requirements for a minor should file the approved application with the intent-to-graduate cards.

## Computer Engineering Major (B.S.C.P.) <br> A. General Education (36 hours)

See Graduation from the University link for University General Education Program requirements. Note the following requirements are specified for this program: Communication : ENGL 3603 instead of COMM 2381; Mathematics: MATH 1910 (students who have not had MATH 1730 or its equivalent must take it before
enrolling MATH 1910); History: waived for B.S.C.P. students who have completed one unit of American history in high school; Social/Behavioral Sciences: ECON 2110 must be taken in addition to 3 hours from the other specified choices; Natural Science: PHYS 2110/2111, 2120/2121.

## B. College and Degree Requirements ( 21 hours)

Mathematics (14 hours): MATH 1920, 2110, 2701, 3391, and 4635.
Natural Science (4 hours): CHEM 1110/1111.

## C. The Major ( 71 hours)

1. Major Core: Completion of the following: EECE 1202, 1206, 2201, 2203, 2222, COMP 2150, 3160, 4270, MECH 3310 or 3311; EECE 3201, 3202[C], 3211, 3213, 3220, 3221[C], 3270 (4), 4235, 4278, 4279, 4280 [W,I].
2. Electives: Choose Group I elective from: EECE 4222, 4277, 4710, or 4711. Choose Group II from: EECE 4272, 4273, 4275, 4276, 4720, 4730 or 4731.
3. Technical Electives: Choose from upper division courses in engineering, mathematics, computer science, or physics.

## Typical 4-Year Computer Engineering Sequence

## Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| MATH 1910 | 4 | MATH 1920 | 4 |
| EECE 1202 | 3 | PHYS 2110/2111 | 4 |
| CHEM 1110/1111 | 4 | EECE 1206 | 4 |
| Humanities* | 3 |  |  |
| Semester Totals | 17 hrs |  | 15 hrs |


| Sophomore Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 2201 or 2202 | 3 | Humanities* | 3 |
| MATH 2110 | 4 | MATH 3120 | 3 |
| PHYS 2120/2121 | 4 | EECE 2201 | 3 |
| COMP 2150 | 3 | EECE 2203 | 1 |
| MATH 2701 | 3 | EECE 2222 | 4 |
|  | 3 | COMP 3160 | 3 |

Semester Totals $17 \mathrm{hrs} \quad 17 \mathrm{hrs}$

| J unior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| EECE 3201 | 4 | EECE 3202 [C] | 3 |
| EECE 3211 | 3 | ENGL 3603 | 3 |
| EECE 3213 | 1 | EECE 4278 | 3 |
| EECE $3221[C]$ | 3 | EECE 3220 | 3 |
| EECE 3270 | 4 | MATH 4635 | 3 |
| Semester Totals | 15 hrs | 15 hrs |  |


| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| MECH 3310 or 3311 | 3 | EECE $4280[W]$ | 3 |
| Group I elective | 3 | ECON 2110 | 3 |
| Group II elective | 3 | Technical elective | 3 |


| COMP 4270 | 3 | Technical elective | 3 |
| :--- | :--- | :--- | :--- |
| EECE 4235 | 3 | Social/Behavioral Sciences* | 3 |
| EECE 4279 | 2 |  |  |
| Semester Totals | 17 hrs |  | 15 hrs |

Total Hours: 128
Total Hours Required for Graduation: 128
*Must satisfy University General Education Program Requirement.

## COMPUTER ENGI NEERI NG TECHNOLOGY

## Department of Engineering Technology

This Computer Engineering Technology (CET) program provides a unique blend of courses in electronics, computer hardware, and computer software that emphasizes the analysis and design of microprocessor based computer systems. The CET graduate understands electronic hardware, software, and the interaction between them. CET graduates provide business and industry with qualified professionals who can design, install, maintain, and operate computer systems as well as do programming and systems analysis.
Computer Engineering Technology Major (B.S.E.T.)
A. University General Education Program ( 42 hours)

See Graduation from the University link for University General Education Program requirements. Note the following are specified by the department for this program: Mathematics: MATH 1910; Natural Science:
PHYS 2010/2011, 2020/2021
B. College and Degree Requirements ( 25 hours)

Technology Core: ENGL 3603; CHEM 1010/1011; MATH 1730; TECH 1010, 1411, 1521, 3044 [C], CETH 4944 [W, I].

## C. The Major ( 61 hours)

Completion of 61 hours including CETH 1211, 2251, 2261, 3232, 3233, 4234, 4262, 4272; EETH 1811, 2820, 2821, 2831; METH 3440, 4381, 4462, 4474, and one CETH Elective and one Technical Elective. NOTE: Substitutions must be approved by the Program Coordinator. Computer Engineering Technology electives include CETH 3281, CETH 3251, CETH 4241, CETH 4242, CETH 4263, and CETH 4281. Elective courses to be selected in consultation with advisor.

## D. Graduation

In addition to meeting University requirements for graduation, the student must also attain a minimum grade of in all required TECH, EETH, CETH, and METH courses, MATH 1730 and 1910, ENGL 3603, and technical electives. Waiver of departmental graduation requirements for exceptional circumstances will be granted only upon approval of both the department chair and the Dean of the College of Engineering (or designee).
E. Computer Engineering Technology Minor

CETH 1211, 2251, 2261, 3232, 3233, 4241 or 4281, 4262; EETH 1811, 2821.

## Typical 4-Year Computer Engineering Technology Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | ENGL 1020 | 3 |
| TECH 1010 | 3 | CHEM 1010/1011 | 4 |
| History* | 3 | MATH 1910 | 4 |
| MATH 1730 | 4 | EETH 1811 | 3 |
| TECH 1411 | 1 | CETH 1211 | 3 |
| TECH 1521 | 3 |  |  |
| Semester Totals | 17 hrs | 17 hrs |  |

Sophomore Year

| PHYS 2010/2011 | 4 | PHYS 2020/2021 | 4 |
| :--- | :--- | :--- | :--- |
| CETH 2251 | 3 | COMM 2381 | 3 |
| EETH 2820 | 4 | ENGL 2201 or 2202 | 3 |
| EETH 2821 | 3 | CETH 2261 | 3 |
| History* | 3 | EETH 2831 | 3 |

Semester Totals 17 hrs 16 hrs

| Junior Year   <br> ENGL 3603 3 Humanities* | 3 |  |  |
| :--- | :--- | :--- | :--- |
| Humanities* | 3 | Social/Behavioral Sciences* | 3 |
| TECH 3044 [C] | 4 | Social/Behavioral Sciences* | 3 |
| METH 4474 | 3 | METH 3440 | 3 |
| CETH 3232 | 4 | CETH 3233 | 4 |

Semester Totals $17 \mathrm{hrs} \quad 16 \mathrm{hrs}$

| Senior Year |  |  |  |
| :--- | :--- | :--- | :--- |
| Technical elective | 3 | CETH elective | 4 |
| CETH 4234 | 4 | CETH 4272 | 4 |
| CETH 4262 | 4 | METH 4462 [C] | 2 |
| METH 4381 | 3 | CETH 4944 [I,W] | 3 |
| Semester Totals | 14 hrs | 14 hrs |  |

Total Hours: 128
Total Hours Required for Graduation: 128
*Must satisfy University General Education Program requirements.

## ELECTRI CAL ENGI NEERI NG

## Department of Electrical and Computer Engineering

The educational objectives of the Electrical Engineering program are consistent with the mission of the University of Memphis. The program is designed to provide students satisfying, robust, and quality education in electrical engineering, leading to professional employment and/or graduate-level education. The program educational objectives are that Electrical Engineering graduates will have a quality added education that: (1) enables them to think critically as well as analyze and design engineering systems; (2) enables them to succeed in graduate programs in engineering, business, medicine, law, or other fields if pursued; and (3) enables them to succeed in employment, working independently and in teams, and undertaking leadership roles in their communities and the global society.

In pursuit of these objectives, students enrolled in electrical engineering are offered a curriculum designed to provide a thorough background and understanding of the theoretical and physical principles of electric and magnetic phenomena. The intent of the program is to produce graduates who can apply concepts and techniques of mathematics and physics to a variety of analysis and design applications in electrical engineering. In addition graduates are prepared to communicate their ideas succinctly and clearly in both oral and written presentations.

Laboratory facilities are available for a wide variety of instructional and research activities. Significant laboratory activity is required in the curriculum.

Career opportunities include positions in development and design, research, sales, management, manufacturing, and construction. Some of the technical areas of opportunity are related to computer applications, communications systems, power generation and distribution systems, microwave and antenna systems, automatic control systems, and general instrumentation. An undergraduate student, with the approval of the department chairman, may select some electives that satisfy the course entrance requirements for medical school.
Honors Program: Students are eligible for the honors program in electrical engineering if they have and maintain a cumulative GPA of 3.4 with at least junior standing and have received approval of the departmental honors committee. The honors program in electrical engineering requires a minimum of 8 hours of honors courses in electrical engineering and must include honors sections of EECE 4279 and EECE 4280 [W], along with the completion of an honors thesis. (EECE 4999). Those students who complete the program and the regular B.S.E.E. requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Electrical Engineering." Moreover, the student's diploma and record at the University of Memphis will reflect this accomplishment. Details concerning this program and honors course offerings are available in the Department of Electrical and Computer Engineering.

The Department of Electrical and Computer Engineering offers a Master of Science degree for electrical engineers who desire advanced study in electro-optical systems, automatic control systems, engineering computer systems, and communications and propagation systems. The department also offers a concentration in Electrical Engineering for students pursuing the interdepartmental Doctor of Philosophy degree.
Details about the program and the program objectives are available on the departmental home page of the world wide web (http://www.ee.memphis.edu/).
GRADUATI ON: The minimum requirements for the degree of Bachelor of Science in Electrical Engineering are given below. The student must satisfy general university and college requirements. The student must obtain a minimum grade of "C" in EECE 1202, 1207, 2201, 2222; MATH 1910, 1920, 2110, 3120; CIVL 2131; MECH 2332; CHEM 1110/1111; PHYS 2110/2111, 2120/2121 or any equivalents to these courses used to satisfy degree requirements. Students must obtain a C or better in each EECE course that is used to satisfy degree requirements. No transfer credit with a grade less than $\geqslant \mathrm{C} \geqslant$ may be used to satisfy a requirement for the Bachelor of Science in Electrical Engineering. In addition, no transfer credit may be used to satisfy EECE 2201 or any upper division EECE course unless the credit was earned at an ABET accredited program. Waiver of departmental graduation requirements for exceptional circumstances will be granted only upon approval of both the department chair and the Dean of the College of Engineering (or designee).
MI NORS: Students satisfying the requirements for the Bachelor of Science in Electrical Engineering may also satisfy requirements for a minor offered by a department in one of the other colleges. Requirements for minors are specified by the appropriate college and department. Students should submit application for the minor to the appropriate department chair. Candidates for graduation who satisfy requirements for a minor should file the approved application with the intent-to-graduate cards.

## Electrical Engineering (B.S.E.E.)

## A. University General Education Program (36 hours)

See Graduation from the University link for University General Education Program requirements. Note the following requirements are specified for this program: Communication: ENGL 3603 instead of COMM 2381; Mathematics: MATH 1910 (students who have not had MATH 1730 or its equivalent must take it before enrolling MATH 1910);
Social/Behavioral Sciences: ECON 2110 must be taken in addition to 3 hours from the other specified choices; Natural Science: PHYS 2110/2111, 2120/2121.
American Heritage: waived for B.S.E.E. students who have completed one unit of American history in high school.
B. College and Degree Requirements ( 27 hours)

Mathematics (14 hours): MATH 1920, 2110, 3120, and 4635.
Natural Science (4 hours): CHEM 1110/1111.
Collateral Courses (9 hours): CIVL 2131: MECH 2332, 3310 or 3311.
C. The Major ( 65 hours)

1. Completion of 65 hours including EECE 1202, 1207, 2201 (3), 2203 (1), 2222 (4), 3201 (4), 3202 [C], 3211, 3212 (4), 3213 (1), 3221 [C], 3240 [C], 4201 [C], 4203 (1), 4231, 4279, 4280 [W, I]; 12 hours of EECE electives approved by advisor.
2. Six hours of technical electives. These electives may be chosen from upper division courses in engineering, mathematics, physics, or computer science. Approval of department chair is required for all technical electives. Students may use elective hours to broaden their base of knowledge or for one of the concentrations below. A minimum of 9 semester hours is required for a concentration. The concentrations are the following:
a. Computer Engineering: EECE 3220, 3270 (4), 4222, 4230, 4272, 4273, 4275, 4276, 4278, 4720, and 4730.
b. Electrophysics: EECE 4241, 4242, and 4243.
c. Systems and Signals: EECE 4202, 4204, 4221 (4), 4232, 4251, 4252, and 4253.

NOTE: Projects I or II, EECE 4991 or 4992 can be taken for up to 6 semester hours credit in any of the areas of concentration.

## Typical 4-Year Electrical Engineering Sequence

## Freshman Year

| ENGL 1010 | 3 | ENGL 1020 | 3 |
| :--- | :--- | :--- | :--- |
| MATH 1910 | 4 | MATH 1920 | 4 |
| EECE 1202 | 3 | EECE 1207 | 3 |
| CHEM 1110/1111 | 4 | PHYS 2110/2111 | 4 |
| Humanities* | 3 | Social/Behavioral Sciences* | 3 |
|  |  |  |  |
| Semester Totals | 17 hrs |  |  |

Sophomore Year

| EECE 2222 | 4 | ENGL 2201 or 2202 | 3 |
| :--- | :--- | :--- | :--- |
| MATH 2110 | 4 | MATH 3120 | 3 |
| PHYS 2120/2121 | 4 | EECE 2201/2203 | 4 |
| CIVL 2131 | 3 | MECH 2332 | 3 |
|  |  | ECON 2110 | 3 |

Semester Totals 15 hrs

## J unior Year

| EECE 3201 | 4 | EECE 3202 [C] | 3 |
| :--- | :--- | :--- | :--- |
| EECE 3211/3213 | 4 | EECE 3212 | 4 |
| EECE $3221[C]$ | 3 | MECH 3310 or 3311 | 3 |
| MATH 4635 | 3 | EECE $3240[C]$ | 3 |
| Humanities* | 3 | EECE elective | 3 |

Semester Totals 17 hrs
Senior Year
EECE 4231
EECE 4201[C]/4203 4
EECE elective3

ENGL 3603 3
EECE 42792

17 hrs

Total Hours: 128
Total Hours Required for Graduation: 128
*Must satisfy University General Education Program Requirement

## ELECTRONICS ENGI NEERI NG TECHNOLOGY

## Department of Engineering Technology

Electronics Engineering Technology is designed to educate people for careers in analog and digital communications, manufacturing automation, computer electronics and a host of other areas within the electronics industry. The curriculum is a combination of electronic circuit design and analysis, computer applications and programming, and industrial control methods, coupled with management techniques and strategies that will enable the graduate to design, implement, and manage modern electronic systems. Requirements for this major are as follows:
Electronics Engineering Technology Major (B.S.E.T.)
A. University General Education Program ( 42 hours)

See Graduation from the University link for University General Education Program requirements. Note the following are specified by the department for this program: Mathematics: MATH 1910; Natural Science: PHYS 2010/2011, 2020/2021.

## B. College and Degree Requirements ( 25 hours)

Technology Core: ENGL 3603; CHEM 1010/1011; MATH 1730; TECH 1010, 1411, 1521, 3044 [C], EETH 4944 [W, I].

## C. The Major (60-61 hours)

Completion of 60-61 hours including EETH 1811, 2820, 2821, 2831, 3811, 3821, 3822, 3841, 4821; CETH 1211, 3232, 3233, 4234; METH 1711, 3440, 4381, one EETH elective, and one technical electives (6-7
hours) approved by an advisor. Electronics Engineering Technology electives include: EETH 3812, 4823, and 4990-4998 as available.
NOTE: Substitutions must be approved by the Program Coordinator.

## D. Graduation

In addition to satisfying University and College graduation requirements, the student must also attain a minimum grade of $\geqslant \mathrm{C}$ ? in all required TECH, EETH, CETH, and METH courses, MATH 1730, MATH 1910, ENGL 3603 and technical electives (also applies to any courses substituted for these courses). Waiver of departmental graduation requirements for exceptional circumstances will be granted only upon approval of both the department chair and the Dean of the College of Engineering (or designee).
E. Electronics Engineering Technology Minor

EETH 1811, 2820, 2821, 2831, 3811, 3821, 3822.

## Typical 4-Year Electronics Engineering Technology Sequence

## Freshman Year

| ENGL 1010 | 3 | CETH 1211 | 3 |
| :--- | :--- | :--- | :--- |
| TECH 1411 | 1 | ENGL 1020 | 3 |
| MATH 1730 | 4 | MATH 1910 | 4 |
| METH 1711 | 3 | TECH 1521 | 3 |
| TECH 1010 | 3 | EETH 1811 | 3 |
| Semester Totals | 14 hrs |  | 16 hrs |


| Sophomore Year |  |  |  |
| :--- | :--- | :--- | :--- |
| EETH 2820 | 4 | COMM 2381 | 3 |
| ENGL 2201 or 2202 | 3 | PHYS 2020 | 3 |
| PHYS 2010 | 3 | PHYS 2021 | 1 |

The Herff College of Engineering


Total Hours: 127-128
Total Hours Required for Graduation: 127-128
*Must satisfy University General Education Program Requirement

## MANUFACTURI NG ENGI NEERI NG TECHNOLOGY

## Department of Engineering Technology

Manufacturing Engineering Technology is designed for those individuals interested in careers in the manufacturing, distribution, or service industries. Students will study a combination of technological and mechanical concepts coupled with quantitative management techniques that will enable them to design, control, and manage both traditional and automated industrial systems that utilize complex machinery and computer controlled production systems.
Graduates of this program are employed in the areas of quality assurance, supervision, plant management, materials handling, industrial safety, systems planning, process planning, computer integrated manufacturing, product development, technical sales, and warehouse management.
Manufacturing Engineering Technology Major (B.S.E.T.)
A. University General Education Program (42 hours)

See Graduation from the University link for University General Education Program requirements. Note the following are specified by the department for this program: Mathematics: MATH 1910; Natural Science:
PHYS 2010/2011, 2020/2021.
B. College and Degree Requirements ( 25 hours)

Technology Core: ENGL 3603; CHEM 1010/1011; MATH 1730; TECH 1010, 1411, 1521, 3044 [C], METH 4944 [W, I].
C. The Major (61 hours)

Completion of 61 hours including METH 1711, 3401, 3408, 3421, 3440, 3462, 3573, 4381, 4460, 4462, 4464, 4466, 4472, 4474, 4476, 4571; EETH 1811, 2812, 3822; and one Technical elective approved by an advisor.

NOTE: Substitutions must be approved by the Program Coordinator.

## D. Graduation

In addition to satisfying University and College graduation requirements, the student must also attain a minimum grade of in all required TECH, EETH, CETH, and METH courses, MATH 1730 and 1910, ENGL 3603 and technical electives (also applies to any courses substituted for these courses). Waiver of departmental graduation requirements for exceptional circumstances will be granted only upon approval of both the department chair and the Dean of the College of Engineering (or designee).

## E. Manufacturing Engineering Technology Minor

18 hours selected from any 3000 or 4000 level METH courses except METH 4381. TECH 1521 and METH 1711 may be applied toward the 18 hours. Course selections/substitutions must be approved by a METH advisor or chair of the department.

## Typical 4-Year Manufacturing Engineering Technology Sequence



| J unior Year |  |  |  |
| :---: | :---: | :---: | :---: |
| Humanities* | 3 | Humanities* | 3 |
| TECH 3044 [C] | 4 | METH 3408 | 3 |
| METH 3401 | 3 | METH 3440 | 3 |
| Technical elective | 3 | METH 3573 | 3 |
| METH 3462 | 3 | METH 3421 | 3 |
| Semester Totals | 16 hrs |  | 15 hrs |


| Senior Year   <br> METH 4381 3 METH 4466 <br> METH 4460 3 METH 4476 | 3 |  |  |
| :--- | :--- | :--- | :--- |
| METH 4464 | 3 | METH 4571 | 3 |
| METH 4472 | 3 | METH $4944[W, I]$ | 3 |
| METH 4474 | 3 | METH 4462 [C] | 3 |
| Semester Totals | 15 hrs | 15 hrs |  |

Total Hours: 128
Total Hours Required for Graduation: 128
*Must satisfy University General Education Program Requirement

## MECHANI CAL ENGI NEERING

## Department of Mechanical Engineering

Mechanical Engineering is a broad field that contains many areas. Students are offered a wide variety of topics that touch on as many of these areas as possible in a balanced four-year program. The curriculum is designed to prepare graduates for professional practice, and to provide a foundation for lifelong learning as well as professional growth. The course of study begins with a strong foundation in mathematics, physical sciences, and engineering sciences, and culminates in a series of synthesis and design courses. These require the student to apply material learned in foundation courses to practical design problems in various areas. Traditional classroom instruction is supplemented with laboratory experiences in four areas. The laboratory courses are designed to develop the student $\geqslant$ s knowledge base with a hands-on learning experience. The program educational objectives express expectations of the program graduates' abilities within the first few years after successfully completing this comprehensive curriculum. (1) Graduates entering immediately into professional practice upon graduation are capable of performing duties of an entry-level engineering position. (2) Graduates pursuing graduate studies are capable of successfully completing an advanced degree. (3) Graduates recognize the need for and are capable of pursuing life-long learning.

The diversity encountered in the profession requires the successful Mechanical Engineer to have technical and non-technical skills. Courses in the humanities and social sciences enhance non-technical skills, and explore the engineer s relationship with, and responsibility to, society. Students learn that as professionals, they identify with other engineers, and that the welfare of the public is of prime concern. These non-technical courses allow the student to interact and communicate effectively with a wide variety of individuals. One important supplement to this study is a series of lectures on engineering ethics and professionalism.

This well-rounded curriculum equips typical Mechanical Engineering graduates of the University of Memphis with the skills and perspectives required for success in a variety of professional roles. These include ability to conduct project design work, to manage projects, to interface successfully with the public, to continue their education, to conduct themselves with a professional demeanor, with propriety, and with a comportment that will make them an asset to the profession.
Mechanical Engineering (B.S.M.E.)
A. University General Education Program ( 36 hours)

See Graduation from the University link for University General Education Program requirements. Note the following requirements are specified for this program: Communication: ENGL 3603 instead of COMM 2381; Mathematics: MATH 1910 (students who have not had MATH 1730 or its equivalent must take it before enrolling MATH 1910). Social/Behavioral Sciences: ECON 2110 must be taken in addition to 3 hours from the other specified choices; Natural Science: PHYS 2110/2111, 2120/2121. American Heritage: waived for B.S.M.E. students who have completed one unit of American history in high school.
B. College and Degree Requirements ( 26 hours)

Mathematics (11 hours): MATH 1920, 2110, and 3120.
Natural Science (8 hours): CHEM 1110/1111; and one of the following: CHEM 1120/1121, BI OL 1110/1111. Collateral Courses (7 hours): CIVL 2131: EECE 2281 (1), 2283.

## C. The Major (66-67 hours)

1. Completion of MECH 1307, 1309, 2332, 3311, 3312, 3320, 3321, 3322, 3323, 3325 (1), 3331, 3335 (1), 3341 [C], 4300 (1), 4311, 4312 [W], 4314 [I] (4), 4322, 4323 (4), 4335, (1);
2. 12-13 hours of electives approved by the advisor. Students who declare a concentration must take the courses as designated in the following concentrations:
a. Biomedical Systems: MECH 4350 (4), and one course approved by an advisor from the following: MECH 4326, 4365, 4391.
b. Energy Systems: MECH 4314 [I] (4) and two courses approved by an advisor from the following: MECH 4305, 4309, 4313, 4315, 4331, 4333, 4337, 4369, 4391.
c. Mechanical Systems: MECH 4323 (4) and two courses approved by an advisor from the following: MECH

Typical 4-Year Mechanical Engineering Sequence

| Freshman Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1010 | 3 | PHYS 2110/2111 | 4 |
| CHEM 1110/1111 | 4 | Natural Science* | 4 |
| MATH 1910 | 4 | MATH 1920 | 4 |
| MECH 1307 | 3 | MECH 1309 | 3 |
| Semester Totals | 14 hrs |  | 15 hrs |


| Sophomore Year |  |  |  |
| :--- | :--- | :--- | :--- |
| ENGL 1020 | 3 | MATH 3120 | 3 |
| MATH 2110 | 4 | MECH 2332 | 3 |
| PHYS 2120/2121 | 4 | MECH 3341[C] | 3 |
| CIVL 2131 | 3 | MECH 3311 | 3 |
| ECON 2110 | 3 | MECH 3320 | 3 |

Semester Totals 17 hrs 15 hrs

| J unior Year <br> MECH 3312 | 3 | MECH 3323 | 3 |
| :--- | :--- | :--- | :--- |
| MECH 3321 | 3 | MECH 4311 | 3 |
| MECH 3322 | 3 | MECH 4335 | 1 |
| MECH 3325 | 1 | EECE 2283 | 3 |
| MECH 3331 | 3 | EECE 2281 | 1 |
| MECH 3335 | 1 | Social/Behavioral Sciences* | 3 |
| ENGL 3603 | 3 | Humanities | 3 |

Semester Totals 17 hrs 17 hrs

Senior Year

| MECH 4314 [I] | 4 | MECH 4323 | 4 |
| :--- | :--- | :--- | :--- |
| MECH 4322 | 3 | MECH 4312 [W] | 3 |
| MECH elective | 3 | Technical elective | 3 |
| Humanities* | 3 | MECH elective | 3 |
| MECH 4300 | 1 | Humanities* | 3 |
| MECH elective | 3 |  |  |

Semester Totals 17 hrs
16 hrs
Total Hours: 128
Total Hours Required for Graduation: 128
*Must satisfy University General Education Program Requirement
HONORS PROGRAM: The Honors in Mechanical Engineering Program provides an exceptional educational opportunity for highly motivated students to develop their talents, interests, and abilities within a curriculum
designed to encourage independence and creativity．
ADMISSI ON：Incoming freshmen who score a minimum of 26 on the ACT or its equivalent are invited to participate．Transfer students or students previously enrolled at the University of Memphis are eligible for the program if they have an overall grade point average of 3.00 and a grade point average of 3.25 for course work within the Herff College of Engineering．The departmental honors committee admits eligible students to the program upon approval of Intent to Pursue Honors application．Students with academic records that fall short of these requirements may apply for provisional acceptance．
RETENTION：Participants must maintain a minimum overall grade point average of 3.00 and a minimum grade point average of 3.25 for course work within the college to continue in the program．The departmental honors committee may grant participants failing to meet this requirement a one semester probationary period before they are dismissed from the program．
REQUI REMENTS：To qualify for With Honors in Mechanical Engineering ，a student must successfully complete a minimum of 18 semester hours from the following：1）MECH 4395 and MECH 4396，2） 9 credits of upper division mechanical engineering honors courses，and 3） 3 credits of MECH 1395，MECH 2395，or MECH 3395．A minimum grade of $\geqslant \mathrm{B}\rangle$ is required in each honors course for it to count toward fulfilling the honors course requirement，but regular credit for the course will be earned if the grade is lower than a人
THESI S：A participant must select a major advisor during the first semester senior year and enroll in MECH 4395．Successful completion of this course requires acceptance of a thesis proposal by the departmental honors committee．During the second semester of the senior year a participant must enroll in MECH 4396. Successful completion of this course requires acceptance of a thesis by the departmental honors committee．

DESIGNATION OF 仓WITH HONORS IN MECHANICAL ENGINEERING $仓$ ：Students successfully completing the prescribed course work will have earned the designation of With Honors in Mechanical Engineering．This designation will be recognized at the commencement ceremony and it will appear on the transcript and diploma．
GRADUATI ON：To qualify for the degree of Bachelor of Science in Mechanical Engineering，the student must satisfy University and College requirements，and obtain a minimum 2.0 grade point average on all work completed，and obtain a minimum grade of＂C－＂in all engineering，mathematics，physics，and chemistry courses used to satisfy degree requirements．Waiver of departmental graduation requirements for exceptional circumstances will be granted only upon approval of both the department chair and the Dean of the College of Engineering（or designee）．

## Last Updated：6／12／15

# THE LOEWENBERG SCHOOL OF NURSI NG 

MARJ ORIE LUTTRELL, Ph.D., RN, Dean and Associate Professor<br>Room 101 Newport Hall; (901) 678-2020

## http://nursing.memphis.edu

## PURPOSES

The primary function of The Loewenberg School of Nursing is to offer a program of study designed to prepare students for careers in professional nursing. As a part of a comprehensive university, the school is dedicated to developing scholarship in nursing and providing services that support the institutional mission. The program is designed to accommodate the needs of high school graduates, transfer students, college graduates, licensed practical nurses, and registered nurses who are graduates of diploma or associate degree nursing programs. The school is committed to: (1) providing a curriculum leading to the degree of Bachelor of Science in Nursing basic to beginning professional practice and graduate study in nursing; (2) promoting the intellectual, personal and professional development of students by offering a curriculum that combines a strong liberal education with the professional major; (3) providing a plan of study with flexible options that are responsive to the individual learner's needs; (4) encouraging the use of opportunities available in a comprehensive university setting to foster values, attitudes and personal qualities essential to living a fulfilling life and contributing to a diverse society, (5) producing politically and socially conscious graduates who are competent practitioners in a variety of settings; and (6) preparing graduates who assume leadership roles to effect change for a healthy society.

Graduates of the program are eligible to apply to take the NCLEX examination for state licensure through the respective state boards of nursing. Program applicants should be aware that conviction of the following crimes would make the student ineligible for Registered Nurse licensure in the State of Tennessee:
Aggravated Assault as in T.C.A. 39-13-102; First Degree Murder, as in T.C.A. 39-13-202; Second Degree Murder, as in T.C.A. 39-13-207; Voluntary Manslaughter, as in T.C.A. 39-13-211; False Imprisonment, as in T.C.A. 39-13-302; Kidnapping, as in T.C.A. 39-13-303; Aggravated Kidnapping, as in T.C.A. 39-13-304; Especially Aggravated Kidnapping, as in T.C.A. 39-13-305; Robbery, as in T.C.A. 39-13-401; Aggravated Robbery, as in T.C.A. 39-13-402; Especially Aggravated Robbery, as in T.C.A. 39-13-403; Aggravated Rape, as in T.C.A. 39-13-502; Rape, as in T.C.A. 39-13-503; Aggravated Sexual Battery, as in T.C.A. 39-13-504; Sexual Battery, as in T.C.A. 39-13-505; Statutory Rape, as in T.C.A. 39-15-506; Theft of Property, as in T.C.A. 39-14-103; Theft of Services, as in T.C.A. 39-14-104; Forgery, as in T.C.A. 39-14-114; Falsifying of Educational and Academic Records, as in T.C.A. 39-14-136; Arson, as in T.C.A. 39-14-301; Aggravated Arson, as in T.C.A. 39-14-302; Burglary, as in T.C.A. 39-14-402; Aggravated Burglary, as in T.C.A. 39-14404; Incest, as in T.C.A. 39-15-302; Aggravated Child Abuse, as in T.C.A. 39-15-402; Sexual Exploitation of a Minor, as in T.C.A. 39-17-1003; Aggravated Sexual Exploitation of a Minor, as in T.C.A. 39-17-1004; Especially Aggravated Sexual Exploitation of a Minor, as in T.C.A. 39-17-1005; Assisted Suicide, as in T.C.A. 39-13-216; Rape of a Child, as in T.C.A. 39-13-522.

## PROGRAM OUTCOMES

Baccalaureate graduates of the Loewenberg School of Nursing:

1. Use the nursing process, core nursing knowledge ${ }^{1}$, and core nursing compentencies ${ }^{2}$ to design, provide, and manage culturally competent, cost effective, direct and indirect nursing care to individuals, families, communities, and populations.
2. Integrate theoretical, empirical, and intuitive knowledge from other scientific disciplines, and the humanities into the practice of nursing.
3. Collaborate with others to provide health promotion and health care access to diverse populations.
4. Integrate professional nursing values into nursing practice.
5. Modify patient care in response to changing health care systems, health policies, and global environmental factors ${ }^{4}$.
6. Integrate selected research findings into nursing practice.
7. Maintain professional accountability for effective nursing practice and the advancement of the profession.
8. Implement nursing roles that meet the emerging health needs of individuals, families, communities, and populations.
${ }^{1}$ Core nursing knowledge includes: a) health promotion, risk reduction, and disease prevention, b) illness and disease management, and c) information and health care technologies.
${ }^{2}$ Core nursing competencies include: a) critical thinking, c) communication, c) assessment and technical skills, d) teaching, e) caring, f) management, g) leadership, and h) integration of knowledge skills.
${ }^{3}$ Professional nursing values include: a) caring, b) altruism, c) autonomy, d) human dignity, e) integrity, and f) social justice.
${ }^{4}$ Global environment factors include: a) international law and public health, b) disease transmission, c) health policy, and d) health care economics.

## ORGANI ZATI ON

The Loewenberg School of Nursing is organized as one unit under the leadership of a dean. The curriculum leading to the degree of Bachelor of Science in Nursing includes general education and support courses offered through other units of the university as well as the major requirements offered by the school. A comprehensive approach to health care is emphasized through utilization of a wide variety of health care settings available in Memphis and the surrounding community.

The faculty of the Loewenberg School of Nursing represents all clinical areas of nursing practice and a variety of experiences and interests. They reflect this diversity in their teaching, practice and research and are qualified by practical experience as well as by academic credentials, to function as facilitators of learning.

The Loewenberg School of Nursing holds membership in the American Association of Colleges of Nursing, Southern Council for Collegiate Education in Nursing, and the National League for Nursing Council for Baccalaureate and Higher Degree Programs. The program is accredited by the National League for Nursing Accrediting Commission, 61 Broadway, 33rd Floor, New York, NY, 10006, phone number (800) 669-1656, and the Commission on Collegiate Nursing Education, One Dupont Circle NW, Suite 530, Washington, DC 20036-1120, (202) 887-6791 and approved by the Tennessee Board of Nursing.

## ADMI SSI ON AND ADVISI NG

Because the University seeks to provide in as much as possible a reasonably safe environment for its health career students and their patients, students may be required during the course of the program to demonstrate their physical and/or emotional fitness to meet the essential requirements of the program. Such essential requirements include freedom from communicable diseases, the ability to perform certain physical tasks, and suitable emotional fitness. Any appraisal measures used to determine such physical and/or emotional fitness will be in compliance with Section 504 of the Rehabilitation Act of 1973 and the American with Disabilities Act of 1990, so as not to discriminate against any individual on the basis of disability. See specific criteria under Sophomore Admission

Core performance standards for admission and progression:
A. Critical thinking ability sufficient for clinical judgment.
B. Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.
C. Communication abilities sufficient for interaction with others in verbal and written form.
D. Physical abilities sufficient to move from room to room and maneuver in small spaces.
E. Gross and fine motor abilities sufficient to provide safe and effective nursing care.
F. Auditory ability sufficient to monitor and assess health needs.
G. Visual ability sufficient for observation and assessment necessary in nursing care.
H. Tactile ability sufficient for physical assessment.

## ADMI SSI ON

## Freshman Admission

Qualified high school seniors admitted as freshmen to the University of Memphis may at the time of admission to the University be directly admitted to the nursing major by applying to the School of Nursing after receiving admission to the University. Freshman admission to the nursing major guarantees the student who remains in good standing placement in the nursing program in the second semester of the sophomore year.

Freshmen admitted to the nursing major must remain in "good standing" by completing the prescribed curriculum at The University of Memphis for the freshman year and 1st semester of the sophomore year with a minimum grade of " C " in all required prerequisite courses, a cumulative grade point average of 2.7 for the prescribed three semesters of coursework and a science cumulative grade point average of 2.4. Students who do not remain in "good standing" may reapply to the LSON in a competitive pool with other students. See Sophomore Admission.

Freshman admission requirements:

1. Graduation from an accredited high school with a cumulative grade point average of 3.0.
2. Minimum ACT score of 21 with a minimum score of 19 in all areas.
3. Completion of high school Algebra I, II, Geometry, Biology, and Chemistry.

Applicants will be rank-ordered on the basis of a calculated point system:
Freshman Point System
Cumulative high school quality point average $\times 100$ added to the ACT score $\times 10$ or SAT score.

## Sophomore Admission

Students who are not admitted as freshmen may apply to the Loewenberg School of Nursing when they meet the requirements identified below. To be admitted to the School, a student must:

1. Be admitted to the University of Memphis as a degree-seeking undergraduate student.
2. Have a minimum college cumulative grade point average of 2.7, a cumulative of 2.4 in prerequisite science courses. (A prerequisite science course may be repeated only once to earn a minimum grade of
$\geqslant C \geqslant$. A maximum of two prerequisite science courses may be repeated to earn the minimum required grade.)
3. Have completed specific pre-nursing courses with a minimum grade of $\geqslant \mathrm{C}\rangle$ in all courses:

ENGL 1010 \& 1020: English Composition I \& II (6)
BIOL 2010/11 \& 2020/2021: Anatomy \& Physiology I \& II (8)
BIOL 1230/1231: Microbiology (4)
SOCI 1111: Introduction to Sociology (3); PSYC1200: General Psychology
NUTR 3202: Nutrition for Health Care preferred or NUTR 2202: Nutrition (3)
MATH 1420: Foundations of Mathematics, or Math 2000: Experiences in Mathematics, or MATH 1830:
Elementary Calculus, or MATH 1190: Calculus I
4. Clearance of any high school deficiencies.
5. Have a minimum score of 600 ( 250 computer based score) on the TOEFL (for students for whom English is a second language).
6. Students who are transferring from another nursing program must submit a letter of good standing from the dean/director of the previous nursing program and a transcript.
7. Complete and submit School of Nursing application for admission to:

Loewenberg School of Nursing
The University of Memphis

Newport Hall, Room 101
Memphis, TN 38152
Must have complete files by the deadline (February 15 for Fall; October 1 for Spring) to be considered. (In order to allow adequate time for processing of the University of Memphis transfer credit evaluation you should receive your acceptance letter to the University by September 15 for Spring term or February 1 for Fall term).

## Selection of Students

1. All students admitted as freshmen students to the nursing major who remain in good standing will be accommodated.
2. After freshmen nursing majors have been accommodated, all other students will be considered on a competitive space available basis according to GPA.

## Admission Procedures:

1. Students must have complete files by the deadline (February 15 for Fall; October 1 for Spring) to be considered.
2. Acceptance into the school will be based on rank-order cumulative GPA.
3. If individuals have the same GPA, the order will be determined by the amount of prerequisite and support course work completed.
4. A new list will be created each semester. Students who are not accepted must reapply for consideration the next semester.
5. An alternate list will be established each semester to fill vacancies that might occur before the beginning of class. The criteria for the alternate list will be the same as for the acceptance list.

## ADVANCED PLACEMENT ADMI SSI ON-RN STUDENTS

To be admitted with advanced placement, the Registered Nurse must:

1. Be admitted to the University of Memphis as a degree-seeking undergraduate student.
2. Have current licensure as a Registered Nurse in Tennessee.
3. Submit evidence of recent clinical practice.
4. Have a minimum college cumulative grade point average of 2.7.
5. Have completed specified pre-nursing courses with a minimum grade of $\geqslant$ : ENGL 1010, 1020 (6); BIOL 2010/2011, 2020/2021 (8), MATH 1420 or MATH 1830, 1910 or 2000, BI OL 1230/1231 (4); SOCI 1111 or PSYC 1200; NUTR 3202*.
6. Minimum of 2.4 cumulative grade point average in required laboratory science courses: BIOL 2010/2011 and 2020/2021; BI OL 1230/1231. A prerequisite science course may be repeated only once to earn a minimum grade of C . A maximum of two prerequisite science courses may be repeated to earn the minimum required grade.
7. Must meet the Sophomore Admission Criteria identified earlier.
*Credit in NUTR 2202 may also be used to meet this course requirement

## ACADEMIC ADVISI NG-BASIC AND RN STUDENTS

Students who are completing courses required for admission to The Loewenberg School of Nursing receive advising through the Academic Counseling Center. However, questions about admission requirements may be addressed to the assistant dean for students in the Loewenberg School of Nursing. The Assistant Dean for Students advises RN students while they are completing courses required for admission to The Loewenberg School of Nursing. Following admission to the School of Nursing, each student is assigned an advisor from the school. The advisor will assist the student in planning for completion of the BSN program and will provide the opportunity for meaningful discussion regarding academic progress and career goals. This assistance, however, does not in any way relieve the student of the primary responsibility for studying the Bulletin and fulfilling all the requirements for the degree.

## LOANS AND SCHOLARSHI PS

Students are encouraged to complete applications and forms for financial aid. These are available in the Student Financial Aid Office. Some scholarships are also available through The Loewenberg School of Nursing. See Section 3 of this Bulletin for a list. Applications for scholarships are available in the school office.

## FEES

Practicum nursing courses require an additional fee of $\$ 60$ and Skills Laboratory courses an additional
fee of $\$ 50$. These fees are not included in the Fee Schedule.

## RESI DENCY

University residence requirements are explained in detail in the Graduation from the University section of this catalog. Note that students transferring from a community or junior college must complete a minimum of sixty semester hours in an accredited senior institution. In addition, 31 of the last 62 semester hours for the degree must be completed at the University of Memphis.

## DEGREE REQUIREMENTS

1. To qualify for the degree of Bachelor of Science in Nursing, the student must complete a minimum of 120 semester hours with the minimum overall grade point average of 2.0 and must meet specific grade requirements described below.
2. A minimum grade of $\ll$ must be earned for English 1010 and 1020, each required science course, each required upper division course, and each required nursing course.
3. Detailed course requirements are described below under General Education Program Requirements, Other Support Course Requirements, and Nursing Course Requirements.

## Nursing Major (B.S.N.)

A. University General Education Program (41 hours)

See Graduation from the University link for University General Education Program requirements. Note the following requirements are specified for this program: Natural Science: BI OL 2010/2011, 2020/2021; Social/Behavioral Sciences: PSYC 1200 or SOCl 1111.

## B. Support Courses for Nursing Major (10 hours)

Microbiology (4 hours)*: BIOL 1230/1231
Nutrition (3 hours): NUTR 3202.
Statistics (3 hours): EDPR 4541 [C], PSYC 3001 [C], or SOCI 3311 [C], with a minimum grade of "C".
All support courses must be completed with a minimum cumulative grade of "C".

* Science courses must have a minimum grade point average of 2.4 and must have been completed in the past 7 years. Refer to Science Course Validation section below.
C. The Major ( 66 hours)

Completion of NURS 2217, 2218 (1), 2219 (2), 2220 (1), 3000, 3101, 3117 (4), 3118 (1), 3119, 3127, 3129
(2), 3217 (2), 3219, 3227 (2), 3229, 3230, 3400, 4110 [W], 4117, 4119, 4120, 4127, 4129 (2), 4227, 4229
[C,I] (4).

## D. Elective ( 3 hours)

Any upper division course at the 3000 or 4000 level.

## Nursing Course Requirements - Basic Students

Nursing (66 hours): NURS 2217, 2218 (1), 2219 (2), 2220 (1), 3000, 3101, 3117 (4), 3118 (1), 3119, 3127
(3), 3129 (2), 3217 (2), 3219, 3227 (2), 3229, 3230, 3400, 4110 [W], 4117, 4119, 4120, 4127, 4129 (2), 4227, 4229 [C,I] (4).
Upper Division Elective ( 3 hours): Any 3000-4000 course.

## Nursing Course Requirements - RN Students

Nursing (27 hours): NURS 3000, 3101, 3107 (1), 3400, 4110, [W], 4120 (2), 4127, 4129, 4327, 4329 [C,I]. Upper Division Elective ( 3 hours): Any 3000-4000 course.
The remaining hours for the major requirements are fulfilled by validation.
Under the Tennessee Career Mobility Plan registered nurses who have graduated from Tennessee schools or out-of-state NLN accredited programs will be able to progress to the baccalaureate degree in nursing without testing to verify previous nursing education. Registered nurses articulating to the baccalaureate level may be awarded or transfer in nursing credits equivalent to approximately one year of nursing courses. For this to occur, a minimum grade of "C" must have been earned in previous nursing course work. Nursing credits transferred or awarded will be held in escrow. These credits will be placed on individual transcripts only after students have successfully completed 15 hours of nursing courses with a minimum grade of "C" in The Loewenberg School of Nursing. Non nursing credits are transferred according to university policies. Testing will be required for graduates of non NLN accredited programs or for students who have not been in active clinical practice in the past three years.
The following represent typical schedule plans for basic and RN students.

## BASIC STUDENTS

## FRESHMAN YEAR



* Must satisfy University General Education Program Requirements
${ }^{1}$ Take one of the following: EDPR 4541 [C], PSYC 3001 [C], SOCI 3311 [C], or any approved statistics course.
NOTE: PROGRESSI ON OF NURSI NG COURSEWORK: All courses in group A must be completed before enrolling in any courses in group B. All courses in group B must be completed before enrolling in any courses in group C.
A. Professional Foundation Courses: NURS 3101, 2217, 2218, 2219, 2220, 3400, 3000.
B. Provider of Care Courses: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229, 3230.
C. Coordinator of Care Courses: NURS 4117, 4119, 4127, 4129, 4227, 4229 [C,I], 4327, 4329 [C,I], 4110 [W], 4120.


## RN (Upper Division Requirements)

| NURS 3000 | 3 | NURS 4110 [W] | 3 |
| :--- | :--- | :--- | :--- |
| NURS 3101 | 3 | NURS 4127 | 3 |
| NURS 3107 | 1 | NURS 4129 | 2 |
| NURS 3400 | 3 | NURS 4327 | 3 |
| NURS 4120 | 3 | NURS 4329 [C,I] | 3 |
| Statistics* | 3 | UD elective | 3 |

Semester Totals 16 hrs
17 hrs

* Take one of the following: EDPR 4541 [C], PSYC 3001 [C], or SOCI 3311 [C], or any approved statistics course.

Science Course Validation: If seven years have lapsed since credit was earned in BIOL 2010/2011 and 2020/2021 (Anatomy and Physiology), or BIOL 1230/1231 (Microbiology), the content is considered outdated, and students are required to either repeat the course(s) or validate currency of knowledge. Registered nurses may validate currency of knowledge by submitting evidence of recent clinical practice. If not currently employed as a RN, validation of current knowledge may be accomplished by taking a higher level course in the same field or by examination. The NLN tests in Anatomy and Physiology and Microbiology are used for this purpose. A score at the fiftieth percentile or above is required. Registered nurses are required to submit evidence of recent clinical practice to validate currency of knowledge.

## Progression in the Nursing Major:

1. A nursing course may only be entered twice.
2. A minimum grade of "C" must be earned in each nursing course to progress. Failure to earn a minimum grade of "C" will require repeating the course before attempting other nursing courses.
3. When the theory or clinical component of any course sequence must be repeated, the companion course must also be repeated even though a satisfactory grade has been earned.
4. Irregular progression students who are out of clinical nursing course work for longer than three months will be reviewed by the Student Progression Committee. The Committee may require testing or the repetition of courses in which satisfactory grades have been earned.

## Disqualification from the Nursing Major:

1. Failure to earn a minimum grade of 2 C when repeating a nursing course for a grade of less than a (3) 3 .
2. Failure to earn a satisfactory grade in a clinical course when repeating the course for an unsatisfactory grade.
3. Failure to earn a minimum grade of $\geqslant \mathrm{C} \geqslant$ or $\geqslant \mathrm{S}\rangle$ in two nursing courses.
4. Professional/academic misconduct or dishonesty.
5. Falsification of any academic/medical/ nursing record or misrepresentation of nursing care or credential.
6. Clinical practice that willfully places patients in physical or emotional jeopardy.
7. Clinical practice while under the influence of alcohol or illegal substance.

Clinical Nursing Course Requirements: Before enrolling in a clinical nursing course, students must present evidence of current CPR certification, professional liability insurance (\$1,000,000 per occurrence/ $\$ 3,000,000$ aggregate minimum coverage), criminal background and credential check, appropriate immunizations and titers, and a statement of good health, including a negative PPD skin test or chest x-ray. Immunizations and titers include DT, measles, mumps, polio, Hepatitis B; Rubella vaccine or titer showing immunity; varicela titer. The basic nursing student will pay for malpractice insurance at fee payment. RN students must purchase their own insurance and present evidence prior to enrolling in clinical nursing courses. RN students are also required to present evidence of current licensure in Tennessee.
Students are encouraged to complete these requirements during the semester prior to anticipated enrollment. No student will be allowed to participate in clinical learning experiences until these requirements are satisfied.
Credit By Exam: Credit for some of the upper division nursing courses may be earned through credit by examination. Other methods of earning credit are explained in detail in the Academic Regulations section of this Bulletin.
RN Licensure: Upon graduation from the program, graduates are eligible to take the NCLEX examination for licensure at testing sites determined by the Tennessee Board of Nursing.
Student Organizations: Students are encouraged to join their professional organization, Student

Nurses 3 Association. This is the local chapter of the National Student Nurses Association.
Senior students who have achieved a 3.0 cumulative grade point average and who are recommended by faculty are eligible to apply for induction into Sigma Theta Tau, Beta Theta Chapter at Large of the international nursing honor society.

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# THE <br> UNIVERSITY COLLEGE 

DAN LATTIMORE, Ph.D., Dean
Room 218, John Willard Brister Hall
(901) 678-2716
http://www.uc. memphis.edu

## ACADEMI C PROGRAMS

| Department* | Major** | Concentration Within Major | Degrees Offered |
| :---: | :---: | :---: | :---: |
|  | Individual Studies Studies | Alcohol and Drug Abuse Services <br> Biomedical Illustration <br> Child Development <br> Commercial Aviation <br> Construction Management Services <br> Correctional Administration <br> Dance Education <br> Disability Studies and Rehabilitation Services <br> Family and Consumer Studies <br> Fashion or Home Furnishings Merchandising <br> Fire Administration <br> Fire Prevention Technology <br> Health Services Administration <br> Human Services <br> Judaic Studies** (see College of Arts and Sciences) <br> Law Enforcement Administration <br> Nonprofit Development and Administration <br> Organizational Leadership <br> Paralegal Services <br> Pre-School and Childcare Administration <br> Technology Management Services | Bachelor of Professional Studies (B.P.S.) |
|  | Professional Studies (RODP) | Information Technology*** Organizational Leadership*** | Bachelor of Professional Studies (B.P.S.) |
|  | Individual Studies | ```American Studies** Judaic Studies (see College of Arts and Sciences) Religion in Society**``` | Bachelor of Liberal Studies (B.L.S.) |
|  | $\begin{aligned} & \text { Liberal } \\ & \text { Studies } \\ & \text { (RODP) } \end{aligned}$ | Interdisciplinary Studies*** | Bachelor of Liberal Studies (B.L.S.) |

* University College is not composed of departments. The college's degree programs are interdisciplinary which means many required courses within a student's Coordinated Study are offered by other departments within the University.
** Minors are available in Alcohol and Drug Abuse Services, American Studies, Child Development, Dance Education, Judaic Studies, and Religion in Society.
Individual program requirements described in the University of Memphis 2006-2007 Undergraduate Bulletin
are subject to change. Please consult the college-level advisor for changes that may occur before publication of the next issue of this Bulletin; or consult the Undergraduate Bulletin website at: http://academics.memphis.edu/bulletin for the latest updates.
***These concentrations are offered both on campus and completely online through the Regents Online Degree Program (RODP).


## PURPOSE

University College offers students a wide variety of established and online degree opportunities. Faculty across the university provide the structure to explore and develop unlimited interdisciplinary, academic ventures. University College also seeks to create and maintain a spirit of academic community through careful and concerned advising and interaction outside the classroom among students, faculty, staff, and community professionals. Program objectives for majors in University College are to demonstrate: (a) the theoretical and practical applications of their coordinated study area (i.e., major); (b) knowledge of appropriate communications practices, including effective writing, computer skills, and oral communications; (c) the ability to solve problems, to work independently and to work as members of a team in a professional setting through an experiential-learning environment; and (d) the ability to address significant problems, themes, and ideas which impact a global society.

## ADMISSI ON TO THE COLLEGE

In addition to following the procedure for admission to The University of Memphis, prospective students seeking admission to University College must also apply to the college. University College applications can be found at www.uc.memphis.edu/forms.htm

## STUDENT EVALUATION

A student's performance is evaluated by: a traditional grading system (A-F), Satisfactory/Unsatisfactory, and Credit/No Credit options supplemented by written narrative evaluations; credit or placement by examination; Advanced Placement examinations for degree credit where available; and credit for validated learning from experience or non-traditional instruction. Of the 120 credit-hours required for graduation (except for the Regents Online Degree Program), at least 30 of the last 60 hours must be earned through credit at the University of Memphis.

## HONORS

## Students within the University Honors Program may pursue one of two tracks leading to "graduation with honors": University Honors or University Honors with Thesis.

University Honors: To attain "University Honors," with transcript and diploma notations, students complete 24 semester hours of honors coursework that includes UNHP 1101 and 1102 (see UNHP course descriptions). Students must

- complete the Honors Certificate,
- complete an Honors Thesis with a minimum grade of 3.0, and
- have a 3.25 cumulative grade point average.

Some of the Honors coursework may count toward the Bachelor of Liberal Studies, Bachelor of Professional Studies, or University General Education Program courses, and some may be part of the student's elective hours. The Senior Project may be designed to meet the Honors Thesis requirement. Consult the University Honors Program listing in this Bulletin for detailed information about the Honors designation.

## COLLEGE REQUI REMENTS

University College offers the Bachelor of Professional Studies (B.P.S.) and the Bachelor of Liberal Studies (B.L.S.) undergraduate degrees. These degrees require completion of the following:

## General Education Courses (35-41 hours)

See the Graduation from the University link for the University General Education Program requirements.
Students who have completed one year of American History in high school are exempted from the American Heritage General Education Program requirement.

Coordinated Study ( 33 upper-division hours)
The Coordinated Study (i.e., courses that make up a student's major) must consist of courses from two or more academic disciplines.

Coordinated Study credit may be earned through courses offered by other departments on campus, credit by examination, credit for experiential learning, transfer credit, internships, or independent study courses.

Students must earn a minimum grade of 2.0 in each graded course and a minimum of 2.25 GPA overall in the Coordinated Study. All Coordinated Study plans must include a minimum of 9 graded upper-division hours taken at The University of Memphis. These credit-hours must be earned in courses from two or more departments.

## Thematic Studies (6 hours)

Thematic Studies courses examine a particular theme, problem, issue, or epoch from several points of view. These upper-division courses are designed to provide ways for undergraduates to integrate previous learning. All University College students must complete a minimum of 6 credit-hours of thematic studies courses. Such courses are designated as:
CSED 4205, 4300, 4304
UNIV 3500-3599 Thematic Studies
UNIV 4500-4599 Advanced Thematic Studies

## The Senior Project (4 hours)

The Senior Project is a major independent research project designed to integrate the knowledge gained through completion of the student's Coordinated Study courses. The Senior Project is preceded by UNIV 4990 --Project Planning Seminar or an equivalent course. A student must earn a minimum grade of C- on the Senior Project. Completed projects must also receive administrative approval before students are certified for graduation.

## Electives

Students may need to take lower or upper-division elective courses in order to reach the 120 credit-hours required for graduation. Such electives may typically be offered by any department at The University of Memphis.

## Experiential Learning

A maximum of 30 credit-hours of documented learning outside the college classroom may be applied toward a degree. This learning must be related to the Coordinated Study. Experiential learning credit is not available for students pursuing a B.P.S. degree with a concentration in Paralegal Services.

Additional information about Experiential Learning can be found at: http://www.uc.memphis.edu/experiential.htm

## The Baccalaureate Contract Program (B.P.S. or B.L.S.)

Undergraduate students admitted to University College may design either of two degrees through the Baccalaureate Contract Program: the Bachelor of Liberal Studies (B.L.S.) or the Bachelor of Professional Studies (B.P.S.). To be eligible for this program, a student must have a cumulative undergraduate grade
point average of 2.500 . Upper-division courses within the student's Coordinated Study (i.e., major) must be from two or more departments on campus. In addition, the proposed degree must be unlike any other degree offered by the University of Memphis. A Baccalaureate Contract Advising Committee, comprised of faculty members from the two primary departments represented in the student's Coordinated Study, will assist the student in the development and execution of a degree program that serves the student's needs and meets the academic requirements of University College and the University of Memphis. One faculty member will serve as the student's committee chairperson. The committee members may be regular or adjunct members of the University of Memphis faculty. A third committee member is optional. The committee may direct the student in the preparation of a portfolio to obtain credit for knowledge gained through experience or nontraditional instruction (see Expenses and Aid for a description of credit evaluation fees in this bulletin). All baccalaureate contracts will be reviewed and approved by a faculty council review committee and the administration of University College. The baccalaureate contract will include work in the following areas: (1) General Education, (2) Coordinated Study, (3) Thematic Studies, (4) a Senior Project, and (5) General Electives.

## ALCOHOL AND DRUG ABUSE SERVICES

Students in Alcohol and Drug Abuse Services will develop concentrations in either Social and Public Services or Administrative Services. All will take a core of courses in alcohol and drug abuse, social, and administrative services and will complete their degrees by taking courses relevant to their concentrations. All students must have on-the-job experience, evaluated through internships or portfolio assessment, or both.

Persons pursing this degree typically provide services to those disabled by alcohol and drug abuse, including abusers, families, friends, colleagues, and associates. Wishing to build upon knowledge of and experience in alcohol and drug abuse treatment, persons served by these guidelines will seek careers in Alcohol \& Drug Abuse (A\&D) Services as administrators or as providers of social and public services in hospitals, social service agencies, employee assistance programs, churches, etc. Some may wish to continue their education in graduate-level programs.

These guidelines are designed for persons who can document previous paid and/or volunteer work in A\&D services. Documentation must be included with your application.

Persons who have completed the Technical Certificate in Substance Abuse Counseling offered by Southwest Tennessee Community College will be able to apply their coursework to these guidelines. (Applicable STCC courses are listed in bold type.) State licensed substance abuse counselors will receive credit-hours applicable to the experiential learning/internship requirement upon submission of their certification credentials.

Program Summary<br>A. General Education (35-41 hours)<br>B . Coordinated Study (51-58 hours)<br>Professional Core ( 3 hours) Choose one course:<br>SWRK 2911 Social Response to Human Need<br>COUN 4621 Human Interactions<br>Alcohol and Drug Core ( 6 hours) Choose two courses:<br>ANTH 4531 Alcohol, Culture and Biology<br>CJUS 3152 Drug Addiction and Alcoholism<br>COUN 4783 Alcohol and Drug Abuse Services<br>PSYC 3507 Alcohol, Drugs and Behavior<br>Statistical Methods ( 3 hours) Choose one course:<br>EDPR 4541 Fundamentals of Applied Statistical Methods<br>PSYC 3001 Psychological Statistics<br>SOCI 3311 Social Statistics<br>Professional Writing (3 hours) Choose one course:<br>ENGL 3601 Technical and Professional Writing

ENGL 3604 Persuasive Writing
MGMT 3510 Business Communication*
Electives - Alcohol and Drug Abuse Studies (9 hours)
Credit may be earned as follows:

- By submitting a portfolio describing prior learning in A\&D Services, not used to meet the internship requirement (see below).
- Taking additional approved courses.

Students choose one area of concentration in either Social and Public Services or Administrative Services.
Social and Public Services Concentration: (27 hours)
Courses in this concentration stress issues related to individual development and social behavior, as well as
societal responses and aspects of public policy.
Group 1. Choose one course:
CJUS 4533 Juvenile Delinquency: Theory and Process
COUN 4781 Strategies for Crisis Intervention
PSYC 3102 Abnormal Psychology
SOCI 3501 Sociology of Deviant Behavior
SOCl 4852 Sociology of Mental IIlness
Group 2. Choose three courses:
PSYC 3103 Child Psychology
PSYC 3104 Adult Psychology
PSYC 3106 Social Psychology or SOCI 3701 Individual and Society
PSYC 3506 Human Sexuality (Prerequisite: PSYC 1101 \& 1102 or 1200)
SOCI 3432 Sociology of Gender
SOCI 3831 Marriage and the Family
SWRK 3902 Human Development and Social Environment*
(Prerequisites: SWRK 2911, or permission of instructor).
Group 3. Choose two courses:
ECON 3411 Economics of Social Issues
POLS 3213 Introduction to the Study of Public Policy
POLS 4224 Urban Problems
SOCI 3422 Racial and Ethnic Minorities: A Socio-Historical Approach
SOCl 4442 Sociology of Poverty
SOCl 4541 Sociology of Aging
SOCl 4851 Medical Sociology
Internship (9 hours)
Students completing a concentration in Social and Public Services will complete 450 hours of supervised therapeutic experience. These hours may be earned in two ways, as follows:

1. UNIV 2110 Field Experience (3) and UNIV 4110 Internship (12) may be taken in 3 or 6 credit increments or
2. Submission of State of Tennessee A\&D Counselor Certifications, credited as UNIV 2985 Intermediate A\&D Services (3) and UNIV 3985 Advanced A\&D Services (12).
Administrative Services Concentration: ( $\mathbf{2 7} \mathbf{~ h r s}$ ) Courses in this concentration are basic to management and administration.
Group 1. Choose one course:
MGMT 3110 Organization and Management*
POLS 3601 Public Administration
Group 2. Choose two courses:
ACCT 2010 Fundamentals of Accounting I
ECON 2110 Introduction to Macroeconomics
ECON 2120 Introduction to Microeconomics
Group 3. Choose three courses:
ACCT 3011 Business Law*
ECON 4740 Health Care Economics*
FIR 3810 Principles of Risk and Insurance*
MGMT 3215 Management of Human Resources*
MGMT 4420 Organizational Behavior in Business

MGMT 4260 Employee Staffing and Development
MGMT 4410 Office Management*
MKTG 3010 Principles of Marketing*
POLS 4207 Health Politics and Policy
POLS 4208 Mental Health Policy and Law
POLS 4226 Introduction to Nonprofit Organizations
Group 4. Choose one course:
ECON 3411 Economics of Social Issues
POLS 3213 Introduction to the Study of Public Policy
POLS 4224 Urban Problems
SOCI 3422 Racial and Ethnic Minorities: A Socio-Historical Approach
SOCl 4442 Sociology of Poverty
SOCl 4541 Sociology of Aging
SOCl 4851 Medical Sociology

## Internship ( $6 \mathbf{h r s}$ )

Students with a concentration in Administrative Services must complete 300 hours of experience in an approved setting. These hours may be earned in the following ways.

- UNIV 4110 - Internship ( 6 hours), may be taken in 3 or 6 credit increments, or
- UNIV 39xx - Advanced Experiential Learning ( 6 hours), based upon assessment of a portfolio describing prior experiential learning.
C . Thematic Studies (6 hours)
D. Senior Project (4 hours)

UNIV 4990 Project Planning Seminar ( 1 hr ) [Completed the next to last semester]
UNIV 4995 Senior Project ( 3 hrs ) [Completed during the final semester]
E. Electives (hours vary)

## BI OMEDI CAL I LLUSTRATI ON

Students in Biomedical Illustration will take a common core of courses in art, photography, chemistry, and the life sciences. In addition to courses in biomedical illustration and biomedical photography, students will take appropriate courses in cinema, video, computer applications, and graphics. Students in Biomedical Illustration will complete internships in at least one academically relevant setting in the Memphis area.

## Program Summary

A. General Education (35-41 hours)
B. Coordinated Study ( 54 hours)

Core Courses (28 hours)
Professional Courses ( 6 hours)
Program Area (21 hours)
C . Thematic Studies (6 hours)
D. Senior Project (4 hours)
E. Electives (hours vary)

## CHI LD DEVELOPMENT

Students following these guidelines will seek careers in child care centers, both for-profit and non-profit; Head Start; pre-schools; parent's day out programs; before and after school care programs; as child life specialists; child advocacy organizations and other community programs aimed at children. In addition to core courses based on early childhood development, these guidelines contain course work designed to develop skills and knowledge of the historical, social, cultural, and educational contexts of the field.

This program DOES NOT lead to teacher licensure. Students interested in gaining a teaching license should contact the College of Education at 678-2728.

Program Summary
A. General Education (35-41 hours )
B. Coordinated Study ( 51 hours)
I. Child Development Core ( 18 hours)

CSED 3302 Child and Adolescent Development
CSED 3401 Parenthood Education
CSED 4211 Readings in Child Development and Family Relations
EDPR 2111 Development Across the Life Span
EDPR 3301 Early Child Development
PSYC 3103 Child Psychology
II. Family and Social I nteractions ( 6 hours)

ANTH 3511 Culture, Kin and Family
COMM 3003 Television and Culture
PSYC 4034 Children's Social Relationships
SOCI 3422 Racial and Ethnic Minorities: A Socio-Historical Approach
SOCI 3432 Sociology of Gender
SOCl 3831 Marriage and the Family
SOCl 4442 Sociology of Poverty
II I. Counseling (3 hours)
COMM 4341 Interpersonal Communication
COUN 4611 Introduction to Counseling
COUN 4621 Human Interactions
COUN 4781 Strategies for Crisis Intervention
COUN 4783 Alcohol and Drug Abuse Services
IV. Historical Context ( 3 hours)

HIST 4831 History of American Family
HIST 4863 History of Childhood in America
V. Social Services and Public Policy ( 6 hours)

CJ US 4533 J uvenile Delinquency: Theory and Process
PADM 3601 Public Administration
PADM 4226 Introduction to Nonprofit Organizations
POLS 3213 Introduction to the Study of Public Policy
SWRK 2911 Social Response to Human Need
SWRK 3902 Human Behavior and Social Environment
SWRK 4934 Child Welfare Policy and Services

- Statistical Methods (3 hours)

EDPR 4541 Fundamentals of Applied Statistical Methods
SOCl 3311 Social Statistics
VII. Educational Context (3 hours)

CSED 4101 Preschool Curriculum
ECED 3555 * Observation and Assessment of Infant an d Early Childhood Development
EXSS 3306 Elementary School Health and Wellness
SPED 2000 Issues of Human Diversity
SPED 4900 * Consultation with School/Family/Community
*Students who select either of these two courses must meet Teacher Education Program admission requirements.
VIII. Child Development Electives (6 hours)

CSED 4300 Family Resource Management
ENGL 3401 Children's Literature
NUTR 2202 Nutrition
PSYC 3101 Psychology of Personality
PSYC 3102 Abnormal Psychology
PSYC 3106 Social Psychology
PSYC 3305 Learning and Memory
PSYC 3506 Human Sexuality
IX. I nternship ( 3 hours)

UNIV 4110 Internship or
UNIV 3900 Experiential Learning
C. Thematic Studies ( 6 hours)
D. Senior Project (4 hours)

UNIV 4990 Project Planning Seminar
UNIV 4995 Senior Project

## E. Electives (18-24 hours)

See the Graduation from the University link for the University General Education Program requirements at http://academics.memphis.edu/bulletin/Students who have completed one year of American History in high school are exempted from the six credit-hour American Heritage General Education Program requirement; otherwise, students will have to meet the American Heritage requirement.

## COMMERCI AL AVI ATI ON

Students in Commercial Aviation will study General Administration or develop contracts in areas of interest such as aviation and climatology and technological or computer systems. A student must hold a private pilot license or other FAA ratings to be considered for admission. Academic credit is awarded for FAA ratings for Commercial Pilot, Instrument Rating, Multi-Engine Rating, and other ratings. Students are required to earn a minimum number of FAA ratings.

## Program Summary

## A . General Education ( $\mathbf{3 5 - 4 1}$ hours)

Note: Students are advised to complete ESCI 1010/1011, 1020/1021 or PHYS 1010/1011-1020/1021 for their Natural Science General Education requirements. They are also advised to take ECON 2120 and ESCI 1301 to apply toward their Social Science General Education requirement.
B . Coordinated Study ( 50 hours)
Management and Business Operations ( 15 hours)
ACCT 2010 Fundamentals of Accounting I or
ACCT 2020 Fundamentals of Accounting II
MIS 2749 Introduction to Business Microcomputer Applications
MGMT 3110 Organization and Management or
PADM 3601 Public Administration or
MGMT 3610 Principles of Management and Organizational Behavior or
METH 4381 Principles of Supervision
MKTG 3010 Principles of Marketing
ENGL 3250 Professional Communication or
ENGL 3601 Technical and Professional Writing or
ENGL 3604 Persuasive Writing
Human Resources, Staffing and Development ( 9 hours
Choose one course:
BMGT 3630 Human Resources Management
LDSP 3000 Leadership Development
MGMT 3215 Management of Human Resources
MGMT 4260 Employee Staffing and Development
MGMT 4420 Organizational Behavior in Business
Choose one course:
COMM 3010 Integrated Corporate Communications
COMM 4011 Communication in Organizations
PM 4120 Organizational Theory and Behavior
PSYC 3508 Industrial and Organizational Psychology
Choose one course:
COUN 4621 Human Interactions
LEAD 3350 The Adult Learner
SOCI 3150 Social Psychology
SW 3200 Cultural Diversity
Transportation and Logistics ( 9 hours)
UNIV 3200 Aviation Administration

MKTG 3610 Logistics Management I
MKTG 3620 Logistics Management II or
MKTG 3630 Transportation Management

## Experiential Learning in Commercial Aviation ( 6 hours)

Internships may be completed in any of the following areas: (1) Airline, (2) Airport, (3) Corporate Aviation, (4) Federal Aviation Administration, (5) Flight Instruction, (6) Fixed-Base Operation, \& Other, as arranged.

Persons with prior aviation administration experiences may seek credit for their learning by submitting appropriate documentation.

## Professional Aviation Instruction (minimum: 11 hours)

The Commercial Aviation program is designed to build upon professional instruction in aviation maintenance, flight, avionics technology, aircraft operations support or other aviation-related fields. A minimum of 11 credit- hours is required for the degree; a maximum of 30 hours in aviation may be applied to the degree.
Students may present FAA ratings, military records, or transfer aviation credit from other colleges or universities, as evidence of their learning. Notarized copies of FAA licenses should be presented to the college advisor; transcripts and military records should be sent to the Admissions Office. See below for a listing of credit granted for Pilot Licenses and Ratings, Airframe/Power Plant License, and the Aircraft Dispatcher's License: Students accepted into this program will receive semester hours at the UNIV 2900-3900 levels. A group assessment fee of (\$180.00) must be paid before this credit is posted to the student's transcript.
NOTE : Since the University of Memphis will not accept credit for experiential learning assessed at another college or university, such credit cannot apply toward graduation, unless it is part of an earned degree. The university will assess all experiential learning for credit independently.
Students who need professional instruction in aviation may wish to plan their studies to accommodate flight training programs available at local aviation schools. For example, persons holding the Private Pilot License might choose to complex a six-month intensive flight training program. Four of these schools are listed below ; all are FAA approved Part 141 flight schools. The University of Memphis does not endorse these or any other school, but encourages students to plan a course of study which makes the best use of available academic, professional and financial aid resources.

Douglas Aviation Dewitt Spain Airport Shelby Aviation, Inc. Downtown Aviation 11299 Airport Road 2787 N. 2 nd St. 3870 Fite Road 2787 North Second St. Olive Branch , MS 38654 Memphis , TN 38127 Millington , TN 38053 Memphis , TN 38127 Phone: (901) 521-1123 Phone: (901) 353-9151 Phone: (901) 873-3838 Phone: (901) 3539151

## UNI VERSI TY COLLEGE CREDI T FOR PROFESSI ONAL AVI ATI ON I NSTRUCTI ON

Credit for Flight Instruction: Course No. Hours Credit
Private Pilot License UNIV 29005
Commercial Pilot License UNIV 39003
Instrument Rating UNIV 39003
Multi-Engine Rating UNIV 39003
Certified Flight Instructor UNIV 39003
Airline Transport Pilot License UNIV 39005
Flight Engineer UNIV 39005
Flight Navigator-Commercial UNIV 39006
Captain Air Carrier UNIV 39006
Aircraft Type Rating: (varies) UNIV 39004
Multi-Engine Flight Instructor UNIV 39001
Seaplane UNIV 39001
Certified Ground Instructor-Basic UNIV 39003
Certified Ground Instructor-Instruments UNIV 39003

## Credit for Airframes/

Powerplant License: Course No. Hours Credit
Intro to Airframe/Powerplant Systems UNIV 19004
Airframe Systems/Components UNIV 29004
Aircraft Structure/Repair UNIV 29004
Aircraft Electric Systems Maintenance UNIV 29004
Jet Engine Inspection/Repair UNIV 29004
Recip. Eng. Systems in/RPR UNIV 29004
Credit for the Aircraft
Dispatcher's License: Course No. Hours Credit
Federal Aviation Regulations UNIV 39003
Aviation Meteorology UNIV 39003
Principles of Aircraft Navigation UNIV 39003
Flight Operations UNIV 39003
Aircraft Performance Systems UNIV 39003
Credit for Air Traffic Controllers: Course No. Hours Credit
Phase III J ourneyman (Center) UNIV 390031
Phase V J ourneyman (Air Traffic/Control UNIV 390031 Tower)
Phase III J ourneyman (Flight Service) UNIV 390031
Technician Level (Airway Facility) UNIV 390031
C. Thematic Studies ( 6 hours)
D. Senior Project (4 hours)

UNIV 4990 Project Planning Seminar (1 hr) [Completed the next to last semester]
UNIV 4995 Senior Project ( 3 hrs ) [Completed during the final semester]
E. Electives (hours vary)

## CONSTRUCTI ON MANAGEMENT SERVICES

These guidelines are designed for persons wishing to increase professional skills within the construction industry. In addition to enhancing their technical knowledge and understanding, such persons will also wish to increase their skills in management, organizational relations, and communication, add to their knowledge of political and economic contexts within which the management construction fits, and enhance their ability to manage diversity and respond appropriately to workplace dynamics.

## CORRECTI ONAL ADMI NI STRATI ON

The Correctional Administration concentration is designed for experienced correctional professionals who wish to further their careers by completing a program of study designed to increase their skills in management, organizational relations, and communication; their knowledge of the contexts within which correctional administration fits; their understanding of workplace issues that can affect productivity; and their ability to manage diversity in the workforce. In most cases, candidates for this degree program will be active duty or retired law enforcement or correctional officers at the municipal, county, or state levels, though military police and in certain circumstances those whose experience is in private security are eligible as well.

## Program Summary

A. General Education (35-41 hours )
B. Coordinated Study ( 42 hours)

- Organization and Administration (Required Core - 12 hours)

CJUS 4126 Criminal J ustice Administration and Management
(Students will also select any three courses from the following group: 9 hours)
ACCT 2010 Fundamentals of Accounting
CJ US 3426 Corrections in America
J OUR 3400 Introduction to Public Relations
METH 4381 Principles of Supervision
MGMT 3110 Organization and Management
MGMT 3215 Management of Human Resources
PADM 3601 Public Administration

- Team Work and Organizational Relations
(Students will select any two courses from the following group - 6 hours)
COMM 3342 Communication and Leadership
COMM 4011 Communication in Organizations
COUN 4621 Human Interactions
LEGL 3482 Labor Law
MGMT 4420 Organizational Behavior in Business
PSYC 3508 Industrial and Organizational Psychology
III. Written Communication ( 3 hours)

ENGL 3601 Technical and Professional Writing
ENGL 3604 Persuasive Writing
J OUR 3421 Public Relations Writing
MGMT 3510 Business Communication

- Decision-Making
(Students will select one course from Group A and one course from Group B-6 hours)
Group A - Statistics
CJUS 3129 Statistical Methods in Criminal J ustice
POLS 4101 Political Statistics
PSYC 3001 Psychological Statistics
SOCI 3311 Social Statistics
Group B - Research Methods
CJUS 3130 Research Methods in Criminal J ustice
POLS 3213 Introduction to the Study of Public Policy
PSYC 3000 Research Methods in Psychology
SOCI 3322 Methods of Social Research
V. Professional Ethics ( 3 hours)

CJUS 4130 Ethical Dilemmas in Criminal Justice
PHIL 3511 Ethics
UNIV 3540 Ethics and Professionalism

- Urban and Public Policy Issues (6 hours)
(Students will select any two courses from the following group)
POLS 4222 Urban Politics
POLS 4223 Issues in Urban Politics
SOCl 3112 Contemporary Social Problems
SOCl 4631 Cities in Change
VII. Social Issues (3 hours)

COMM 4373 Interracial Communication
SOCl 3422 Racial and Ethnic Minorities
SOCI 3432 Sociology of Gender
SOCI 3701 Individual and Society
SOCI 4422 Sociology of Poverty
SOCI 4460 Black and White Women in the South
VIII. Behavioral Issues (3 hours)

CJ US 3541 Criminology
COUN 4781 Strategies for Crisis Intervention
PSYC 3102 Abnormal Psychology
PSYC 3106 Social Psychology

PSYC 3507 Alcohol, Drugs, and Behavior
C. Thematic Studies ( 6 hours)
D. Senior Project (4 hours)

UNIV 4990 - Project Planning Seminar
UNIV 4995 - Senior Project
E. Electives (27-33 hours)

See the Graduation from the University link for the University General Education Program requirements at http://academics.memphis. edu/bulletin/Students who have completed one year of American History in high school are exempted from the six credit-hour American Heritage General Education Program requirement; otherwise, students will have to meet the American Heritage requirement.

## DANCE EDUCATION

Those students with a background in dance and wish to teach either in the private or public school (K-12) setting will be most directly served by this concentration. Students with limited exposure to dance but with the desire, dedication, and commitment to achieve the requisite level of dance training needed in addition to completing the remaining curriculum will also be served. All students will have to be accepted into the Teacher Education Program according to university requirements.

## Program Summary

A. General Education (35-41 hours )
B. Coordinated Study (55-63 hours)

- Dance Studies ( 32 hours)

DANC 2825 Ballet Dance II
DANC 3101 Dance History (W)
DANC 3201 Dance Movement Analysis
DANC 3829 Advanced Dance Techniques
DANC 4202 Dance Composition/Improvisation
DANC 4204 Advanced Dance Composition (C)
THEA 2511 Theatre Crafts
THEA 3603 Lighting Lab
THEA 3604 Costume Lab

- Dance Licensure ( $\mathbf{2 3} 31$ hours)

DANC 1821 Modern Dance I
(Elementary School Teaching Practicum)
DANC 1825 Ballet Dance I
(High School Teaching Practicum)
DANC 1827 Jazz Dance I
(Middle School Teaching Practicum)
DANC xxxxDance Education: Methods and Materials
EDPR 2111 Development Across Life Span
ICL 4800 Professional Seminar
ICL 4901 Student Teaching
LEAD 2010 Teaching and Schools in Urban Settings
SPED 2000 Issues of Human Diversity
C. Thematic Studies ( 6 hours)
D. Senior Project (4 hours)

UNIV 4990 - Project Planning Seminar
UNIV 4995 - Senior Project

## E. Electives ( $6 \geqslant 20$ hours )

See the Graduation from the University link for the University General Education Program requirements at http://academics.memphis. edu/bulletin/Students who have completed one year of American History in high school are exempted from the six credit-hour American Heritage General Education Program requirement; otherwise, students will have to meet the American Heritage requirement.
Course being developed and submitted to the UUC by the College of Communication and Fine Arts

## DISABILITY STUDI ES AND REHABILITATION SERVI CES

Advising guidelines for the Bachelor of Professional Studies (B.P.S.) degree with a concentration in Disability Studies and Rehabilitation Services are designed for students seeking to be academically and professionally grounded in a thorough understanding of the social, psychological, economic, physical, medical, and other environmental problems faced by individuals seeking disability services. The history, philosophy, legal issues, ethical issues, and agencies/facilities are also addressed through the courses within these guidelines. Students will also be exposed to the theme of employment including vocational adjustment and appropriate job placement $\Leftrightarrow$ and independent living outcomes as reaffirmed in the Rehabilitation Act Amendments of 1992. Rehabilitation depends heavily upon communication between both the consumer and professional and among various professionals; consequently, communication will be stressed, as well as an understanding of the potential influence of cultural diversity and individual lifestyle choices. Courses will also enable students to understand the methods used in disability services to solve consumer problems and how to utilize available resources to improve consumer access, quality of services, and decision making. Finally, a well-supervised field experience component will provide students the opportunity to integrate classroom principles and develop entry-level skills in a work setting.

## Program Summary

A. General Education (35-41 hours)
B. Coordinated Study (58-59 hours)

Professional Core (19 hours)
COUN 4901* Principles and Techniques of Rehabilitation Counseling
COUN 4 913* Medical and Psychosocial Aspects of Rehabilitation
COUN 4921* Vocational Development \& Occupational Information Service
SWRK 3902 Human Behavior \& Social Environment
SWRK 3903 Social Work Practice I
Choose one:
SWRK 2910 Social Work Profession and Practice
SWRK 2911 Social Response to Human Need

* Courses are pending approval of re-numbering by Undergraduate and Graduate Councils. Statistics and Research Methods (6-7 hours)

1. Statistics (select 1)

PSYC 3001 Psychological Statistics
SOCI 3311 Social Statistics
2. Research Methods (select 1)

PSYC 3000 Introduction to Psychological Research
SOCI 3322 Methods of Social Research
Rehabilitation Delivery ( 12 hours)
COUN 4611 Introduction to Counseling
COUN 4781 Strategies for Crisis Intervention
COUN 4783 Alcohol and Drug Abuse Services
HADM 4101 Health Systems
PADM 4207 Health Politics and Policy
PETE 3308 Exceptional Learners in Physical Education
PSYC 3512 Health Psychology
SLS 3905 Leisure and Recreation for People with Disabilities
SWRK 3920 Social Welfare Policies \& Programs: Theory \& Application
THEA 4503 Creative Dramatics
Management Services (9 hours)
ACCT 2010 Fundamentals of Accounting I
MGMT 3110 Organization and Management
MGMT 3215 Management of Human Resources
PADM 3601 Public Administration
PADM 4226 Introduction to Nonprofit Organizations
PADM 4227 Issues in Nonprofit Administration

## Communications (6 hours)

1. Professional Communications (3 hours)

MGMT 3510 Business Communications
ENGL 3601 Technical \& Professional Writing
ENGL 3604 Persuasive Writing
COMM 3342 Communication and Leadership
COMM 4011 Communications in Organizations
2. Interpersonal Communications (3 hours)

COMM 4012 Health Communications
COMM 4373 Interracial Communications
COMM 4375 Intercultural Communications
COUN 4621 Human Interactions
Development and Aging (6 hours)
E DPR 2111 Development Across the Life Span
EXSS 1102 Personal Health
HMSE 4305 Problems in Human Movement Sciences \& Education
LEAD 3350 The Adult Learner
NUTR 2202 Nutrition
SOCI 3112 Contemporary Social Problems
SOCI 4541 Sociology of Aging
SOCI 4851 Medical Sociology
SOCI 4852 Sociology of Mental Illness
SOCI 4923 Social Institutions and the Life Cycle
SPED 2000 Issues Human Diversity
UNIV 4527 The Developing Adult
C. I nternship ( 3 hours, Optional)

UNIV 2110 Field Experience
UNIV 4110 Internship
UNIV 3900 Advanced Experiential Learning
Persons with prior experience in the disability services field may apply for credit through the Experiential Learning process. For information, visit: http://www.uc.memphis.edu/experiential.htm
D. College Requirements (10 hours)

Thematic Studies (6 hours )
Any UNIV 3500-3599 or UNIV 4500-4599
Students complete a total of 6 hours in a University College thematic studies course(s) of their choosing. These courses are designed to broaden a student's knowledge of significant themes in social, political, and religious history. Only specifically designated courses will meet this requirement. For a complete list of courses: http://www.uc.memphis.edu/thematic.htm
Senior Project (4 hours)
UNIV 4990 Project Planning Seminar
UNIV 4995 Senior Project
The Senior Project is a student's culminating experience or capstone designed to synthesize and integrate the content of a students program of study. The senior project is intended to fuse together the two or more academic areas that comprise your coordinated study (major) into an academically-relevant example of scholarship. Students will complete a thesis, task based or artistic project on a topic of their choice with approval of their Senior Project instructor. Students must select a topic by the end of their Junior year. UNIV 4990 must be completed before UNIV 4995. The Senior Project is completed during a student's final semester. UNIV 4990 and UNIV 4995 can not be taken during the same semester. For more information on the Senior Project and to request a registration permit, visit this website:
http://www.uc.memphis.edu/Senior_Project.htm
E. General Electives (5-11 hours)

Students must successfully complete enough electives hours to earn a minimum of 120 semester hours. 60 of these hours must be taken at a 4 -year institution and a minimum of 30 of the last 60 hours must be completed at the University of Memphis. A minimum of 42 upper division hours are required.

## Students who have earned the $\S$ Home Manager technical certificate from Southwest Tennessee Community College can receive 15 hours of credit to be applied to the

# concentration as follows: $\mathbf{1 2}$ hours in Rehabilitation Delivery and $\mathbf{3}$ hours of Internship. Students who hold this certification need to inform their advisor in University College in order for the hours to be posted to the students' University of Memphis transcript. 

## FAMILY AND CONSUMER STUDIES

A . General Education ( $\mathbf{3 5}$ ) 41 hours)
Note : ECON 2120 and CSED 2101 must be taken to satisfy the Social/Behavioral Sciences requirement.
B. Coordinated Study (36-39 hours)

## Required Core ( 18 hours)

CSED 3104 Home Furnishings and Related Arts
CSED 3302 Child and Adolescent Development
CSED 4106 Trends and Issues in the Profession [W,I]
CSED 4300 Family Resource Management
CSED 4405 Textiles
CSED 4600 Senior Seminar in Merchandising
Nonprofit Management Minor ( 21 hours) (Of the required 21 hours, 18 must be upper-division)
Other approved minor (18-21 hours)
Specialty Area Family and Consumer Studies (18 hours)
CSED 2202 Nutrition
CSED 2302 Principles of Food Preparation
CSED 3401 Parenthood Education
CSED 4101 Preschool Curriculum
CSED 4213 Readings in Family Economics and Consumer Education
CSED 4217 Readings in Family and Consumer Science Education
C. Thematic Studies ( 6 hours)
*CSED 4205 Behavioral Science Aspects of Clothing
CSED 4300 Family Resource Management
*CSED 4304 Trends in Housing and Home Furnishings
UNIV 3500-3599
UNIV 4500-4599
D. Internship (3-6 hours)

PADM 4231 Administrative Internship or
UNIV 4110 Internship (Co-requisite CSED 4600 and UNIV 4995 [W,I ])
E. Senior Project (3 hours)

UNIV 4995 [W,I]
F. Electives may be chosen to bring the total number of hours to120 with a minimum of 42 upperdivision hours

* Required for Secondary Licensure


## FASHI ON AND HOME FURNISHI NGS MERCHANDISI NG

## Program Summary

A. General Education (35-41 hours)

Program requirements. The Fashion and Home Furnishings Merchandising Concentration requires ECON 2120 and CSED 2101 to satisfy the Social/Behavioral Sciences Category.
B. Coordinated Study ( 39 hours)

Family and Consumer Sciences Core (18 hours)
CSED 3104 Home Furnishings and Related Arts
CSED 3302 Child and Adolescent Development
CSED 4106 Trends and Issues in the Profession [W,I]
CSED 4300 Family Resource Management
CSED 4405 Textiles
CSED 4600 Senior Seminar in Merchandising (final semester)
C. Specialty Area: Students choose a specialty in either Fashion Merchandising or Home Furnishing Merchandising (15-18 hours)

Fashion Merchandising
CSED 2005 Introduction to Fashion Merchandising
CSED 2106 Visual Merchandising
CSED 3206 Merchandising Systems [C]
CSED 4205 Behavioral Science Aspects of Clothing
CSED 4215 Readings in Clothing and Textiles or
CSED 4216 Readings in Fashion Merchandising

## Home Furnishings

CSED 2004 Technical Skills for Home Furnishings
CSED 2106 Visual Merchandising
CSED 3204 Residential Kitchen Planning
CSED 3206 Merchandising Systems [C]
CSED 4204 Furnishings Problems and Presentations
CSED 4304 Trends in Housing and Home Furnishings
D. Thematic Studies ( 6 hours)

CSED 4205 Behavioral Science Aspects of Clothing
CSED 4300 Family Resource Management
CSED 4304 Trends in Housing and Home Furnishings
UNIV 3500-3599
UNIV 4500-4599
E. Internship in Merchandising or Marketing-Related Business ( 6 hours)

UNIV 4110 (Co-requisite CSED 4600 and UNIV 4995) Final semester
F. Senior Project (3 hours)

UNIV 4995 [W,I]
G. Electives may be chosen to bring the total number of hours to120 with a minimum of 42 upperdivision hours
H. Marketing Minor ( $\mathbf{2 4}$ hours) (J unior level classification required for all $\mathbf{3 0 0 0}$ to $\mathbf{4 0 0 0}$-level courses)
ACCT 2010 Fundamentals of Accounting I
ECON 2120 Introduction to Microeconomics
MKTG 3010 Principles of Marketing
MKTG 3012 Consumer Behavior
MKTG 3140 Advertising and Sales Promotion
MKTG 3610 Introduction to Supply Chain Management
MKTG elective (3000 4000 level)
MKTG elective (3000 4000 level)

## FIRE ADMI NI STRATI ON AND FIRE PREVENTI ON TECHNOLOGY

A. University College is the regional center for the Degrees at a Distance Program (DDP), serving fire service personnel in Alabama, Arkansas , Kentucky , Louisiana , Mississippi, South Carolina , and Tennessee. DDP is a degree completion program, offering upper-division courses in Fire Administration and Fire Prevention Technology. These courses are designed for independent study. Freshman and sophomore courses, electives, and other courses related to the fire service are taken at a college near the student's residence. Students completing the AAS in Fire Science at Southwest Tennessee Community College may transfer directly into this program. Additional articulation agreements exist with other two-year fire science programs in the region.

## Program Summary <br> B. Fire Service Core Courses (21 upper-division hours):

PADM 3612 Fire Prevention Organization and Management
PADM 3613 Fire and Emergency Services Administration
PADM 3614 Political and Legal Foundations of Fire Prevention
TECH 3940 Analytic Approaches to Public Fire Protection [C]
TECH 3944 Fire Protection Structure and Systems Design
TECH 3947 Applications of Fire Research
TECH 3948 Managerial Issues in Hazardous Materials
C. Fire Administration Concentration ( 9 upper-division hours):

PADM 3610 Personnel Management for the Fire Service
PADM 3611 Disaster and Fire Defense Planning
PADM 3615 The Community Risk Reduction for the Fire Services
D.Fire Prevention Technology Concentration ( 9 upper-division hours):

TECH 3942 Fire Related Human Factors
TECH 3945 Fire Investigation and Analysis
TECH 3946 Fire Dynamics
[Students may complete both concentrations, if desired]
E. Fire Service Elective ( $\mathbf{3}$ hours) : Select one course from the other concentration F. Senior Project (3 hours)

## HEALTH SERVI CES ADMI NI STRATION

Students following guidelines for Health Services Administration are experienced health care professionals who have completed non-baccalaureate programs in health care specialties such as medical laboratory technology, respiratory therapy, radiological technology, and nursing, and who want to become administrators in health care settings. They will build upon their training and experience by taking courses in such areas as business practice, administration, interpersonal skills, policy, risk management, social context of health care, and financial management. Transfer credits for their health care specialty will be considered a part of their Coordinated Study.
A. General Education (35-41 hours)
B. Coordinated Study is comprised of the Professional Core, Health Care Specialty and Support Courses. Students must earn a minimum grade of $\langle\mathrm{C}-\overline{\mathrm{c}}$ in all classes within the Coordinated Study.
Professional Core ( $\mathbf{2 4}$ hours) take each class as indicated below
ACCT 2010 Fundamentals of Accounting I
ACCT 2020 Fundamental of Accounting II
MIS 2479 Introduction to Microcomputer Business Applications
MGMT 3110 Organization and Management**
ECON 4740 Health Care Economics**
Group 1: Statistical and Research Methods (take one course)
EDPR 4541 Fundamentals of Applied Statistical Methods
POLS 4101 Political Statistics
SOCI 3311 Social Statistics
Group 2: Professional Writing (take one course)
ENGL 3601 Technical and Professional Writing
ENGL 3604 Persuasive Writing
MGMT 3510 Business Communications**
Group 3: Health Care Systems (take one course)
HADM 4101 Health Systems
PADM 4207 Health Politics and Policy
C. Support Courses (18 hours) Take specified number of courses from each area below

Interpersonal Communications (take two courses)
COMM 4011 Communications in Organizations
COMM 4012 Health Communications
COMM 4341 Interpersonal Communications
COMM 4342 Small Group Communications
COUN 4621 Human Interactions

Policy and Social Context : (take two courses)
ECON 3411 Economics of Social Issues**
PADM 4208 Mental Health Policy and Law
PADM 4209 Aging Policy and Law
PHIL 3514 Biomedical Ethics
POLS 3213 Introduction to the Study of Public Policy
PSYC 3101 Psychology of Personality
PSYC 3102 Abnormal Psychology
PSYC 3507 Alcohol, Drugs and Behavior
PUBH 4707 International Health Problems \& Issues (This course offered online format only)
SOCI 3401 Social Inequality
SOCI 3422 Racial and Ethnic Minorities: A Socio-Historical Approach
SOCI 3432 Sociology of Gender* or UNIV 2304 - Gender and Society
SOCI 3831 Marriage and Family* or CSED 2101 - Family in Global Perspective
SOCl 4442 Sociology of Poverty
SOCl 4851 Medical Sociology
SOCl 4852 Sociology of Mental Illness
*UNIV 2304 - Gender and Society, may be taken in place of SOCI 3432 and CSED 2101 - Family in Global
Perspective, may be taken in place of SOCI 3831 as long as it will not leave the student short of the
required 42 upper-division hours.
Human Resource Management (take one course)
MGMT 3215 Human Resource Management**
MGMT 4251 Labor Relations**
MGMT 4260 Employee Staffing and Development**
Financial and Risk Management (take one course)
ACCT 3130 Legal, Social, Political Environment of Business**
FIR 3410 Business Finance**
FIR 3810 Principles of Risk and Insurance**
FIR 4820 Life and Health Insurance**
FIR 4870 Risk Management**
** Junior Standing, registration permit, and prerequisites or permission of instructor required. Students must request their own registration permit through the Fogelman College of Business and Economics webpage.

## D. Health Care Specialty ( 21 hours)

Courses represented in this category will provide professional preparation in a health care field such as nursing, medical laboratory technology, radiological technology, respiratory therapy, or cardiovascular technology. Transfer courses from an accredited institution must be presented. Students who do not have a health care specialty will work in consultation with their academic advisor to select a series of health-related courses that they will take in place of the specialty.
E. Thematic Studies (6 hours)

CSED 4205 Behavioral Science Aspects of Clothing
CSED 4300 Family Resource Management
CSED 4304 Trends in Housing and Home Furnishings
PHIL 3514 Biomedical Ethics
UNIV 3500-3599, Topics vary
UNIV 4500-4955, Topics vary
F. Senior Project (4 hours)

UNIV 4990 Project Planning Seminar (completed next to last semester)
UNIV 4995 Senior Project (completed final semester)
G. Electives (hours vary)

Students must take enough elective hours to meet the minimum required total number of hours for graduation. A minimum of 120 semester hours are required to graduate.

## HUMAN SERVI CES

Students in Human Services are expected to develop a philosophical orientation to the human condition; to
enlarge their understanding of social structures, values and norms; to study human growth and development; and to become informed about social change and social and bureaucratic organizations. Students in Human Services will take courses from such departments as Counseling and Personnel Services, Sociology and Social Work, Psychology, Management, and Special Education.

## Program Summary

A. General Education (35-41 hours)
B. Coordinated Study ( 51 hours)

Professional Core

## Basic Core: ( 9 hours) Take each of the following courses:

COUN 4611 Introduction to Counseling
COUN 4621 Human Interactions
SWRK 2911 Social Response to Human Need or SWRK 2910 - Introduction to Social Work
Statistical Methods ( 3 hours) Choose one course:
EDPR 4541 Fundamentals of Applied Statistical Methods
PSYC 3001 Psychological Statistics
SOCI 3311 Social Statistics
Students must complete the General Education Math requirement before taking a Statistical Methods course.

## Professional Writing ( 3 hours) choose one course:

ENGL 3601 Technical and Professional Writing
ENGL 3604 Persuasive Writing
MGMT 3510 Business Communication*
Students must complete the General Education English Composition and Literature requirements before taking a Professional Writing course. Rehabilitation/ Social Intervention (9 hours) Choose three

## courses:

COUN 4781 Strategies for Crisis Intervention
COUN 4783 Alcohol and Drug Abuse Services
SWRK 3903 Social Work Practice I*
(Prerequisite: SWRK 2911, 3901, 3902 or Instructor's Permission)
SWRK 3904 Social Work Practice II*
(Prerequisite: SWRK 3903)
Support Courses . Twenty-one semester hours must be taken from the following groups.
Group I: Individual Development . (6 hours) Choose two courses.
EDPR 3302 Child \& Adolescent Development (Same as CSED 3302)
PSYC 3101 Psychology of Personality
PSYC 3102 Abnormal Psychology
PSYC 3103 Child Psychology
PSYC 3104 Adult Psychology
PSYC 3106 Social Psychology
SOCI 3701 Individual and Society
SWRK 3902 Human Behavior and Social Environment*
(Prerequisite: SWRK 2910, SWRK 2911, SWRK 3901 or Instructor's Permission)
Group II: The Individual and the Community (9 hours) Choose three courses.
ANTH 3511 Culture, Kin, and Family
ANTH 4412 Neighborhood Development and Poverty
ANTH 4531 Alcohol, Culture, and Biology
CJUS 3152 Drug Addiction and Alcoholism
CJUS 4533 Juvenile Delinquency: Theory and Process
COMM 4373 Interracial Communication
HIST 4831 History of American Family
PSYC 3507 Alcohol, Drugs, and Behavior
SOCI 3432 Sociology of Gender
SOCI 3501 Sociology of Deviant Behavior
SOCI 3831 Marriage and the Family
SOCI 4923 Social Institutions and the Life Cycle
SOCI 4420 Racial Inequality

SOCI 4442 Sociology of Poverty
SOCl 4460 Black and White Women in the South
SOCI 4541 Sociology of Aging
Group III: The Individual and the $\langle$ System ( 6 hours) Choose two courses.
ECON 3411 Economics of Social Issues
PADM 3601 Introduction to Public Administration
PADM 4221 Urban Administration
PADM 4226 Introduction to Nonprofit Organizations
POLS 3213 Introduction to the Study of Public Policy
POLS 4207 Health Politics and Policy
POLS 4208 Mental Health Policy and Law
POLS 4209 Aging Policy and Law
SOCI 3422 Racial and Ethnic Minorities
SOCl 4851 Medical Sociology
Experiential Learning or I nternship (6 hours):
UNIV 3900 Advanced Experiential Learning or
UNIV 4110 Internship
C. Thematic Studies ( 6 hours)

CSED 4205 Behavioral Science Aspects of Clothing
CSED 4300 Family Resource Management
CSED 4304 Trends in Housing and Home Furnishings
PHIL 3514 Biomedical Ethics
UNIV 3500-3599, Topics vary
UNIV 4500-4955, Topics vary

## D. Senior Project (4 hours)

UNIV 4990 Project Planning Seminar ( 1 hr ) [Completed the next to last semester]
UNIV 4995 Senior Project ( 3 hrs ) [Completed during the final semester]

## Possible Minors

Students pursuing a B.P.S. in Individual Studies with a concentration in Human Services may be able to complete a minor in Sociology, Psychology, or Social Work by taking a minimal number of additional classes depending on courses selected for the major. Check with your advisor or the Undergraduate Bulletin regarding specific minor requirements.
*Junior standing, prerequisites, or permission of instructor required. Please check the University of Memphis Undergraduate Bulletin. The College of Business will drop all lower division students from upper division business courses.

## LAW ENFORCEMENT ADMI NISTRATION

Advising guidelines for the Bachelor of Professional Studies (B.P.S.) degree with a concentration in Law Enforcement Administration are designed for experienced law enforcement professionals who wish to further their careers by completing a program of study designed to increase their skills in management, organizational relations, and communication; their knowledge of the contexts within which law enforcement administration fits; their understanding of workplace issues that can affect productivity; and their ability to manage diversity in the workforce. In most cases, candidates for this degree program will be active duty or retired law enforcement officers at the municipal, county, or state levels, though military police and in certain circumstances those whose experience is in private security are eligible as well.

## Program Summary

A. General Education (35-41 hours)
B. Coordinated Study

Organization and Administration Required Core ( 12 hours)
ACCT 2010 Fundamentals of Accounting
CJUS 4126 Criminal Justice Administration and Management OR
MGMT 3110 Organization and Management OR
POLS 3601 Public Administration OR

METH 4381 Principles of Supervision
JOUR 3400 Introduction to Public Relations*
MGMT 3215 Management of Human Resources

* CJ 372 Mass Media and the Police, taken at the FBI National Academy and transferred from The University of Virginia, will be accepted in place of this course.
Team Work and Organizational Relations (Select two courses) (6 hours)
COMM 3342 Communication and Leadership
COMM 4011 Communication in Organizations
COUN 4621 Human Interactions
COUN 4781 Strategies for Crisis Intervention
LEGL 3482 Labor Law
MGMT 4420 Organizational Behavior in Business
Written Communication (Select one course) (3 hours)
ENGL 3601 Technical and Professional Writing
ENGL 3604 Persuasive Writing
MGMT 3510 Business Communication


## Decision-Making (Select one course from Group A and one from Group B ) © (6 hours) Group A

CJUS 3129 Statistical Methods in Criminal Justice
POLS 4101 Political Statistics
SOCI 3311 Social Statistics
Group B
CJA 3230 Police Organization and Administration (this course offered online only)
CJUS 3130 Research Methods in Criminal J ustice*
SOCI 3322 Methods of Social Research*
${ }^{*}$ CJ 571 Applied Research Methods in Law Enforcement, taken at the FBI National Academy and transferred from The University of Virginia, will substitute for one of these courses.
Professional Ethics (Select one course) (3 hours)
CJUS 4130 Ethical Dilemmas in Criminal Justice
LEGL 2400 Legal Ethics
PHIL 3511 Ethics
UNIV 3540 Ethics and Professionalism
Urban and Public Policy Issues
Urban Issues (Select two courses)* - (6 hours)
ANTH 4411 Urban Anthropology
ANTH 4412 Neighborhood Development and Social Entrepreneurship
ESCI 3451 Introduction to Urban Planning
POLS 4222 Urban Politics
SOCI 3112 Contemporary Social Problems
SOCI 4631 Cities in Change
*CJ 360 Overview of Criminal and Community Behavior, taken at the FBI National Academy and transferred from The University of Virginia, will substitute for one of these courses.
Public Policy Issues (Select two courses) © (6 hours)
CJUS 3226 Police in America
LEGL 3487 Administrative Law and Procedure
POLS 3213 Introduction to the Study of Public Policy
POLS 4221 Urban Administration
SOCl 4842 Sociology of Occupations and Professions
Social and Behavioral Issues
Social Issues (Select one course) © ( 3 hours
COMM 4373 Interracial Communication
SOCI 3422 Racial and Ethnic Minorities
SOCI 3432 Sociology of Gender
SOCI 4460 Black and White Women in the South
Behavioral Issues (Select one course)* - (3 hours)
CJUS 3541 Criminology
PSYC 3102 Abnormal Psychology

PSYC 3106 Social Psychology
PSYC 3507 Alcohol, Drugs, and Behavior
SOCI 3701 Individual and Society
*CJ 462 Applied Criminal Psychology, taken at the FBI National Academy and transferred from The University of Virginia, will substitute for one of these courses.
C. Thematic Studies ( 6 hours)
D. Senior Project (4 hours)

UNIV 4990 Project Planning Seminar (1 hr) [Completed the next to last semester]
UNIV 4995 Senior Project (3 hrs) [Completed during the final semester]

## E. Electives (hours vary)

## NONPROFIT DEVELOPMENT AND ADMI NISTRATI ON

The goal of these guidelines is to help persons understand the role of nonprofit organizations in society and to prepare them to organize, develop, and administer nonprofit organizations. Nonprofit organizations include educational, scientific, religious, and other charitable organizations, as well as private foundations, community-based organizations, professional and fraternal associations, and civic and social organizations. The guidelines are designed to serve persons who have worked, or who want to work, within the nonprofit sector as employees, or have served in the community as volunteers. Graduates may enter careers such as communications director, volunteer director, or program director for a nonprofit agency.

Objectives of the program include the study of (1) the historical and cultural context of nonprofit organizations, specifically their place within a market economy; (2) the characteristics of persons and communities served by nonprofit organizations; (3) legal, ethical, and policy issues which shape the governance, development, and operation of nonprofits; (4) relevant skills, including management of personnel, information, and finances, interpersonal communication, program evaluation, and marketing; and (5) special topics, including fundraising, philanthropy and volunteerism.

## Program Summary

A. General Education (35-41 hours)
B. Coordinated Study ( 60 hours)

Core Courses (18 hours) take each course
ANTH 4412 Neighborhood Development and Poverty OR
ANTH 3282 Cultural History of American Communities
COMM 4011 Communications in Organizations OR
MGMT 4420 Organizational Behavior in Business
ECON 3411 Economics of Social Issues
MGMT 3110 Organization and Management
PADM 3601 Public Administration
PADM 4226 Introduction to Nonprofit Organizations
Context Courses
Historical Context (take one course):
HIST 3881 African-American History
HIST 4831 History of American Family
HIST 4851 History of Women in America
HIST 4863 History of Childhood in America
HIST 4871 United States Urban History
Social, Political, Economic Context (take 3 courses from at least two different disciplines)
ANTH 4411 Urban Anthropology
CJUS 1100 Introduction to Criminal Justice
COMM 4381 Rhetoric and Public Controversy
ECON 2110 Introduction to Macroeconomics
ECON 4740 Health Care Economics
PHIL 3511 Ethics
POLS 3211 State and Local Government

POLS 3213 Introduction to the Study of Public Policy
POLS 4224 Urban Problems
SOCI 3401 Social Inequality
SOCl 3422 Racial and Ethnic Minorities: A Soci-Historical Approach
SOCl 4442 Sociology of Poverty
SOCI 4541 Sociology of Aging
SOCl 4851 Medical Sociology or ANTH 4511 - Medical Anthropology
Nonprofit Work Setting: (take one course)
ANTH 4253 Anthropology of Religion
ARTH 4382 Professional Practices in Museums
ARTH 4830 Museums in Society
CJUS 4126 Criminal Justice Administration and Management
ESCI 3451 Introduction to Urban Planning
POLS 4221 Urban Administration
SOCI 3860 Sociology of Religion
UNIV 4380 Independent Study (of work setting not included above)
Skills for Administration \& Community Development: (21hours) take one course from each category
Marketing \& Fund-raising: (take one course)
FIR 4011 Estate Planning and Law of Taxation
JOUR 3400 Public Relations
MKTG 3010 Principles of Marketing
MKTG 4230 Services Marketing
Human Resources: ( take one course)
COUN 4621 Human Interactions
MGMT 3215 Human Resource Management
Program Evaluation: (take one course)
ANTH 4010 Anthropological Methods of Field Research
COMM 3330 Communication Research Methods
PADM 4101 Political Statistics
SOCI 3311 Social Statistics
SOCI 3322 Methods of Social Research
Accounting: (take one course)
ACCT 2010 Fundamentals of Accounting I
ACCT 2020 Fundamentals of Accounting II
ACCT 3310 Cost Accounting
ACCT 4540 Governmental/Health Care/ Not-for-Profit Accounting
Legal Environment: (take one course)
ACCT 3011 Business Law
LEGL 2410 Legal Ethics
POLS 3405 Introduction to Law and Jurisprudence
Communication: ( take one course)
COMM 4342 Small Group Communication
ENGL 3601 Technical and Professional Writing
MGMT 3510 Business Communications
Computer Use \& Technology: (take one course)
JOUR 3900 Visual J ournalism
MIS 2749 Introduction to Microcomputer Applications for Business
Experiential Learning or Internship: ( 6 hours) any 6 hours from
UNIV 3900 Advanced Experiential Learning
(See: http://www.uc.memphis.edu/experiential.htm
UNIV 4110 Internship
C. Thematic Studies ( 6 hours)
D. Senior Project (4 hours)

UNIV 4990 Project Planning Seminar ( 1 hr ) [Completed the next to last semester]
UNIV 4995 Senior Project ( 3 hrs ) [Completed during the final semester]

## E. Electives (hours vary)

## ORGANI ZATI ONAL LEADERSHI P

Organizational Leadership is designed to (1) promote understanding of the nature of bureaucratic organizations and the fundamentals of administrative leadership; (2) allow students to reflect upon national and international organizational contexts and upon significant social and cultural issues raised in those contexts; and (3) promote skills in formal and interpersonal communication, including sensitivity to personal issues having an impact upon the quality of accomplishment in the work place. In addition to meeting all entrance requirements for The University of Memphis, applicants must provide documentation of a minimum of five years of organizational leadership experience and present a transcript showing at least 45 semester hours of earned academic credit or an earned associate's degree.

The Organizational Leadership Adults in Mind (AIM) program provides an accelerated schedule to west Tennessee residents in the J ackson, Dyersburg, and Millington, Tennessee areas.
A. General Education (35-41 hours)
B. Coordinated Study ( 33 hours)

Administration and Supervision (3 hours) ( Take one course from this group):
METH 4381 Principles of Supervision
MGMT 3110 Principles of Supervision and Management
PADM 3601 Public Administration
Organizational Systems (3 hours) (Take one course from this group):
MGMT 3215 Human Resources Management
MGMT 4420 Organizational Behavior in Business
PADM 4226 Nonprofit Organizations
Statistical and Research Methods (3 hours) (Take one course from this group):
EDPR 4541 Educational Statistics
PSYC 3001 Psychological Statistics
SOCI 3311 Social Statistics
Written Communications (3 hours) (Take one course from this group):
ENGL 3601 Technical and Professional Writing
ENGL 3604 Persuasive Writing
J OUR 3421 Public Relations Writing
MGMT 3510 Business Communications
Team and Organizational Relations (3 hours) (Take one course from this group):
COMM 4011 Communications in Organizations
COMM 4342 Small Group Communication
COMM 4373 Interracial Communications
COMM 4375 Intercultural Communications
COUN 4621 Human Interactions
Political and I nternational Context (3 hours) (Take one course from this group):
ACCT 3130 Legal, Social, Political Environment of Business
ACCT 3011 Business Law
ECON 4130 Government Regulation of Business
HIST 3212 Latin American Nations
HIST 3274 Modern Islamic World
HIST 3291 Modern Asia
HIST 3302 Modern Europe
HIST 4881 African-American History
POLS 3213 Introduction to the Study of Public Policy
POLS 3509 Contemporary Problems International Relations
POLS 3302 Western European Government and Politics
POLS 3304 African Politics
POLS 3306 Latin American Government and Politics
POLS 3309 Government and Politics of the Middle East
POLS 4305 Post-Soviet Governments and Politics
POLS 4307 Government and Politics of Communist China
Social and Cultural Context of Leadership ( 15 hours)
( Take 5 courses, no more than 3 courses from any one area):
ACCT 3130 Legal, Social, Political Environment of Business*
COUN 4611 Introduction to Counseling
COUN 4621 Human Interactions*
COUN 4781 Strategies for Crisis Intervention
COUN 4783 Alcohol and Drug Abuse Services
ECON 3411 Economics of Social Issues
ENGL 4372 African American Authors through the Harlem Renaissance
ENGL 4373 African American Authors Since the Harlem Renaissance
ENGL 4451 Women and Literature
HIST 4851 History Women in America
HIST 4881 African American History*
JOUR 3400 Introduction to Public Relations
LEAD 3350 The Adult Learner
METH 4381 Principles of Supervision*
MGMT 3110 Principles of Supervision and Management*
PADM 3601 Public Administration*
PADM 4226 Nonprofit Organizations*
PSYC 3101 Psychology of Personality
PSYC 3102 Abnormal Psychology
PSYC 3106 Social Psychology
SOCI 3422 Racial and Ethnic Minorities
SOCl 3432 Sociology of Gender
SOCI 4460 Black and White Women in the South
SOCI 4631 Cities in Change
UNIV 4110 Internship**
*These courses may be used to fulfill one requirement only for group A-G
** Students who do not have a significant amount of work or volunteer experience at a supervisory level,
usually two years, MUST take UNIV 4110 (internship) for one of their Group G classes. The determination
of whether or not UNIV 4110 is required will be made by the Academic Advisor in consultation with the
Assistant Dean of the University College.
C. Thematic Studies ( 6 hours)
D. Senior Project (4 hours)
UNIV 4990 Project Planning Seminar ( 1 hr ) [Completed the next to last semester]
UNIV 4995 Senior Project ( 3 hrs) [Completed during the final semester]

## E. Electives (hours vary)

## PARALEGAL STUDIES

Paralegal Studies courses are designed for students seeking professional knowledge and skills necessary to perform substantive legal work under the direction and supervision of an attorney. Only licensed attorneys are permitted to practice law; however, qualified paralegals working under attorney supervision can contribute significantly to the efficient delivery of legal services in an expanding variety of private law office, corporate, and government agency settings.

University College's Paralegal Studies Program offers the B.P.S. degree with a concentration in Paralegal Services. The paralegal professional core courses emphasize (1) theoretical and practical applications of legal and ethical principles; (2) collection, organization, and critical analysis of legal materials; (3) effective communications and computer skills; (4) initiative, flexibility, and cooperation in the workplace; and (5) preparation to meet the challenges of a demanding profession while avoiding the unauthorized practice of law by lay persons.

The Paralegal Studies Program is approved by the American Bar Association.

## Paralegal Services Advising Guidelines

Students pursuing the B.P.S. degree with a concentration in Paralegal Services complete all University College degree and graduation requirements including the Coordinated Study degree component according to the following guidelines:

## Program Summary

A. General Education (35-41 hours)
B. Paralegal Professional Core ( $\mathbf{3 6}$ hours)
( At least 18 hours of these core courses must be completed at the University of Memphis with a minimum grade of "C-" in each course).
Paralegal Requirements** [27 hours]
LEGL 2400 Legal Ethics
LEGL 2410 Introduction to Law
LEGL 2420 Legal Research and Writing I
LEGL 3410 Contracts and Commercial Law
LEGL 3420 Torts
LEGL 3430 Business Associations
LEGL 3440 Civil Procedure
LEGL 3450 Legal Research and Writing II
LEGL 4410 Paralegal Internship
Paralegal/ Law-Related Electives [9 hours]
CJUS 3510 Law and Society
CJ US 3521 Constitutional Criminal Procedure
CJUS 4530 Principles of Evidence and Proof
COMM 4812 Communications Law in Performing Arts
FIR 3310 Real Estate Principles
FIR 4011 Estate Planning and Law of Taxation
J OUR 4700 Mass Communications Law
LEGL 3481 Family Law
LEGL 3482 Labor Law
LEGL 3483 Computers in the Law
LEGL 3484 Bankruptcy Practices
LEGL 3485 Real Estate Practices
LEGL 3486 Criminal Law and Procedure
LEGL 3487 Administrative Law and Procedure
LEGL 4450 Legal Research and Writing III
POLS 4200 Environmental Law, Policy, and Regulation
POLS 4222 Urban Politics
Communications Requirements [6 hours]
(Select one course from each group listed below; a minimum grade of $\geqslant>\boldsymbol{\theta} \hat{2}$ is required)
Group 1: Written Communications (W)
ENGL 3601 Technical and Professional Writing
ENGL 3604 Persuasive Writing
ENGL 4602 Advanced Composition
MGMT 3510 Business Communications
Group 2: Interpersonal Communications
COMM 3341 Discussion
COMM 4341 Interpersonal Communication
COUN 4621 Human Interactions
COUN 4781 Strategies for Crisis Intervention
I nterdisciplinary Requirements [15 hours]
(Select one course from each of the groups listed below; a minimum grade of $\boldsymbol{\rho} \boldsymbol{\rho} \boldsymbol{\beta}$ is required)
Group 1: Business and Administrative Applications
CJUS 4180 Corporate and White Collar Crime
FIR 3011 Business Law

FIR 3130 The Legal, Social, and Political Environment of Business
FIR 4011 Estate Planning and Law of Taxation
FIR 4310 Real Estate Law
MGMT 3215 Management of Human Resources
PADM 3601 Public Administration
POLS 4221 Urban Administration
Group 2: Philosophical and Constitutional Perspectives
CJUS 4531 Issues in Constitutional Rights
HIST 3275 History of the Jewish People
HIST 3840 United States Constitutional History
HIST 4851 History of Women in America
HIST 4881 African-American History
HIST 4941 History of the American Indian
PHIL 3741 African-American Philosophy
PHIL 4551 Social and Political Philosophy
POLS 4211 Constitutional Law: National Powers
POLS 4212 Constitutional Law: The Origins \& Evolution of Civil Liberties in the U.S.
POLS 4405 Origin and Development of American Political Thought
Group 3: Law in Society
CJUS 3426 Corrections in America
CJUS 3510 Law and Society
CJ US 3521 Constitutional Criminal Procedure
CJ US 4170 Prevention and Deterrence to Crime
CJUS 4520 Substantive Criminal Law
PADM 4208 Mental Health Policy and Law
PADM 4209 Aging Policy and Law
PADM 4224 Urban Problems
POLS 4416 African-American Political Thought
POLS 4504 International Law
SOCI 3420 Sociology of the South
SOCI 3541 Criminology
Group 4: Ethical/Moral/Social Issues
ANTH 3242 Peoples of Africa
CJUS 3152 Drug Addiction and Alcoholism
CJUS 4130 Ethical Dilemmas in Criminal Justice
PHIL 3411 Contemporary Moral Problems
PHIL 3511 Ethics
PHIL 3514 Biomedical Ethics
POLS 3402 Legal/Political Thought: Modern
SOCI 4420 Racial Inequality
SOCl 4442 Sociology of Poverty
SOCI 4460 Black and White Women in the South
SOCI 4631 Cities in Change
Group 5: Research and Statistical Applications (C)
EDPR 4541 Fundamentals of Applied Statistical Methods
ENGL 3604 Persuasive Writing
POLS 4101 Political Statistics
SOCI 3311 Social Statistics
C . Thematic Studies ( 6 hours)
D. Senior Project (4 hours)

UNIV 4990 Project Planning Seminar ( 1 hr ) [Completed the next to last semester]
UNIV 4995 Senior Project ( 3 hrs ) [Completed during the final semester]

## E. Electives (hours vary)

## PRE-SCHOOL AND CHI LDCARE ADMI NI STRATI ON

These guidelines are designed for persons seeking careers in the administration of early childhood programs
including childcare centers, both for-profit and non-profit; private and public pre-kindergarten programs; Head Start; pre-schools; parents' day out programs; before and after school care; and centers for children with special needs. Also served by these guidelines are persons with experience in childcare settings from a wide variety of backgrounds, including childcare volunteers and aides, as well as teachers and directors. In addition to core content in early childhood professional knowledge, there is course work to develop skills in fiscal management, recruiting and hiring personnel, health and safety management, board relations, marketing and public relations, and liaison with professional associations and regulatory agencies. These guidelines build upon and incorporate courses in childcare administration and early childhood studies offered at Southwest Tennessee Community College.

Note: This program does not lead to Tennessee state licensure for school administration.

## A. General Education (35-41 hours)

B. Coordinated Study ( $62 \mathbf{h r s}$ ) Students must earn a grade of C or better in all Coordinated Study courses

## Child Development and Learning* (24 hrs)

ECED 3555 Observation/Assessment Infant/Early Childhood Development
ECED 4500 Emergent Literacy \& Language Development
ECED 4510 Foundations of Early Childhood Education
ECED 4515 Teach and Learning in Early Childhood Education
EDPR 2111 Development Across the Life Span
EDPR 4301 Early Childhood Development
SPED 2000 Issues of Human Diversity
SPED 4900 Consultation with School/Family/Community
Families and Culture: ( 9 hrs) Pick ONE course from EACH group
Group A
SOCI 3401 Social Inequality
SOCI 3422 Racial and Ethnic Minorities: A Socio-Historical Approach
SOCI 4420 Racial Inequality
SOCl 4442 Sociology of Poverty
Group B
ANTH 3511 Culture, Kin and Family
ANTH 4411 Urban Anthropology
HIST 4831 History of American Family
HIST 4863 History of Childhood in America
SOCI 3831 Marriage and the Family
Group $\mathbf{C}$
HIST 4851 History of Women in America
SOCI 3432 . Sociology of Gender
SOCI 4460 Black and White Women in the South
UNIV 2304 Gender and Society
Program Administration (27 hours)
Fiscal Management
ACCT 2010 Fundamentals of Accounting I
ACCT 2020 Fundamentals of Accounting II
MIS 2749 Introduction to Business Microcomputer Applications
(Students may take COMP 1200 in place of MIS 2749)
Human Resource Management
MGMT 3110 Organization and Management
MGMT 3215 Management of Human Resources
Health And Safety Management
NUTR 2202 Nutrition
EXSS 3306 Elementary School Health and Wellness
Marketing and Public Relations (Select one course)
JOUR 3400 Introduction to Public Relations or
MKTG 3010 Principles of Marketing
Internship or Experiential Learning:

UNIV 4110 or UNIV 3900
C . Thematic Studies ( 6 hours)
D. Senior Project (4 hours)

UNIV 4990 Project Planning Seminar ( 1 hr ) [Completed the next to last semester]
UNIV 4995 Senior Project ( 3 hrs ) [Completed during the final semester]
E. Electives (hours vary)

## TECHNOLOGY MANAGEMENT SERVI CES

Technology Management Services is designed for experienced technicians who wish to enhance their technical expertise while at the same time increasing their skills in management, organizational relations, and communication; their knowledge of contexts within which the management of technology fits; their understanding of workplace issues that can affect productivity; and their ability to manage diversity in the workforce.

## Program Summary

A. General Education (35-41 hours)
B. Coordinated Study (54 Hours)

Technology Concentration 24 hours ( 12 hours must be upper-division)
This includes courses taken from such departments as Engineering, Engineering Technology, Manufacturing Engineering, Architecture, Mathematics, Construction Technology, Computer Science, Biology, Chemistry, Physics, and approved Earth Sciences courses.
It is assumed that students will take all technology concentration courses from one area. Students wishing to take a combination of classes from the above areas need permission of the University College Dean. A limited number of courses from Management Information Systems (MIS/ISDS) is allowed but can not make up the entire content of the technology concentration.
Management Services (30 hours)
Administration and Supervision (3 hours, Take one course from the following group)
MGMT 3110 Organization and Management
METH 4381 Principles of Supervision
PADM 3601 Public Administration
Organizational Systems (3 hours, Take one course from the following group)
MGMT 3215 Management of Human Resources
MGMT 4420 Organizational Behavior in Business
PADM 4226 Introduction to Nonprofit Organizations
PSYC 3508 Industrial \& Organizational Psychology
Marketing and Public Relations (3 hours, Take one course from the following group)
MKTG 3010 Principles of Marketing
J OUR 3400 Public Relations
Administrative Skills (3 hours, Take one course from the following group)
ACCT 2010 Fundamentals of Accounting I
MIS 2749 Business Microcomputer Applications
MIS 2755 Introduction to Management Information Systems
MIS 2770 Computer Hardware/Software
Statistical \& Research Methods (3 hours, Take one course from the following group)
SOCI 3311 Social Statistics
EDPR 4541 Fundamentals of Applied Statistical Methods
ISDS 3711 Analytical Tools for Business Decisions
MATH 1601 Statistical Reasoning
MATH 4611 Introduction to Applied Statistics
Team and Organizational Relations ( 3 hours, Take one course from the following group)
COMM 4011 Communications in Organizations
COMM 4342 Small Group Communication
COMM 4373 Interracial Communication
COMM 4375 Intercultural Communication
COUN 4621 Human Interactions

COUN 4781 Strategies for Crisis Intervention
Written Communication ( 3 hours, Take one course from the following group)
ENGL 3601 Technical and Professional Writing
ENGL 3602 Writing and Editing in the Professions
ENGL 3603 Engineering Communications
ENGL 3604 Persuasive Writing
MGMT 3510 Business Communications
Social \& Cultural Context ( 3 hours, Take one course from the following group)
ANTH 4412 Neighborhood Development and Poverty
ANTH 3511 Culture, Kin and Family
CJUS 4180 Corporate and White Collar Crime
CJUS 4235 Private and Industrial Security
COMM 3003 Television and Culture
SLS 3105 Sport and Leisure as Popular Culture
SOCI 3422 Racial and Ethnic Minorities
SOCl 3432 Sociology of Gender
SOCI 3831 Marriage and Family
SOCI 4631 Cities in Change
Political \& Economic Context ( 3 hours, Take one course from the following group
ACCT 3130 Legal/Political/Social Environment of Business
ECON 3411 Economics of Social Issues
ECON 4130 Government Regulation of Business
HIST 4824 Business History
POLS 4510 Politics in a Global Economy
ESCI 3430 Economic Geography
Technology \& Culture ( 3 hours, Take one course from the following group)
COMM 4014 Computer Mediated Communication
HIST 3035 Technology and Culture in American History
PHIL 3512 Science, Technology and Human Values
PHIL 3514 Biomedical Ethics
C . Thematic Studies ( 6 hours)
D. Senior Project (4 hours)

UNIV 4990 Project Planning Seminar ( 1 hr ) [Completed the next to last semester]
UNIV 4995 Senior Project (3 hrs) [Completed during the final semester]

## E. Electives (hours vary)

## GUIDELINE PROGRAMS § BACHELOR OF LIBERAL STUDIES

## AMERICAN STUDIES

American Studies engages students in an examination of the culture and society of the United States with attention paid to the ways in which Americans express their basic values and give meaning to their institutions and everyday social practices. These values, institutions, and practices are a reflection, in part, of the different experiences of a people, according to their race, gender, class, and historical roots. These guidelines provide students and faculty the opportunity to explore the commonalities and differences among Americans through an interdisciplinary course of study.

## Program Summary

A. General Education (35-41 hours)
B. American Studies Concentration ( 33 hours)

Required Core: (take all of the following)
HIST 2010 The United States to 1877
HIST 2020 The United States Since 1877
UNIV 3531 American Experience: Images and Narrative
Group 1: Literature, Communications and Fine Arts
(Take at least 4 courses from this group)

ARTH 4166 Social History of American Art
ARTH 4185 African-American Art
COMM 3361 African-American Rhetoric
COMM 4360 Great American Speeches
COMM 4381 Senior Seminar in Rhetoric and Communication
COMM 4851 Film History II (1940-1960)
COMM 4856 Women and Film
ENGL 3321 American Literature Before 1860
ENGL 3322 American Literature: 1860-WWI
ENGL 3323 American Literature: WWI-Present
ENGL 3521 The American Language
ENGL 4372 Major African-American Authors Through the Harlem Renaissance
ENGL 4373 Major African-American Authors Since the Harlem Renaissance
HIST 3863 Social and Intellectual History of the United States
J OUR 1700 Survey of Mass Communication
J OUR 3700 History of Journalism
JOUR 4702 Current Issues in Journalism
MUHL 4801 American Folk and Popular Music
MUHL 4805 History of Rock and Roll
MUHL 4806 History of J azz
MUHL 4807 Memphis Music
SLS 3105 Sports and Leisure as Popular Culture

## Group 2: History, Philosophy, Politics and Social Institutions

(Take at least 4 courses from this group)
ANTH 4336 Native Peoples of the Mid-South
ANTH 3282 Cultural History of American Communities
ANTH 4420 American Folklore
CJUS 3326 Courts in America
CJUS 3426 Corrections in America
ECON 3210 Labor Economics
ECON 3411 Economics of Social Issues
ESCI 3401 Historical Geography of the United States
HIST 3035 Technology and Culture in American History
HIST 3823 Economic History of the U.S.
HIST 3905 History of Memphis
HIST 4670 Civil War and Reconstruction
HIST 4701 The United States: 1914 to the Second World War
HIST 4851 History of Women in America
HIST 4881 African-American History
HIST 4941 History of the American Indian
LEAD 4000 Leadership and Reform in American Schools
PADM 4221 Issues in Urban Administration
PHIL 3880 Problems in Philosophy (when topic pertains to the U.S. )
PHIL 3741 African-American Philosophy
POLS 3103 Religion and Politics
POLS 3217 The Political Media
POLS 3506 American Foreign Policy
POLS 4211 Constitutional Law: National Powers
POLS 4212 Constitutional Law: Origins and Evolution of Civil Liberties in the U.S.
POLS 4217 Legislative Process
POLS 4224 Urban Problems
POLS 4405 Origin and Development of American Political Thought
POLS 4506 Problems of American Foreign Policy
SLS 4145 The Cultural Formation of Sports in Urban America
SOCI 3420 Sociology of the South
SOCI 4420 Racial Inequality
SOCI 4460 Black and White Women in the South

SOCI 4631 Cities in Change
C. Thematic Studies ( 6 hours)
D. Senior Project (4 hours)

UNIV 4990 Project Planning Seminar ( 1 hr ) [Completed the next to last semester]
UNIV 4995 Senior Project ( 3 hrs) [Completed during the final semester]

## E. Electives (hours vary)

## RELIGION IN SOCIETY

These guidelines are designed to serve persons who are interested in the study of religion and who want to work within some type of religious organization. They offer an historical understanding of the place of religion in society as well as an understanding of the social and individual dimensions of religious experience. They also offer an opportunity to study various religious belief systems from an academic perspective. Persons who want to serve in religious organizations may use these guidelines to gain practical skills. Graduates may enter graduate study in religion and receive further preparation for careers in religious organizations, as leaders, administrators, directors of education, counselors, teachers, social workers, or youth directors.

## Program Summary

A. General Education (35-41 hours)
B. Coordinated Study ( $\mathbf{6 0}$ hours)

Core Courses © ( 15 hours required)
ANTH 4253 Anthropology of Religion
JDST 2850 Religions of Abraham: Judaism, Christianity, Islam
PHIL 3701 Human and the Divine
SOCI 3860 Sociology of Religion
UNIV 3581 Faith, Reason, and Imagination

## Context Courses e (21 hours) © Choose at least one course from each category

Religious Perspectives and Society
HIST 3273 Islamic Civilization
HIST 3274 Modern Islamic World
HIST 3275 History of the Jewish People
HIST 4361 History of the Byzantine Empire
HIST 4371 Early Middle Ages
HIST 4372 The High Middle Ages
HIST 4390 Europe in the Age of the Reformation
HIST 4882 Civil Rights Movement in the U.S. since 1930
JDST 3601 Judaism
JDST 3801 Jewish Thought I
JDST 3802 J ewish Thought II
PHIL 3721 Oriental Philosophy
PHIL 4711 Philosophy of Religion
POLS 3102 Religion and Politics
Arts \& Literature
ARTH 4130 Art of the Medieval World
ARTH 4143 Art of High Renaissance Italy
ARTH 4181 Traditional Arts of Africa, Oceania, and North America
CLAS 2481 Mythology
ENGL 4461 Bible as Literature
MUSA 4104 Sacred Music in History and Practice I
MUSA 4105 Sacred Music in History and Practice II
UNIV 3580 Hebrew and Greek Legacy
Individual Development
PSYC 3101 Psychology of Personality
PSYC 3102 Abnormal Psychology
PSYC 3103 Child Psychology
PSYC 3104 Adult Psychology

PSYC 3106 Social Psychology
SOCI 3701 Individual and Society
Individual in Society
ANTH 3511 Culture, Kin and Family
CJUS 3540 Criminology
HIST 4851 History of Women in America
HIST 4881 African-American History
PHIL 3411 Contemporary Moral Problems
SOCI 3422 Ethnic Minorities
SOCl 3432 Sociology of Gender
SOCI 3831 Marriage and Family
SOCI 4460 Black and White Women in the South
SOCl 4541 Sociology of Aging
SOCl 4923 Social Institutions and the Life Cycle
Urban Society
ANTH 4411 Urban Anthropology
ANTH 4412 Neighborhood Development
HIST 4871 United States Urban History
SOCl 4442 Sociology of Poverty
SOCI 4631 Cities in Change
UNIV 3527 Making the Humane City (6 hours)

## Skills for Service $\Leftrightarrow 18$ hours $\triangleq$ (Choose at least one course from each category) Administrative Skills

ACCT 2010 Fundamentals of Accounting I
MIS 2749 Introduction to Business Microcomputer Applications
MGMT 3110 Organization and Management
MKTG 3010 Principles of Marketing
PADM 3601 Public Administration
PADM 4226 Introduction to Nonprofit Organizations
SOCI 3311 Social Statistics

## Counseling

COUN 4611 Introduction to Counseling
COUN 4781 Strategies for Crisis Intervention
COUN 4783 Alcohol and Drug Abuse Services*
*Students may want to take PSYC 3507 - Alcohol, Drugs and Behavior concurrently
Education
COUN 4621 Human Interactions
EDPR 2111 Development Across the Life Span
EDPR 3302 Child and Adolescent Development
EDSV 3350 The Adult Learner
EDSV 4350 Instructional Development for Training
HPRO 4401 Death and Dying Education
SLS 3305 Leisure and Recreation Program Development
SLS 3905 Leisure and Recreation for People with Disabilities
Communication
COMM 4011 Communication in Organizations
COMM 4341 Interpersonal Communication
COMM 4342 Small Group Communication
COMM 4373 Interracial Communication
ENGL 3601 Technical and Professional Writing
ENGL 3604 Persuasive Writing
Applied and Experiential Learning or Internship (6 hours)
UNIV 4110 Internship or
UNIV 3900 Advanced Experiential Learning
(For prior learning, credit may be awarded for learning relevant to the major area of study based on assessment of an Experiential Learning portfolio that describes and documents the learning experiences. http://www.uc.memphis.edu/experiential.htm)

## C . Thematic Studies ( 6 hours) <br> D. Senior Project (4 hours)

UNIV 4990 Project Planning Seminar ( 1 hr ) [Completed the next to last semester]
UNIV 4995 Senior Project (3 hrs) [Completed during the final semester]
E. Electives (hours vary)

## MI NORS

Students majoring in any department within the University may enhance their academic experience through University College minors in American Studies, Judaic Studies, and Religion in Society. If a University College student chooses to complete a minor, courses within the minor must differ substantially from courses within the student's coordinated study. A University College student may be certified as having a minor only if at least fifteen hours taken for the minor are not included in the coordinated study.

## ALCOHOL AND DRUG ABUSE SERVICES

This interdisciplinary minor examines societal alcohol and drug abuse from the perspectives of anthropology, counseling, criminal justice, psychology, and sociology. The minor is open to students majoring in any undergraduate program at the University of Memphis or to special students who wish to enroll in order to take such a program.

## Alcohol and Drug Abuse Services (18 hours)

This interdisciplinary minor examines societal alcohol and drug abuse from the perspectives of anthropology, counseling, criminal justice, psychology, and sociology. The minor is open to students majoring in any area within any undergraduate college at The University of Memphis or to special students who wish to enroll in order to take such a program.
A. Required core courses ( 9 hours):

ANTH 4531 Alcohol, Drugs and Culture
COUN 4783 Alcohol and Drug Abuse Counseling
PSYC 3507 Alcohol, Drugs and Behavior
B. Plus 3 additional courses from the following list (9 hours):

CJUS 3152 Drug Addiction and Alcoholism
COUN 4781 Crisis Intervention
SOCI 3501 Deviant Behavior
SOCI 3112 Contemporary Social Problems
SOCl 4851 Medical Sociology

## AMERICAN STUDIES

The American Studies minor engages students in an examination of the culture and society of the United States, with attention paid to the ways in which Americans express their basic values and give meaning to their institutions and everyday social practices. These values, institutions, and practices are a reflection, in part, of the different experiences of a people, according to their race, gender, class, and historical roots. This minor provides an opportunity to explore the commonalities and differences among Americans through an interdisciplinary course of study.

## A. Required Core Courses ( 6 hours)

UNIV 35xx and/or UNIV 45xx

## B. Elective Courses ( 12 hours)

Select one course from each of the following groups, plus two additional courses from these groups. No more than two courses from any single department will be accepted.

## Group 1

COMM 4381 Senior Seminar in Rhetoric and Communication
COMM 4851 Film History II
COMM 4856 Women and Film
ENGL 3325 African American Literature through the Harlem Renaissance

ENGL 3326 African American Literature since the Harlem Renaissance
ENGL 3327 American Literature to 1890
ENGL 3328 American Literature since 1890
ENGL 3521 The American Language
MUHL 4801 American Folk and Popular Music
MUHL 4804 Blues
MUHL 4805 History of Rock and Roll
MUHL 4806 History of J azz
MUHL 4807 Memphis Music

## Group 2

ANTH 3282 Cultural History of American Communities
ANTH 4336 Native Peoples of the Southeastern United States
ESCI 3401 Historical Geography of the U.S.
HIST 3035 Technology and Culture in American History
HIST 3863 Social and Intellectual History of the United States
HIST 4701 The United States, 1914 to the Second World War
HIST 4851 History of Women in America
HIST 4941 History of the American Indian
SOCI 3420 Sociology of the South
SOCI 4420 Racial Inequality
C. With the signed permission of the dean of the University College or the dean's designate, the following are acceptable: (1) A course from Group 1 of Section B can be substituted for one of the courses in Section A. (2) Up to two courses may be substituted for those listed in Section B. In content and approach, these courses will have a distinct American Studies emphasis.

## CHI LD DEVELOPMENT (18 hours)

This interdisciplinary minor will attract students with majors in education, family and consumer studies, human services, nonprofit administration, psychology, social work, and related areas.
A. Required core courses ( $\mathbf{1 2}$ hours):

CSED 3302 Child and Adolescent Development
EDPR 2111 Development Across the Life Span
EDPR 3301 Early Child Development
PSYC 3103 Child Psychology
B. Plus 2 additional courses from the following list ( $\mathbf{6}$ hours):

ANTH 3511 Culture, Kin and Family
CJ US 4533 Juvenile Delinquency: Theory and Process
CSED 3401 Parenthood Education
CSED 4101 Preschool Curriculum
CSED 4211 Readings in Child Development and Family Relations
HIST 4863 History of Childhood in America
PSYC 3101 Psychology of Personality
PSYC 3102 Abnormal Psychology
PSYC 3506 Human Sexuality
PSYC 4034 Children's Social Relationships
SOCI 3432 Sociology of Gender
SOCI 3831 Marriage and the Family
SWRK 4934 Child Welfare Policy and Services

## RELIGION IN SOCIETY (18 hours)

The University College offers an interdisciplinary minor in Religion in Society. This minor examines the role of religion in society as seen from the perspectives of cultural and social organizations; of history and philosophy; of art and music. The minor is open to students majoring in any area within any undergraduate college at The University of Memphis or to special students who wish to enroll in order to take such a program.
A. Required Core Courses (9 hours)

ANTH 4253 Anthropology of Religion
JDST 2850 Religions of Abraham
PHIL 3701 The Human and the Divine

- Additional Courses (9 hours)
(Select one course each from any three of the following four groups of courses): Group 1
ANTH 3351 Old World Archaeology
JDST 4511 Holocaust Studies
POLS 3102 Religion and Politics
SOCI 3860 Sociology of Religion


## Group 2

JDST 3801 Jewish Thought I
PHIL 3411 Contemporary Moral Problems
PHIL 3511 Ethics
PHIL 3721 Chinese Philosophy
UNIV 3581 Faith, Reason, and Imagination
Group 3
HIST 3274 Modern Islamic World
HIST 3275 History of the Jewish People
HIST 3290 Traditional Asia
HIST 4361 History of the Byzantine Empire
HIST 4372 The High Middle Ages
HIST 4390 Europe in the Age of the Reformation
HIST 4882 Civil Rights Movement in the United States Since 1930
Group 4
ARTH 4130 Art of the Medieval World
ARTH 4143 Art of the High Renaissance in Italy
ARTH 4181 Traditional Arts of Africa, Oceania and North America
CLAS 2481 Mythology
ENGL 4461 The Bible as Literature
JDST 3661 Old Testament
MUSA 4104 Sacred Music in History and Practice I
MUSA 4105 Sacred Music in History and Practice II
UNIV 3580 Hebrew and Greek Legacy

## A SECOND BACHELOR'S DEGREE

Students seeking to earn a second bachelor's degree through University College must satisfy all degree requirements of the college, the university, and the Tennessee Board of Regents.

## REGENTS ONLI NE DEGREE PROGRAM

The degrees offered are:<br>Bachelor of Professional Studies with concentrations in<br>Information Technology or Organizational Leadership<br>Bachelor of Interdisciplinary Studies<br>(General Studies/Liberal Studies/University Studies)

Tennessee Board of Regents' colleges, universities, and technology centers joined to offer the Regents Online Degree Programs (RODP). All the institutions are fully accredited. All six TBR universities deliver and award the noted bachelor's degrees. Courses completed in the Regents Online Degree Programs are entirely online and transferable among all the participating institutions.

For information about the requirements and courses for the Regents Online Degree Program, please see:

The courses below are available online for the degrees offered through the Regents Online Degree Program. Please note: Unless otherwise stated, courses taken below may not satisfy University of Memphis degree programs. It is encouraged for an advisor to be consulted before enrolling in any online course.

ACC 1104. Principles of Accounting I. (3). (Same as UofM ACCT 2010).
ACC 1105. Principles of Accounting II. (3). (Same as UofM ACCT 2020)
AGR 130. Introduction to Animal Science. (3).
AHSC 4547. Corporate Etiquette.
ASTR 1030. Astronomy. (4).
BIOL 1430. Nutrition. (3). (Same as UofM NUTR 2202).
BIOL 3100. Genetics (4).
BIOL 4417. Teach Science/Secondary. (4 ).
BIT 1150. Introduction to Micro Computers. (3).
BMGT 3600. International Management. (3).
BMGT 3630. Human Resource Management. (3). (Same as UofM MGMT 3215).
BUS 1050. Legal Issues for the Web. (3).
CHEM 3005. Organic Chemistry Survey. (4).
CIS 113. Visual Basic. (3).
CIS 1610. Programming in C++. (3).
CIS 173. Programming in C\#. (3).
CIS 186. Database Programming. (3).
CIS 193. Introduction to Linux. (3).
CIS 263. Web Page Development and Design. (3).
CIS 264. Web Page Applications. (3).
CIS 1100. Technology for Teachers. (3).
CJA 1100. Introduction to Criminal Justice Administration. (3). (Same as UofM CJUS 1100).
CJA 2600. Corrections. (3).
CMT 1010. Network and PC Communications. (3).
COL 101. Orientation: The College Experience. (3).
COM 1000. Beginning HTML. (3).

COM 1010. Basic Web Design. (3).
COM 1020. Basic Web Graphics. (3).
COMM 3010. Integrated Corporate Communication. (3).
COMM 3560. Intercultural Communication. (3). (Same as UofM COMM 4375).
COMM 4410. Conflict Resolution and Negotiation. (3).
COMM 4910. Public Relations Campaign. (3).
COMP 3050. Programming Languages. (3).
CSC 3700. Software Analysis and Design. (3).
CSCl 3222. Database Management System. (3).
CST 203. Data Structures. (3). (Same as UofM M COMP 2150).
CST 209. J ava Programming I. (3).
CST 218. J ava Programming II. (3).
ECED 1010. Introduction to Early Childhood Education. (2).
ECED 2010. Safe, Healthy Learning Environments. (3).
ECED 2015. Early Childhood Curriculum. (3).
ECED 2020. Infant, Toddler Child Development. (3).
ECED 2040. Family Dynamics and Community Involvement. (3).
ECED 2060. Development of Exceptional Children. (3). (Same as UofM SPED 2000).
ECED 2070. Developmental Assessment Methods. (3).
ECED 2085. Math and Science in Early Childhood. (3).
ECED 2130. Clinical Practicum I. (2).
ECON 2030. Survey of Economics. (3).
EDCI 4900. Multicultural Education. (3).
EDU 1100. Technology for Teachers. (3).
EDU 201. Foundations of Education. (3). (Same as UofM LEAD 2010).
EDU 2050. Classroom Management. (3).
EDU 250. Instructional Technology in Education. ( 3). (Same as UofM IDT 3600).
ELED 4260. Teaching and Learning with Internet Technology. (3).
ENGL1010. English Composition I. (3).

ENGL 1020. English Composition II. (3).
ENGL 1110. Research Writing Methods. (1).
ENGL 1113. Introduction to Research. (3).
ENGL 1114. Technical Editing. (3).
ENGL 2010. Introduction to Literature 1: Fiction. (3).
ENGL 2110. American Masterpieces I (3).
ENGL 2112. Technical Report Writing. (3).
ENGL 2114. Writing for Industry. (3).
ENGL 2116. Writing for the Web. (3).
ENGL 2120. American Masterpieces II. (3).
ENGL 2210. English Masterpieces I. (3).
ENGL 2220. English Masterpieces II. (3).
ENGL2410. Western World Literature I. (3).
ENGL 2420. Western World Literature II. (3).
ENGL 2630. Literature for Children. (3).
ENGL 3134. Computers, Writing and Literature. (3).
ENGL 3250. Professional Communication. (3). (Same as UofM ENGL 3601).
ENGL 3290. Introduction to Film. (3).
ENGL 4100. Writing for the Internet \& Electronic Media. (3).
ENGL 4680. Continental Literature. (3).
ENGL 4700. Non-Western Literature. (3).
ENTC 3030. Technical Communication. (3).
FACS 4547. Corporate Etiquette. (3).
GEOG 105. World Regional Geography. (3).
GEOG 3710. Geography of the United States . (3).
HIST 1110. Civilization: Past \& Present to 1500. (3). UofM title World Civilization I
HIST 1120. World History Since 1500. (3). UofM title World Civilization II
HIST 220. African American History. (3).
HIST 2010. US History I. (3).

HIST 2020. US History II. (3).
HIST 2030. Tennessee History. (3).
HIST 3811. U.S. Military \& Naval History. (3).
HIST 3880. Renaissance and Reformation Europe . (3).
HIST 4670. Civil War and Reconstruction, 1850-1877. (3)
HMSE 1100. Concepts of Fitness and Wellness. (2).
HPRO 2100. Wellness Concepts \& Practices. (3).
HPSS 3550. Principles of Sports Fitness. (3).
HTL 110. Introduction to Hospitality Industry. (3).
INFS 3700. Introduction to System Analysis. (3).
INFS 4900. Seminar and Data Communications. (3).
INTC 1050. Computer Graphics. (3).
JOUR 3400. Introduction to Public Relations. (3).
J OUR 3410. Public Relations Research. (3).
J OUR 3421. Public Relations Writing. (3).
J OUR 4250. Mass Media Law. (3).
J OUR 4420. Public Relations Case Study. (3).
JOUR 4712. Mass Media and Cultures. (3).
LDSP 3000. Leadership Development. (3).
LIST 4093. Special Topics and Leadership. (3).
MATH 1110. College Algebra. (3).
MATH 1130. College Algebra. (3).
MATH 1410. Number Concepts for Elementary Education. (3).
MATH 1420.Geometry for Elementary Education. (3).
MATH 1530. Probability/Statistics (non calculus). (3).
MATH 1630. Finite Mathematics. (3).
MATH 1710. Precalculus. (3).
MATH 1720. Precalculus II (Trigonometry). (3).
MATH 1830. Intuitive Calculus. (3).

MATH 1910. Calculus I. (4).
MATH 1920. Calculus II. (4).
MATH 2010. Introduction to Linear Algebra. (3).
MATH 2810 Discrete Structures \& Mathematical Reasoning. (3).
MATH 4000. Mathematics Seminar. (1).
METH 4381. Principles of Supervision. (3).
MGMT 3030. Management of Service Organizations. (3).
MGMT 3220. Management Information Systems. (3).
MGMT 3610. Principles of Management and Organizational Behavior. (3). (Same as UofM MGMT 3110).
MKT2450. E-Commerce. (3).
MUS 1030. Music Appreciation. (3). GenEd Hum Baccalaureate
NURS 4210. Health Care Research. (3).
ORCO 3240. Organizational Communications. (3). (Same as UofM COMM 4011).
PADM 3601. Public Administration. (3).
PADM 4401. Comparative Public Administration. (3).
PADM 4226. Introduction to Nonprofit Organizations. (3).
PHIL 121. Elementary Ethics. (3).
PHIL 1030. Introduction to Philosophy. (3).
PHIL 201. Introduction to World Religions. (3).
PHYS 1030. Concepts of Physics \& Lab. (4).
PM 4120. Organizations Theory and Behavior. (3). web title Organizational
POL 1010. U.S. Government \& Politics. (3).
POL 1020. Introduction to Political Science. (3).
POLI 4350. International Law. (3).
POLS 3010. Comparative Politics. (3).
PS 2020. State and Local Government. (3).
PS 3330. Political Parties and the Electoral. (3).
PS 3510. International Political Economy. (3).
PS 4240. American Foreign Policy. (3).

PSCI 1010. Survey of Physical Science I. (3).
PSY 101. General Psychology I. (3).
PSY 3590. Psychology of Personality. (3).
PSYC 2111. Psychology of Human Growth and Development. (3).
PSYC 3210. Abnormal Psychology. (3).
PSYC 3305. Psychology of Learning and Memory. (3).
PSYC 3306. Physiological Psychology. (3).
PTMA 3020. Managing Information Technology. (3).
PTMA 3500. Methods of Performance Productivity. (3).
PUBH 4707. International Health:Problems/Issues. (3).
SOAA 3350. Social Statistics. (3). (Same as UofM SOCI 3311).
SOAA 3444. Microcomputers as a Research Tool. (3).
SOC 1010. Introduction to Sociology. (3). (Same as UofM SOCI 1111).
SOC 1020. Social Problems. (3).
SOC 3150. Social Psychology. (3). (Same as UofM PSYC 3106).
SOC 3610. Juvenile Delinquency. (3).
SOC 4330. Population and Social Process. (3).
SOC 4510. Social Deviance. (3).
SOC 4720. Sociological Theory. (3).
SOCI 1120. Intro to Cultural Anthropology. (3). (Same as UofM ANTH 1200
SOCI 4510. Introduction to Social Research. (3). (Same as UofM SOCI 3322).
SP 110. Fundamentals of Public Speaking. (3).
SPAN 1010. Spanish I. (3).
SPAN 1020. Spanish II. (3).
SPAN 2010. Intermediate Spanish I. (3).
SPAN 2020. Intermediate Spanish II. (3).
SPAN 355. Latin America :The Countries and the Peoples. (3).
SW 3170. Family Caregiving. (3).
SW 3200. Cultural Diversity. (3).

TEAE 4020. Reading , Writing, and Learning Methods for ESL. (3).
TEAE 4260. Teaching ESL with Internet and Technology. (3).
TEAE 4300. Multicultural Education. (3).
TEAE 4500. Linguistics. (3).
TEAE 4550. Latin America: The Countries and the Peoples. (3).
TEAS 4001. Collaborative Practices, Trends and Issues, and Characteristics of the Exceptional Learner in Special Education. (4).

TEAS 4003. Assessment Procedure/Special Education
TEAS 4004. Applied Behavioral Intervention \& Support
TEAS 4005. Reading Methods Across the Curriculum
TEAS 4006. Assistive Technology. (3).
TEAS 4007. Math Methods Across the Curriculum. (3).
TELC 2101. Survey of Exceptionalities and Diversities. (3).
TELC 2011. Teaching and Technology. (3).
TELC 4001. Adolescent Development. (3).
TELC 4003. Managing the Learning Environment. (3).
TELC 4004. Survey of Exceptional Children. (3).
TELC 4005. Teaching and Learning with Technology. (3).
THEA 1030. Introduction to Theater. (3). Gen Ed UofM
UNIV 3580. Hebrew \& Greek Legacy. (3). Gen Ed UofM Humanities
UNIV 3581. Faith, Reason \& Imagination. (3). Gen Ed UofM Humanities
UNIV 4110. Internship. (6).
UNIV4706. Managing Software Development. (3).
UNIV 4995 [W,I]. Culminating Project. (3).
WEB 2210. CIW Foundations. (3).
WEB 2811. Advanced Computer Graphics. (3).
WEB 2812. Advanced Web Page/Site Design. (3).

## I NDEPENDENT DEPARTMENTS AND PROGRAMS

There are several independent units which contribute to undergraduate programs. The independent departments or programs included here are the University Honors Program, and Transitional Academic Studies.

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- University Honors Program
- Developmental Studies
- Transitional Academic Studies Course Descriptions
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## UNI VERSI TY HONORS PROGRAM

Melinda J ones, Ph.D., Director<br>Room 204, Scates Hall, (901) 678-2690<br>http:/ / honors.memphis.edu

The University Honors Program, founded in 1972, provides exceptional educational opportunities for highly motivated and talented students. The Program enables students (regardless of major) to take advantage of the more intimate learning environment offered by small classes. Honors faculty members promote active learning and provide excellent teaching, including individualized support and attention.

The Program offers special curricular options and the opportunity to earn honors distinction. In most cases, participation in the Program does not increase the number of credit hours required for graduation. Classes within the Program span the entire range of the University.

The University Honors Program encourages and supports opportunities that are designed to enhance the educational experience of its members. The Honors Program also coordinates special academic, social, and cultural events for honors students in which they can become part of a community of friends and fellow scholars outside the classroom. Students in the Honors Program benefit both personally and professionally from the special programs and individualized attention that characterize the University Honors Program.

The University Honors Program Office is located in Room 204, Scates Hall. Also located on the 2nd floor of Scates Hall are a conference room, quiet study areas, a lounge area, and two computer rooms for the use of UHP students. The Director and Program staff may be reached at 901-678-2690.

## Admission and Retention Standards and Procedures

National Merit Finalists, National Achievement Finalists, and recipients of the Cecil C. Humphreys Presidential and Herff Scholarships, the Provost's Scholarship, and the Distinguished African American Scholarship are automatically admissible to the Program upon receipt of their applications. Other incoming freshmen who score a minimum of 27 on the ACT, or its equivalent on other tests, and have a 3.5 high school GPA are invited to apply to the Honors Program. Transfer students or students currently enrolled at the University of Memphis are also eligible for the Honors Program if they have earned an overall grade point average of 3.00 for freshmen and sophomores and 3.25 for juniors and seniors. Students who do not qualify in one of these ways will be considered for provisional admission upon direct application. Letters of recommendation, though not required, may also be submitted.

To be considered for admission, applicants must be admitted to the University of Memphis and complete a separate application for admission to the Honors Program. An application for admission may be obtained from the Honors Office or downloaded from the UHP仓s web site: http://www.memphis.edu/honors.

Honors students are expected to maintain good academic standing to continue in the Program; normally this is a minimum cumulative GPA of 3.0 in the freshman and sophomore years, and a minimum of 3.25 cumulative GPA in the junior and senior years. Students whose GPAs fall below the minimum will be
allowed one probationary semester to raise their GPAs to the expected level. Students in the University Honors Program are expected to take a least one honors course each semester in order to maintain the privilege of priority registration and to fulfill scholarship service obligations.

## The Honors Curriculum and Requirements

The honors curriculum includes honors sections of General Education Program courses and other courses that fulfill core curriculum requirements. Honors programs offered by some departments also offer special honors sections of courses required for the major. Honors sections have the advantage of small class size, specially selected faculty, teaching that emphasizes student participation, and assignments that encourage students to think independently.

In addition to honors sections of regularly offered courses, the Honors Program also offers courses designed specifically for honors students. Courses carrying the UNHP subject area are interdisciplinary in nature, designed to explore a particular topic intensively and creatively.

Students also may earn honors credit by designing their own special projects based on independent study, fieldwork, or an internship experience (see UNHP 4900 course descriptions), or by contracting for honors credit within the context of a regularly scheduled course not officially offered as an honors course. Detailed information about earning honors credit through these approaches is available in the Honors Office. A minimum grade of $\geqslant$ B (3.0) is required in each honors course for it to count toward fulfilling the honors course requirement, but regular credit for the course will be earned if the grade is lower than a © B (3.0).

## Students within the University Honors Program may pursue one of two tracks leading to "graduation with honors": University Honors or University Honors with Thesis.

University Honors: To attain "University Honors," with transcript and diploma notations, students complete 24 semester hours of honors coursework that includes UNHP 1101 and 1102 (see UNHP course descriptions). Students must earn a minimum grade of "B" (3.0) in all honors courses and achieve a 3.25 cumulative grade point average.

University Honors with Thesis: The highest honor a University Honors Program student can achieve is "University Honors with Thesis," which carries transcript and diploma notations. To attain this honors designation, students complete 21 semester hours of honors coursework that includes UNHP 1101 and 1102, in addition to completing a 3 -credit senior honors thesis or project ( 24 semester hours total). Student must earn a minimum grade of " B " (3.0) in all honors courses and achieve a 3.25 cumulative grade point average. The UNHP 1101 and 1102 course requirements may be waived for students who are accepted into the University Honors Program after completing university coursework at the University of Memphis or another institution, with the expectation that they will substitute six semester hours of honors courses for this requirement.

Departmental or College Honors Programs: Some academic departments offer honors programs based on work in the major. Academic areas in the Fogelman College of Business and Economics offer a collegewide program for students pursuing the Bachelor of Business Administration, and several disciplines in the College of Arts and Sciences offer students the opportunity to earn honors distinction through special projects and independent study.

Generally speaking, students must have a 3.25 cumulative grade point average to pursue and receive department or college honors. Consult the specific department or college listing in this Bulletin for detailed requirements, or contact the Honors Program Office for a listing of departments offering honors work in the major.

## The Non-Resident Honors Student Award

A limited number of Non-Resident Honors Student Awards are available on a competitive basis to nonresident students who enroll full-time and who are actively pursuing a University Honors Program
designation. This award allows out-of-state students to pay in-state tuition. Students who receive this award are required to maintain good standing with the Honors Program, take at least one honors course every semester until they have earned the baccalaureate degree, and work toward graduation with an honors designation. Entering freshmen receive primary consideration for this award. Application forms for admission to the University Honors Program and for the Non-Resident Honors Student Award may be obtained by writing to The University Honors Program, 204 Scates Hall, the University of Memphis, Memphis, TN 38152-6140; by calling 901-678-2690; or by faxing 901-678-5367. Students may also submit an on-line application for the Non-Resident Honors Student Award at www.memphis.edu/honors.

## Special Opportunities for Honors Students

Students in the Honors Program participate in an intellectually vibrant atmosphere that extends beyond the classroom. Honors students are challenged by enriched honors courses, interdisciplinary seminars, and conversations with visiting scholars. Students have opportunities to extend their learning beyond the classroom and into the community through internships and public service. Students in the program may elect to live in honors-designated housing, which provides an atmosphere conducive to studying, but at the same time a place where friendships are easily established. Because of the special nature of their contribution to the University, honors students enjoy other privileges as well, including priority registration, an honors computer lab, and special ceremonies that recognize outstanding students.

Students in the Honors Program are strongly encouraged to participate in undergraduate research opportunities. The University Honors Program administers the Undergraduate Research Scholar Program that provides students the opportunity to present individual research at student research forums on campus. The Honors Program sponsors the Works-in-Progress Symposium (WIPS) held at the University of Memphis each November, which gives all undergraduates an opportunity to present their research. Students who present at WIPS are encouraged to apply for acceptance to the National Conference on Undergraduate Research (NCUR) during the spring semester. Students who attend both WIPS and NCUR, and present at one other approved research forum can earn the designation "Undergraduate Research Scholar" on their transcript. Membership in the University Honors Program is not required for this transcript designation.

## Transitional Academic Studies

http://dstudies.memphis.edu/
The University of Memphis permits students to enroll in special basic/developmental level courses to develop the academic competencies necessary for success in college level courses.

## ACT/ SAT and COMPASS Placement

Students admitted to the University of Memphis will be assessed by valid ACT/SAT scores for English, mathematics, and reading. (Valid scores are those earned within three years prior to the first day of a student s entering term.) The ranges used for placement can be found on the department web site.

Students without valid ACT/SAT scores and without college level credit in math or English will be required to take the COMPASS test in the appropriate areas.
Students who feel they have been misplaced by their ACT/SAT scores are encouraged to take the COMPASS test, which can place them in a higher level course.
A list of COMPASS dates can be obtained from room 212, Wilder Tower, 901/678-2028, or on the web at www.people.memphis.edu/ $\sim$ dstudies. Students must pre-register for the test by 10:00 a.m. of the day preceding the test.
Depending on valid ACT/SAT scores or the results of the COMPASS test, students may be required to take one or more basic/developmental (DSP) courses. Students placing in these courses must enroll in and begin each subject-area sequence at the level indicated by their ACT/SAT scores or by their COMPASS results and complete that particular sequence before enrolling in the subsequent college level course.

## CREDIT

Each DSP course carries three semester hours of non-degree level credit.
The credit will count in the calculation of full-time status and the undergraduate joint (UJ) grade point average, and toward eligibility for athletics, financial aid, scholarships, and housing.

## ACADEMI C ADVI SI NG

Students requiring DSP courses should be advised in the Academic Counseling Center (ACC).

## COURSE GRADES AND CLASS ATTENDANCE

The grading scale for DSP courses is A, B, C, F. No audit students will be permitted. Regular class attendance is mandatory and may be used in determining semester grades.

Last Updated: 6/12/15

# (AAAS) AFRI CAN AND AFRI CAN AMERI CAN STUDI ES 

Interdisciplinary Studies Office<br>Room 107, Scates Hall<br>http://cas.memphis.edu/isc/aaas

AAAS 2100. Introduction to African and African American Studies. (3). Status of Africans and African Americans in historical and modern times.<br>AAAS 3100. Research Methodology in African and African American Studies. (3). Students design research project focusing on African and African American experiences and issues.<br>AAAS 4100. Seminar in African and African American Studies. (3). Capstone course to provide an integrated and interdisciplinary understanding of the black experience which arises from culture, society, and the natural world.<br>AAAS 4251. African Religions in the Diaspora. (3). Transplantation of African religions to the Western hemisphere; change in religions over time; African religious thought; retention, adaptation, hybridity in religious movements.<br>AAAS 4351. Ghanan History and Culture. (3). Study of the history and cultures of Ghana.<br>AAAS 4901. Independent Study. (1-3). Readings and writing assignments designed to further understanding of specialized areas within African and African American Studies. May be taken for a maximum of 6 hours credit when topic varies. (A-F/IP)<br>AAAS 4990-4999. Special Topics in African and African American Studies. (3). Topics are varied and in online class listing. May be taken for a maximum of 6 hours credit when topic varies.

# (ACAD) ACADEMICS - ORIENTATION PROGRAM 

Room 500, Wilder Tower<br>http://academics.memphis.edu/acad/

The Orientation Program offers a 3-hour credit course for entering freshmen only. This course has been specially designed to assist freshmen in making the transition to higher education by introducing them to the expectations and opportunities provided by the University.
ACAD 1100. Introduction to the University. (3). History, philosophy, and principles of higher education, with emphasis on the University of Memphis. Special attention to developing student skills necessary to meet the intellectual expectations of the university. OPEN TO FRESHMEN ONLY.

(ACCT) ACCOUNTANCY<br>KENNETH R. LAMBERT, Ph.D., Director<br>Room 200, Fogelman College of Business and Economics Administration Building<br>http://fcbe.memphis.edu/modules/general/Dp_accounting.php

Students must have junior standing and have met specific course prerequisites with a minimum grade of $\boldsymbol{C} \geqslant$ to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of $\boldsymbol{C} \geqslant$ in each; (2) minimum of 2.25 GPA ( 2.5 for accounting majors) in all required lower division business courses and MATH 1830, and (3) 60 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements). A surcharge of $\$ 20$ per credit hour for 3000 and 4000 level courses and $\$ 20$ per credit hour for $6000-9000$ level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).
ACCT 2010. Fundamentals of Accounting I. (3). Introduction to measurement, realization, classification and disclosure concepts about businesses financial statement; emphasis on how managers, creditors, and investors can analyze financial accounting information to make investment, financing, and operating decisions.
ACCT 2020. Fundamentals of Accounting II. (3). Introduction to measurement and disclosure concepts about cost and profit of products, services, and organizational units; emphasis on how managers can use internal and external information to make resource allocation decisions, to plan and to control investment and make operating decisions. PREREQUISITE: ACCT 2010, MIS 2749.

ACCT 3011. Business Law. (3). (FI R). Elements of law and legal principles encountered in business; emphasis on basic law of contracts, sales and secured transactions, negotiable instruments, real and personal property, agency, forms of business organization, suretyship, insurance contracts and torts.
ACCT 3110. Intermediate Accounting I. (3). Review of accounting process and financial statements; cash; receivables and short-term investments; inventories; investments in equity securities, income recognition; operational assets; intangibles. PREREQUISITE: ACCT 2020, or permission of director.
ACCT 3120. Intermediate Accounting II. (3). Long-term debt; corporations, formation and changes after formation; retained earnings; investments in debt instruments; statement of cash flows; pensions; leases; E.P.S.; deferred income taxes; accounting changes; financial reporting and changing prices. PREREQUISITE: ACCT 3110.

ACCT 3130. The Legal, Social, and Political Environment of Business. (3). (FI R). Emphasis on legal, social, and political environment in which business and its executives exist; legal, social, and political forces that affect business operations; lectures and case discussions.
ACCT 3310. Cost Accounting. (3). Cost systems, including job order, process, and standard, as management information systems for planning and control. Allocation of indirect costs, preparation of variable budgets, and determination of standard cost variances and their meaning. PREREQUISITE: ACCT 2020.
ACCT 3510. Federal Income Tax I. (3). Introduction to the federal income taxation of individuals. PREREQUISITE: ACCT 2020.
ACCT 4020. Accounting Systems. (3). (4450). Accounting systems analysis and design emphasizing the accounting cycles approach; theory of systems control in an organizational setting; holistic approach of synthesizing the accounting, financing, operating, and production functions where applicable. On-site practicum with an actual company. PREREQUISITE: ACCT 3110, 3310.

ACCT 4211-6211. Advanced Financial Reporting. (3). Business combinations; accounting methods for consolidated financial statements; foreign transactions and accounting for foreign subsidiaries; partnership accounting; state and local government accounting. PREREQUISITE: ACCT 3120.
ACCT 4240. Audit and Assurance Services. (3). Ethics in accounting practices, internal control, auditing standards and procedures, programs of audit of various accounts, reports to clients. PREREQUISITE: ACCT 3120; PREREQUISITE or COREQUISITE: ACCT 4020.
ACCT 4241-6241. Information Systems Auditing and Assurance. (3). Auditing of computer-based systems; emphasis on auditing software and computer auditing techniques used to evaluate accounting systems controls and test accounting data integrity; nature and use of expert systems in accounting with emphasis on their use as an audit tool. PREREQUISITE: ACCT 4240. ACCT 4300. Financial Statement Analysis of the Hospitality Industry. (3). Comprehensive and up-to-date treatment of analysis of financial statements in assessing an organization s risk in decision making. PREREQUISITE: ACCT 2020.
ACCT 4520-6520. Taxation of Business Entities. (3). Introduction to the federal income taxation of corporations,
partnerships, estates and trusts. PREREQUISITE: ACCT 3510.
ACCT 4540. Governmental, Health Care/ Not-for-Profit Accounting. (3). Basic accounting and reporting procedures for governmental units, universities and other not-for-profit entities. PREREQUISITE: ACCT 2010.
ACCT 4910. Problems in Accounting. (1-3). Students will conduct approved projects in major area under supervision of faculty. PREREQUISITE: permission of director.
ACCT 4911. Internship in Accounting. (1-6). Internship in business organization to gain on-the-job experience. Project to be approved, supervised by departmental faculty member. Credit allowed only after acceptance of report, varies with complexity of duties. PREREQUISITE: 2.75 overall GPA and completed 15 hours in the Upper Division core.
ACCT 4920-29. Special Topics in Accounting. (3). Varied topics. May be repeated once with change in topic. PREREQUISITE: permission of director.
ACCT 4996. Senior Honors Thesis in Accountancy. (3). Independent research open only to those students enrolled in the honors program. Thesis supervised by faculty member; approved by the Director of the School. PREREQUISITE: senior standing and permission of the director of the college honors program.

## (AERO) AEROSPACE STUDI ES

CHARLIE R. YOUNG, M.P.A., Lt. Col., USAF, Professor of Aerospace Studies Room 118, Hayden Hall<br>http://afrotc.memphis.edu

AERO 1111. The Air Force Today. (1). Survey course designed to introduce students to the United States Air Force and Air Force ROTC. Topics include Air Force mission and organization, customs and courtesies, officer opportunities, problem solving, and communication skills. One class hour per week and one and one-half hours of Leadership Laboratory. * [G]
AERO 1112. The Air Force Today. (1). Continuation of AERO 1111. One class hour per week and one and one-half hours of Leadership Laboratory. * [G]
AERO 2211. The Air Force Way. (1). Survey course designed to examine aspects of air and space power through a historical perspective. The course covers the time period from the first balloons and dirigibles to the space age global positioning systems of the Persian Gulf War. Leadership Laboratory is mandatory for AFROTC cadets. One class hour per week and one and one-half hours of Leadership Laboratory. * [G]
AERO 2212. The Air Force Way. (1). Continuation of AERO 2211. One class hour per week and one and one-half hours of Leadership Laboratory. * [G]

## PROFESSI ONAL OFFICER COURSES

AERO 3211. Aerospace Studies Four-Week Field Training. (4). Twenty-eight day course conducted during summer at active installation of USAF, consists of approximately 185 hours of instruction in Air Force base functions, leadership, physical training, Air Force environment, career orientation, and survival training. Students assigned to groups of twenty-five and individually counseled and evaluated on their performance. Emphasis on self initiated leadership activities. PREREQUISITE: AERO 1111, 1112, 2211, 2212, or equivalent.
AERO 3212. Aerospace Studies Five-Week Field Training. (6). Forty-two day course conducted during summer at active installation of USAF. Consists of approximately 258 hours of instruction on role of military forces, organization of Defense Department, instruments of national security, Air Force base functions, leadership, physical training and Air Force environment.

Students are assigned to groups of approximately twenty-five and individually counseled and evaluated on their performance.
AERO 3311. Air Force Leadership and Management. (3). Study of leadership, Air Force personnel and evaluation systems, management fundamentals, professional knowledge, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to demonstrate and exercise practical application of concepts studied. Three class hours per week and one and one-half hours of Leadership Laboratory.*
AERO 3312. Air Force Leadership and Management. (3). Continuation of AERO 3311. Three class hours per week and one and one-half hours of Leadership Laboratory.*
AERO 4411. Preparation for Active Duty. (3). Examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics include the military as a profession, officership, military justice, civilian control of the military, and preparation for active duty. Within this structure, continued emphasis is given to refining communication skills. Three class hours per week and one and one half hours of Leadership Laboratory.*
AERO 4412. Preparation for Active Duty. (3). Continuation of AERO 4411. Three class hours per week and one and one-half hours of Leadership Laboratory.*

* Leadership Laboratory. Freshman/Sophomore level topics (supporting the General Military Course) include Air Force customs and courtesies, drill and ceremonies, issuing military commands, instructing, environment of the Air Force officer, and officer opportunities. Junior/Senior level topics (supporting the Professional Officer Course) include such advanced leadership experiences as planning and controlling cadet wing activities, preparing and presenting oral and written communication, and providing the guidance and information needed to train and motivate other cadets. One and one-half hours per week.


# (ANTH) ANTHROPOLOGY 

RUTHBETH FINERMAN, Ph.D., Chair<br>Room 316, Manning Hall<br>http://www.people.memphis.edu/~anthropology/

ANTH 1100. Biological Anthropology and Prehistory. (3). Evolutionary basis of human origins and contemporary biocultural variation; fossil record of primate and hominid evolution; beginnings of human society; discovery of agriculture and emergence of complex societies; controversies in the search for human origins. [G]
ANTH 1200. Cultural Anthropology. (3). Origin and development of human culture; social relations, language, government, religion and ritual, and problems of developing nations or minority groups in modern world. [G]
ANTH 3111. Human Paleontology. (3). Hominid fossil record starting with primate developments; human evolution; human osteology.
ANTH 3200. Peoples and Cultures of the World. (3). (Same as ESCI 3200). Major ethnographic areas and selected cultures of the world.
ANTH 3232. Cultural Heritage of Latin America. (3). Description and distribution of prehistoric and contemporary peoples and cultures of South America and Mesoamerica; comparisons and interrelationships during pre- and post-contact periods.
ANTH 3242. Peoples of Africa. (3). Description and distribution of peoples and cultures of Africa; comparisons and interrelationships during pre- and post-contact periods.
ANTH 3282. Cultural History of American Communities. (3). Cultural historic interpretation of formation, development and transformation of diverse community life patterns in America; emphasis on analysis of community as it reflects change in settlement patterns, kinship networks, political, religious, economic and value systems in American society. [G] •
ANTH 3300. The Ascent to Civilization. (3). (Same as HIST 3300). Interdisciplinary integrative examination of nature of civilization through investigation of origins of civilization and comparative study of world $>s$ earliest civilizations. PREREQUISITE: 9 hours of anthropology and/or history including either ANTH 1100 or HIST 1110. [I]
ANTH 3511. Culture, Kin and Family. (3). Changing structure of family in Western and non-Western societies; cross-cultural approaches to mate selection, courtship rituals, kinship organization, institution of marriage, division of labor and authority in household, and childbearing; variation and flexibility in family structures as adaptive strategies for environmental, social and cultural change.
ANTH 4010. Anthropological Methods of Field Research. (3-6). Various qualitative and quantitative methods of anthropological research; includes preparing for field research, collecting data, analyzing data and writing ethnographic descriptions of contemporary societies. [W,C]
ANTH 4051-6051. Anthropology and Education. (3). Advanced study of cultural transmission process with emphasis on identifying differing behavioral, cognitive and learning styles of various ethnic groups within American society and selected third world countries; encounters of U.S. subcultural groups with public education system. PREREQUISITE: permission of instructor. ANTH 4065-6065. Contemporary Anthropological Theory. (3). Contemporary growth of theories and methods in anthropology.
ANTH 4111-6111. Human Adaptations. (3). Physical and cultural adaptations of humans in an evolutionary and ecological context; information from primate studies, the archaeological record and studies of contemporary societies; environmental context of physical adaptations, cultural adaptations, language, social organization. PREREQUISITE: ANTH 1100, 1200, or permission of instructor.
ANTH 4120-6120. Africa $\Leftrightarrow$ s New World Communities. (3). Survey of African American cultures in the New World emanating from 17th and 18th centuries slave trade; focus on African Diaspora; Caribbean, Central America, South America and North America.

ANTH 4220-6220. Cultural Perspectives on the Environment. (3). Role of culture in the use and management of natural resources; discusses how societies construct knowledge about nature and attribute value to it; examines how indigenous knowledge, alternative value systems and traditional management strategies influence policy decisions at the local, national, and international levels. PREREQUISITE: ANTH 4200 or permission of instructor.
ANTH 4251-6251. Psychological Anthropology. (3). Examines the relationship between culture and personality; cross-cultural comparison of perspectives on cognition, mental illness, ethnopsychiatry and ethnotherapies.
ANTH 4253-6253. Anthropology of Religion. (3). Comparative analysis of religious systems and their functional relationships to other cultural institutions; interrelations of myth, magic, and ritual; types of religious institutions and religious practitioners.
ANTH 4301-6301. Archaeology of North America. (3). (Same as ESCI 4301). Intensive study of various prehistoric cultures from earliest times until historic contact. PREREQUISITE: ANTH 1100, 1200, 1300, or permission of instructor.
ANTH 4302-6302. Native Peoples of North America. (3). (3231). Ethnology of North America; intensive study of various prehistoric cultures from earliest times until historic contact. PREREQUISITE: ANTH 1100, 1200, 1300, or permission of instructor. ANTH 4325-6325. Archaeological Field and Laboratory Techniques. (3). (Same as ESCI 4325). Instruction in field excavation, specimen preparation, use of survey instruments and photography, map making, archaeological record keeping; methods and techniques in archaeological laboratory analysis; emphasis on organization and supervision of laboratory procedures. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.
ANTH 4336-6336. Native Peoples of the Southeastern United States. (3). (3035). Ethnology of Southeast; intensive study of various Native American cultures in the Southeast during the post-contact period. PREREQUISITE: ANTH 1100, 1200 and 1300, or permission of instructor.
ANTH 4352-6352. Old World Archaeology. (3). (3351) (Same as ESCI 4352). Old World cultures from first humans to early civilizations.
ANTH 4411-6411. Urban Anthropology. (3). Anthropological studies of pre-industrial and industrial cities; urbanization, movements of social transformation and other processes of adjustment to urban milieu; urban slums, ethnic enclaves and housing developments in cross-cultural perspective; urban kinship and social organization; urban community development; urban research techniques.
ANTH 4412-6412. Neighborhood Development and Social Entrepreneurship. (3). (Same as PADM 4412). Role of various institutions and their relationship to developmental needs of inner city neighborhoods; evolution of American cities as context for understanding urban neighborhoods and poverty; role of government and foundations in shaping policy at local level; rise of neighborhood associations and non-profits as extensions of family values; contributing to better understanding of neighborhoods and various intervention strategies.
ANTH 4413-6413. Anthropology of Tourism. (3). Advanced study of developing field of tourism in anthropology; explores cultural dynamics and dilemmas of tourism and tourist development; different forms of tourism (mass, elite, eco, ethnic and heritage) assessed both in terms of impacts on host culture and its environment as well as tourists themselves; tourism assessed as a development alternative, a driver of cultural change, and a form of local, regional national, international and intercultural relations. PREREQUISITE: ANTH 1200.
ANTH 4414-6414. Culture and Transnational Processes. (3). Advanced study of changes in culture and economic systems beginning with early industrial capitalism, evolving through stages of integrated mass production, and finally the current restructuring of a global system; focus on flexible mass production, regional connections, workplace innovation, international labor migration, human resources. PREREQUISITE: ANTH 1200 or 3200, or permission of instructor.
ANTH 4420-6420. American Folklore. (3). Selected genres of American folklore, including folk religion and belief, folk medicine, folk song and music, narrative and humor (jokes and riddles); comparisons to other cultures; emphasis on role of folklore in maintenance of tradition, in social change, and in concept of culture.
ANTH 4511-6511. Medical Anthropology. (3). Cross-cultural analysis of bio-behavioral components of infectious, nutritional, genetic, chronic and psychiatric diseases; individual and cultural reactions to medical care, professionals and health care delivery systems.
ANTH 4512-6512. Complementary and Alternative Medicine. (3). Focus on complementary and alternative medicine practiced in the United States and the world.
ANTH 4531-6531. Alcohol, Drugs and Culture. (3). Cross-cultural comparison of beliefs, rituals, meaning of substance use and abuse; examination of biological and cultural evidence on origin and development problems; implications for prevention, early intervention, and treatment.
ANTH 4541-6541. Nutritional Anthropology. (3). Cross-cultural comparison of human diet; assessment; cultural and health value of foods; hunger and malnutrition; acculturation and dietary change.
ANTH 4551-6551. Culture, Sex and Childbirth. (3). Review of biological, environmental, social and cultural factors influencing human reproduction; comparison of cultural and clinical perspectives on sexual orientation and behavior, sexually transmitted diseases, fertility, birth control, pregnancy, birth and post-partum care; evaluation of alternative delivery systems in Western and non-Western societies.
ANTH 4660-6660. Museum Collections. (3). (Same as ARTH 4660). Theory, methods, collection policy, development, preservation, documentation, interpretation of museum collections. PREREQUISITE: permission of instructor. ANTH 4661-6661. Collections Research. (3). (Same as ARTH 4661). Introduces students in object based disciplines to museum collections research methods and application to exhibitions, catalogs, scholarly publications. PREREQUISITE: permission of instructor.

ANTH 4662-6662. Museum Exhibitions (3). (Same as ARTH 4662). Methods and theory of research, design, layout, object selection and handling, installation, public programming and evaluation. PREREQUISITE: permission of instructor.
ANTH 4840-6840. I srael: Antiquity in Modernity. (3). (Same as JDST 4840). Interdisciplinary examination of relationship between ancient traditions and modern issues in Israel; emphasis on relationship between historical conditions, conflicts, and interconnections, and new choices facing Israel.
ANTH 4841-6841. Biblical Archaeology. (3). (Same as ESCI 4841 and JDST 4841). Relationship between historical texts in Hebrew Bible and historical evidence from archaeological research in Israel and surrounding area; emphasis on how archaeological evidence and biblical narratives illuminate each other.
ANTH 4880-6880. Social Life of Things. (3). Advanced study of material culture that examines ways in which things people make, acquire, use and discard can inform understandings of society and culture. PREREQUISITE: permission of instructor.
ANTH 4970. Directed Anthropological Internship. (1-3). Supervised practical experience in application of anthropological principles in agency or facility appropriate to discipline of anthropology. Student selects topic and partner organization in consultation with faculty supervisor and department chair. PREREQUISITE: permission of instructor.
ANTH 4975. Directed Individual Readings. (1-3). Intensive guided survey of anthropological and related literature; student selects a topic in consultation with a faculty member and department chair.
ANTH 4985. Directed Individual Research. (1-3). Intensive guided research, data analysis and presentation; student selects a topic in consultation with a faculty supervisor and department chair.
ANTH 4990-99-6990-99. Special Topics in Anthropology. (3). May be repeated for a maximum of 6 hours credit when topic varies.

(ARAB) ARABIC<br>Department of Foreign Languages and Literatures<br>RALPH ALBANESE, Ph.D., Chair<br>Room 375, Dunn Hall<br>http://fl.memphis.edu

ARAB 1010. Elementary Arabic I. (3). (1101). Principles of pronunciation; everyday expressions; basic sentence patterns through oral practice, writing and reading. -
ARAB 1020. Elementary Arabic II. (3). (1102). Continued study of sentence patterns through oral and written practice. PREREQUISITE: ARAB 1010 or equivalent. *
ARAB 2010. Intermediate Arabic I. (3). (2201). Continued study of sentence patterns through oral and written practice. PREREQUISITE: ARAB 1020 or equivalent. -
ARAB 2020. Intermediate Arabic II. (3). (2202). Continued study of sentence patterns through oral and written practice. PREREQUISITE: ARAB 2010 or equivalent. •

## (ARCH) ARCHITECTURE

Department of Art

JAMES E. JACKSON, M.F.A., Chair<br>MI CHAEL D. HAGGE , M.Arch., Coordinator<br>Room 404, Jones Hall<br>http://www.memphis.edu./architecture/

Additional fees are charged for some Architecture courses. See the online class listings or the Expenses section of the Bulletin.
ARCH 1111. Fundamentals of Design.(3). Visual perception, principles and systems of order that inform two and three dimensional design, architectural composition and urban design; basic architectural principles used in design of building, interior spaces and sites.
ARCH 1112. Architectural Graphics Studio. (3). (1521). Graphic communication principles in architecture; mechanical drawing skills; introduction to digital presentation techniques; architectural modeling; orthographic and paraline projections; graphics reproduction techniques. PREREQUISITE: ARCH 1111, 1211 1120. COREQUISITE: ARCH 1113, 1212, 1411.
ARCH 1113. Design Visualization. (3). Freehand drawing skills for designers; perception-based drawing and concept ideation; principles of one and two point perspective; use of light, shade and shadow in representation of architectural forms and spaces. PREREQUISITE: ARCH 1111. COREQUISITE: ARCH 1112.
ARCH 1120. Introduction to Architecture. (3). (1500). Fundamental principles of architecture and design; historical, cultural, theoretical aspects of architecture and design; architecture profession values, ethics.
ARCH 1211. History of Architecture I. (3). (1555). Major trends in architecture from prehistoric times to Renaissance; emphasis on impact of technological and social changes on prevailing architectural styles.
ARCH 1212. History of Architecture II. (3). (1556). Major trends in architecture from Renaissance to present; emphasis on pre-1900 era; development of architecture through cultural and technological change. PREREQUISITE: ARCH 1211.
ARCH 1411. Building Technology I. (3). (1561). Building types and building systems; emphasis on the effect of scale, materials, assembly systems and detail methods upon architectural design; drafting of details included.

PREREQUISITE/COREQUISITE: ARCH 1112.
ARCH 2311. Structures I. (3). (3401). Introduction to analysis and design of building systems and impact of these systems based upon fundamental principles of mechanics; force systems, equilibrium; axial, shear, bending stress theory; stress diagrams, buckling, strain and deformation related to building load requirements of structural systems within architectural forms.
PREREQUISITE: PHYS 2010/2011.
ARCH 2412. Building Technology II. (3). (1562). Advanced study of building types and building systems; material and their properties as related to architecture; drafting of details included. PREREQUISITE: ARCH 1411.
ARCH 2611. Computer Applications in Architecture I. (3). ( 2561). Computer aided drafting and design applications to produce computer generated architectural design and working drawings. PREREQUISITE: ARCH 1112, 1411.
ARCH 2612. Computer Applications in Architecture II. (3). (3562). Advanced concepts of computer generated drawings including LISP programming, tool bar customization, utilization of third party software for special applications, file referencing, 3-D building studies, site development. PREREQUISITE: ARCH 2611, or equivalent.
ARCH 2711. Architectural Design I Studio. (5). (2555). Projects to introduce architectural precedents, typology, form, space, order, meaning, and place; understanding of specific cultural, social and physical contexts of architecture. PREREQUISITE: ARCH 1112. COREQUISITE: ARCH 2412, 2611.

ARCH 2712. Architectural Design II Studio. (5). (3520). Integration of concepts and methods as applied to building types, design, construction, and systems with a focus on regionalism; site analysis and development of design solutions integrating formally expressive visual ideas and functionally adept planning and design concepts. PREREQUISITE: ARCH 2711. COREQUISITE: ARCH 2311, 2612. .
ARCH 3312. Structures II. (3). (3471). Fundamentals of structural design and analysis of steel and timber buildings and building components. PREREQUISITE: ARCH 2311. [C]
ARCH 3313. Structures III. (3). ( 3472). Fundamentals of structural design and analysis of concrete buildings and building components. PREREQUISITE: ARCH 2311.
ARCH 3421. Environmental Systems. (3). (3531). Studies in environmental technologies in architecture; mechanical systems, plumbing, electrical and energy conservation. COREQUSITE: ARCH 3713.
ARCH 3431. Professional Practice. (3). (4535). Professional practice of architecture; professional services of architect; professional ethics; building programming. PREREQUISITE: ARCH 3713.
ARCH 3713. Architectural Design III Studio. (5). (4515). Integrative design strategies that engage programmatic, contextual, and constructed dimensions of architecture and its representations with a focus on environmental and sustainable issues.
PREREQUISITE: ARCH 2612, 2712. COREQUISITE: ARCH 3312, 3421.
ARCH 3714. Architectural Design IV Studio. (5). (4615). Integration of design determinants; selection and design of structural systems. environmental systems, materials, and connections for large and small scale buildings. PREREQUISITE: ARCH 3713. COREQUISITE: ARCH 3313, 3431.

ARCH 4021. Architecture Independent Study. (1-3). (4660). Independent research in selected area of architecture under supervision of architecture faculty. May be repeated for a maximum of 6 credit hours. PREREQUISITE: permission of instructor. (AF, IP)
ARCH 4022. Architecture and Urbanism Seminar. (3). Review of contemporary concepts in architectural design in context of urban environment; attitudes and phenomena which have led to the making of particular culture of our time and their impact on the built environment. PREREQUISITE: permission of instructor. COREQUISITE: ARCH 4822.
ARCH 4023. Urban Design Seminar. (3). Comprehensive overview of significant issues of contemporary urban design; emphasis on experimental nature of cities; role of the architect in urban design. PREREQUISITE: permission of instructor.
ARCH 4221. Determinants of Modern Design. (3). Significant works of architecture and urban design from 1900 to present; focus on Europe, United States, non-Western world; examination of architecture as a mode of cultural production in relation to its aesthetic. PREREQUISITE: ARCH 1211, 1212, or equivalent.
ARCH 4441. Construction Documents. (3). (4600). Construction drawings and specifications; document organization and integration of building systems; graphics conventions; structural and architectural detailing. PREREQUISITE: ARCH 2612, or equivalent, 3312, 3313, 3714.
ARCH 4451. Site and Environmental Planning. (3). (2556). Building sites; selection and utilization, including environmental influences; technical aspects such as zoning, contour lines, parking, ingress/egress, site drainage, building location and sustainable design. PREREQUISITE: permission of instructor.
ARCH 4510-19-6510-19. Special Topics. (1-3). Varied topics in online class listings. May be repeated by permission for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.
ARCH 4613. Computer Applications in Architecture III. (3). Advanced design, modeling, analytical concepts using various computer software programs. PREREQUISITE: permission of instructor.
ARCH 4811. Parameters in Architecture Studio. (3-6). (4650). Comprehensive overview of differences and relationships of history, technology, and culture in terms of impact on architecture and urban design; concepts of form generation and historic dimensions of architecture with respect to human settlement. May be repeated for a maximum of 6 hours credit when topic varies. PREREQUISITE: permission of instructor.
ARCH 4812. Furniture Design Studio. (4). (4994). Examination of historical precedents in modern style and place of furniture in architecture; design philosophy, expression of materials, construction. PREREQUISITE: permission of instructor.
ARCH 4821. Urban Design Studio. (6). (4651). Comprehensive overview of significant issues of contemporary urban design; emphasis on experiential nature of cities, role of public policy, and genesis and development of urban building types.

PREREQUISITE: permission of instructor.
ARCH 4822. Architecture and Urbanism Studio. (6). Advanced design studio for identifying needs, resources, and operational methodologies across an expanded range of environmental scales; methods for identification of socio-cultural needs and coordination of complex variables, information, resources, leading to conceptualization and development of design of components of built environment. COREQUISITE: ARCH 4022.
ARCH 4841. Studio - Study Abroad. (3-9). (4655). Comparative studies of cultures; relationships of culture to physical environment, organization of cities; history and behavior of inhabitants; analysis and documentation of elements of physical environment and relationship between buildings and urban fabric. PREREQUISITE: permission of instructor.
ARCH 4715. Architectural Design V Studio. (5). Assessment, selection, integration of structural systems, building envelop systems, environmental systems, life-safety systems, building service systems into a comprehensive building design. PREREQUISITE: ARCH 3714. COREQUISITE: ARCH 4441.
ARCH 4716. Architectural Design VI Studio. (5). Issues of urban design; role of architecture in creating livable, sustainable cities; built environment and urban condition. PREREQUISITE: ARCH 4715. COREQUISITE: ARCH 4930.
ARCH 4930. Senior Thesis. (3). (4944). Study and research in specific area culminating in an integrating experience through individual and/or group projects and technical reports. PREREQUISITE: ARCH 4715. [W, I] (A-F, IP)
ARCH 4931. Senior Thesis Seminar. (1). (4940). Study and research in a specific area culminating in an integrating experience through individual project; research techniques, preliminary research and conceptual development of architectural project; site analysis and selection, case studies; development of Thesis proposal. PREREQUISITE: permission of instructor.

## (ARMY) MI LITARY SCI ENCE

LTC. GREGORY V. MARINICH, Professor of Military Science
Room 123A, Hayden Hall
http://armyrotc.memphis.edu/
NOTE: Leadership laboratory provides the forum for the reinforcement of formal classroom instruction. Lab revolves around the practical application of the theories of leadership with a hands-on approach to learning. Provides opportunities for cadets to exercise leadership, planning, and management skills as well as covering independent topics including: rappelling, drill and ceremonies, basic rifle marksmanship, first aid, and orienteering.
ARMY 1100. Leadership Laboratory. (1). Two laboratory hours per week. COREQUISITE: ARMY 1110.
ARMY 1110. I ntroduction to Military Science. (1). Introduction to Army ROTC with hands-on approach through several basic military skills. Lectures and practical exercises in following areas: rappelling, communications, weapons, first aid, and land navigation. There is no military obligation. COREQUISITE: ARMY 1100.
ARMY 1115. Leadership Laboratory. (1). Two laboratory hours per week. COREQUISITE: ARMY 1120.
ARMY 1120. Leadership and Confidence Building. (2). Basic military first aid skills; lectures and practical exercises in basic emergency treatment for fractures, lacerations, heat and cold injuries; cardiopulmonary resuscitation. THIS COURSE DOES NOT PROVIDE RED CROSS OR ANY OTHER CERTIFICATION. COREQUISITE: ARMY 1115.
ARMY 2100. Leadership Laboratory. (1). Two laboratory hours per week. COREQUISITE: ARMY 2105.
ARMY 2105. American Military History. (3). Developments since colonial period; emphasis on background and growth of national military and naval establishments, military and naval thought, difficulties accompanying modernization and assumption of global responsibilities, and problem of relationship between civilian and military naval sectors in democracy. COREQUISITE: ARMY 2100.

ARMY 2115. Leadership Laboratory. (1). (2110 lab). Two laboratory hours per week. COREQUISITE: ARMY 2120. [G]
ARMY 2120. Fundamental Survival Skills. (1). (2110). Basic Military Skills including map reading, military first aid skills and
small unit leadership. One hour weekly classroom instruction. COREQUISITE: ARMY 2115. [G]
ARMY 2140. Small Unit Tactics I. (2). Emphasis on preparation of the individual for combat. Preparation of potential leaders in combat through study of the knowledge and skills needed by an individual soldier. Skill developed in planning and organizing by combat patrols. Course includes a series of field practica.
ARMY 2145. Small Unit Tactics II. (2). Advanced concepts in reconnaissance, raid, and ambush patrolling techniques, extended patrolling operations, and application techniques for specialized equipment; leadership skills through student led patrols. Includes series of field practica. Expands material taught in ARMY 2140 but may be taken independently of 2140.
ARMY 2190. Basic Camp Practicum. (1-6). Six-week training normally taken during the summer between the second and third years by those students who have not taken previous ROTC training, or who have not completed the required basic military science courses for advanced course enrollment. Training conducted at designated U.S. Army installation and includes practical experience in leadership, small unit tactics, weapons drill, and communications under field conditions. After completion of camp, student required to complete satisfactorily an examination administered by Military Science Department. Student must register for this course following successful camp completion to receive appropriate credit. Students receive approximately $\$ 670$ pay, room and board, and travel expenses. No military obligation is incurred. PREREQUISITE: Permission of Professor of Military Science
ARMY 3100. Leadership Laboratory. (1). Two laboratory hours per week. COREQUISITE: ARMY 3111.
ARMY 3111. Applied Leadership I. (3). (3110, 3190). Presentation, discussion, practical exercise, and field training on fundamentals of map reading and land navigation; development of skills in individual and small unit tactical planning and operations; and professional subjects in leadership, leadership assessment, and principles of war. Three lecture hours per week, three hours
physical training per week, and field training exercises on two weekends during semester. COREQUISITE: ARMY 3100.
PREREQUISITE: permission of the Professor of Military Science.
ARMY 3115. Leadership Laboratory. (1). Two laboratory hours per week. COREQUISITE: ARMY 3121.
ARMY 3121. Applied Leadership II. (3). (3120). Continuation of first year advanced course. COREQUISITE: ARMY 3115. PREREQUISITE: permission of the Professor of Military Science.
ARMY 3190. Advanced Camp Practicum. (6). Six weeks of training at an Army post, normally taken between the 1st and 2nd years of Advanced Course; practical experience in leadership, small unit tactics, U.S. Army weapon systems and equipment, and patrolling operation; examination administered by the Department of Military Science required to receive academic credit. Students must register for course following successful camp completion to receive credit. PREREQUISITE: permission of Professor of Military Science.
ARMY 4100. Leadership Laboratory. (1). Two laboratory hours per week. COREQUISITE: ARMY 4111.
ARMY 4111. Seminar in Leadership and Planning. (3). (4110). Leadership and management skill development in specific areas of oral and written communications, training management, personnel evaluation and counseling, personnel management systems of Army, U.S. Army logistic systems, military justice, and familiarization with ethics of military professional. This course, in conjunction with ARMY 4121, completes the cadet $\geqslant$ s preparation for commissioning as a Second Lieutenant in the Army Reserve or National Guard. Three lecture hours every week, three hours physical training each week, and field training exercises on two weekends during semester. COREQUISITE: ARMY 4100. PREREQUISITE: permission of the Professor of Military Science.
ARMY 4115. Leadership Laboratory. (1). Two laboratory hours per week. COREQUISITE: ARMY 4121.
ARMY 4121. Seminar in Organizational Leadership. (3). (4120). Continuation of second year of advanced course.
COREQUISITE: ARMY 4115. PREREQUISITE: permission of the Professor of Military Science.

## (ART) ART

JAMES E. JACKSON, M.F.A., Chair
Room 201, J ones Hall
http://deptart.memphis.edu/
Transfer students seeking advanced standing in art are required to submit a portfolio.
In addition to specific prerequisites, junior standing or permission of the instructor is a prerequisite for all 3000 and 4000 level courses in the Department of Art.
Additional fees are charged for some Art courses. See the online class listings or the Expenses section of the Bulletin.
ART 1030. I ntroduction to Art. (3). (1101). Fundamental principles of artistic expression as basis for understanding Western and non-Western traditions in the visual arts. [G] *
ART 1210. Foundations Studio I. (3). Methods of studio practice including research, creative problem solving, idea development, collaborative operations, integration of digital technology, engagement with readings in contemporary art criticism and historical and critical texts; emphasis on development of independent projects and critical and verbal skill development.
ART 1215. Foundations of Studio II. (3). Exploration of design elements and principles as applied to development of two and three dimensional construction; imaginative and fundamental use of materials in visual problem solving. PREREQUISITE: ART 1210. ART 1233. I ntroduction to Interior Design. (3). Processes of interior design and various aspects and considerations involved in practice of both residential and commercial design.
ART 1234. I nterior Drafting Practices. (3). Introduction to equipment, standards and requirements of interior design drafting practices through lecture and space planning and production of working drawings. COREQUISITE: ART 2238.
ART 1235. I nterior Color and Composition. (3). (2234). Application of color theory and design composition to specific requirements of interior design practice, through lectures and studio assignments. PREREQUISITE: ART 1233, or permission of instructor.
ART 1311. Drawing I. (3). Introduction to materials and techniques of basic drawing; study of still life, rendering of the human form including work from skeleton and from female and male nude models to develop perception of line, value, space, and volume; use of contour and gesture.
ART 1314. Drawing II. (3). Use of basic drawing materials and techniques; analysis and rendering of the human form, still-life, architectural space and landscape; work from skeleton and from female or male models; study of anatomy and proportion;
introduction to issues of expression; continued study of perspective; introduction to alternative drawing approaches. PREREQUISITE: ART 1311.
ART 2201. Design. (3). Continued study of the elements of design, using variety of materials and methods. NOTE: Students may not receive credit for both ART 2201 and 1210. PREREQUISITE: ART 1201 and 1204, or permission of instructor.
ART 2213. Typographic Design I. (3). Terminology, technology, and design aspects of typography for effective communication. PREREQUISITE: ART 1210 and Acceptable Incoming Evaluation for Graphic Design.
ART 2219. Visual Thinking. (3). Fundamental methods in generating ideas for effective visual communication. PREREQUISITE: ART 1210, 1311, and Acceptable Incoming Evaluation for Graphic Design.
ART 2223. Computer Assisted Graphic Design. (3). Introduction to computer graphic design; overview of technical and aesthetic issues relevant to graphic design profession.
ART 2235. I nterior Construction Drafting. (3). (3237). Principles of building construction and their application through development of working drawings for both residential and commercial projects; building methods and materials studied through
lectures and studio assignments. PREREQUISITE: ART 1234, or permission of instructor.
ART 2236. Components of Interiors. (3). Technical aspects of surface and structural materials of interior design in relation to
building codes and public health, safety and welfare. PREREQUISITE: ART 1233, or permission of instructor.
ART 2238. CADD for I nterior Design. (3). Introduction to use of microcomputer software in production of interior design drawings and documents; exploration of computer applications in design development and presentation. COREQUISITE: ART 1234. ART 2301. Digital Art I. (3). Introduction to computer graphics and its application in field of Art; use of standard hardware and software to solve creative problems; exploration of current issues and computer history. PREREQUISITE: ART 1210, 1311, or permission of instructor.
ART 2305. Principles of Time-Based Media. (3). Study of various principles and techniques applied by cinematographers, film editors and designers to plan and produce time-based media; storyboarding and effective use of animation and sound.
ART 2331. Painting I. (3). (3331). Preliminary course in theory and practice of oil painting. PREREQUISITE: ART 1210, 1311, or permission of instructor.
ART 2351. Introduction to Printmaking. (3). Printmaking processes: relief, intaglio, planography, and stencil, focusing on relief and screen printing. . PREREQUISITE: ART 1210, 1311, or permission of instructor.
ART 2352. Introduction to Intaglio and Lithography. (3). Monochrome metal plate intaglio and stone lithography. Intaglio includes etching, engraving, and acquatint; lithography includes crayon, wash, and transfer; emphasis on personal expression.
PREREQUISITE: ART 1210, 1311, or permission of instructor.
ART 2511. Sculpture I. (3). Introduction to basic materials and techniques of sculpture. PREREQUISITE: ART 1215 or permission of instructor.
ART 2523. Ceramics I. (3). Introduction to clay and ceramic process; emphasis on thoughtful, purposeful exploration of medium, regarding both pottery vessel and nonvessel object.
ART 2701. Photography I. (3). Basic techniques and processes of black and white still photography; history and aesthetics of photography as fine art; emphasis on personalized perception and seeing photographically.
ART 2702. Photography II. (3). (4224). Exploration of black and white still photography as means to personal expressive statement and self-discovery; assignments emphasize a broad range of contemporary photographic practice. PREREQUISITE: ART 2701 or permission of instructor.
ART 3103. History of Architecture, Interiors and Furniture I. (3). Major trends through 18th century; exploring impact of technology and social changes.
ART 3104. History of Architecture, Interiors and Furniture II. (3). Major trends from 19th century to present; exploring impact of technology and social changes.
ART 3204. Residential Kitchen Planning. (3). (Same as CSED 3204). Socioeconomics and design aspects of housing; kitchen planning principles: selection, use, and care of household equipment. PREREQUISITE: CSED 2104.
ART 3213. Typographic Design II. (3). Advanced problems involving visual organization and typography as an expressive design element. PREREQUISITE: Admission to Graphic Design concentration.
ART 3219. I mage Design. (3). Strategies, processes and techniques for integrating verbal and visual messages in graphic communications; illustration and computer imaging. PREREQUISITE: Admission Graphic Design concentration.
ART 3222. Graphic Design Methodology. (3). Emphasis on intellectual processes underlying applied design. PREREQUISITE: Admission to Graphic Design concentration.
ART 3227. Electronic Pre-Press Production. (3). Methods of preparing art for reproduction. PREREQUISITE: ART 3222.
ART 3234. I nterior Design Studio I. (3). Application of material covered in basic interior design courses to theoretical designs for complete environments; design development, production of working and presentation drawings and specifications studied through lectures and studio projects. PREREQUISITE: ART 2235, 2236, 3235, 3236, or permission of instructor.
ART 3235. Commercial Lighting Design. (3). Comprehensive study of lighting sources and principles, color and applications, including circuiting, switching, dimming systems, task ambient lighting and industry resources. Zonal cavity method and point source calculations applied through lectures and studio assignments. PREREQUISITE: ART 1234, 1235, 2235 and 1 required math course or permission of instructor. [C]
ART 3236. I nterior Design Media Practice. (3). Use of black-white and color media for one and two-point perspective illustration; assignments in line, texture, shade-shadow, volume, color, freehand drawing and drafting. PREREQUISITE: ART 1234, 1235.

ART 3238. Interior Detail Drawing. (3). Design and drawing of interior millwork and casework; production and specification for construction studied through lectures and studio assignments. PREREQUISITE: ART 2235, or permission of instructor.
ART 3250. Interior Design Studio II. (3). Comprehensive assignment in commercial design including design development, space planning, building code requirements, and construction and specification documentation for barrier free design studied through lectures and design assignments. PREREQUISITE: ART 3234, or permission of instructor.
ART 3313. Drawing and Composition. (3). (2313). Problems in visual communication; emphasis on compositional and technical considerations; analytical and objective investigations of organizational problems; use of varied graphic media and methods. PREREQUISITE: ART 1311 and 1314, or permission of instructor. [C]
ART 3314. Drawing and Concept. (3). (2314). Problems in visual communication; emphasis on personal expression; conceptual and subjective investigation of individual problem-solving strategies; use of varied graphic media and methods. PREREQUISITE: ART 2313 or permission of instructor.
ART 3332. Painting II. (3). Continuation of ART 2331; still-life, landscape, and portrait painting.

ART 3351. I ntaglio Printmaking. (3). In-depth study of metal plate intaglio printmaking processes: engraving, drypoint, etching, aquatint, and color intaglio; mixed media; emphasizes personal expression. PREREQUISITE: ART 2352 or permission of instructor.
ART 3352. Lithography (3). In-depth study of lithography in monochrome and color from stone and aluminum plates; mixed media color printing; emphasizes personal expression. PREREQUISITE: ART 2352 or permission of instructor.
ART 3411. Art for Children. (3). Introduction to skills and methods for instructional art programs in studio and art appreciation activities; emphasis on materials and ideas for children's art expression and development.
ART 3414. Primary School Art Practicum. (1). (2414). Observation and art teaching in a local K-4 classroom; campus based seminars. PREREQUISITE: Art major and permission of instructor. (S/U).
ART 3416. Middle School Art Practicum. (1). Observation and art teaching in a local 5-8 classroom; campus based seminars. PREREQUISITE: Art major and permission of instructor. (S/U).
ART 3423. Art For Secondary Schools. (3). Studio activities and related art education issues relevant to the artistic development of adolescents; emphasizes multicultural concerns and art evaluation systems. PREREQUISITE: ART 3411, ARTH 2101, 2102, or permission of instructor.
ART 3511. Sculpture II. (3). Problems of sculptural form as expressed in metal, wood, and related materials.
ART 3512. Sculpture III. (3). Continuation of ART 3511; emphasis on techniques.
ART 3522. Kilns, Glazes and Technical Skills. (3). Further development and experimentation with technical skills; firing kilns, glaze preparation, technical and visual research. PREREQUISITE: ART 1210, 1311, and 2523.
ART 3524. Ceramics II. (3). Some consideration to fundamental historical and aesthetic aspects peculiar to ceramics as a studio medium. PREREQUISITE: ART 3522, or permission of instructor.
ART 3701. Photography III. (3). Continuation of ART 2702. Closer examination of several key photographers $\hat{l}$ work as point of departure for student work; how student work relates to traditions. PREREQUISITE: ART 2702, or permission of instructor.
ART 4010-19-6010-19. Special Topics in Studio Art. (1-3). Topics are varied and in online class listings. May be repeated for a maximum of 9 hours credit when topic varies.
ART 4020-29-6020-29. Special Topics In Art Education. (1-3). Topics are varied and in online class listings. May be repeated for a maximum of 9 hours credit when topic varies.
ART 4209. Digital and Motion Typography. (3). Aesthetic and technical issues for effective typographic communication in electronic media; emphasis on relationship of form to content; special consideration of time-based presentation and impact of electronic interface.
ART 4211-6211. Writing and the Design Process. (3). Synthesis of verbal and visual problem-solving methods and the use of writing as integral phase of design process. PREREQUISITE: ART 3213, 3222, or permission of instructor. [W]
ART 4221-6221. Graphic Design for Print Communications. (3). Practical problems in areas of publication, information, corporate and promotional design. PREREQUISITES: ART 3213, 3222, or permission of instructor.
ART 4222-6222. Interactive Multimedia for Graphic Design. (3). Introduction to time-based, electronic media in graphic design, impact of electronic interface on visual communication; emphasis on visual design of narrative, commercial and/or educational multimedia presentations on computer. PREREQUISITE: ART 2223 and admission to Graphic Design concentration.
ART 4223-6223. Specialized Studies In Graphic Design. (3-12). Advanced instruction in either electronic imaging, typography and publication design, 3-dimensional design, corporate and promotional design, or information graphic design. May be repeated for a maximum of 12 hours credit when topic varies. PREREQUISITE: ART 3213, 3222, or permission of instructor.
ART 4224-6224. History of Graphic Design. (3). Cultural, theoretical, and stylistic aspects of major movements in the field of graphic design in Europe and America from Industrial Revolution to present. PREREQUISITE: Admission to Graphic Design concentration or permission of instructor.
ART 4230. Graphic Design Internship. (3). Practical experience in visual communication within approved professional work environment. PREREQUISITE: ART 4221 and recommendation from advisor.
ART 4232. Visual Design Business Practices. (3). Application of principles, procedures, and business practices of visual design. PREREQUISITE: junior standing or permission of instructor.
ART 4233. Design Practice Studio. (3). Work under faculty supervision on projects for institutional and corporate clients; assist in developing publications, exhibits, signage and other graphics, and participate in professional design process from project inception to completion. May be repeated for a maximum of 12 hours credit with approval of advisor, but not for the purpose of improving a grade previously earned. PREREQUISITE: senior standing. Admission by portfolio review only.
ART 4235. Graphic Design Portfolio Seminar. (3). Methodology and techniques in graphic design applied to an extended visual communication project; written proposal, preparation of comprehensive layouts and oral/visual presentation of project. PREREQUISITE: art major with concentration in graphic design and senior status. [I]
ART 4238. I nterior Design Studio III. (3). Further advanced studio assignments in commercial interior design studied through lectures and design projects. PREREQUISITE: ART 3238, 3250 or permission of instructor.
ART 4239. I nterior Design Business Practices. (3). History and organization of interior design profession; study of business methods and practices; formulation of resume and design portfolio. PREREQUISITE: ART 3234, or permission of instructor. ART 4240-6240. I nterior Design I nternship. (3). Supervised apprenticeship in interior design industry. Placement requires approval of Interior Design faculty. PREREQUISITE: ART 3234 and permission of instructor.
ART 4250. I nterior Design Senior Project Seminar. (1). Study and research in specific area of interior design resulting in program brief for ART 4251. PREREQUISITE: ART 4238 and permission of instructor.

ART 4251. Interior Design Senior Project. (3). Addresses creative, professional, technical, and historical issues involved in problem chosen and defined by student. Culminates in formal presentation of unique solution to problem. PREREQUISITE: ART 4238, or permission of instruction. [I]
ART 4314-6314. Art of the Book. (3). Comprehensive study of skills and processes involved on design of traditional and nontraditional book formats; investigation of history of the book, book as aesthetic object and as vehicle for creative expression. PREREQUISITE: ART 3313, 3314, or permission of instructor.
ART 4321-6321. Drawing and Painting I. (3). Advanced drawing and painting methods; emphasis on transparent watercolor. PREREQUISITE: ART 3313, or permission of instructor.
ART 4322-6322. Drawing and Painting II. (3). Continuation of ART 4321; attention to various mixed media. PREREQUISITE: ART 3313, 4321, or permission of instructor.
ART 4331-6331. Painting III. (3). Advanced problems in oil painting, presupposing that student has mastered basic techniques and is ready for a more experimental approach to subject. PREREQUISITE: ART 2331, 333,2 or permission of instructor.
ART 4332-6332. Painting IV. (3). Continuation of ART 4331; emphasis on development of personal style. PREREQUISITE: ART 2331, 3332, 4331, or permission of instructor.
ART 4351-6351. Advanced Printmaking I. (3). Specialization in one or two printmaking media with emphasis on development of personal imagery and technical skills. PREREQUISITE: ART 2351, 3351 or 3352 , or permission of instructor.
ART 4352-6352. Advanced Printmaking II. (3). Advanced work in one or two printmaking media with continued development of personal imagery and advanced technical skills. PREREQUISITE: ART 2351, 3351 or 3352, and 4351, or permission of instructor. ART 4353-6353. Computer I maging in Printmaking/ Photography I. (3). Use of digital imaging in one of several output options including:inkjet printing, lithography, screen printing, etching, silver and non-silver photographic processes; emphasis on personal expression PREREQUISITE: a computer course and either ART 2351, 2701.
ART 4354-6354. Computer Imaging in Printmaking/ Photography II. (1-3). Advanced project using digital imaging. Proposal for study to be approved in advance; emphasis on personal expression. PREREQUISITE: ART 4353, or permission of instructor. May be repeated for a maximum of 6 hours credit.
ART 4410-6410. Art Education Independent Study. (1-3). Theoretical and pragmatic ideas relevant to teaching of art. May be repeated for a maximum of 6 semester hours credit. PREREQUISITE: ART 3411, 3423, or permission of instructor.
ART 4418. High School Art Practicum. (1). Observation and art teaching in a local 9-12 classroom; campus based seminars. PREREQUISITE: Art major and permission of instructor. (S/U).
ART 4405. Textiles. (3). ( Same as CSED 4405). Selection, use, and care of textiles related to properties of fibers, yarn structures, fabric construction, and finishes; morphology and chemistry of fibers, finishes, dyes, fabric maintenance, and procedure involved in fiber, yarn, and fabric identification. PREREQUISITE: CSED 2004. 2005, or permission of instructor.
ART 4420. Alternative Arts Education Practicum. (1). Observation and art education for special populations in local schools, community institutions or clinical settings. Includes campus-based seminars. (S/U)
ART 4427. Methods and Materials for Art Instruction. (3). Curriculum planning, resources, and standards for art program goals, budget, and facilities; current art education philosophy and research. PREREQUISITE: Admission to TEP and ART 2414, 3416, 3423, or permission of instructor.
ART 4441. Art Education and Professional Seminar. (3). Analysis and problem solving of art student teaching experience; creation of art teacher's professional portfolio. PREREQUISITE: completion of all licensure and degree requirements. COREQUISITE: ICL 7912.
ART 4511-6511. Sculpture IV. (3). Advanced work in various sculptural media. PREREQUISITE: ART 2511, 3511, 3512, or permission of instructor.
ART 4512-6512. Sculpture V. (3). Continuation of 4511; emphasis on personal expression. PREREQUISITE: ART 4511, or permission of instructor.
ART 4521-6521. Ceramics III. (3). Advanced studies in ceramic process and technique; concentration on development of personal attitudes toward work. PREREQUISITE: ART 3524, or permission of instructor.
ART 4522-6522. Ceramics IV. (3). Technical competence and the production of ceramic objects reflective of genuinely personal involvement. PREREQUISITE: ART 4521, or permission of instructor.
ART 4610. Senior Studio. (3). Studio production and associated research that interrelates historical, technical, and aesthetic components of visual art; contract for study project to be approved by instructor and faculty committee in semester prior to registration. PREREQUISITE: Art major, senior status with concentration in Art Education; Ceramics/Painting/Printmaking/Sculpture or Photography. [I]
ART 4621-6621. Workshop In Art I. (1-3). Specific art problems as they apply to individual student; emphasis on basic art concepts and creative experience. PREREQUISITE: permission of instructor.
ART 4622-6622. Workshop in Art II. (1-3). Continuation of ART 4621, providing study of problems appropriate to need of individual student. PREREQUISITE: permission of instructor.
ART 4641-6641. Study and Travel In Art. ( 3 or 6). Travel to important art areas of world and specialized study under direction of faculty member of Department of Art.
ART 4650-6650. Professional Art Practices. (3). Development of skills needed for success as practicing professional artist; portfolio preparation and presentation, marketing, contracts, copyrights, and alternative art careers. [W]
ART 4701-6701. Color Photography. (3). Exploration of photographic perception in color; survey of history and aesthetics of color photography; techniques of color photography; emphasis on color printing. PREREQUISITE: ART 3701, junior standing, or permission of instructor.

ART 4702-6702. Photographic Materials and Processes. (3). Advanced technical course exploring creative potential in various contemporary photography materials, processes and techniques; emphasis on aesthetic application of those materials and techniques. PREREQUISITE: ART 3701, or permission of instructor. [C]
ART 4703-6703. Alternative Photographic Processes. (3). Exploration of creative potential of archaic and non-traditional photographic processes such as Cyanotype, Gum Bichromate and Kwik-Print. PREREQUISITE: ART 3701, or permission of instructor.

ART 4704-6704. Photographic Lighting. (3). Advanced theory, technique, and equipment used by professional photographers for black and white and color; emphasis on aesthetic application in actual practice. PREREQUISITE: ART 3701, or permission of instructor.
ART 4711. Advanced Photography Seminar. (1-3). Creation of a unified body of photographic work based on subject matter or formal problem. Contract for study project to be approved by instructor in semester prior to registration. May be repeated for a maximum of 6 semester hours credit. PREREQUISITE: ART 3701, or permission of instructor.
ART 4712. Photography Portfolio Seminar. (1-3). Creation and production of bound book or portfolio containing student's photographs and written introduction. Contract for study project to be approved by instructor in semester prior to registration. May be repeated for a maximum of 6 semester hours credit. PREREQUISITE: ART 4711, or permission of instructor.

# (ARTH) ART HI STORY 

Department of Art
J AMES E. JACKSON, M.F.A., Chair
Room 201, J ones Hall
http://deptart.memphis.edu/
ARTH 2101. World Art I. (3). Development of visual arts from prehistoric times through medieval period, their use by man as social, cultural, and educational force; brief survey of art of Far East.
ARTH 2102. World Art II. (3). Continues World Art I; development of visual arts from medieval period through Renaissance to present.
ARTH 4030-39-6030-39. Special Topics in Art History. (1-3). Topics are varied and in online class listings. May be repeated to a maximum of 9 hours credit when topic varies.
ARTH 4111-6111. Art and Archaeology of Egypt. (3). Predynastic to Late Period. PREREQUISITE: ARTH 2101 or permission of instructor. [W]
ARTH 4112-6112. Egyptian Art and Archaeology in the Old and Middle Kingdom. (3). Art, architecture, and archaeology, 3000-1500 B.C. PREREQUISITE: ARTH 2101, or permission of instructor.
ARTH 4113-6113. Egyptian Art and Archaeology in the New Kingdom and Late Period. (3). Art, architecture, and archaeology, 1500 B.C.-642 A.D. PREREQUISITE: ARTH 2101, or permission of instructor.
ARTH 4121-6121. Ancient Art of the Near East. (3). Architecture, sculpture, painting, and the minor arts in Mesopotamia, Anatolia, and Syria Palestine. PREREQUISITE: ARTH 2101, or permission of instructor.
ARTH 4123-6123. Greek Art. (3). Architecture, sculpture and painting from the Bronze Age to the end of the Hellenistic period.
ARTH 4124-6124. Roman Art. (3). Architecture, sculpture and painting from Etruscan Rome to the fall of the Empire.
ARTH 4125-6125. Art and Archaeology of Pompeii. (3). Pompeii's excavations, art, artifacts and architecture in reconstructing ancient Roman daily life. [W]
ARTH 4129-6129. Studies In Ancient and Medieval Architecture. (3). Selected topics comparing the architecture of ancient Egypt, the Classical world, and Medieval Europe. PREREQUISITE: ARTH 2101. [C]
ARTH 4130-6130. Art of the Medieval World. (3). Architecture, sculpture, and painting, including manuscript illumination of the middle ages; Western European and Byzantine traditions. PREREQUISITE: ARTH 2101, or permission of instructor. [W]
ARTH 4131-6131. Art of the Early Middle Ages. (3). Advanced study of architecture, sculpture and painting of the early medieval period. PREREQUISITE: ARTH 2101, or permission of instructor.
ARTH 4134-6134. Art of High Middle Ages. (3). Advanced study of architecture, sculpture and painting, including manuscript illumination, ivories and stained glass in the Romanesque and Gothic periods. PREREQUISITE: ARTH 2101, or permission of instructor.
ARTH 4141-6141. Art of the Early Renaissance in Italy. (3). Architecture, sculpture and painting of Italy, 1300-1510.
PREREQUISITE: ARTH 2101, or permission of instructor.
ARTH 4142-6142. Northern Renaissance Art. (3). Fifteenth Century Art in Northern Europe; emphasis on panel painting, manuscript illumination and printmaking. PREREQUISITE: ARTH 2101, or permission of instructor.
ARTH 4143-6143. Art of the High Renaissance in Italy. (3). Sixteenth Century Art in Italy; highlights works of Michelangelo, Raphael, Titian, and the Mannerists. PREREQUISITE: ARTH 2102, or permission of instructor. [W]
ARTH 4146-6146. Baroque Art. (3). Architecture, sculpture, and painting produced in Europe during Seventeenth Century. PREREQUISITE: ARTH 2102 or permission of instructor.
ARTH 4148-6148. Neo-Classicism and Romanticism. (3). Western European art, ca. 1760-1850 emphasizing painting, sculpture, and art theory. PREREQUISITE: ARTH 2102 , or permission of instructor.
ARTH 4149-6149. Realism and Impressionism. (3). Western European art, ca. 1850-1880, emphasizing painting, sculpture
and art theory. PREREQUISITE: ARTH 2102, or permission of instructor.
ARTH 4152-6152. Early Modern Art. (3). Movements in Western art and art theory, 1880-1905 which are the foundation of 20th century modernism, Symbolism and Post-Impressionism. PREREQUISITE: ARTH 2102, or permission of instructor.
ARTH 4153-6153. Cubism through Surrealism. (3). History of avant-garde art before World War II. PREREQUISITE: ARTH 2102, or permission of instructor.
ARTH 4155-6155. High Modern Art. (3). American and European art and art theory 1940-1968, emphasizing the development of modernism. PREREQUISITE: ARTH 2102, or permission of instructor.
ARTH 4157-6157. Contemporary Art. (3). Historical movements in art, 1968 to present. PREREQUISITE: ARTH 2102, or permission of instructor.
ARTH 4158-6158. Modern Architecture. (3). Survey of 19th century styles, 20th century masters, and contemporary developments in architecture; historic preservation.
ARTH 4160-6160. Architecture and Nature. (3). Survey and analysis of spaces in a variety of cultures from world history where the relationship between the natural and the built environment is healthy.
ARTH 4162-6162. Latin American Art. (3). Hispanic arts of the Americas from 1500 to the present in relation to Iberian and Indian traditions.
ARTH 4163-6163. Pre-Columbian Art. (3). Ancient art of Mexico, Central America and South America from about 1000 B. C. to European contact.
ARTH 4166-6166. Social History of American Art. (3). American art examined in social, cultural and historical contexts; broad range of creative expression, including fine arts, architecture, folk art, film, furniture, popular culture; covers the period of conquest to modern developments. PREREQUISITE: ARTH 2102, or permission of instructor.
ARTH 4181-6181. Traditional Arts of Africa, Oceania and North America. (3). Survey of the arts created by native Americans of U.S. and Canada, peoples of sub-Saharan Africa and Pacific islands, examined in relation to their cultural context and heritage.
ARTH 4183-6183. Visual Arts of Africa. (3). Survey of the arts of the African continent from pre-historic to the modern era; African aesthetic traditions in relation to social and cultural contexts.
ARTH 4185-6185. African American Art. (3). Introduction to African American visual expression and culture from Colonial to the modern era, including fine arts, photography, film and popular culture.
ARTH 4195. Proseminar In Art History. (3). Investigation of selected topics in art history with emphasis on development of research techniques and methodologies. Oral presentation and writing of thesis paper. PREREQUISITE: senior status with 18 semester hours in art history. [I]
ARTH 4381-6381. Art Curatorial Techniques. (3). Curatorial responsibilities and functions: receiving and shipping methods, registration, physical and environmental security, research, conservation, and study of art market and publications.
ARTH 4660-6660. Museum Collections. (3). (Same as ANTH 4660). Theory, methods, collection policy, development, preservation, documentation, interpretation of museum collections. PREREQUISITE: permission of instructor.
ANTH 4661-6661. Collections Research. (3). (Same as ANTH 4661). Introduces students in object based disciplines to museum collections research methods and application to exhibitions, catalogs, scholarly publications. PREREQUISITE: permission of instructor.
ARTH 4662-6662. Museum Exhibitions. (3). (Same as ANTH 4662). Exhibition methods and theory, including research, design, layout, object selection and handling, installation, public programming and evaluation. May not be repeated for credit. PREREQUISITE: permission of instructor.
ARTH 4721-6721. History of Photography I. (3). Survey of history and theory of photography since its invention in the 19th century.
ARTH 4722-6722. History of Photography II. (3). Historical and critical issues in photography from World War I to the present. [W] Last Updated: 6/12/15

## (BA) BUSI NESS ADMI NI STRATI ON

CAROL DANEHOWER , D.B.A., Associate Dean for Academic Programs Room 426, Fogelman College of Business and Economics Administration Building http://fcbe.memphis.edu/modules/general/index.php
Students must have junior standing and have met specific course prerequisites with a minimum grade of $\geqslant \mathrm{C}\rangle$ to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of $\geqslant \mathrm{C}\rangle$ in each; (2) minimum of 2.25 GPA ( 2.5 for accounting majors) in all required lower division business courses and MATH 1830, and (3) 60 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements). A surcharge of $\$ 20$ per credit hour for 3000 and 4000 level courses and $\$ 20$ per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).
BA 4900. Practicum In Research. (1-3). Actual problem-solving research activities in business and economics. Student assigned to project either being conducted currently by faculty member or one developed under supervision of faculty member. Whenever possible, project within student $>$ s major field of study. PREREQUISITE: senior status.
BA 4911. Internship In I nternational Business. (1-6). Practical operations of international business. Students placed for 1-8 month period with cooperating business firm operating in fields of international banking and finance, transportation, management, marketing or accounting. Academic credit granted upon certification of satisfactory performance by cooperating business firm and upon acceptance by faculty of written research report by student. PREREQUISITE: 2.75 overall GPA and completed 15 hours of Upper Division core.

## (BIOL) BIOLOGY

MELVIN BECK , Ph.D., Interim Chair
Room 103, Ellington Building
http://biology.memphis.edu
Students must earn a grade of at least $\geqslant$ in BIOL 1110/1111 and BIOL 1120/1121 before enrolling in any upper division course. Additional fees are charged for some Biology lecture and laboratory courses. See the online class listings or the Expenses section of the Bulletin.
BI OL 1010. Introduction to Biology I. (3). (1071, MMCS 1010). General overview of cellular structure and function, genes and biodiversity. NOTE: credit will not apply toward a major or minor in the sciences, nor will it satisfy any part of science requirements for pre-professional curricula. Three lecture hours per week. [G] •
BI OL 1011. Introduction to Biology I Laboratory. (1). (1072, MMCS 1011). Laboratory observations, demonstrations, experiments designed to apply scientific methods to lecture subjects. NOTE: credit will not apply toward a major or minor in the sciences, nor will it satisfy any requirements for pre-professional curricula. Two laboratory hours per week. PREREQUISITE or COREQUISITE: BIOL 1010. [G] *
BI OL 1020. Introduction to Biology II. (3) (1081). General overview of life; emphasis on structure and function of organisms and biosphere. NOTE: credit will not apply toward a major or minor in the sciences, nor will it satisfy any part of science requirements for pre-professional curricula. BIOL 1010 is not a prerequisite for this course. Three lecture hours per week. [G] • BI OL 1021. Introduction to Biology II Laboratory. (1). (1082). Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. NOTE: Credit will not apply toward a major or minor in the sciences, nor will it satisfy any requirements for pre-professional curricula. Two laboratory hours per week. PREREQUISITE or COREQUISITE: BIOL 1020. [G] •
BI OL 1110. General Biology I. (3). (1151, MMCS 1110). Unifying principles of biology with emphasis on cell structure, cell function, heredity, development and evolution. NOTE: course designed for students majoring in the natural sciences or pursuing a pre-professional program. Three lectures hours per week. PREREQUISITE: CHEM 1110. [G] •
BI OL 1111. General Biology I Laboratory. (1). (1152, MMCS 1111). Investigative laboratories in introductory cell and molecular biology with emphasis on experimental theory and design, practical laboratory skills; interpretation of data; documentation and communication of laboratory work. NOTE: course designed for students majoring in the natural sciences or pursuing a preprofessional program. Three laboratory hours per week. PREREQUISITE or COREQUISITE: BIOL 1110.
[G] •
BI OL 1120. General Biology II. (3). (1161). Continuation of BIOL 1110 with emphasis on origin and diversity of life; structure, functions, and ecology of organisms. NOTE: course designed for students majoring in the natural sciences or pursuing a preprofessional program. Three lecture hours per week. PREREQUISITE: BIOL 1110 and BIOL 1111. [G] •
BI OL 1121. General Biology II Laboratory. (1). (1162). Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. NOTE: course designed for students majoring in the natural sciences or pursuing a pre-professional program. Three laboratory hours per week. PREREQUISITE or COREQUISITE: BIOL 1120. [G] • BIOL 1230. Microbiology. (3). (1451, MMCS 1230). Microorganisms and their basic characteristics, with emphasis on relationship to pathogenesis and disease prevention. NOTE: credit will not apply toward a major or minor in the sciences. Three
lecture hours per week. •
BI OL 1231. Microbiology Laboratory. (1). (1452, MMCS 1231). Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. NOTE: credit will not apply toward a major or minor in the sciences. Two laboratory hours per week. PREREQUISITE or COREQUISITE: BIOL 1230. *
BI OL 2010. Anatomy and Physiology I. (3). (1751). Detailed study of structure and functions of human organism; credit not acceptable for Biology major or minor. Three lecture hours per week.
BI OL 2011. Anatomy and Physiology I Laboratory. (1). (1752). Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. Two laboratory hours per week. PREREQUISITE or COREQUISITE: BIOL 2010.

BI OL 2020. Anatomy and Physiology II. (3). (1761). Continuation of BIOL 2010; credit not acceptable for Biology major or minor. Three lecture hours per week.
BI OL 2021. Anatomy and Physiology II Laboratory. (1). (1762). Laboratory observations, demonstrations and experiments designed to apply scientific methods to lecture subjects. Two laboratory hours per week. PREREQUISITE or COREQUISITE: BIOL 2020.

BI OL 3030. Principles of Animal Physiology. (4). Basic concepts of animal function, including study of many invertebrate phyla and most classes of vertebrate organisms. Two lecture hours, four laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121 .
BI OL 3050. General Ecology. (4). Relationships between organisms and their environment; emphasis on fundamental principles; topics include: nutrient cycles, limiting factors, population dynamics, community succession and structure, species interactions, and human ecology. Two lecture hours, four laboratory hours per week. [W,C]
BI OL 3072. Genetics. (3). Principles of heredity, including classical, microbial, molecular, and population genetics. Three lecture hours per week. PREREQUISITE: 16 hours in the biology, including BIOL 3130 or 3500 . [I,C]
BI OL 3073. Genetics Laboratory. (1). Laboratory experiments in classical, microbial, molecular, and population genetics designed to illustrate principles of heredity. Three laboratory hours per week. PREREQUISITE or COREQUISITE: BIOL 3072 or equivalent.
BI OL 3130. Cell Biology. (3). (MMCS 3130). Introduction to principles of cell and molecular biology as they relate to eukaryotic cells with emphasis on functions common to most cell types. Three lecture hours per week. PREREQUISITE: BIOL 1120.
BI OL 3200. General Botany. (4). Structure, function and diversity of plants. Two lecture hours, four laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 3230. Plant Physiology. (4). Principles of physiology and application to living organisms; emphasis on higher plants. Three lecture hours, three laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 3500. Microbiology I: Fundamental Aspects. (3). (MMCS 3500). Origins, composition, structure, growth, genetics, genomics of viruses and microorganisms. Three lecture hours per week. PREREQUISITE: BIOL 1120 and 1121 and CHEM 1120.
BI OL 3505. General Microbiology Laboratory. (2). (MMCS 3600). Essential microbiological laboratory skills such as aseptic technique, microscopy, and bacterial culture and characterization. Four laboratory hours per week. PREREQUISITE or COREQUISITE: BIOL 3500.
BI OL 3550. Microbiology II: Medical and Applied Aspects. (3). (MMCS 3550). Bacterial diversity, associations including symbiosis, pathogenesis, micro- to planetary-scale ecology; microbial biotechnology. Three lecture hours per week.
PREREQUISITE: BIOL 3500.
BI OL 3610. Vertebrate Embryology. (4). Development of selected vertebrate embryos from fertilized egg cell. Two lecture hours, four laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 3620. Comparative Anatomy of Vertebrates. (5). Origin, development, structure, and functions of organs and systems of selected forms of vertebrates. Two lecture hours, six laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121. BI OL 3730. Vertebrate Physiology. (4). Normal function of the organ systems of vertebrates, with an emphasis on mammals. Three lecture hours, two laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 3751. Vertebrate Zoology. (4). Life histories, adaptations, ecology, distribution, behavior, and classification of vertebrates.
Two lecture hours, four laboratory per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 3800. Parasitology. (4). Distribution, morphology, life history, economic importance, and control of some of parasites of man and domestic animals; protozoa through helminths. Two lecture hours, four laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 4000. Research I. (1-2). Consultation, reading, and laboratory and/or field work in a selected area of biology under supervision of faculty member. No more than five total credit hours of research and practicum (BIOL 4000, BIOL 4001, BIOL 4570) can be applied toward degree requirements. (S/U). PREREQUISITE: BIOL 1120 and 1121.
BI OL 4001. Research II. (2-3). Laboratory and/or field work in a selected area of biology under supervision of a faculty member; formal paper and presentation of research results at a professional meeting or departmental seminar required. No more than five total credit hours of research and practicum (BIOL 4000, BIOL 4001, BIOL 4570) can be applied toward degree requirements. PREREQUISITE: BIOL 4000. (S/U).
BI OL 4050-6050. Field Technique In Ecology. (4). Field techniques of applied ecology covering practical training in forest, field, aquatic, and atmospheric sampling and analysis; extended field trips. Two lecture hours, four laboratory hours per week. PREREQUISITE: permission of instructor.
BI OL 4052-6052. Flora of Tennessee. (3). Classification, distribution, techniques of collection and preservation, and habitats of
native and non-native plant species. One lecture hour, four field hours per week. PREREQUISITE: BI OL 1120 and 1121. BI OL 4053-6053. Plant Ecology. (4). Relationships of plants and environmental factors at physiological, population, and community scales; study of ecosystem dynamics at local and landscape scales; emphasis on field techniques. Two lecture hours, four laboratory hours per week. PREREQUISITE: BI OL 1120 and 1121.
BI OL 4054-6054. Wetland Ecology. (4). Study of wetlands and wetland resources; attributes of hydrology, biogeochemistry and wetland plants with emphasis on bottomland hardwood forests. Two lecture hours, four laboratory hours per week. PREREQUISITE: BIOL 3050 and permission of instructor.
BI OL 4055-6055. Ecological and Environmental I ssues. (3). Ecological perspective on current environmental issues such as conservation and biodiversity, global climatic change, regulation of chemicals in environment. Three lecture hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 4056-6056. Tropical Ecology. (4). Lecture and field intensive course in ecology of the tropics. International travel required for laboratory portion of course. Two lecture hours, four laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.

BI OL 4057-6057. Large River Ecology. (3). Field intensive course on physical and biological processes of large river systems; focus on Mississippi River channel and floodplain ecology; controlling flooding regime, physical processes of rivers, communities associated with floodplain and in-channel habitats. Offered every other summer at Edward J. Meeman Biology Station.
BI OL 4060-6060. Limnology. (4). Physical and chemical attributes of lakes, ponds, and streams; organisms of fresh water, problems of production, practical training in limnological methods and identification of organisms. Two lecture hours, four laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 4071-6071. Human Genetics. (3). Genetic principles as applied to humans; pedigree analysis, genetic counseling, cancer, genomics. Three lecture hours per week. PREREQUISITE: BI OL 3072.
BI OL 4090-99-6090-99. Special Topics in Biology. (1-3). Topics are varied and in online class listings. May be repeated with different topics for maximum of 4 hours credit. PREREQUISITE: BIOL 1120 and 1121 and junior standing.
BI OL 4100-6100. Evolution. (3). Synthesis of principles and concepts of modern evolutionary theory; geologic evolution, biological evaluation, and evolution of societies; emphasis on recent development and current controversies. Three lecture hours per week. PREREQUISITE: BIOL 1120 and 1121. [W]
BI OL 4150-6150. Developmental Biology. (3). (MMCS 4150). Introduction to study of developing biological systems at cellular and molecular level. Three lecture hours per week. PREREQUISITE: BIOL 3072 and CHEM 3312.
BI OL 4300. Microbial Physiology. (3). (MMCS 4300). Cell structure and function; biosynthesis, degradation and metabolic regulation; regulation of growth. Three lecture hours per week. PREREQUISITE: BIOL 3500 and CHEM 3312.
BI OL 4325. Microbial Genetics. (3). (MMCS 4325). Introduction to the principles of microbial genetics with emphasis on bacteriophage, prokaryotic and yeast genetics; mutation, conjugation, transformation, transduction, recombination, plasmids, gene mapping and applications of genetic modifications are covered. Three lecture hours per week. PREREQUISITE: BIOL 3072, 3500, CHEM 1120.
BI OL 4350-6350. Microbial Biotechnology. (3). (MMCS 4350). Principles underlying practical applications of microorganisms, including synthesis of commercial products, vaccines and antibodies, bioremediation and biomass utilization, plant biotechnology and food production. Three lecture hours per week. PREREQUISITE: BI OL 3550 and CHEM 3312.
BI OL 4375-6375. Molecular Biology of Parasites and Their Vectors. (3). (MMCS 4375). Emphasis on molecular and immunological aspects of parasites of humans, companion animals and livestock; biology, treatment and prevention of parasitic diseases. Three lecture hours per week. PREREQUISITE: BIOL 3130 or 3550.
BI OL 4380-6380. Histology: Tissue and Organ Biology. (4). (MMCS 4380). Relationship between structure and function in mammalian tissues and organs; human histology emphasized. Three lecture hours and three laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 4401-6401. Plant Cell and Molecular Biology. (3). (MMCS 4400). The cellular and molecular basis of plant development, including plant hormones, signal transduction, regulation by light, plant-microbe interactions and plant transformation. Three lecture hours per week. PREREQUISITE: BIOL 3130 and BI OL 3072.
BI OL 4440-6440. Pathogenic Bacteriology. (3). (MMCS 4440). Survey of pathogenic bacteria, human and veterinary, diseases they cause, and methods of diagnosis; molecular basis of pathogenesis; introduction to immunological principles and immunity. Three lecture hours per week. PREREQUISITE: BI OL 3550 and CHEM 3312.
BI OL 4445-6445. Immunology. (3). (MMCS 4445). Antigens, immunoglobulin classes, cells and cytokines of immune response, complement system, hypersensitivities, blood groups, vaccines and immunity. Three lecture hours per week. PREREQUISITE: BIOL 3130 or 3500 and CHEM 3311.
BI OL 4450-6450. Microbial Ecology. (3). (MMCS 4450). Roles of microorganisms in the environment; microbial processes, interactions with the environment and biota, population ecology, community ecology, and biodegradation. Three lecture hours per week. PREREQUISITE: permission of instructor.
BI OL 4461-6461. Advanced General Microbiology Laboratory. (2). (MMCS 4460). Application of modern laboratory techniques and instrumentation to experiments in microbial physiology, genetics, ecology and biotechnology. Four laboratory hours per week. PREREQUISITE: BI OL 3550 and 3600.
BI OL 4465-6465. Advanced Medical Microbiology Laboratory. (2). (MMCS 4465). Application of modern laboratory techniques and instrumentation to experiments in pathogenic bacteriology, immunology, virology and parasitology. Four laboratory hours per week. PREREQUISITE: BIOL 3550 and 3600.
BI OL 4470-6470. Molecular Genetics. (4). (MMCS 4470). Structure, function and replication of DNA, recombination,
colinearity of DNA with genetic map, mutagenesis, plasmids, genetic code, protein synthesis, suppression, regulation of gene expression, genetic engineering and immunogenetics. For students without formal training in molecular genetics. Four lecture hours per week. PREREQUISITE: BIOL 3130 or 3500 and BIOL 3072.
BI OL 4480-6480. Cellular and Molecular Pharmacology. (3). Study of mechanisms by which therapeutic agents regulate physiological function of cells comprising organ systems such as heart and central nervous system; drug action (pharmacodynamics) at the molecular, cellular and organ level; common disease affecting a system. PREREQUISITE: CHEM 1120, BIOL 3130.
BI OL 4501-6501. Virology. (3). (MMCS 4501). Introductory study of viruses of human and veterinary significance and methods of cultivation, isolation and characterization; study of pathogenic mechanisms. Three lecture hours per week. PREREQUISITE: BIOL 3550.
BI OL 4503-6503. Laboratory Techniques in Biochemistry. (2). (MMCS 4503). (Same as CHEM 4501). Biochemical techniques, analysis and design strategies; properties of protein/enzymes, including binding, catalysis, kinetics, electron and proton transport processes of intermediate metabolism; purification, characterization and assay of enzymes using chromatography, spectroscopy and electrophoresis. Six laboratory hours per week. PREREQUISITE: CHEM 3302. PREREQUISITE OR COREQUISITE: BIOL 4511 or CHEM 4511.
BI OL 4504-6504. Laboratory Techniques in Molecular Biology. (2). (MMCS 4504). Biochemical and molecular biology laboratory techniques; emphasis on nucleic acids and recombinant DNA; vector design and practical incorporation into host systems; product expression, isolation and identification; bioinformatics in research design strategies. Six laboratory hours per week. PREREQUISITE or COREQUISITE: BIOL 4512 or CHEM 4512, or permission of instructor.
BI OL 4511-6511. Biochemistry I. (3). (MMCS 4511). (Same as CHEM 4511). Chemistry of amino acids and proteins related to their properties in biochemical systems; protein conformation studies; enzymology, coenzymes and their functions; importance of pH and bioenergetics in catalysis; protein and carbohydrate metabolism. Three lecture hours per week. PREREQUISITE: CHEM 3312.
BI OL 4512-6512. Biochemistry II. (3). (MMCS 4512). (Same as CHEM 4512). Continuation of BI OL 4511; chemistry of lipids; metabolism, membrane formation and function in cell signaling mechanisms and sensory transduction; chemistry of nucleotides, DNA and RNA; mechanisms of information storage and transmission; advanced treatment of enzyme kinetics. Three lecture hours per week. PREREQUISITE: BI OL 4511 or CHEM 4511.
BI OL 4570. Practicum In Biology. (3). Directed extra-departmental studies in special areas of biology. No more than five total credit hours of research and practicum (BIOL 4000, BIOL 4001, BIOL 4570) can be applied toward degree requirements. PREREQUISITE: approval from Undergraduate Studies Committee. (S/U).
BI OL 4604-6604. Animal Behavior. (4). Animal behavior, primarily from ecological, physiological, developmental and evolutionary perspective. Two lecture hours, two laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 4610. Honors Senior Seminar. (1). Student involvement in attending seminars; reading, discussing and presenting specialized topics in biology. No more than 1 credit hour of seminar can be applied toward degree requirement. PREREQUISITE: senior standing and permission of instructor and Director of University Honors Program. (S/U)
BI OL 4630-6630. General Endocrinology. (3). Anatomy and physiology of the organs of internal secretion; role of hormones in metabolism and development. PREREQUISITE: BIOL 3030 or 3730 .
BI OL 4640-6640. Ornithology. (4). Biology of birds, with emphasis on avian anatomy, physiology, behavior, and reproductive biology. Field trips emphasize identification of local species and techniques of field study. Two lecture hours, four
field/ laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 4644-6644. I chthyology. (4). Collection, preservation, identification, life histories, management, and economic importance of fishes. Two lecture hours, four laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 4651-6651. Field Techniques of Vertebrate Zoology. (4-6). Techniques in field study of vertebrates. Extended field studies outside local area. PREREQUISITE: BI OL 1120 and 1121.
BI OL 4740-6740. Mammalogy. (4). Classification, distribution, life histories. economic importance, techniques of field study, methods of collection and preservation of mammals. Two lecture hours, four laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 4744-6744. Herpetology. (4). Classification, distribution, life histories, techniques of collection and preservation, and natural habitats of North American reptiles and amphibians. Two lecture hours, four laboratory hours per week. PREREQUISITE: BIOL 1120 and 1121.
BI OL 4745-6745. Tropical Herpetology. (4). Lecture and field intensive course. International travel required for laboratory portion of course. Two lecture hours, four laboratory hours per week. PREREQUISITE: PREREQUISITE: BIOL 1120 and 1121. BI OL 4840-6840. I nvertebrate Zoology. (4). Invertebrate phyla with emphasis on phylogeny, embryology, and ecology of selected groups; extended field trip. Two lecture hours, four laboratory hours per week. PREREQUISITE: permission of instructor.
BI OL 4900-6900. Entomology. (4). Morphology, physiology, behavior and ecology of insects. Three lecture hours, two laboratory hours per week. PREREQUISITE: BI OL 1120 and 1121.

The following courses are taught only at the Gulf Coast Research Lab, Ocean Springs, Mississippi. The University of Memphis residence credit is given through affiliation with the laboratory.

BI OL 4010-6010. Aquaculture. (6). Review of technology, principles, and problems relating to the science of aquaculture with emphasis on culture of marine species. PREREQUISITE: 16 hours of zoology including invertebrate and vertebrate zoology or
ichthyology.
BI OL 4020-6020. Comparative Histology of Marine Organisms. (1-6). Histological organization of representative marine organisms. Fixation, processing, and study of tissues using light microscopy, transmission and scanning electron microscopy. Structural changes and physiological changes during life cycle of organism including histopathology. PREREQUISITE: permission of instructor.
BI OL 4051-6051. Marine Ecology. (5). Relationship of marine organisms to environment includes effects of temperature, salinity, light, nutrient concentration, currents, food, predation and competition on the abundance and distribution of marine organisms. PREREQUISITE: 16 hours of biology including general zoology, general botany, and invertebrate zoology.
BI OL 4057-6057. Salt Marsh Plant Ecology. (4). Emphasis on botanical aspects of local marshes; includes plant identification, composition, structure, distribution and development of coastal marshes; biological and physical interrelationships; primary productivity and relation of marshes to estuaries and associated fauna. PREREQUISITE: general botany, plant taxonomy, plant physiology, and general ecology, or permission of instructor.
BI OL 4200-6200. Marine Botany. (4). Local examples of principal groups of marine algae and maritime flowering plants, treating structure, reproduction, distribution, identification and ecology. PREREQUISITE: ten hours of biology, including introductory botany.
BI OL 4300-6300. Coastal Vegetation. (3). General and specific aspects of coastal vegetation; emphasis on local examples. PREREQUISITE: 10 hours of biology including general botany.
BI OL 4500-6500. Marine Microbiology. (5). Role of microorganisms in overall ecology of oceans and estuaries. PREREQUISITE: general microbiology and environmental microbiology, or permission of instructor.
BI OL 4600-6600. Marine Vertebrate Zoology and Ichthyology. (6). Marine Chordata, including lower groups of mammals and birds; emphasis on fishes. PREREQUISITE: sixteen semester hours of zoology including comparative anatomy, or permission of instructor.
BI OL 4610-6610. Early Life History of Marine Fishes. (4). Reproductive strategies and developmental processes of marine fishes; temporal and spatial distribution patterns, population dynamics, and ecological interactions of fish eggs and larvae; methods of sampling and identifying eggs and larvae. PREREQUISITE: ichthyology, fisheries, biology, ecology, and/or permission of instructor.

BI OL 4646-6646. Marine Fisheries Management. (4). Overview of practical marine fishery management problems. PREREQUISITE: permission of instructor.
BI OL 4700-6700. Behavior and Neurobiology of Marine Animals. (4). Behavior, neuroanatomy, and neurophysiology of marine animals with emphasis on neural mechanisms underlying behavior of selected invertebrates, fishes, birds and mammals. PREREQUISITE: 16 hours of zoology and/or psychology, or permission of instructor.
BI OL 4800-6800. Marine Invertebrate Zoology. (6). Important free living, marine estuarine invertebrates of the Mississippi Sound and adjacent continental shelf of the northeastern Gulf of Mexico, emphasis on structure, classification, phylogenic relationships, larval development and functional processes. PREREQUISITE: 16 hours of zoology including introductory invertebrate zoology.
BI OL 4844-6844. Parasites of Marine Animals. (6). Parasites of marine animals; emphasis on morphology, taxonomy, life histories and host-parasite relationships. Lecture, laboratory and field work included. PREREQUISITE: general parasitology, or permission of instructor.
BI OL 4850-6850. Fauna and Faunistic Ecology of Tidal Marshes. (4). Survey and discussion of taxonomy, distribution, trophic relationships, reproductive strategies and adaptation of tidal marsh animals; emphasis on those occurring in northern Gulf marshes. PREREQUISITE: 16 hours of biology and junior standing, or permission of instructor.

# (BI OM) BI OMEDI CAL ENGI NEERI NG 

EUGENE C. ECKSTEIN, Ph.D., Chair
Room 330, Engineering Technology http://www.be.memphis.edu/.

Undergraduate and graduate level engineering courses require an additional $\$ 20$ per credit hour.
BI OM 1710. Introduction to Biomedical Engineering and Biotechnology. (3). General engineering problem solving, design methods, ethics with emphasis on biomedical and biotechnology applications; individual and group design projects. PREREQUISITE: MATH 1710 or 1730.
BI OM 1720. Introduction to Biomedical Engineering Tools. (3). Use of computer tools for data analysis, presentation, documentation; introduction to programming; individual and group design projects. PREREQUISITE: MATH 1710.
BI OM 2710. Medical Measurements. (4). Theory and application of major types of sensors used in biomedical engineering and clinical medicine; principles of signal processing and instrumentation, such as frequency domain analysis, operational amplifiers, and filtration. Three lecture hours and three laboratory hours per week. PREREQUISITE: BIOM 1720. COREQUISITE: PHYS 2120. BI OM 2720. Experimental Design and Analysis for BME. (3). Application of probability, statistics, error analysis, uncertainty in design and performance of biomedical engineering experimentation; discussion and evaluation of common experimental designs for medical device development. PREREQUISITE: BIOM 1720 and MATH 1910.
BI OM 3710. Physiological Systems and Modeling. (3). Fundamentals of control theory and mathematical modeling and
analysis as applied to physiological systems. PREREQUISITE: MATH 3120. COREQUISITE: BIOL 1120.
BI OM 4205-6205. I ntroduction to Chemical Sensors and Biosensors. (3). Measurement techniques and recognition processes; application of chemical sensors and biosensors to analysis of real samples.
BI OM 4210. Research Studies. (1-3). Consultation, reading, laboratory and design work to investigate selected areas of biomedical engineering under supervision of faculty member; emphasis on laboratory work, design, and scientific writing. Formal paper required. PREREQUISITE: permission of instructor.
BI OM 4720. Bioelectricity. (4). (3720). Bioelectricity, including calculations of potential fields resulting from cardiac or neural electrogeneration; treatment of how heart and nerves generate and propagate electrical signals. Three lecture hours, three laboratory hours per week. PREREQUISITE: MATH 3120, BIOL 1120, CHEM 1120, BIOM 2710, or permission of instructor. BI OM 4730. Biomaterials. (4). (3730). Synthetic materials and their interaction with the physiological environment; methods to design and study materials that are compatible with natural tissue. PREREQUISITE: BIOL 1120, MECH 3320, or permission of instructor.
BI OM 4750. Biomechanics. (4). (3750). Application of mechanical principles to the human body, with focus on joint function, muscle force transmission and generation, gait, soft-tissue mechanics, injury mechanisms and risk, and experimental measurements. PREREQUISITE: MECH 2332, 3320, or permission of instructor. COREQUISITE: BIOL 1120.
BI OM 4760. Biomedical Engineering Design Principles. (3). Practical design methods; wave propagation in tissue; flow in cardiovascular systems; circulatory assist-devices; total artificial hip; high frequency ventilation; cardiac pacemakers; intensive-care monitoring; drug delivery systems. PREREQUISITE: BIOL 3030 and BIOM 3710.
BI OM 4780. Senior Project. (3). Student initiated projects with significant design, analytical and integrative components. Group efforts are encouraged to allow a larger range of projects. Individual contribution to the final result is the basis for the grade. PREREQUISITE: ENGL 3603, and senior standing in BME department. COREQUISITE: BI OM 4760.
BI OM 4900-19-6900-19. Special Topics in Biomedical Engineering. (1-3). Topics are varied and in online class listings.

# (CCFA) COMMUNI CATI ON and FI NE ARTS 

RICHARD RANTA, Ph.D., Dean<br>Room 234, Communication and Fine Arts Building<br>http://www.people.memphis.edu/~ccfa/

CCFA 3001. Arts in Education. (3). Integrates art, music, and drama with other subject areas to stimulate creativity and build positive attitudes.
Students who wish to apply for credit for experiential learning may obtain guidelines from the Dean of the College of Communication and Fine Arts. Fees for this credit are listed in Fees and Charges.
CCFA 4001-6001. Arts in the Schools Institute. (1). Provides West Tennessee educators the opportunity to discover and explore the impact of aesthetic education; students will view performances and exhibits and experience in-depth, hands-on exploratory workshops led by teaching artists.

## (CETH) COMPUTER ENGI NEERING TECHNOLOGY

Department of Engineering Technology
DEBORAH J. HOCHSTEIN, M.S., Chair
Room 203, Engineering Technology Building
http://www.et.memphis.edu
CETH 1211. Computer Programming. (3). Computer usage in engineering technology; emphasis on use of computer programming in solving technical problems using C. Three lecture hours per week. PREREQUISITE: TECH 1010 and MATH 1730.

CETH 2251. Advanced Programming Techniques. (3). Principles of computer programming applicable to engineering technology using C++; algorithmic problem solving, coding in a structured high level language, subprograms and parameters, control structures, I/O, complex arithmetic, and double precision operations emphasized. Three lecture hours per week. PREREQUISITE: CETH 1211.
CETH 2261. Data Structures. (3). Application of high speed digital computer to problems associated with storage and retrieval of numeric and non-numeric data in engineering systems; representation and organization for storing of data, searching and sorting techniques, decision tables, and file maintenance techniques. Three lecture hours per week. PREREQUISITE: CETH 2251.
CETH 3232. Digital Technology. (4). Numbering systems and codes, logic gates, Boolean algebra, Combinational logic, TTL circuits, and memory devices. Three lecture hours, three laboratory hours per week. PREREQUISITE: EETH 1811.
CETH 3233. Microprocessor Technology. (4). Computer history and architecture; microprocessor and microcomputer operation; fetching and executing instructions; microcode; microprocessor registers; memory addressing modes; assembly-language instructions; assembler operation. Three lecture hours, three laboratory hours per week. PREREQUISITE: CETH 1211 and 3232, EETH 2821.
CETH 3251. Assembly Language Programming. (4). (TECH 4251). Microcomputer programming using assembly language instructions, DOS function calls, and BIOS functions. Microprocessor architecture. Using an assembler to create executable files from
assembly language programs. Text and graphic displays using assembly language programs. Application programs for input-output devices. Three lecture hours, three laboratory hours per week. PREREQUISITE: CETH 3233.
CETH 3281. Computer Aided Circuit Design. (4). Utilization of commercially available software for electronic circuit documentation, analysis and design; schematic capture, printed circuit board design, and circuit simulation. Three lecture hours, three laboratory hours per week. PREREQUISITE: EETH 2831, CETH 3232.
CETH 4234. Microprocessor Interfacing Technology. (4). Analysis and design of microprocessor based hardware and software. Interfacing microprocessors to volatile and non-volatile memory devices and to parallel and serial input/output devices using digital logic devices. Assembly language programs are used to verify operation of the hardware. Three lecture hours, three laboratory hours per week. PREREQUISITE: CETH 3233, EETH 2831 and TECH 3044.
CETH 4241-6241. Internet Technology. (4). Internet servers and protocols; e-mail using Simple Mail Transfer Protocol (SMTP), World Wide Web (WWW), Transmission Control Protocol/Internet Protocol (TCP/IP), Telnet Protocol, Hypertext Transport Protocol (HTTP), Hypertext Markup Language (HTML), File Transfer Protocol (FTP), and Uniform Resource Locator (URL). Three lecture
hours, three laboratory hours per week. PREREQUISITE: CETH 2251.
CETH 4242-6242. Client Application Technology. (4). Hypertext Markup Language (HTML), XML, and script languages. Three lecture hours, three laboratory hours per week. PREREQUISITE: CETH 4241, or permission of instructor.
CETH 4262-6262. Modern Programming. (4). Application of Java and Java Script programming languages to problems from selected area of engineering technology; data collecting, modeling techniques, constraints, program development and validation; interfacing with peripherals and machine language. Three lecture hours, three laboratory hours per week. PREREQUISITE: CETH 2261.
CETH 4263-6263. Server Application Technology. (4). J ava exception handling, multithreading, files and streams; JDBC, Servlets, JSP, J avaBeans, Perl server side software. Three lecture hours, three laboratory hours per week. PREREQUISITE: CETH 4262, or permission of instructor.
CETH 4272-6272. Operating Systems. (4). Memory management, processor management, devise management, and file management; MS-DOS operating system, Windows NT, UNIX operating system, VAX/VMS operating system. Three lecture hours, three laboratory hours per week. PREREQUISITE: CETH 2261 and 3233, or permission of instructor.
CETH 4281-6281. Computer Network Technology. (4). Local area networks; interconnecting computers and peripherals; installation of network hardware and software; data communications between computers; sharing peripherals. Three lecture hours, three laboratory hours per week. PREREQUISITE: CETH 3232, EETH 2820.
CETH 4944. Senior Thesis. (3). (Same as EETH 4944, METH 4944). Study and research in specific area culminating in an integrating experience through individual and/or group projects and technical reports. PREREQUISITE: METH 3440 and either ENGL 3601 or 3603, and senior with two semesters of graduation. Permission of department required. [W, I]

## (CHEM) CHEMI STRY

## PETER K. BRIDSON, Ph.D., Chair Room 210, J.M. Smith Building http://www.chem.memphis.edu/

Additional fees are charged for some Chemistry lecture and laboratory courses. See the online class listings or the Expenses section of the Bulletin.
CHEM 1010. Chemistry of Materials. (3). (1101). Fundamental laws of chemistry and impact of chemistry on modern society; nature of science, scientific measurement, nature of matter; Dalton's atomic theory, modern atomic theory; periodicity, nomenclature; acid based interactions; oxidation-reduction interactions; chemical equilibrium, kinetics; solutions and heterogeneous mixtures. NOTE: not credited toward major in any of the physical sciences, biological sciences, mathematics, or engineering. Three lecture hours per week. PREREQUISITE: minimum ACT Math subscore of 21 or MATH 1420. [G] *
CHEM 1011. Chemistry of Materials Laboratory. (1). Experiments and experimental techniques in general and inorganic chemistry. Two laboratory hours per week. [G] •
CHEM 1020. Chemistry of Life. (3). (1102). Basics of organic and biological chemistry: properties, reactions and nomenclature of enzymes, organic functional groups; amino acids, lipids, carbohydrates, nucleic acids and biochemical pathways. NOTE: not credited toward major in any of the physical sciences, biological sciences, mathematics, or engineering. Three lecture hours per week. PREREQUISITE: minimum ACT math subscore of 21 or MATH 1420. [G] *
CHEM 1021. Chemistry of Life Laboratory. (1). Experiments and experimental techniques in organic and biochemistry. Two laboratory hours per week. PREREQUISITE or COREQUISITE: CHEM 1020. [G] •
CHEM 1100. Preparation for General Chemistry. (3). For students whose curriculum requires CHEM 1110 but who have inadequate background; emphasis on scientific calculations and properties of matter. NOTE: does not satisfy any part of science requirement for any degree; not applicable toward fulfilling credit hour minimum for degrees in The College of Arts and Sciences.
Three lecture hours per week. COREQUISITE: MATH 1710 or 1720 recommended.
CHEM 1110. General Chemistry I. (3). (1131). Laws of chemistry; periodic table and chemical periodicity. stoichiometry, nomenclature. modern atomic theory and bonding; ionic and molecular compounds; molecular geometry; oxidation-reduction reactions; solutions and heterogeneous mixtures; gaseous state; states of matter and intermolecular forces; thermochemistry. Three lecture hours per week. PREREQUISITE: high school chemistry or CHEM 1100 or CHEM 1010, and ACT Math score of 24 or MATH 1710, or score on math placement exam earning placement into MATH 1910. COREQUISITE: CHEM 1111 recommended. [G] * CHEM 1111. General Chemistry I Laboratory. (1). (1121). Experiments and experimental techniques in general chemistry.

Three laboratory hours per week. PREREQUISITE or COREQUISITE: CHEM 1110. [G] •
CHEM 1120. General Chemistry II. (3). (1132). Continuation of CHEM 1110. Physical properties of solutions; acid-based reactions; chemical kinetics and reaction mechanisms; chemical equilibrium; thermodynamics; electrochemistry; chemistry of elements. Three lecture hours per week. PREREQUISITE: CHEM 1110. COREQUISITE: CHEM 1121 recommended. [G] • CHEM 1121. General Chemistry II Laboratory. (1). (1122). Continuation of CHEM 1111. Three laboratory hours per week. PREREQUISITE or COREQUISITE: CHEM 1120. [G] •
CHEM 3201. Quantitative Chemical Analysis Laboratory. (2). Application of the techniques of quantitative analysis in areas described in CHEM 3211. Six laboratory hours per week. PREREQUISITE or COREQUISITE: CHEM 3211. Note: Both CHEM 3201 and CHEM 3211 must be completed in order to satisfy the computation intensive requirement. [C]
CHEM 3211. Quantitative Chemical Analysis. (2). Theory and practice of modern chemical analysis; acid base, redox, and complex ion equilibria, separation methods, absorptiometry, flame spectroscopy, and electroanalytical methods. Two lecture hours per week. PREREQUISITE: CHEM 1120, 1121. COREQUISITE: CHEM 3201 recommended. Note: both CHEM 3201 and CHEM 3211 must be completed in order to satisfy the computation intensive requirement. [C]
CHEM 3301. General Organic Chemistry I Laboratory. (1). Emphasis on laboratory techniques as applied to synthesis and other reactions. Three laboratory hours per week. PREREQUISITE: CHEM 1120 and 1121. PREREQUISITE or COREQUISITE: CHEM 3311.
CHEM 3302. General Organic Chemistry II Laboratory. (1). Continuation of CHEM 3301; emphasis on correlation of chemical behavior with structure. Three laboratory hours per week. PREREQUISITE: CHEM 3311 and 3301 COREQUISITE or PREREQUISITE: CHEM 3312.
CHEM 3311. General Organic Chemistry I. (3). Systematic study of preparations and properties of organic compounds, including interpretations based on modern theories of organic chemistry; emphasis on aliphatic and aromatic hydrocarbons, their halogen derivatives, and alcohols. Three lecture hours per week. PREREQUISITE: CHEM 1120.
CHEM 3312. General Organic Chemistry II. (3). Continuation of CHEM 3311; emphasis on more important functional derivatives of aliphatic and aromatic hydrocarbons and natural products important in biochemistry. Three lecture hours per week. PREREQUISITE: CHEM 3311.
CHEM 3402. Physical Chemistry Laboratory. (2). Measurements of physical properties, reaction rates, and equilibria; application of electrochemistry and calorimetry. Six laboratory hours per week. PREREQUISITE: CHEM 3411. COREQUISITE or PREREQUISITE: CHEM 3412.
CHEM 3411. Physical Chemistry I. (3). Fundamentals of thermodynamics and kinetics and their applications in chemical and biological systems; selected topics in the areas of surface chemistry, spectroscopy and macromolecules. Three lecture hours per week. PREREQUISITE: MATH 1830 or MATH 1910, PHYS 2020/2021 or 2120/2121; CHEM 3211 and CHEM 3312.
CHEM 3412. Physical Chemistry II. (3). Aspects of thermodynamics and kinetics with emphasis on the derivation and mathematical treatment; quantum chemistry, chemical bonding, statistical mechanics, spectroscopy and other methods of structure determination. PREREQUISITES: CHEM 3411 and MATH 2110.
CHEM 4001-6001. Environmental Chemistry. (3). Chemical phenomena occurring in soil, atmospheric and aquatic
environments; consideration of natural resources and energy. Three lecture hours per week. PREREQUISITE: CHEM 3311.
CHEM 4101-6101. Inorganic Chemistry Laboratory. (1). Experimental techniques of inorganic synthesis and physical methods for characterization of inorganic and organometallic compounds. Three laboratory hours per week. PREREQUISITE or COREQUISITE: CHEM 4111.
CHEM 4111-6111. I norganic Chemistry. (3). Theoretical and applied inorganic chemistry; relationship of structure and bonding to properties of elements and compounds; molecular orbital theory, coordination compounds and organometallics, ligand field theory, nonaqueous solvent systems, and reaction mechanisms. Three lecture hours per week. PREREQUISITE: CHEM 3412, or permission of the instructor. COREQUISITE: CHEM 4101 recommended.
CHEM 4180-99-6180-99. Special Topics In Inorganic Chemistry. (1-3). Topics in inorganic chemistry that are of current interest. Topics are varied and in online class listings. PREREQUISITE: CHEM 3312 and permission of instructor.
CHEM 4211-6211. Advanced Instrumental Analysis. (3). Topics in analytical instrumental analysis, including atomic spectroscopy, x-ray spectroscopy, mass spectroscopy, UV-visible spectroscopy, luminescence, infrared, Raman, and nuclear magnetic resonance spectroscopy. Three lecture hours per week. PREREQUISITE: CHEM 3211 and 3412.
CHEM 4280-99-6260-99. Special Topics In Analytical Chemistry. (1-3). Topics of current interest in analytical chemistry. Topics are varied and in online class listings. PREREQUISITE: CHEM 3412 and permission of instructor.
CHEM 4311-6311. Intermediate Organic Chemistry. (3). Further study of physical organic chemistry, spectrometric methods of identification of organic compounds, modern organic synthesis, and natural products chemistry. Three lecture hours per week. PREREQUISITE: CHEM 3312.
CHEM 4315-6315. Organic Medicinal Chemistry. (3). Introduction to principles of medicinal chemistry; structure, synthesis, and biochemical mechanism of action of major drug classes. Three lecture hours per week. PREREQUISITE: CHEM 3312. CHEM 4380-99-6380-99. Special Topics In Organic Chemistry. (1-3). Topics of current interest in organic chemistry. Topics are varied and in online class listings. PREREQUISITE: CHEM 3312 and permission of instructor.
CHEM 4411-6411. Advanced Physical Chemistry. (3). Advanced topics in physical chemistry; statistical mechanics and statistical thermodynamics plus selected topics in the areas of kinetic theory of gases, condensed phases, and non-equilibrium processes. PREREQUISITE: CHEM 3412, or permission of instructor.
CHEM 4415-6415. Computational Chemistry. (3). Application of computers to address problems in organic and inorganic chemistry; emphasis on use of quantum chemistry codes to solve problems related to electronic, molecular, and vibrational structure
problems. PREREQUISITE: CHEM 3412 and permission of instructor.
CHEM 4480-99-6480-99. Special Topics in Physical Chemistry. (1-3). Topics of current interest in physical chemistry. Topics are varied and in online class listings. PREREQUISITE: CHEM 3412 and permission of instructor.
CHEM 4501-6501. Laboratory Techniques in Biochemistry. (2). (Same as BIOL 4503). Biochemical techniques, analysis and design strategies; properties of proteins/enzymes, including binding, catalysis, kinetics, electron and proton transport processes of intermediate metabolism; purification, characterization and assay of enzymes using chromatography, spectroscopy,
electrophoresis. Six laboratory hours per week. PREREQUISITE: CHEM 3302. PREREQUISITE or COREQUISITE: CHEM 4511 or BIOL 4511.
CHEM 4511-6511. Biochemistry I. (3). (Same as BIOL 4511). Chemistry of amino acids and proteins related to their properties in biochemical systems; protein conformation studies; enzymology, coenzymes and their functions; importance of pH ; bioenergetics in catalysis; protein and carbohydrate metabolism. Three lecture hours per week. PREREQUISITE: CHEM 3312. CHEM 4512-6512. Biochemistry II. (3). (Same as BI OL 4512). Continuation of CHEM 4511; chemistry of lipids; metabolism, membrane formation and function in cell signaling mechanisms and sensory transduction; chemistry of nucleotides DNA and RNA; mechanisms of information storage and transmission; advanced treatment of enzyme kinetics. Three lecture hours per week. PREREQUISITE: BIOL 4511 or CHEM 4511.
CHEM 4580-99-6560-99. Special Topics in Biochemistry. (1-3). Topics of current interest in biochemistry. Topics are varied and in online class listings. PREREQUISITE: CHEM 4512 and permission of instructor.
CHEM 4604-6604. Instrumental Methods. (3). Analytical instrumental techniques including molecular spectroscopy, chromatography, atomic spectroscopy, and electrochemical analysis. Two lecture hour, three laboratory hours per week. PREREQUISITE: CHEM 3201, 3211, and 3312, or permission of instructor. [W, I]
CHEM 4901. Chemical Research I. (1). Introduction to basic research; collaboration with faculty sponsor on problem of mutual interest in any chemical subdiscipline; effective literature search, laboratory techniques, experimental design, preparation and revision of formal scientific paper. One seminar hour per week. PREREQUISITE: CHEM 3312, permission of instructor and complete prospectus in consultation with faculty sponsor.
CHEM 4902. Chemical Research II. (1). Continuation of basic research; student collaborates with faculty sponsor on problem of mutual interest in any chemical subdiscipline; experience gained in effective literature search, laboratory techniques, experimental design, preparation and revision of formal scientific paper. One seminar hour per week. PREREQUISITE or COREQUISITE: CHEM 4901.

CHEM 4903. Chemical Research III. (1). Completion of research project; student collaborates with faculty sponsor on problem of mutual interest in any chemical subdiscipline; experience gained in effective literature search, laboratory techniques, experimental design, preparation and revision of formal scientific paper. One seminar hour per week. PREREQUISITE or COREQUISITE: CHEM 4902.

## (CHI N) CHI NESE

Department of Foreign Languages and Literatures
RALPH ALBANESE, Ph.D., Chair
Room 375, Dunn Hall
http://fl.memphis.edu
CHI N 1010. Elementary Chinese I. (3). (1101). Principles of pronunciation; everyday expressions; basic sentence patterns through oral practice, writing and reading. -
CHIN 1020. Elementary Chinese II. (3). (1102). Continued study of sentence patterns through oral and written practice. PREREQUISITE: CHIN 1010 or equivalent. •
CHIN 2010. Intermediate Chinese I. (3). (2201). Continued study of sentence patterns through oral and written practice. PREREQUISITE: CHIN 1020 or equivalent. *
CHIN 2020. Intermediate Chinese II. (3). (2202). Continued study of sentence patterns through oral and written practice. PREREQUISITE: CHIN 2010 or equivalent. *
CHIN 3301. Conversation and Composition. (3). Conversational practice dealing with various topics on social life, traveling, business; fundamental Chinese grammar for reading and writing. PREREQUISITE: CHIN 2020 or equivalent.
CHIN 3302. Conversation and Composition. (3). Conversational practice dealing with various topics on Chinese culture, life style, business, education, history, current grammar and slang for conversation and composition. PREREQUISITE: CHIN 3301 or equivalent.
CHI N 4301. Modern Chinese Fiction. (3). Reading in twentieth century Chinese fiction; themes of modernity, nationalism, class, gender and self. PREREQUISITE: CHIN 3301, 3302 or permission of instructor.
CHIN 4304. Advanced Chinese I. (3). Composition, reading, conversation; emphasis on vocabulary and grammar.
PREREQUISITE: CHIN 3302 or equivalent.
CHIN 4305. Advanced Chinese II. (3). Composition, reading, conversation; emphasis on vocabulary and grammar.
PREREQUISITE: CHIN 4304 or equivalent.
CHIN 4780. Individual Studies in Chinese. (1-3). Directed individual study in selected areas of Chinese chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of the instructor.
CHI N 4791-99. Special Topics in Chinese Literature, Language, or Civilization. (3). May be repeated for a maximum of 6
hours credit. PREREQUISITE: permission of instructor.

## ( CI VL) CI VI L ENGI NEERI NG

MARTIN E. LIPINSKI, Ph.D., P.E., Chair

Room 104A, Engineering Science Building
http://www.ce.memphis.edu/
A minimum grade of "C" must be earned in all CIVL courses that are prerequisites for other CIVL course before taking those courses.
Undergraduate and graduate level engineering courses require an additional $\$ 20$ per credit hour.
CIVL 1101. Civil Engineering Measurements. (3). Theory of measurements, linear measurements, angles, topographic surveys, and mapping with applications in Civil Engineering; emphasis on individual and group problem solving, techniques of data collection and analysis, and project documentation. Two lecture hours, three laboratory hours per week.
CIVL 1112. Civil Engineering Analysis. (3). Microcomputer applications for data analysis, presentation, documentation; emphasis on algorithm design and logic; fundamental numerical analysis; elementary programming. Two lecture hours, three
laboratory hours per week. PREREQUISITE: CIVL 1101. PREREQUISITE or COREQUISITE: MATH 1910 and ENGL 1020.
CIVL 2101. Civil Engineering Visualization. (3). Using engineering drawings and computer-aided drafting packages to communicated information and solve engineering problems; emphasis on group work, project documentation, and oral presentation.
Two lecture hours, three laboratory hours per week. PREREQUISITE: CIVL 1112.
CIVL 2107. Civil Engineering Computation. (3). Incorporating programming logic into spreadsheet solutions to engineering problems; emphasis on group work, project documentation, oral presentation. Two lecture hours, three laboratory hours per week. PREREQUISITE: CIVL 2101.
CIVL 2131. Statics. (3). Analysis of two and three dimensional force systems; centroids and moments of inertia; friction. Three lecture hours per week. PREREQUISITE: MATH 1920, PHYS 2110/2111.
CIVL 3103. Approximation and Uncertainty in Engineering. (3). Application of fundamental numerical methods to obtain approximate solutions to engineering problems; application of fundamental probabilistic methods to quantify uncertainty in engineering data. Three lecture hours per week. PREREQUISITE: CIVL 2107.
CIVL 3121. Structural Analysis I. (3). Analysis of statically determinate structures; reactions, shear, and moment; truss analysis; deflections; influence lines and moving loads. Three lecture hours per week. PREREQUISITE: CIVL 2107, 2131.
PREREQUISITE or COREQUISITE: CIVL 3322. [C]
CIVL 3131. Design of Steel Structures. (3). Current design concepts for structural steel members and their connections. Three lecture hours per week. PREREQUISITE: CIVL 3121, 3322.
CIVL 3137. Civil Engineering Materials. (3). Properties of aggregates, mix design and use of Portland cement concrete, masonry products and construction, use of wood and timber products in construction, bituminous materials and mixtures and other engineering materials. Two lecture hours, three laboratory hours per week. PREREQUISITE: CIVL 3322.
CIVL 3140. Environmental Systems Engineering. (4). Fundamentals of environmental engineering systems with emphasis on the integration of the concepts of chemistry, hydraulics, economics, English, and social sciences as they can be applied to benefit mankind. Three lecture hours, three laboratory hours per week. PREREQUISITE: CIVL 3180.
CIVL 3161. Transportation Systems Engineering. (3). Development and function of transportation systems; operational control and characteristics; system coordination, traffic flow and patterns. Three lecture hours per week. PREREQUISITE: CIVL 2107, MECH 2332, MATH 2110. COREQUISITE: CIVL 3103.
CIVL 3180. Civil Engineering Hydraulics. (3). Basic principles of incompressible fluid mechanics with emphasis on hydrostatics, conservation of energy and momentum with application on engineering analysis of pipe networks, pumps, and open channel systems. Three lecture hours per week. PREREQUISITE: CIVL 2107, MECH 2332.
CIVL 3181. Hydrology and Hydraulics. (3). Quantification of precipitation and runoff, reservoir and channel routing, groundwater, and design of drainage systems and open channels. Three lecture hours per week. PREREQUISITE: CIVL 3180. CIVL 3182. Hydrology and Hydraulics Laboratory. (1). Principles of fluid mechanics, open channel hydraulics, and collection of hydrologic data; fluid instrumentation, measurement techniques, data collection methods, and organization of written reports of experimental investigations. Two laboratory hours per week. PREREQUISITE: CIVL 3180.
CIVL 3322. Mechanics of Materials. (3). (Same as MECH 3322). Analysis of components subjected to tension, compression, bending moment, torque; combined loading; Mohres stress circle; deflection of beams; simple treatment of column buckling. Three lecture hours per week. PREREQUISITE: CIVL 2131.
CIVL 3325. Mechanics of Materials Laboratory. (1). Materials testing and evaluation. Three laboratory hours per week. PREREQUISITE or COREQUISITE: CIVL 3322.
CIVL 4111. Engineering Economics. (3). Application of economics and decision theory to engineering alternatives in planning, developing, constructing, and managing engineering projects. Three lecture hours per week.
CIVL 4122-6122. Structural Analysis II. (3). Analytical and numerical solutions for statically indeterminate structures. Three lecture hours per week. PREREQUISITE: CIVL 3121, 3322.
CIVL 4131-6131. Intermediate Steel Design. (3). Design of plate girders and composite beams; moment connections; current code provisions. Three lecture hours per week. PREREQUISITE: CIVL 3131.
CIVL 4135. Reinforced Concrete Design. (3). Strength analysis and design of reinforced concrete members; floor systems;
current code provisions. Three lecture hours per week. PREREQUISITE: CIVL 3121, 3322.
CIVL 4136-6136. Intermediate Reinforced Concrete Design. (3). Design of two-way slab systems; column design including length effects; current code provisions. Three lecture hours per week. PREREQUISITE: CIVL 4135, PREREQUISITE or COREQUISITE: CIVL 4122.
CIVL 4140-6140. Environmental Engineering Design. (3). Detailed design of one component of an environmental engineering system with appropriate consideration of the interactions with the other components; design standards, procedures, and legal constraints. Three lecture hours per week. PREREQUISITE: CIVL 3140.
CIVL 4143-6143. Physical/ Chemical Treatment. (3). Basic physical-chemical treatment concepts including sedimentation, filtration, adsorption, neutralization, coagulation, air stripping, dissolved air flotation, disinfection, and ion exchange; application of basic concepts to design of water and wastewater treatment system components. Three lecture hours per week. PREREQUISITE: CIVL 3140.
CIVL 4144-6144. Biological Wastewater Treatment. (3). Basic biological treatment concepts including biological kinetics, activated sludge, fixed-film systems, lagoon systems, and sludge digestion; application of basic concepts to design of biological wastewater treatment system components. Three lecture hours per week. PREREQUISITE: CIVL 3140.
CIVL 4149-6149. Pump Station Design. (3). Detailed design of sumps, pumps, piping, valves, and controls associated with design of pumping systems for wastewater, process water, drinking water, storm water. PREREQUISITE: CIVL 3180. COREQUISITE: CIVL 3182.
CIVL 4151. Soil Mechanics. (4). Properties of soil and rock, including identification and classification, hydraulic properties, consolidation characteristics, and stress deformation-strength relationships. Three lecture hours, three laboratory hours per week. PREREQUISITE: CIVL 3137.
CIVL 4152. Applied Soil Mechanics. (3). Subsurface exploration, foundation types, foundation construction, selection of foundation type and basis of design, earth retaining structures, and slope stability. Three lecture hours per week. PREREQUISITE: CIVL 4151.
CIVL 4162-6162. Traffic Engineering. (3). Traits and behavior patterns of road users and their vehicles. Includes traffic signs and signals, pavement markings, hazard delineation, capacity, accidents and parking analysis. PREREQUISITE: CIVL 3103, 3161. CIVL 4163-6163. Airport Planning and Design. (3). Aeronautical demand and air traffic control; airport and runway configuration; capacity and delay analysis, geometric design of runways and taxiways; airport access and parking; ground movements and baggage movements. Three lecture hours per week. PREREQUISITE: CIVL 3103, 3161.
CIVL 4164-6164. Route Location and Design. (3). Elements of route location and design; emphasis on horizontal and vertical alignment, curvature, gradient and sight distance. Two lecture hours, three laboratory hours per week. PREREQUISITE: CIVL 1101, 3161.
CIVL 4171. Construction Engineering I. (3). Construction process and project management system; planning, cost estimating, bidding and scheduling construction projects; use of optimization techniques to control schedules and costs; computer applications.
Three lecture hours per week. PREREQUISITE or COREQUISITE: CIVL 4111.
CIVL 4172. Construction Engineering II. (3). Application of construction engineering and management methods to estimate, bid, plan, and manage actual engineering construction project in safe, efficient manner. Three lecture hours per week. PREREQUISITE: CIVL 4171.
CIVL 4180-6180. Advanced Hydrology and Hydraulics. (3). Current methods and techniques used in hydrologic and hydraulic analysis for the design of water resources projects; watershed hydrology, groundwater hydrology, flood frequency analysis, flood plain management, hydraulic structures, hydraulic machinery, and project feasibility. Three lecture hours per week. PREREQUISITE: CIVL 3181.
CIVL 4190-6190. Water Resources Planning and Design. (3). Application of engineering principles to planning and design of multipurpose water resources projects, various physical components and appurtenances of water resources projects and economic, financial, and social feasibility of various purposes. Three lecture hours per week. PREREQUISITE: CIVL 3181, 4111, or permission of instructor.
CIVL 4191. Civil Engineering Projects. (1-3). Independent investigation of a Civil Engineering problem in consultation with instructor. May be taken for a maximum of 3 hours credit toward graduation. PREREQUISITE: permission of instructor. CIVL 4193. Senior Seminar. (1). Reports and discussion on engineering history, current developments, ethics, professionalism, registration, engineering organizations, publications, and activities. One lecture hour per week. PREREQUISITE: senior standing in civil engineering. ( $\mathrm{S} / \mathrm{U}$ )
CIVL 4199. Civil Engineering Design. (3). Design of a civil engineering system. Establishment of design objectives and criteria; synthesis and computer assisted analysis of alternatives; selection of optimum system design; preparation of detailed system descriptions including design sketches and engineering drawings and reports. Must be taken in student's final semester. Two
lecture hours, two laboratory hours per week. PREREQUISITE: ENGL 3603. [W, I]
CIVL 4900-10-6900-10. Special Topics in Civil Engineering. (1-3). Topics are varied and in online class listings. CIVL 4999. Honors Thesis. (3). Under the direction of a faculty member, the student writes and defends a thesis based upon background reading and research on a topic in civil engineering. PREREQUISITE: approval by the Honors Committee of the Department of Civil Engineering.

CJUS 3129 is a prerequisite for all upper division courses except CJUS 3510 and 3521 . CJUS 3130 is a prerequisite or corequisite for CJ US 3540 . CJ US 1100, 3129, 3130, 3510, 3521, and 3540 are prerequisites for all upper division electives. The department chair or advisor may grant exceptions to these requirements for selected elective courses
CJ US 1100. I ntroduction to Criminal J ustice. (3). Introduction to American criminal justice system in its three dimensions: police, courts, and corrections, tracing its development from ancient and early English beginnings to present time.
CJ US 2110. Comparative J ustice Systems. (3). Overview of justice systems of various countries, focusing primarily on substantive and philosophical relationships between the subsystems and the society they serve.
CJ US 2120. Contemporary Issues in Criminal Justice. (3). Overview of current problems facing the criminal justice system; magnitude, causation, potential consequences, potential solutions.
CJ US 3129. Statistical Methods in Criminal Justice. (4). Statistical methods commonly utilized in criminal justice research; emphasis on descriptive and inferential statistics, measures of significance, and interpretation of results; introduction to micro-
computers. Three lecture hours, two laboratory hours per week. PREREQUISITE: MATH 1710, 1830 or 1910. [C]
CJ US 3130. Research Methods in Criminal Justice. (3). Techniques commonly utilized in criminal justice research, emphasis on research design, methods of data collection, measurement of variables, and threats to validity and reliability; use of microcomputers and statistical programs for data collection and analysis. PREREQUISITE: CJUS 3129.
CJ US 3152. Drug Addiction and Alcoholism. (3). Cultural and medical aspects of use of alcohol and various other drugs; consideration of roles of law enforcement and corrections in these areas.
CJ US 3226. Police in America. (3). Comparative analysis of problems, procedures, organization, and functions of effective police organization.
CJ US 3326. Courts in America. (3). Exploration and analysis of structure, process, personnel, policy, and legal theory in the American judicial system.
CJ US 3426. Corrections in America. (3). Concepts of organizational behavior applied to probation, parole, community-based corrections, prisons, and other detention facilities, with emphasis on their history and practice.
CJ US 3510. Law and Society. (3). Law as system of control and as mechanism for resolution of conflict; relationship of law to political, economic and social systems critically analyzed and development of legal profession studied.
CJ US 3521. Constitutional Criminal Procedure. (3). General application of U.S. constitution principles to investigative and prosecutorial process of the criminal justice system; emphasis on requirements of the 4th, 5th, 6th, 8th, and 14th Amendments as they relate to arrest, search, and seizure, interrogation and identification procedures, trial and appellate proceedings.
CJ US 3540. Criminology. (3). (3541). Examination and explanation of crime including sociological, economic, psychological, and biological theories of crime causation; theories examined in light of criminal justice data.
CJ US 3542. Crime and Criminal Typologies. (3). Classification of crime and typical elements involved in each type of crime, classification of criminal offenders and salient career variables associated with each type of offender relative to background, crime, and career prognosis.
CJ US 4010-19-6010-19. Special Topics in Criminal Justice. (1-6). Topics are varied and in online class listings.
CJ US 4100. I ndividual Directed Study in Criminal Justice. (1-4). Individual directed reading and research in special areas of interest in field of criminal justice. PREREQUISITE: permission of department chair. NOTE: Course may be repeated for a maximum of 4 semester hours credit.
CJ US 4110. Senior Seminar in Criminal Justice. (3). Analysis of criminal justice issues from a systems perspective; emphasis on active learning, gaining familiarity with criminal justice resources, and development of analytical and writing skills.
PREREQUISITE: senior standing in Criminology and Criminal Justice, or permission of department chair. [W, I]
CJ US 4126. Criminal J ustice Administration and Management. (3). Management philosophies for administration of criminal justice agencies; focus on organizational behavior, theories of management, planning and budgeting, administrative legal issues, and administrative problems unique to the criminal justice system.
CJ US 4130. Ethical Dilemmas In Criminal Justice. (3). Legal, moral, and social implications of ethical dilemmas in criminal justice, including police use of deadly force, police discretion, victimless crimes, surveillance, enforcement of unpopular laws, use of informers, plea bargaining, judicial discretion, and capital punishment; subcultural norms and dilemmas they present to criminal justice practitioners.
CJ US 4150. I nternship In Criminal J ustice. (1-3). Experience in actual criminal justice setting; both department and agency supervise and direct student program. May be repeated for maximum of 6 hours. PREREQUISITE: senior standing and/or approval of department chair. (S/U)
CJ US 4160-6160. Forensic Sciences. (3). Forensic specialties in terms of their history, scientific rationale upon which each is based, and problems that may compromise accuracy or validity; introduction to field techniques and analysis of evidence.
CJ US 4170. Prevention and Deterrence to Crime. (3). Theoretical and practical strategies for crime prevention and deterrence. Social, environmental, and mechanical developments; police, courts, and correctional elements of criminal justice system analyzed in terms of current effectiveness and future potential for crime suppression.
CJ US 4180-6180. Corporate and White-Collar Crime. (3). Organizational and occupational crime compared to other types of criminality; emphasis on causes, frequency, control, and social impact.
CJ US 4190-6190. Terrorism: Social and Legal Perspective. (3). Theoretical and ideological aspects of practice of and
response to international and domestic terrorism; terrorism as crime from political, social. economic, historical, and legal perspectives.
CJ US 4233. Organized Crime. (3). Nature, structure, characteristics, and investigation of syndicated crime; its impact on social and economic conditions in this country.
CJ US 4235. Private and Industrial Security. (3). Role and function of private police organizations and legal restrictions on private security personnel; facets of private security to include retail, industrial and corporate security.
CJ US 4520-6520. Substantive Criminal Law. (3). Substance of the crime, including common-law sources and basic principles, types of offenses, responsibility, justification and excuse, and related areas.
CJ US 4521. Foundations of the Criminal Process. (3). Examination of historical, philosophical and social issues influencing the development of criminal law; consideration of various problems regarding application of criminal law in a democratic society.
CJ US 4530. Principles of Evidence and Proof. (3). Rules of evidence and matters of proof affecting criminal investigation in investigatory and prosecutive stages of criminal justice; socio-legal aspect of basic rules of evidence, including hearsay rules, impeachment, materiality and relevancy, privilege, eyewitness identification.
CJ US 4531-6531. Issues in Constitutional Rights. (3). Issues in constitutional rights related to criminal defendants; exclusionary rule; application of 1st Amendment to criminal law; due process, equal protection; examination of civil and criminal remedies for protecting and vindicating constitutional rights.
CJ US 4533-6533. Juvenile Delinquency: Theory and Process. (3). Theories of juvenile delinquency, gang activities, and status offenses; history, organization programs and procedures of agencies charged with control and prevention of juvenile delinquency including police, juvenile units, juvenile court, and juvenile correctional agencies.
CJ US 4542. Victimology. (3). Analysis of victim s role in criminal event; victim interaction with offender, criminal justice system, and others involved in event; evidenced by current and historical research findings. PREREQUISITE: senior standing or permission of instructor.

## (CLAS) CLASSI CS

Department of Foreign Languages and Literatures
RALPH ALBANESE, Ph.D., Chair
Room 375, Dunn Hall
http://fl.memphis.edu
CLAS 2481. Mythology. (3). Thematic study of classical myths and their function in ancient literature; emphasis on reading myths in ancient sources in translation. [G] •
CLAS 3021. Scientific Terminology. (3). Origin and derivation of words used in medicine and the sciences; emphasis on building of scientific vocabulary.
CLAS 3412. Roman Culture. (3). Study based on literary sources, of public and private life including such topics as family life, slavery, religion, medicine, law, and technology.
CLAS 3413. Greek Literature in Translation. (3). Reading and analysis of masterpieces of Greek literature in translation from Homer to Lucian; emphasis on development of literary types.
CLAS 3414. Roman Literature in Translation. (3). Reading and analysis of masterpieces of Roman literature in English translation from origins to close of Silver Age; emphasis on genres of Roman literature.
CLAS 4780. I ndividual Studies in Classics. (1-3). Directed individual study in selected areas of Classics chosen in consultation with instructor. Repeatable for a maximum of 6 semester hours credit. PREREQUISITE: permission of instructor.
CLAS 4791. Special Studies in Classics. (1-3). Topics in classical literature and civilization. May be repeated for maximum of 6 hours credit. PREREQUISITE: permission of instructor.

## (COMM) COMMUNI CATI ON

MICHAEL LEFF, Ph.D., Chair<br>Room 143, Theatre and Communication Building

https://umdrive.memphis.edu/g-communication/www/
NOTE: In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000 and 4000 level courses in the Department of Communication.
COMM 1780. Introduction to Human Communication. (3). Principles and processes underlying human communication; communication models, communication purposes and breakdowns, and variables related to interpersonal, small group, intercultural, and public communication.
COMM 1823. TV/ Video Production Laboratory. (1). Experiences in production of broadcast quality television studio and remote productions. Students assume technical positions on a variety of assignments as productions assistants. May be repeated for a maximum of 3 hours credit.
COMM 1851. Introduction to Film. (3). Comprehensive study of the forms, functions, and history of film art; emphasis on developing student's critical skills and aesthetic appreciation through analysis of complex formal, social, historical, and cultural dimensions of the art of film. [G] •

COMM 2381. Oral Communication. (3). Principles and practices of basic oral communication forms with emphasis on listening and critical understanding related to contemporary mass media, especially television and film, and to public information and decision making. [G] *
COMM 3001. Rhetoric and Civic Controversy. (3). Theory and practice of rhetoric; art of designing, delivering, interpreting persuasive messages; study of various forms of rhetoric, including argument and narrative; strategies for building persuasive arguments.
COMM 3002. Theories of Human Communication. (3). Theories and models that describe and explain human communication processes ranging from intrapersonal to mass communication contexts; use of analytical tools to critically analyze communication environments.
COMM 3003. Television and Culture. (3). (3861). Social, political, and aesthetic dimensions of television in contemporary
culture. [W]
COMM 3321. Argumentation and Debate. (3). Theory of argumentation with emphasis on developing skills in analysis, reasoning, and use of evidence in various debate situations and understanding of the role of debate in public decision-making. PREREQUISITE: COMM 2381.
COMM 3322. Theories of Persuasion. (3). Principles underlying communication designed to influence attitudes or behavior; approaches to motivation, perception, message structure, attention, reasoning, audience analysis, persuasibility, and attitude change; items for analysis drawn from speeches, advertising, radio, television, and film.
COMM 3330. Communication Research Methods. (3). Examination and application of qualitative and quantitative methods of research. PREREQUISITE: COMM 1780 or JOUR 1700. [C]
COMM 3341. Discussion. (3). Study and practice of principles and techniques of discussion, dealing with current problems of wide interest and significance.
COMM 3342. Communication and Leadership. (3). Relationship between communication variables and leadership styles and effectiveness in various organizational and group settings.
COMM 3360. Rhetorics of Popular Culture. (3). Investigation of rhetorics of U.S. culture; focus on how constructions of class, gender, race, and sexuality work in contemporary television, film, music, and advertising.
COMM 3361. African-American Rhetoric. (3). Speeches and rhetoric of African-Americans; emphasis on spokespersons such as Walker, Turner, Douglass, Washington, DuBois, Malcolm X, King, Davis, and J ackson.
COMM 3800. Elements of Broadcasting and Electronic Media. (3). Survey of broadcast and electronic media dealing with technology, history, programming, economics, advertising, and regulation.
COMM 3801. TV Production Techniques for J ournalists. (4). For majors in the broadcast journalism sequence; basic principles and techniques of video production with production exercises. PREREQUISITE: permission of instructor.
COMM 3820. Broadcast Preparation and Performance. (3). Skills required for on-air performance in broadcasting and cable emphasizing use of voice and copy preparation; presentation of public affairs programming, talk show hosting, sportscasting, newscasting and general announcing.
COMM 3821. Radio Production and Studio Operations. (3). Preparation, production and evaluation of programs, including talk, discussion, interview, music documentary and special event shows; emphasis on construction, editing, and compilation for broadcast use.
COMM 3823. Motion Picture Production I. (4). Basic production skills and theory; still and 16 mm motion picture photography; film editing and audio; hands-on production exercises.
COMM 3824. Motion Picture Production II. (4). Continued production skills and theory utilizing 16 mm film, digital video and digital post production; extensive production exercises. PREREQUISITE: minimum grade of " C " in COMM 3823, or permission of instructor.
COMM 3842. Television Studio Production I. (4). Techniques of studio TV production, including staging and direction of programs. PREREQUISITE: minimum grade of "C" in COMM 3823 or permission of instructor.
COMM 4011-6011. Communication in Organizations. (3). Study of communication systems and problems in contemporary organizations with emphasis on the role of communication in corporate culture and organizational change.
COMM 4012-6012. Health Communication. (3). Examination of the role of communication in health care; application of communication theory and practice to the health care context from provider-patient interaction to cultural influences on health. COMM 4013-6013. Political Communication. (3). Investigation of various forms of political communication; texts drawn primarily from current political disputes in the U.S.; focus on improving basic skills of critical thinking and writing about civic life. COMM 4014-6014. Computer-Mediated Communications. (3). Theories of computer-mediated communication in interpersonal relationships and organizations; role and impact of the internet and computer technology in society.
COMM 4210-19-6210-19. Special Topics In Communication Studies. (1-3). Topics are varied and announced in online class listings. May be repeated for a maximum of 9 hours credit when topic varies.
COMM 4220-29-6220-29. Special Topics in Film. (1-3). Topics are varied and in online class listings. May be repeated for a maximum of 9 hours credit when topic varies.
COMM 4340-6340. Listening. (3). Exploration of communication theory and practice from perspective of listening; philosophical, practical, personal dimensions of listening as an art of being as well as a mode of doing.
COMM 4341-6341. I nterpersonal Communication. (3). Theory, research and practice regarding dyadic communication.
COMM 4342-6342. Small Group Communication. (3). Study of group communication theory emphasizing group membership, member perceptions, group development, group processes, and group outcomes.

COMM 4360-6360. American Eloquence. (3). Examination of notable public discourse from before founding of the republic through twentieth century; religious and secular foundations of American rhetoric; tensions of inclusion and exclusion in development of national self-understanding. [W]
COMM 4363-6363. Dialogue. (3). Theoretical, philosophical and practical exploration of dialogic communication and relations. COMM 4364-6364. Voices of American Women. (3). History of women's public discourse in the U.S. from the 19th through 20th century; social and cultural significance of women's participation in public discourse; credibility and nature of argument both within and about women's public address.
COMM 4365-6365. Place, Community and Communication. (3). Exploration of interrelationships between human interaction, created places and natural world; emphasis on communication environment, broadly conceived, and its effect on community.
COMM 4373-6373. I nterracial Communication. (3). Special problems encountered in communication among races; readings, discussion, and field study of how prejudice, stereotypes, and self-concepts can affect communication; exploration of methods to minimize these problems.
COMM 4374. Directed Studies in Communication Arts. (1-3). Independent research in areas of special interest of communication, broadcast and electronic media, and film and video. PREREQUISITE: permission of instructor.
COMM 4375-6375. I ntercultural Communication. (3). Special problems encountered in communication among people of different cultural backgrounds; focus on understanding communication between and among people with different national/cultural backgrounds and functioning more effectively in multicultural settings. [W]
COMM 4380-6380. Communication and Conflict. (3). Theories and methods of conflict management and resolution focusing on practical communication skills.; concepts of perception, listening and peacemaking emphasized.
COMM 4381. Senior Seminar in Rhetoric and Communication. (3). Intensive examination of the presentation of public issues in political and entertainment forms (speeches, drama, television, and film). PREREQUISITE: Senior standing, or permission of instructor. [I]
COMM 4802-6802. I nternship. (1-3). Field studies in communication. Supervised practical work with government institutions, non-profit organizations, private business, film companies, and broadcast and electronic media firm. Written analysis of experience required. May be repeated for maximum of 6 hours credit. PREREQUISITE: permission of instructor. (S/U)
COMM 4810-6810. Broadcast Regulation and Program Policy. (3). Effects of FCC and other governmental regulations on broadcast and electronic media management and operations; licensing, renewals, content control, politics, and copyright.
PREREQUISITE: COMM 3800.
COMM 4811-6811. Radio and Television Programming. (3). Analysis of individual program formats (with examples); use of this information along with ratings and other audience research to study design of program schedules. PREREQUISITE: COMM 3800.

COMM 4812-6812. Communications Law in the Performing Arts. (3). Artist, performer, and management contractual relationships; acquisition, copyright and disposition of literary and audio-visual properties; production and distribution agreements; advertising law and other matters for TV, motion picture, radio and stage businesses.
COMM 4822-6822. Audio Production for Film and Video. (3). Intermediate principles and practices of audio (recording, editing, mixing, and design) with emphasis on film and video production. PREREQUISITE: A minimum grade of "C" in COMM 3824, or permission of instructor.
COMM 4824-6824. Cinematography/ Videography. (3). Art of visual interpretation with strong concentration in theory and techniques of lighting. Experience with professional film and video cameras and lighting equipment. PREREQUISITE: A minimum grade of " C " in COMM 3824, or permission of instructor.
COMM 4825-6825. Editing and Post-Production. (3). Aesthetics of continuity development in a variety of editing styles; editing techniques and post-production procedures for both videotape and double system film. PREREQUISITE: A minimum grade of "C" in COMM 3824, or permission of instructor.
COMM 4831-6831. Broadcast and Cable Sales and Advertising. (3). Relation of broadcasting and cable sales and advertising to networks, station representatives and salespeople; role of sponsors, agencies, and allied groups. PREREQUISITE: COMM 3800.
COMM 4841-6841. Television Workshop. (4). Production of television programming for local cable casting. May be repeated for a maximum of 8 semester hours; repetition will not result in a change of any grade previously given. PREREQUISITE: COMM 3842 or permission of instructor.
COMM 4842. Television Studio Production II. (4). Advanced training in TV studio/multiple camera techniques; extensive production work. PREREQUISITE: COMM 3842.
COMM 4850-6850. Film History I. (3). Historical survey of motion pictures from medium's pre-history to 1940; emphasis on narrative film.
COMM 4851-6851. Film History II. (3). Historical survey of the major movements, genres, and themes in narrative film from 1940 to 1960.
COMM 4853-6853. Documentary Form in Film. (3). Development of non-fiction film as rhetorical and expressive form; analysis of individual films, genres, and filmmakers.
COMM 4854-6854. Documentary Form in Broadcasting. (3). History, theory, and criticism of non-fiction broadcasting, including docudrama and television documentaries.
COMM 4856-6856. Women and Film. (3). Women as performers, viewers, subjects, and creators in U.S. and international cinema.
COMM 4857-6857. History of Broadcast and Electronic Media. (3). Comprehensive history of broadcast and electronic media
in United States as developed from 1895 to present; use of primary sources. PREREQUISITE: COMM 3800.
COMM 4858-6858. Contemporary Cinema. (3). Major themes and styles in international and U.S. narrative film from 1960 to present. [W]
COMM 4871-6871. Broadcast and Cable Management. (3). Theories of management; special problems and situations confronting managers of broadcast and cable outlets; personnel, engineering, programming, news, promotion and sales functions. PREREQUISITE: COMM 3800.
COMM 4891-6891. Producing and Directing for Film and Video. (3). Research and script preparation; budgeting and production management; working with actors and crew. PREREQUISITE: COMM 3824, or permission of instructor.
COMM 4892. Film and Video Production. (1-3). Film and video production workshop. Class members write, produce, direct, or assume crew responsibilities on productions. May be repeated for a maximum of 6 hours credit. See departmental guidelines for independent production requirements and procedures. PREREQUISITE: COMM 3824 and permission of instructor.
COMM 4960-6960. Documentary Writing. (3). Writing for non-fiction media.
COMM 4970-6970. Screenwriting. (3). Writing for fiction film and television; basic dramatic theory, narrative structure, characterization, dialogue, adaptation, and the unique demands of audiovisual media.
COMM 4980. Honors Studies. (3). Reserved for students enrolled in Communication Honors Program. May be repeated for a maximum of 15 hours credit. PREREQUISITE: permission of Director of Communication Honors Program.
COMM 4982. Honors Seminar. (3). Intensive study of particular problems in communication. May be repeated for a maximum of 12 hours credit when semester topics vary. PREREQUISITE: permission of Director of Communication Honors Program.
COMM 4993. Senior Practicum. (3). Independent work in radio, video, or film production. Each student has complete creative control of a program from conception through final product. See departmental guidelines for independent production requirements and procedures. PREREQUISITE: permission of instructor. [I]
COMM 4999. Senior Honors Thesis. (3). Supervised independent research project. Open only to students enrolled in the Communication Honors Program. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of Director of Communication Honors Program.

## (COMP) COMPUTER SCI ENCE

Department of Computer Science<br>Sajjan Shiva, Ph.D., Chair Room 209, Dunn Hall<br>http://www.cs.memphis.edu

COMP 1200. Computer Literacy. (4). Basic computer concepts including hardware, operating systems, software, human user interface; software packages including word processing, graphics, spreadsheets, database management; programming in HTML; basics of networks and Internet; legal, ethical, social implications of computers and their role in our world. Three lecture hours, two laboratory hours per week. NOTE: Credit may not be used for degree with major in computer science. PREREQUISITE: DSPM 0850, or two years of high school mathematics.
COMP 1800. Problem Solving with Computers. (3). Fundamental aspects of problem solving within the context of computer programming; techniques for deriving problem solutions and use of basic programming concepts such as loops, conditionals, and variables; basics of high-level programming language. NOTE: computer science majors may not use this course to fulfill degree requirements. ( $\mathrm{F}, \mathrm{Sp}$ )
COMP 1900. CS1: I ntroduction to Computer Science. (4). Fundamental concepts of programming, in the object-oriented paradigm; primitive data types, control structures, arrays, strings, I/O, objects and classes; documentation, coding styles and debugging; problem-solving strategies with emphasis in fundamental programming skills. NOTE: this course is designed for computer science majors. Non-majors should take COMP 4001. Three lecture hours, two laboratory hours per week. COREQUISITE: MATH 1910. (F, Sp, Su)
COMP 2150. CS2: Data Structures. (3). Principles of object-oriented programming and software development; problem solving with recursion and abstract data types, including linked lists, stacks, queues, trees, binary search trees; basic sort and search algorithms. PREREQUISITE: MATH 1910 (or MATH 1830 for non computer science majors) and COMP 1900 or EECE 1207. COREQUISITE: COMP 2701, MATH 2701. (F, Sp, Su)
COMP 2701 Discrete Structures Laboratory. (1). Practicum for discrete mathematical concepts and abstractions in the context of discrete structures, algorithms, programming, graphs, boolean algebra, automata, and software development. PREREQUISITE: MATH 1910 and COMP 1900. COREQUISITE: MATH 2701 and COMP 2150. (F, Sp, Su if MATH 2701 is offered in summer) COMP 3160. CS3: Advanced Data Structures and Algorithms. (3). Review of data structures and object-oriented concepts; implementation of advanced data structures and related algorithms; graphs; B-trees; advanced sorting, hashing; introduction to software engineering teams. PREREQUISITE: COMP 2150, MATH 2701. (F, Sp, Su)
COMP 3410. Computer Organization and Assembly Language. (3). Basic concepts in assembly language programming, including logic, comparing and branching, interrupts, macros, procedures, arrays, program design, testing, debugging, loading, and linking; combinational, arithmetic and logical circuits in ALU; memory circuits, latches, flip-flops, registers; computer structure; fetchexecute cycles, clocks and timing; microprogramming and microarchitecture; data path, timing, sequencing; cache memory organization; RISC architectures. PREREQUISITE: COMP 2150. (Sp)
COMP 3715. Data, Information and Knowledge. (3). Information as a unifying theme to investigate a range of issues in computer science; database systems, artificial intelligence, human-computer interaction, multimedia systems, data communication;
intellectual property, privacy and civil liberties in the information age. PREREQUISITE: COMP 3160, MATH 2701. (Sp)
COMP 3825. Networking and Information Assurance. (3). Net-centric computing; communication and networking; worldwide web; multimedia networking; network management; basic issues in computer security; threat modeling; basic methods and protocols in cryptography; web security; security; security policies; etiquette and cyberethics. PREREQUISITE: MATH 2701 and COMP 3410. (F)
COMP 4001-6001. Computer Programming. (3). Basic concepts in computer programming in BASIC and FORTRAN, including the software development cycle, data types, interation and flow control commands, modular programming, I/O, file processing; basic skills for using operating systems (DOS, VMS), visual basic, computer systems, and network navigation. NOTE: Computer Science majors may not use this course to fulfill degree requirements. PREREQUISITE: MATH 1710. (F, Sp)
COMP 4002-6002. Accelerated Computer Programming. (3). Computers and computer programming; principles of style and documentation; specification, algorithms, coding, and step-wise refinement; structured language, modularity; recursive procedures; programming of basic data structures including linked lists, stacks, queues, trees, and sets; basic sort and search algorithms;
hashing. NOTE: Computer Science majors may not use COMP 4002 to fulfill degree requirements. Credit for either COMP 1900 or COMP 2150 precludes credit for COMP 4002. PREREQUISITE: MATH 1910. COREQUISITE: MATH 4701 or 6701.
COMP 4005-6005. Web Design and Development. (3). Web interface development using HTML, dynamic HTML, XML, JavaApplets, CGI Scripts (with Pearl, C, C++, etc.), Javascripts, Java Servlets, and dynamic forms; technological issues in web page design and data visualization; search engines and their features; digital libraries, Push Technology. NOTE: Computer Science majors may not use this course to fulfill degree requirements. PREREQUISITE: COMP 4001, one course in computer program, or permission of instructor. (F, Sp)
COMP 4011-6011. Advanced Visual Basic. (3). Advanced internet and user interface features and applications; error handling; graphics, images, audio; multimedia; database applications. NOTE: Computer Science majors may not use this course to fulfill degree requirements. PREREQUISITE: COMP 4001, or permission of instructor. (F, Sp)
COMP 4014-6014. I ntroduction to J ava Programming. (3). Basic structured programming syntax; internet features; client/server environments, Applets/Servlets; advanced J ava features, user interface, JFC Eidgets and Events, SWING; database applications; security, threading. NOTE: Computer Science majors may not use this course to fulfill degree requirements.
PREREQUISITE: COMP 4001 or permission of instructor. (F, Sp)
COMP 4016-6016. Java Programming for Teachers. (3). Introduction to object-oriented programming, problem solving, algorithm development and testing, primitive data types, instantiable classes, control structures, strings, arrays, packages, inheritance and polymorphism. NOTE: Computer Science majors may not use this course to fulfill degree requirements.
PREREQUISITE: programming experience in a higher-level language.
COMP 4030-6030. Design and Analysis of Algorithms. (3). Asymptotic behavior of programs, basic paradigms in algorithm design; greedy, divide-and-conquer, dynamic programming; analysis of efficiency and optimality of representative algorithms, including graph, pattern matching, numerical, randomized, and approximation algorithms; approaches to lower bound analysis; basic parallel algorithms. PREREQUISITE: COMP 3160. (F, Sp)
COMP 4040-6040. Programming Languages. (3). Comparative features, syntax and applicability of high-level programming languages such as FORTRAN, PASCAL, LISP, Scheme, ADA, C, C++, JAVA, PHP, JavaScript, Perl, Prolog, FORTH; data types, data structures, dataflow; procedures, recursion, runtime environment, string manipulation, list processing, array processing,
documentation, programming style. PREREQUISITE: COMP 3160. [W] (F)
COMP 4041-6041. Introduction to Compilers. (3). Finite state recognizers, lexical scanners, symbol tables context free methods such as recursive descent; $L L(K)$, precedence, $\operatorname{LR}(K), S L R(K)$; language translation, generation and improvement of machine independent codes, inherited and synthesized attributes, syntax-directed translation schema. PREREQUISITE: COMP 3410, 4040, 4030. (Sp)
COMP 4081-6081. Software Development. (3). Scope of software engineering; software life cycle models; software process; team organization; requirements analysis and design methodologies; metrics, inspections, testing strategies and maintenance; software risks; professional and ethical responsibilities. PREREQUISITE: COMP 3160 and 3715. (F)
COMP 4115-6115. Database Processing and Design. (3). Database processing and architecture; conceptual data modeling and data design; logical data models; relational models, operations and algebra; query languages and SQL; normalization and schema refinement; basic indexing techniques (hashing and B+trees). PREREQUISITE: COMP 3160, or permission of instructor. (F) COMP 4242-6242. I ntroduction to Computer Graphics (3). Characteristics of graphics I/O devices; 2D pictures, scaling, translation, rotation, and windowing; drawing histograms, simple maps, block diagrams, and flowcharts; curved lines, precision, quantization and interpolation, plotting equations; 3D pictures, scaling, translation, rotation, and projections hidden line problem, non-Euclidean geometry, animation. PREREQUISITE: COMP 3410. (F)
COMP 4262-6262. Programming UNI X. (3). Fundamentals of the UNIX system and environment including: file system, shell concepts and programming, editors (vi and emacs), filters (sed, awk, grep, sort), utilities (make, yacc, lex), mail facility,
communication software, C programming and its UNIX interface, $X$ window system. PREREQUISITE: COMP 2150, or permission of instructor. (F, Sp)
COMP 4270-6270. Introduction to Operating Systems. (3). Hierarchy of storage devices, I/O buffering, interrupts, channels; multiprogramming, processor and job scheduling, memory management: paging, segmentation, and virtual memory; management of asynchronous processes; interrupt procedure calls, process stateword and automatic switch instructions, semaphores, concurrency; security and recovery procedures. PREREQUISITE: COMP 3160, and either COMP 3410 or EECE 4278 . (F, Sp)
COMP 4272-6272. System Administration. (3). Review of UNIX and operating systems principles; principles and practices of systems administration and management; network file systems; account management; OS installation; startup and shutdown,
booting, backup, restore; system administration tools; web administration; duties and responsibilities of a system administrator. PREREQUISITE: COMP 4262 and 4270, or permission of instructor. (Sp)
COMP 4302-6302. Web Services and the Internet . (3). Design and implementation of web services; internet architecture and protocol layering; client-server application design; peer-peer application design; World Wide Web programming using HTML, XML, J ava and advanced scripting languages; security issues. PREREQUISITE: COMP 3160, or permission of instructor. (Sp) COMP 4310-6310. Computer Networks and Wireless Mobile Computing. (3). Internet architecture and design; IPv4 and IPv6 ; routing algorithms, TCP congestion control; peer-to-peer applications, wireless LAN, mobile IP, mobile ad hoc networks; wireless sensor networks. PREREQUISITE: COMP 3825. (F)
COMP 4410-6410. Computer Security. (3). Confidentiality, integrity, availability, methods and protocols in cryptography, digital signature, authentication, bit commitment; security in computing, programs, databases, operating systems; secure communication, secure channel, public key infrastructure, certificates; digital evidence, forensics tools; monitor and response; legal and ethical issues; risk management, security administration. PREREQUISITE: COMP 3825. (F)
COMP 4601-6601. Models of Computation. (3). Computer models as basis for the understanding and analysis of programming, computation and complexity; machine models (finite-state, stack and Turing machines); linguistic models (grammars, lambda calculus, predicate calculi); biologically-inspired models (e.g. neural nets or genetic algorithms); unsolvability, universality, decidability, feasibility. PREREQUISITE: COMP 2150 and MATH 2701, or permission of instructor. (F, Sp)
COMP 4720-6720. I ntroduction to Artificial Intelligence. (3). (Same as EECE 4720). Fundamentals of programming in LISP; central ideas of artificial intelligence, including heuristic search, problem solving slot-and-filler structures; knowledge representation. PREREQUISITE: COMP 4040, or permission of instructor. (F)
COMP 4730-6730. Expert Systems. (3). (Same as EECE 4730). Fundamentals of programming PROLOG, central ideas of expert system development, including knowledge representation, control structures, tools, knowledge acquisition, and knowledge engineering. PREREQUISITE: MATH 2701 and COMP 4030, or permission of instructor. (Sp)
COMP 4731-6731. Data Visualization. (3). (Same as EECE 4731). Introduction to the terminology, methodology, and applications of data visualization. Methods for visualizing data from a variety of engineering and scientific fields including both static and time varying data and methods for generating both surface and volume visualizations. PREREQUISITE: EECE 3221 or COMP 2150, or permission of instructor. (F)
COMP 4740-6740. Soft Computing. (3). Foundations of intelligent and soft computing methods; approximate reasoning, fuzzy sets and rough sets, neurocomputing and cellular automata; evolutionary computing and quantum computing; basic principles of software implementation of soft computing. PREREQUISITE: COMP 3160 and MATH 2701, or permission of instructor. (Sp) COMP 4882-6882. Capstone Software Project. (3). Development of significant team project; continuation of COMP 4081; software project management; risk assessment. software requirements and specifications; software design; software validation; professional and ethical responsibilities. PREREQUISITE: COMP 3160, 3715, 4030, and 4081, or permission of instructor. (Sp) COMP 4901-6901. Individual Studies in Computer Science. (1-3). Directed individual study of selected areas of computer science. May be repeated by permission for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.
COMP 4911-6911. Internship in Computer Science. (1-6). Practical experience in computer science. Students placed for some time with governmental or private organizations. Project must be approved and supervised by department faculty. Academic credit granted upon certification of the cooperating agency and acceptance by supervising faculty of studentes written report. May be repeated for up to a total of 6 hours credit. PREREQUISITE: permission of supervising faculty member. (S/U)
COMP 4990-99-6990-99. Topics in Computer Science. (1-3). Topics are varied and in online class listings. PREREQUISITE: permission of instructor.

## (COUN) COUNSELING AND PERSONNEL SERVI CES

Department of Counseling, Educational Psychology and Research DOUGLAS STROHMER, Ph.D., Chair Room 100, E.C. Ball Hall http://coe.memphis.edu/cepr/

COUN 1661. Career Development. (3). Relationship of interests, aptitudes and careers. Includes exploration of work settings and activities to support individual career planning. Students expected to investigate work settings, relate this investigation to academic programs, and utilize this information in individual career development.
COUN 4002. I ndependent Study in Counseling. (1-3). Opportunity for self directed study and/or research under the supervision of faculty member. May be repeated for a maximum of 6 semester hours credit. PREREQUISITE: consent of faculty member. (S/U).
COUN 4010-29. Special Topics in Counseling and Personnel Services. (3). Topics varied and in the online class listings. COUN 4611-6611. Introduction to Counseling. (3). Exploration of history, principles and administration of counseling services in community agencies, schools, business and industry; survey of applicable counseling services, skills and techniques.
COUN 4621. Human I nteractions. (3). Human relations exercises and other personal experiences related to effective learning climates. Includes communication skills for working in groups, one-to-one relationships, and identification and referral of persons to appropriate resources.
COUN 4691. Residence Hall Staff Counseling and Advising. (3). Practical experience for residence hall staff. Instruction and supervision provided. Individual and group activities in counseling, advising, communication, and leadership; concerns such as drug abuse, family planning information, and student discipline. Utilizes interdepartmental disciplines.

COUN 4781-6781. Strategies for Crisis Intervention. (3). Process of crisis intervention; study and practice in understanding crisis induced dysfunctional behavior, recognizing crisis situations, and crisis counseling procedures.
COUN 4783-6783. Alcohol and Drug Abuse Services. (3). Survey of human services for treating alcoholics and substance abusers. Overview of treatment strategies and philosophies.

# (CSED) FAMI LY AND CONSUMER SCI ENCE 

DAN LATTIMORE, Ph. D., Dean<br>Room 404, Manning Hall<br>http://www.uc.memphis.edu/consumer.htm

Due to possible changes in graduation requirements, it is the responsibility of the student to see his or her advisor for updates.
CSED 1101. Personal Development and Human Relations. (3). Individual and group adjustment and influences contributing
to successful marriage and family life.
CSED 1105. Clothing Selection and Construction. (3). Standards in selecting and purchasing, construction of cotton garments to meet individual needs. One lecture hour, four laboratory hours per week.
CSED 2004. Technical Skills for Home Furnishings. (3). Students interested in housing, home furnishing, and related areas focus on varied program of technical skills involving 2-point perspective sketches and drafting freehand and with computer. For Family and Consumer Science majors who lack skills necessary to demonstrate concepts of depicting home furnishing interiors. CSED 2005. Introduction to Fashion Merchandising. (3). Introduction to the types of enterprises, activities, operations, interrelationships, and practices in fashion industry; emphasis on merchandising terminology and techniques.
CSED 2101. The Family in Global Perspective. (3). Introduction to family as a primary, global, social institution; contributions sociology, anthropology, and Family and Consumer Science have made to understanding how and why family systems vary worldwide and common bonds and problems facing families in modern societies. [G]
CSED 2106. Visual Merchandising. (3). Theory and practice in visual merchandising (display); especially retail interior and window display techniques, display creation, planning promotions, and determining budgets.
CSED 3104. Housing and Related Arts. (3). (2104). Elements and principles of design applied to selection of housing and related home furnishings.
CSED 3204. Residential Kitchen Planning. (3). (Same as ART 3204). Design aspects of residential kitchens and their relationship to housing; basic kitchen planning principles based on NKBA guidelines, trends in socio-economic, multi-cultural, universal design; selection, use, care of appliances. PREREQUISITE: CSED 3104, or permission of instructor.
CSED 3206. Merchandising Systems. (3). Analysis of formulas used to plan and control the flow of merchandise through the use of both computer and manual systems. PREREQUISITE: Satisfactory completion of the General Education mathematics requirements. Accounting also recommended. [C]
CSED 3302. Child and Adolescent Development. (3). (Same as EDPR 3302). Principles and processes of child and adolescent development applied to education. Required clinical experiences outside of class. PREREQUISITE: EDPR 2111.
CSED 3401. Parenthood Education. (3). Parental role, parent-child relationship, and factors that influence parenthood. CSED 4101-6101. Preschool Curriculum. (3). Application of child development principles to program planning; infancy through four years of age.
CSED 4106. Trends and I ssues in the Profession. (3). Senior capstone seminar that applies synergistic thinking to integrative discipline of home economics and specializations that make up the discipline; changing trends, issues, and technology affecting today's family and consumer sciences professional; professional orientation and leadership skills critiqued and enhanced in oral and written activities [W, I]
CSED 4204-6204. Furnishings Problems and Presentations. (3). Critical thinking and problem solving related to planning, coordinating, and purchasing of home furnishings. Two lecture hours, one lab hour per week. PREREQUISITE: CSED $2004,4304$. CSED 4205-6205. Behavioral Science Aspects of Clothing. (3). Interdisciplinary study of clothing and appearance; concepts, methodologies, and applications of behavioral science to clothing.
CSED 4211-4217. Readings. (1-3). For Senior Consumer Science majors. In-depth reading or research in area of specialization. PREREQUISITE: Senior Consumer Science majors only.
CSED 4211. Readings in Child Development and Family Relations.
CSED 4213. Readings in Family Economics and Consumer Education.
CSED 4214. Readings in Housing and Home Furnishings.
CSED 4215. Readings in Clothing and Textiles.
CSED 4216. Readings in Fashion Merchandising.
CSED 4217. Readings in Family and Consumer Science Education.
CSED 4300-6300. Family Resource Management. (3). Investigates values, goals, and human and material resources necessary for individuals and families to make informed management decisions throughout the life span.
CSED 4304-6304. Trends in Housing and Home Furnishings. (3). Major trends and influences on contemporary residential furnishings as these affect home furnishings merchandising.
CSED 4383-6383. Materials and Methods in Family and Consumer Sciences Education. (3). Methods in high school
subjects with an emphasis in Consumer Science and Education Instruction. PREREQUISITE: permission of instructor.
CSED 4393-6393. Occupational Methods in Family and Consumer Sciences Education. (3). Special emphasis on
instructional strategies and evaluation through classroom and on-site participation. PREREQUISITE: CSED 4383 and permission of instructor.
CSED 4405-6405. Textiles. (3). Selection, use, and care of textiles related to properties of fibers, yarn structures, fabric construction, and finishes Morphology and chemistry of fibers, finishes, dyes, fabric maintenance, and procedure involved in fiber, yarn, and fabric identification. PREREQUISITE: CSED 2005, 2004, or permission of instructor.
CSED 4600. Senior Seminar in Family and Consumer Sciences. (3). Concentrated study of factors influencing the transitional process from career academics to career implementation. PREREQUISITE: UNIV 4990 and required coursework in concentration/ minor. COREQUISITE: UNIV 4110, 4995, or PADM 4231.
CSED 4900-4906/ 6900-6906. Consumer Science Study Tour. (1-3). On-the-scene knowledge about specific academic areas of specialization within Consumer Science and Education. PREREQUISITE: permission of instructor. Maximum of 6 credit hours for degree program.
CSED 4900-6900. Study Tour in Consumer Science and Education.
CSED 4904-6904. Study Tour: Housing and Home Furnishings.
CSED 4906-6906. Study Tour: Fashion Merchandising.
CSED 4920-29-6920-29. Special Topics in Consumer Science and Education. (1-3). Lectures and conferences covering selected areas of current interest. See online class listings for topics. May be repeated; credit applicable to degree is limited. CSED 4940-49. Workshop in Family and Consumer Science and Education. (1-3). Group study related to specific phases of family and consumer education. May be repeated.

## (DANC) DANCE

Department of Theatre and Dance<br>ROBERT A. HETHERINGTON, M.A., Chair<br>Room 143D, Theatre and Communication Building<br>https://umdrive.memphis.edu/g-theatre/www/

DANC 1151. Introduction to Dance. (3). Comprehensive study of dance as an expressive art form, a symbolic language, and an integral aspect of world cultures; emphasis on developing both aesthetic response and critical skills through an analysis of major dance forms, styles, and genres.
[G] •
DANC 1821. Contemporary Dance I. (2). Introduction to modern dance techniques; emphasis on exploration of fundamentals of dance. For student with little or no previous experience in modern dance. May be repeated for a maximum of 4 hours credit with permission of instructor. [G]
DANC 1825. Ballet I. (2). Introduction to classical ballet technique; emphasis on barre and center floor work. For student with little or no previous experience in ballet. May be repeated for a maximum of 4 semester hours credit with permission of instructor.
[G]
DANC 1827. Jazz Dance I. (2). Contemporary jazz dance techniques; emphasis on fundamentals of idiom. For student with little or no previous experience in jazz dance. May be repeated for a maximum of 4 hours credit with permission of instructor. [G].
DANC 2101. Dance Improvisation. (3). Elements of space, time and force; their interrelationships and their specific applications to movement sequences; experiences in spontaneous development of dance phrases. May be repeated for a maximum of 6 hours credit. (Offered alternate years). PREREQUISITE: permission of instructor.
DANC 2821. Contemporary Dance II. (2). Intermediate modern dance techniques. May be repeated for a maximum of 15 hours credit. PREREQUISITE: DANC 1821, or permission of instructor. [G]
DANC 2825. Ballet II. (2). Intermediate ballet techniques. May be repeated for a maximum of 14 hours credit. PREREQUISITE: permission of instructor. [G]
DANC 2827. Jazz Dance II. (2). Intermediate jazz dance techniques. May be repeated for a maximum of 14 hours credit. PREREQUISITE: permission of instructor. [G]
DANC 3101. History of Dance. (3). Basic features of and uses for dance and expressive movement from early cultures to present. (Offered alternate years). (W)
DANC 3201. Dance Movement Analysis. (3). Theory and methods of analyzing and describing dance movement. Varied semester topics: dance notation, Laban movement analysis, Bartenieff fundamentals, rhythmic analysis, kinetic awareness and body alignment techniques. May be repeated for a maximum of 6 hours credit. . PREREQUISITE: permission of instructor. (Offered alternate years).
DANC 3825. Ballet III. (2). Advanced ballet technique. May br repeated for a maximum of 14 hours credit. PREREQUISITE: permission of instructor.
DANC 3829. Advanced Dance Techniques. (3). Intensive development and refinement of dance technique. Focus on artistic concerns appropriate to advanced level. Repeatable for a maximum of 15 hours credit. PREREQUISITE: permission of instructor. DANC 4000-4029-6000-6029. Special Topics in Dance. (1-3). Topics are varied and announced in the online course listings. May be repeated for a maximum of 9 hours credit when topic varies.
DANC 4101-6101. Dance Repertory. (3). Exploration of stylistic, technical, and expressive elements in rehearsal and performance; notated works, faculty and guest artist choreography. May be repeated for a maximum of 9 hours credit.

PREREQUISITE: permission of instructor.
DANC 4201-6201. Dance Composition. (3). Investigation of movement sources and development of elements of choreographic craft. Emphasis on solo and duet work. May be repeated for a maximum of 6 hours credit. (Offered alternate years).
PREREQUISITE: permission of instructor.
DANC 4202-6202. Advanced Dance Composition. (3). Continued investigation of movement sources and choreographic craft from concept development through rehearsal and performance; emphasis on group forms. May be repeated for a maximum of 6 hours credit. PREREQUISITE: DANCE 4201, or permission of instructor. (I)
DANC 4301-6301. Directed Studies in Dance. (1-3). Individual study, research or practicum. May be repeated for a maximum of 12 hours credit. PREREQUISITE: permission of instructor.
DANC 4402-6402. Dance Education in Diverse Settings. (3). Theory, methods and materials for teaching modern and creative dance in schools, dance studios, arts programs, and community settings; current research in aesthetic education and curriculum development. PREREQUISITE: DANC 2821, or permission of instructor.

## (DSP)TRANSI TI ONAL ACADEMI C STUDI ES

DEVELOPMENTAL STUDIES PROGRAM
http://dstudies.memphis.edu/
Developmental Studies courses are taught by Southwest Tennessee Community College faculty on the University of Memphis campus.
DSPM 0700. Basic Mathematics. (3). (TRAC 0720). Real numbers and number operations, ratio and proportion, percent, measurement, geometry, variables, equations, and applications. Three lecture hours per week. Credit earned will not apply toward degree credit. -
DSPM 0800. Elementary Algebra. (3). (TRAC 0820). Real numbers, their properties, variables, solving equations, polynomials, factoring, linear equations, systems of linear equations, graphing linear equations in two variables, inequalities, quadratic equations, and applications. Three lecture hours per week. Credit earned will not apply toward degree credit. -
DSPM 0850. I ntermediate Algebra. (3). (TRAC 0821). First and second degree equations, linear equations in two variables, polynomials, rational expressions, exponents and radicals, systems of equations, graphing linear equations, inequalities, and applications. Three lecture hours per week. Credit earned will not apply toward degree credit. •
DSPR 0700. Critical Reading I. (3). (TRAC 0740). Essential reading skills needed as foundation for critical reading skills; emphasizes word attack skills, general vocabulary development, comprehension, and increased reading rate. Three lecture hours per week. Credit earned will not apply toward degree credit. -
DSPR 0800. Critical Reading II. (3). (TRAC 0840). Critical reading skills prerequisite for comprehension of college texts; emphasizes increased development of general vocabulary as well as technical and specialized vocabularies. Comprehension with special attention directed toward critical reading skills and improvement of reading flexibility and reading rate. Three lecture hours per week. Credit earned will not apply toward degree credit. -
DSPS 0800. Developmental Study Skills. (3). (TRAC 0830). Necessary reasoning and study skills for college level work; emphasizes critical thinking skills and efficient study techniques. Three lecture hours per week. Credit earned will not apply toward degree credit. .
DSPW 0700. Basic Composition. (3). (TRAC 0710). Practice in developing paragraphs and compositions; extensive work on competencies in grammar, punctuation, and mechanics through numerous writing assignments. Three lecture hours per week. Credit earned will not apply toward degree credit. -
DSPW 0800. Developmental Composition. (3). (TRAC 0810). Expository writing; emphasis on focus, development, organization, and revision of composition; practice with grammar, sentence structure, punctuation, and mechanics. Three lecture hours per week. Credit earned will not apply toward degree credit. • Last Updated: 6/12/15

## (ECED) EARLY CHI LDHOOD EDUCATI ON

Department of Instruction and Curriculum Leadership REBECCA ANDERSON, Ph.D. , Chair

Room 106D, E.C. Ball Hall
http://icl.memphis.edu/
ECED 3555. Observation and Assessment of Infant and Early Childhood Development. (3). Developmental perspective on measurement and evaluation in early childhood years. Considers standardized tests, observations, checklists and rating scales, and tests designed by teachers; their advantages and disadvantages for use with young children; and professional ethical issues pertaining to evaluating young children. PREREQUISITE: EDPR 2111, and admission to TEP. PREREQUISITE or COREQUISITE: EDPR 4301. [C]

ECED 4500. Emergent Literacy and Language Development. (3). Cognitive view in developmental perspective of language development and literacy processes from birth to age five; materials and methods of teaching and assessing language development and emergent literacy from a sociocultural perspective. Required field experiences in multi-cultural settings. PREREQUISITE: ECED 3555 and admission to TEP.
ECED 4510-6510. Foundations of Early Childhood Education. (3). Early childhood profession, its multiple historical, philosophical, and social foundations; current issues, trends and public policies affecting children, families, programs for young children and early childhood profession; exploring early childhood teacher roles and responsibilities through observations in multicultural settings. Ten hours field experience required. PREREQUISITE: admission to TEP. (F,Sp).
ECED 4520-6520. Planning and Facilitating Social Learning and Development. (3). Planning, implementing, and evaluating programs to facilitate young children s social learning t from birth through age 8; addresses socialization, social science skills, knowledge, and dispositions in context of integrating content instruction and learning. Fifteen hours field experience required. PREREQUISITE: admission to TEP, or permission of instructor. COREQUISITE: ECED 4525.
ECED 4525. Practicum in Early Childhood Teaching and Learning. (1-3). Planning, implementing, evaluating early childhood methods and materials in K-3 classes. PREREQUISITE: ECED 4510 and admission to TEP. COREQUISITE: ECED 4520 (Sp) and ECED 4530 (F).
ECED 4530-6530. Planning and Facilitating Math and Science Learning. (3). Provides knowledge, skills, and dispositions necessary to plan for and facilitate development and learning of physical, logico-mathematical, social knowledge of math and science for children from bith through nine years. Fifteen hours field experience required. PREREQUISITE: ECED 4510 and admission to TEP, or permission of instructor. COREQUISITE: ECED 4525.
ECED 4540-6540. Planning and Facilitating Infant and Toddler Development and Care. (3). Models, principles, curriculum and practices of developmentally appropriate infant/toddler caregiving; emphasis on teacher s knowledge of child development, skills and dispositions necessary to foster infant and toddler development in group care settings. Ten hours field experience required. PREREQUISITE: ECED 4510 and admission to TEP, or permission of instructor. (F).

## (ECON) ECONOMICS

JULIA A. HEATH, Ph.D., Chair<br>Room 400, Fogelman College of Business and Economics Administration Building http://fcbe.memphis.edu/modules/general/Dp_economics.php

Students must have junior standing and have met specific course prerequisites with a minimum grade of $\geqslant$ C $\geqslant$ to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of C in each, (2) minimum of 2.25 GPA ( 2.5 for accounting majors) in all required lower division business courses and MATH 1830, and (3) 60 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements). A surcharge of $\$ 20$ per credit hour for 3000 and 4000 level courses and $\$ 20$ per credit hours for $6000-9000$ level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).
ECON 2110. Introduction to Macroeconomics. (3). Nature and functions of the national economy in a global context. Includes consumption and investment behavior, national income and product determination, fiscal and monetary policy, and international trade. [G]
ECON 2120. I ntroduction to Microeconomics. (3). Operation of the market economy at the individual and firm level; supply and demand analysis, consumer behavior, behavior of firms in both competitive and monopoly environments, income distribution theory, and effects of government intervention in the market economy. [G]
ECON 3020-29. Special Topics in Economics. (3). Current economic issues and problems in the United States; emphasis on application of tools and analytical methods. PREREQUISITE: ECON 2110, 2120.
ECON 3123. Economics of Sports. (3). Tools and concepts of microeconomics to the sport world; individual, team and league behavior with the context of economic theory; player salaries, profit maximization, stadium financing, college athletics.
ECON 3210. Labor Economics. (3). Introduction to institutional aspects of American labor force and its organization wage and employment theory, economic role of collective bargaining, and basic ingredients of public policy toward labor organization.
PREREQUISITE: ECON 2120.

ECON 3310. Microeconomic Theory. (3). Intermediate approach to price theory; stress on market mechanism as device for resource allocation; attention to uses of basic microeconomic concepts in analysis of economic problems and in formulation of policy. PREREQUISITE: ECON 2120.
ECON 3320. Macroeconomic Theory. (3). Intermediate approach to social income accounting and to functional relationships between important aggregate economic variables as well as to forecasting and social policy implications. PREREQUISITE: ECON 2110.

ECON 3411. Economics of Social Issues. (3). Applications of economic theory and analysis to current social problems, and evaluation of current and potential policy solutions to social issues.
ECON 3580. International Economic Development-An Ecological Perspective. (3). Process of economic development as adaptive interplay between mans needs and ways in which environment is exploited to satisfy those needs in both developed and less developed countries. PREREQUISITE: ECON 2110, or permission of instructor.
ECON 3610. Money and Banking. (3). Monetary and banking history of leading countries with special emphasis on theory of money and banking in United States, deposit and earnings operations of individual banks, interbank and central bank relations.
PREREQUISITE: ECON 2110.
ECON 4112. Organizational Economics. (3). Analysis of markets and organizations, competitive advantage, production and cost, consumer and market demand, strategic management decision-making, decision rights, incentives and rewards, and structure of performance systems. PREREQUISITE: ECON 2120.
ECON 4120. Economic Forecasting. (3). Current economic thinking on problems of recession and inflation as background to economic forecasting; methodologies of forecasting analyzed with examples of each. PREREQUISITE: ISDS 3711, or equivalent. ECON 4130-6130. Government Regulation of Business. (3). Approaches to legal and legislative control of business, especially tax laws, commission regulations, and antimonopoly legislation, in view of impact of each on industrial operating policy.
PREREQUISITE: ECON 2120.
ECON 4340. Comparative Economic Systems. (3). Factors contributing to differential performance of economic systems, including property rights, information flow, incentive structure, management-labor relations, government policies on technology and competitiveness; emerging trends of system convergence and corporate globalization. PREREQUISITE: ECON 2120.
ECON 4350. International Economics. (3). Historical approach to theory of international trade; consideration given to Classical, Neo-Classical and Modern approach to trade theory with emphasis on policy implications of the analysis. PREREQUISITE: ECON 2120 or equivalent.
ECON 4351. I nternational Monetary Economics: Theory and Policy. (3). Open economy macroeconomics; examination of payments among nations, foreign exchange markets, determinants of exchange rate policies; national income and foreign exchange, internal and external balance and international factor movements. PREREQUISITE: ECON 2110.
ECON 4410. Development of Economic Thought. (3). Historical development of economic thought; attention primarily on emergence of Classical and Neoclassical thought, several dissident schools of thought, and twentieth century economic thought. PREREQUISITE: ECON 2110.
ECON 4510. Introduction to Data Structures and Cleaning. (3). Fundamentals of storing and retrieving data, basic structures, data cleaning techniques using SAS software; methods for examining the quality of data. PREREQUISITE: any one of the following: BIOM 2720, CIVL 3103, CJUS 3129, ISDS 2710, MATH 4614, POLS 4101, PSYC 3001, SOCI 3311.
ECON 4520. Programming Concepts and Techniques. (3). SAS syntax from basic to more advanced statistical concepts; techniques of good programming. PREREQUISITE: ECON 4510.
ECON 4530. From Data to Information. (3). Capstone course focusing on applications; procedure for taking raw data to analysis through final presentation. Case studies presented and analyzed. PREREQUISITE: ECON 4520.
ECON 4620. Mathematical Economics. (3). Introduction to way in which basic mathematical tools are used by economists; applications to consumer theory, production theory, market structures, macroeconomic theory. PREREQUISITE: ECON 2110, 3310, and one semester of calculus, or permission of instructor.
ECON 4740. Health Care Economics. (3). Unique nature of health care as economic good, health care market and its participants including patients, physicians, and hospitals, and financing and delivery of personal health care in United States and other countries.
ECON 4760-69-6760-69. Special Topics in Economics. (1-3). Topics are varied and in online class listings. May be repeated with a change in topic. PREREQUISITE: permission of department chair.
ECON 4810-6810. Quantitative Economic Analysis. (3). Introduction to application of mathematical tools in business and economics; review of matrix algebra, differential and integral calculus; optimization with and without constraints; comparative statistics.
ECON 4820. Econometrics. (3). Introduction to statistical procedures used to estimate and test quantitative economic theories, using microcomputer software for regression analysis.
ECON 4910. Problems In Economics. (1-3). Students investigate issues surrounding selected economic problems and develop reports of that investigation. May be repeated to maximum of 3 hours credit. PREREQUISITE: upper division standing and approval of department chair.
ECON 4911. I nternship In Economics. (1-6). Internship in business organization to gain on-the-job experience. Project to be approved and supervised by departmental faculty. Credit allowed only after acceptance of report. PREREQUISITE: 2.75 overall GPA and completed 15 hours in Upper Division core.
ECON 4920. Senior Seminar In Economics. (3). Coordinated by area coordinator and conducted by selected members of area; integrate several fields and course areas pursued by undergraduate majors into meaningful whole. [I]

ECON 4996. Honors Thesis In Economics. (3). Independent research open only to students enrolled in Economics Honors Program. Honors thesis supervised by three-faculty committee selected by student and approved by Economics Honors Committee. PREREQUISITE: permission of Economics Honors Committee.

(EDPR) EDUCATI ONAL PSYCHOLOGY AND RESEARCH<br>Department of Counseling, Educational Psychology and Research<br>DOUGLAS STROHMER , Ph.D., Chair<br>Room 100, E.C. Ball Hall<br>http://cepr.memphis.edu/

EDPR 2111. Development Across the Life Span. (3). Principles and processes of human development across the life span. EDPR 3121. Learning Processes and Assessment. (3). Major theories and perspectives on classroom learning and classroom assessment practices; emphasis on cognitive processes, individual differences, strategies for instruction, motivation, critical thinking, and self regulation of learning; developing and using classroom assessment and interpreting standardized testing. PREREQUISITE: EDPR 2111, or permission of instructor.
EDPR 3302. Child and Adolescent Development. (3). (Same as CSED 3302). Principles and processes of child and adolescent development applied to education. PREREQUISITE: EDPR 2111 or permission of instructor.
EDPR 4008. Special Problems in Educational Psychology and Research. (1-3). Individually directed reading, field study or research; written report required. PREREQUISITE: permission of instructor.
EDPR 4301. Early Childhood Development for the Beginning Teacher. (3). Philosophy, theory, research, and pedagogy relating to the physical, cognitive, social, and emotional development of children from birth to eight years of age. PREREQUISITE: EDPR 2111 and TEP admission.
EDPR 4541. Fundamentals of Applied Statistical Methods. (3). Use of statistical techniques in education and behavioral sciences; emphasis on practical use and interpretation of concepts. Self-instructional. [C]

## (EDSV) EDUCATI ONAL SERVI CES

Department of Instruction and Curriculum Leadership
REBECCA ANDERSON, Ph.D. , Chair
Room 106D, E.C. Ball Hall
http://icl.memphis.edu/
EDSV 4750. Special Problems: Educational Services. (1-3). Independent study and field projects on selected problems, interests, and needs related to educational programs in training settings.
EDSV 4850. Practicum in Training Settings. (1-3). Opportunities to gain experience in a variety of settings; tailored to interests, needs and career pathways of student. PREREQUISITE: approval by program coordinator. (S/U)
EDSV 4950. Internship in Training Settings. (3-12). Planned and supervised full-time experience in a training setting appropriate to the students specialization area; opportunities to synthesize knowledge and skills and demonstrate professional competencies in an appropriate setting. PREREQUISITE: approval in advance by program director. COREQUISITE: EDSV 4800. (S/U)

(EECE) ELECTRI CAL AND COMPUTER ENGI NEERI NG<br>DAVID J. RUSSOMANNO, Ph.D., Chair<br>Room 206, Engineering Science Building<br>http://www.ee.memphis.edu/

Undergraduate and graduate level engineering courses require an additional $\$ 20$ per credit hour.
EECE 1202. Electrical and Computer Engineering Concepts. (3). (ELEC). Introduction to basic electrical engineering concepts and models; DC circuits; introduction to computers and computer ethics; use of text processors and spreadsheets. PREREQUISITE: MATH 1710 or 1730.
EECE 1206. Computer Engineering Computations. (4). Structured solutions in computer engineering problems; computer implementation of solutions. Three lecture hours, three laboratory hours per week. PREREQUISITE: EECE 1202, or sophomore standing.
EECE 1207. Electrical Engineering Computations. (3). (ELEC). Structured solutions to electrical engineering problems through use of computers. PREREQUISITE: EECE 1202 or sophomore standing.
EECE 1208. Introduction to Computer Engineering Laboratory (1). (ELEC). Laboratory techniques in solutions to computer engineering problems; software/hardware development tools. COREQUISITE: EECE 1207.
EECE 2201. Circuit Analysis I. (3). (ELEC). Fundamental properties of electrical circuits; basic concepts and circuit elements; network theorems; steady-state and transient analyses. PREREQUISITE: MATH 2110. COREQUISITE: MATH 3120.
EECE 2203. Circuit Analysis Laboratory. (1). Introduction to utilization of meters, oscilloscopes, oscillators, power supplies, and related test equipment in experimental verification of basic electric circuit theory. COREQUISITE: EECE 2201.
EECE 2222. Digital Circuit Design. (4). (ELEC). Review of number systems and base conversions; analysis and design of digital
circuits; logic and sequential design; introduction to microprocessors and modern CAD tools; VHDL. Three lecture hours, three laboratory hours per week. PREREQUISITE: EECE 1207.
EECE 2281. Electrical Engineering and Instrumentation Laboratory. (1). Introduction to basic meters, power supplies, test equipment; transient responses and AC power measurements; operational amplifier circuits, bridge circuits and transducers. Does not fulfill degree requirements for Electrical and Computer Engineering majors. Three laboratory hours per week. COREQUISITE:
EECE 2283.
EECE 2283. Electrical Engineering and Instrumentation. (3). Analysis of electrical circuits, sinsoidal steady state analysis, instrumentation circuits, op amps, transducers. Does not fulfill degree requirements for Electrical and Computer Engineering majors. PREREQUISITE: MATH 1920 and PHYS 2120.
EECE 3201. Circuit Analysis II. (4). (ELEC). Laplace transform techniques for network analysis, sinusoidal steady-state response of single and three phase circuits, resonant circuits, linear transformers and magnetic coupling, and introduction to filter design.
Three lecture hours, three laboratory hours per week. PREREQUISITE: EECE 2201, MATH 3120.
EECE 3202. Transform Methods in Network Analysis. (3). (ELEC). Introduction to transform theory; Fourier Series;
application of Fourier, Laplace and Z-transforms to solution of network problems. PREREQUISITE: EECE 2201, MATH 3120. [C]
EECE 3211. Electronics I. (3). (ELEC). Solid state devices as elements of electronic circuits; linear models and linear operation of these devices emphasized. PREREQUISITE: EECE 2201.
EECE 3212. Electronics II. (4). (ELEC). Utilization of devices in linear, non-linear, and switching modes of operation; modeling and simulation of electronic circuits. Three lecture hours, three laboratory hours per week. PREREQUISITE: EECE 2222, 3201, 3211, 3213.
EECE 3213. Electronics I Laboratory. (1). (ELEC). Emphasis on laboratory techniques in performance of basic electronic experiments. COREQUISITE: EECE 3211.
EECE 3220. Computer Software Engineering. (3). (ELEC). Introduction to software engineering; metrics, estimation, and planning; system and software requirements analysis; hardware-software interactions and effects on the design process; software design and implementation techniques; software integrity issues, quality assurance, testing, reliability and maintenance; software development tools. PREREQUISITE: COMP 3160, or permission of instructor.
EECE 3221. Matrix Computer Methods in Electrical Engineering. (3). (ELEC). Fundamentals of matrix theory; application of matrix theory and digital computer techniques to the solution of circuit problems; state equations and their application to the solution of systems of differential equations. PREREQUISITE: EECE 2201. [C]
EECE 3240. Electromagnetic Field Theory. (3). (ELEC). Maxwell $>$ s equations electrostatics, magnetostatics and time varying electromagnetic fields and waves. PREREQUISITE: MATH 3120. [C]
EECE 3270. Introduction to Microprocessors. (4). (ELEC). (4270). LSI circuitry, microprocessor architecture, hardware and software integration, application and system design. Three lecture hours, three laboratory hours per week. PREREQUISITE: EECE 2222.
EECE 4201. Energy Conversion. (3). (ELEC). Energy conversion by electromechanical processes, energy relations in magnetic systems, mathematical modeling of magnetic systems, transformers and electrical machines. PREREQUISITE: EECE 2283 OR 3201.
[C]
EECE 4202-6202. Electrical Power Systems. (3). (ELEC). Investigation of problems associated with transmission of electrical energy; load-flow studies, and fault analysis by use of symmetrical components. PREREQUISITE: EECE 3221.
EECE 4203. Energy Conversion Laboratory. (1). (ELEC). Fundamental properties associated with testing and utilization of direct current and of alternating current equipment such as motors, generators, alternators and transformers. COREQUISITE: EECE 4201.

EECE 4204-6204. Power Distribution Systems. (3). (ELEC). Distribution of power from transmission systems to users; primary and secondary feeders, voltage regulation; distribution transformers; overhead, underground and network distribution system design; lightning phenomena and protective device coordination. COREQUISITE: EECE 4201, 4203.
EECE 4213-6213. Antenna Theory and Design. (3). (ELEC). Theory of operation and design of antennas; determination of antenna radiation characteristics; introduction to antenna array theory. PREREQUISITE: MATH 3120.
EECE 4214. EM Fields Laboratory. (1). Laboratory techniques associated with frequencies above 100 MHz . COREQUISITE: EECE 4215.

EECE 4215-6215. EM Fields Applied to Telecommunications. (3). Steady state and transient solutions of transmission line equations; plane waves; antennas in telecommunications. PREREQUISITE: MATH 3120.
EECE 4221-6221. Electronics III. (4). (ELEC). Applications of analog and digital electronic circuits; special purpose circuits and devices. Three lecture hours, three laboratory hours per week. PREREQUISITE: EECE 3211.
EECE 4222-6222. Digital Logic and Computer Design. (3). (ELEC). Applications of digital system design using MSI, LSI, and VLSI circuits; design of arithmetic logic units, multiple-input controllers, and practical interfacing techniques. PREREQUISITE: EECE 2222.

EECE 4230-6230. Data Communication Systems. (3). (ELEC). Data communications in information and computing systems; analog and digital means of transmitting and controlling information; organization and requirements of data communication systems including modulation and demodulation, multiplexing, switching, error detection and correction. PREREQUISITE: EECE 3202.
EECE 4231-6231. Communication Theory. (3). (ELEC). Frequency and time domain; modulation, random signal theory,
autocorrelation; noise, communication systems. PREREQUISITE: EECE 3202 and MATH 4635.
EECE 4232-6232. Discrete Signal Processing. (3). Introduction to discrete-time signal analysis; includes discrete system
concepts, discrete-time Fourier analysis, sampling of continuous-time signals, z-transform, and transform analysis of discrete time systems; structures for discrete-time systems and discrete filter design techniques. PREREQUISITE: EECE 3202 and MATH 4635.
EECE 4235-6235. Probabilistic System Analysis. (3). (ELEC). Analysis of discrete signals and analog signals with random components; autocorrelation, cross-correlation and power spectra applied to various signals; effects of filters determined; measuring, modeling, and predicting performance of computer systems; entropy and optimum algorithm development; Markovian queuing systems and networks. PREREQUISITE: EECE 3202 and MATH 4635.
EECE 4241-6241. Solid State Physical Electronics. (3). (ELEC). Quantum concepts; statistics; crystal structure; conduction processes in solids; p-n junctions and devices; field-effect devices; charge transfer devices. PREREQUISITE: EECE 3211. [C]
EECE 4242-6242. Electro-Optics. (3). (ELEC). Classical optics including Gaussian optics, Newtonian optics, and vergence
theory; optical design with aberration concepts, F-numbers, pupils, and stops; radiometry with respect to flux transfer calculations; light sources and detectors.
EECE 4243-6243. Linear Optical Systems. (3). (ELEC). Review of Fourier techniques for analysis and design of linear systems, extension to 2-dimensional techniques, 2-dimensional transform applied to linear optical systems and optical data processing. PREREQUISITE: EECE 3202.
EECE 4251-6251. Control System Engineering. (3). (ELEC). General equations of physical linear systems and their transfer functions; transient analysis and stability of servo systems; Bode plot, Nichols chart, Nyquist plot, Routh criterion, root locus methods, introduction to compensation techniques and systems in state space. PREREQUISITE: EECE 3202, 3221.
EECE 4252-6252. Digital Control Systems. (3). (ELEC). Problems and analysis techniques applicable to digital control systems. Prior knowledge of Laplace transforms required; basic knowledge of feedback control theory desirable. PREREQUISITE: EECE 3202, 3221.

EECE 4253-6253. Control Systems Laboratory. (1). (ELEC). Investigations of fundamental properties associated with control systems engineering; laboratory procedures in analysis of control systems, compensating networks, analog and digital computer simulations. COREQUISITE: EECE 4251 or 4252.
EECE 4254-6254. Digital Control Systems Laboratory. (1). (ELEC). Investigations of fundamental properties associated with digital control systems engineering; laboratory procedures in analysis of digital control systems, compensating networks, digital computer simulations and PLCs. COREQUISITE: EECE 4252.
EECE 4271. Computer I nterfacing. (3). (ELEC). Hardware and software aspects of connecting computers to peripherals; tradeoffs between hardware and software; connecting CPUs to ROM, RAM, parallel ports and serial ports; applications to serial and parallel ports; backplane buses, displays, keyboards, A/D and D/A converters; linking interface routines to application software. PREREQUISITE: EECE 2222, or permission of instructor.
EECE 4272-6272. Engineering Software. (3). (ELEC). Procedural and object-oriented programming techniques using $C$ and C++. Introduction to UNIX. PREREQUISITE: EECE 3221, or equivalent.
EECE 4273-6273. Database Engineering. (3). (ELEC). Logical database design, data models for database engineering; entity-relationship, relational, object oriented, logic data models; design theory for relational databases, relational query languages, introduction to integration of database and knowledge-base systems for engineering applications; emerging trends in database machine design and implementation. PREREQUISITE: permission of instructor.
EECE 4275-6275. Network Programming. (3). (ELEC). Introduction to engineering of computer networks, network hardware, and network software; design of software systems for network applications. PREREQUISITE: EECE 1207 and EECE 3221.
EECE 4276-6276. Advanced Network Programming. (3). (ELEC). Advanced methods for engineering software systems; implementations of distributed object models, remote database connectivity, and reusable software components. PREREQUISITE:
EECE 4275, or permission of instructor.
EECE 4277-6277. DSP Microprocessors. (4). (ELEC). Architecture and instruction sent of fixed-point and floating-point devices; hardware interfacing, host communication, real-time signal generation, filtering, and code development using assembly language and C. PREREQUISITE: EECE 2222 and EECE 3202.
EECE 4278-6278. Computer Organization. (3). Organization and structure of CPU, memory, operating system, I/O system organization and implementation issues; hardware and software integration and co-design. PREREQUISITE: EECE 2222, and either COMP 2150 or EECE 4272.
EECE 4279. Professional Development and Capstone Design. (2). Design, ethics, standards, participation in professional organizations; preparation for licensing; preparation for senior design project. PREREQUISITE: EECE 3201, 3211, 3213 and permission of instructor.
EECE 4280. Electrical and Computer Engineering Design. (3). (ELEC). Individual and/or team design projects that require application of electrical engineering or computer engineering concepts. Oral and written presentations required. PREREQUISITE: for BSEE degree: ENGL 3603, EECE 3202, 4279, and either EECE 3212, or 4221; for BSCP degree: ENGL 3603, EECE 3202, 3220, 4278, and 4279. [W, I]
EECE 4710-6710. Computer Architecture. (3). Architecture and design of computers, performance measures, instruction sets, datapaths, I/O systems, and memory hierarchies. PREREQUISITE: EECE 4278.
EECE 4711-6711. Fault Tolerant Computer Design. (3). Evaluation of computer system design and reliability using reliability block diagrams, fault trees, reliability graphics, queuing networks, error detecting and correcting codes, and Markov models; principles of fault tolerant hardware and software design. PREREQUISITE: MATH 4635 and EECE 4278.
EECE 4720-6720. I ntroduction to Artificial Intelligence. (3). (Same as COMP 4720). (ELEC). Fundamentals of programming in LISP; central ideas of artificial intelligence, including heuristic search, problem solving, slot-and-filler structures, and knowledge representation. PREREQUISITE: EECE 3221, permission of instructor.

EECE 4730-6730. Expert Systems. (3). (Same as COMP 4730). (ELEC). Fundamentals of programming in PROLOG, central ideas of expert system development, including knowledge representation, control structures, tools, knowledge acquisition, and knowledge engineering. PREREQUISITE: EECE 3221, or permission of instructor.
EECE 4731-6731. Data Visualization. (3). (Same as COMP 4731). Introduction to the terminology, methodology, and applications of data visualization. Methods for visualizing data from a variety of engineering and scientific fields including both static and time varying data and methods for generating both surface and volume visualizations. PREREQUISITE: EECE 3221 or COMP 2150, or permission of instructor.
EECE 4900-09-6900-09. Special Topics in Electrical and Computer Engineering. (1-3). (ELEC). Topics are varied and in online class listings.
EECE 4910-19. Honors Special Topics. (3). (ELEC). Topics vary and in online class listings. PREREQUISITE: approval by the Honors Committee of the Department of Electrical and Computer Engineering.
EECE 4991. Electrical and Computer Engineering Projects I. (1-3). (ELEC). Independent investigation of problem selected in consultation with instructor; report required. PREREQUISITE: senior standing with a minimum GPA of 2.0 in ELEC courses completed at the University of Memphis.
EECE 4992. Electrical and Computer Engineering Projects II. (1-3). (ELEC). Design, implementation and testing of project investigated in EECE 4991; report required. PREREQUISITE: EECE 4991 with a minimum GPA of 2.0 in EECE courses completed at the University of Memphis.
EECE 4993. Research Studies. (3). (ELEC). Consultation, reading, and design work to investigate selected areas of electrical engineering or computer engineering under supervision of faculty member; formal paper required; emphasis on applied work, design, and scientific writing. PREREQUISITE: ENGL 3603, EECE 3202, and either EECE 3212, 4221, or 3220, and permission of department chair. [W, I]
EECE 4999. Honors Thesis. (3). (ELEC). Under the direction of a faculty member, the student writes and defends a thesis based upon background reading and experimental research on a topic in electrical engineering. PREREQUISITE: approval by the Honors Committee of the Department of Electrical and Computer Engineering.

## (EETH) ELECTRONI CS ENGI NEERI NG TECHNOLOGY

Department of Engineering Technology DEBORAH J. HOCHSTEIN, M.S., Chair<br>Room 203, Engineering Technology Building http://www.et.memphis.edu

EETH 1811. Electronic Circuit Technology. (3). Introduction to fundamental electronic theory and devices, circuit and network theorems. Laboratory emphasis on basic electrical measurements and proper use of instruments. Three lecture hours, two laboratory hours per week. PREREQUISITE: MATH 1730, TECH 1010.
EETH 2812. Basic Industrial Control Devices. (3). Theory and applications of devices commonly used in modern industrial control; including transistors, operational amplifiers, thyristors, and solid-state logic. Applications and characteristics of motors and control system I/O devices. Two lecture hours, three laboratory hours per week. PREREQUISITE: EETH 1811.
EETH 2813. I ndustrial Control Systems. (3). Theory and operation of logic control systems: including relay ladder logic, solidstate logic, and programmable logic controllers. Emphasis on practical industrial applications. Two lecture hours, three laboratory hours per week. PREREQUISITE: EETH 2812.
EETH 2820. Circuit Analysis. (4). Circuit analysis methods in modern electronics engineering technology; laboratory confirmation of mathematical solutions to problems involving direct and alternating currents. Three lecture hours, three laboratory hours per week. PREREQUISITE: EETH 1811.
EETH 2821. Solid-State Technology. (3). Theory of solid-state devices with application in power supplies, amplifiers, and other basic electronic circuits. Solid-state diodes and bipolar junction transistors emphasized. Three lecture hours, two laboratory hours per week. PREREQUISITE: EETH 1811.
EETH 2831. Advanced Solid-State Technology. (3). Theory of field effect transistors and operational amplifiers. Emphasis on practical applications, including amplifiers, filters, and oscillators. Two lecture hours, three laboratory hours per week. PREREQUISITE: EETH 2820, 2821, MATH 1910.
EETH 3811. Electronics Communications. (3). Principles of analog communications; harmonics; noise, active filters, signal generation; A.M., single side band transmission and reception and F.M. Two lecture hours, three laboratory hours per week. PREREQUISITE: EETH 2831, TECH 3044.
EETH 3812. Advanced Electronic Communications Technology. (3). Principles of digital electronic communications; data transmission and modulation/demodulation techniques such as ASK, FSK, Qpsk; quantization error; channel bandwidth; pulse code modulation; satellite communication system principles; optical communication principles. PREREQUISITE: EETH 3811.
EETH 3821. Industrial Electronics. (3). Electronic circuits and systems in industry; principles of signal conditioning, DC and AC motors and drives, sensors; process control and PLcs; theory and application of devices such as unijunction transistors, silicon controlled rectifiers, diacs, triacs. Two lecture hours, three laboratory hours per week. PREREQUISITE: EETH 2831, TECH 3044.

EETH 3822. Programmable Logic Controllers. (4). Theory and operation of programmable logic controllers; emphasis on practical industrial applications and programming techniques. Three lecture hours, three laboratory hours per week. PREREQUISITE: EETH 3821.

EETH 3841. Electrical Power and Motor Control. (3). Generation and utilization of AC and DC electrical power; applications and operating characteristics of motors, generators and transformers with emphasis on three-phase power systems. Two lecture hours, three laboratory hours per week. PREREQUISITE: EETH 3821.
EETH 4821. Microwave Technology. (4). Transition line principles for coax, waveguide and fiber; use of Smith Charts for impedance matching; principles of microwave generation and propagation; measurements such as impedance, antenna gain and VSWR; antenna types, characteristics; radiation patterns. Three lecture hours, three laboratory hours per week.
PREREQUISITE: EETH 3811.
EETH 4823-6823. Advanced Programmable Logic Controllers. (3). Advanced applications of programmable logic controllers, including analog I/O techniques and computer interfacing. Two lecture hours, three laboratory hours per week. PREREQUISITE: EETH 3822, or permission of instructor.
EETH 4944. Senior Thesis. (3). (Same as CETH 4944, METH 4944). Study and research in specific area culminating in an integrating experience through individual and/or group projects and technical reports. PREREQUISITE: METH 3440, and either ENGL 3601 or 3603 , and senior within two semesters of graduation. Permission of department required. [W, I]
EETH 4990-98. Special Topics. (1-3). Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

## (ELED) ELEMENTARY EDUCATI ON

Department of Instruction and Curriculum Leadership
REBECCA ANDERSON, Ph.D. , Chair
Room 106D, E.C. Ball Hall
http://icl.memphis.edu/
ELED 3251. Teaching Methods in the Sciences: Mathematics. (3). Curriculum methods and materials for teaching mathematics with emphasis on problem solving. PREREQUISITE: admission to TEP. [C]
ELED 4240. Literacy in Grades K-4. (3). Cognitive view of literacy processes in developmental perspective; material and methods of teaching; assessing listening, speaking, reading, writing, and thinking. PREREQUISITE: Admission to TEP. Fourteen
hours field experiences. [W]
ELED 4241. Literacy in Grades 5-8. (3). Instructional strategies and assessment procedures relevant to the acquisition of reading, speaking, listening, writing, and thinking skills for students in the middle grades. Fourteen hours field experiences. PREREQUISITE: admission to TEP and ELED 4240.
ELED 4351. Organizing for Teaching and Learning in the Early and Middle Grades. (2). Teacher candidates develop knowledge of best practices for student learning and cognition; identify, develop, and evaluate strategies and techniques of instruction that are sensitive to individual needs of children within a culturally and economically diverse population; emphasis on planning, instruction, assessment, and professional development. Ten hours field experiences. PREREQUISITE/COREQUISITE: ELED 4352, 4353, 4354, admission to TEP, and completion of ALL coursework except Student Teaching and Professional Seminar. ELED 4352. Curriculum and Methods in the Early and Middle Grades. (4). Teacher candidates will learn developmentally appropriate curriculum for K-8 in literacy, science, mathematics, social studies, and fine arts; methods specific to content areas and evaluate current educational materials such as software, textbooks, and manipulatives. Twenty hours field experiences. PREREQUISITE or COREQUISITE: ELED 4351, 4353, 4354, admission to TEP, and completion of ALL coursework except Student Teaching and Professional Seminar.
ELED 4353. Thematic Instruction in the Early and Middle Grades in Urban Settings. (4). Curriculum, methods, and materials for teaching integrated curriculum with a focus on real-world experiences with diverse students in urban settings; teacher candidates will develop and use a thematic unit to instruct K-8 students; emphasis includes critical reflection of how to improve learning and instruction for all students. Twenty hours field experiences. PREREQUISITE or COREQUISITE: ELED 4351, 4352, 4354, admission to TEP, and completion of ALL coursework except Student Teaching and Professional Seminar.
ELED 4354. K-8 Practicum, Integrative Learning in Urban Settings. (2). Integration of the curriculum and teaching for K-8 grades that includes urban site visitation experiences for observation and teaching diverse learners in real-world situations. PREREQUISITE or COREQUISITE: ELED 4351, 4352, 4353, admission to TEP, and completion of ALL coursework except Student Teaching and Professional Seminar. (S/U)

## (ENGL) ENGLISH

STEPHEN TABACHNICK, Ph.D., Chair

Room 467, Patterson Hall http://cas.memphis.edu/english/
All candidates for graduation at the University of Memphis are required to complete ENGL 1010 and 1020 or their equivalents, with a minimum grade of $\geqslant$. Before enrolling in ENGL 1010, a student must have either: (1) an ACT English subscore of 19 or above, or (2) an SAT verbal score of 460 or above, (3) a satisfactory score on a placement exam administered by the University of Memphis Testing Center. Those who do not meet the requirements above, must successfully complete DSPW 0800 with a minimum grade of "C" before proceeding to ENGL 1010. ENGL 1010 and 1020 must be taken in sequence; no credit will be allowed for ENGL 1020 until 1010 has been completed successfully. After completing ENGL 1010 and 1020 with a minimum grade of $\boldsymbol{C}$, all students must take ENGL 2201 or 2202.
ENGL 0102. English as a Second Language (1-2). Intermediate Composition, Practice in process of writing English expository
prose, specifically paragraphs and short essays; review of grammar and sentence structure needed for academic writing skills. Open to non-native speakers of English only. Admission by placement only. (T grade allowed).
ENGL 0103. English as a Second Language (1-3). Advanced Composition, practice in expository writing of paragraphs and essays with emphasis on the writing process; extensive reading in fiction used to encourage writing skill acquisition. Open to nonnative speakers of English only. Admission by placement only. (T grade allowed).
NOTE: The accumulation of three credit hours from the above courses and successful completion of ENGL 0103 will be considered the equivalent of ENGL 1010. Not more than 3 hours credit may be accumulated in ENGL 0102, 0103.
ENGL 1010. English Composition. (3). (1101). Practice in expository writing with emphasis on content, organization, and style (levels of usage and sentence structure) for different purposes and audiences. PREREQUISITE: DSPW 0800 with a minimum grade of $\geqslant \mathrm{C} \geqslant$, or ACT English subscore of 19 or above, or SAT verbal score of 460 or above, or satisfactory completion of placement essay. [G] •
ENGL 1020. English Composition and Analysis. (3). (1102). Practice in expository writing that synthesizes ideas from various readings. Includes library work and production of documented papers. PREREQUISITE: ENGL 1010 with a minimum grade of $\rangle$ C $\rangle$ or equivalent. [G] *
ENGL 2201. Literary Heritage. (3). Major texts of literary heritage; modes of literary expression and cultural context; emphasis on works as products of their historical contexts and as processes shaping human consciousness. Composition and critical thinking beyond levels expected of freshmen. PREREQUISITE: ENGL 1010 and 1020 , with a minimum grade of $\geqslant \mathrm{C} \geqslant$, or their equivalent. [G] -
ENGL 2202. Literary Heritage: African-American Emphasis. (3). Consideration of major texts of literary heritage with emphasis on African-American culture; modes of literary expression and cultural context; emphasis on work as products of historical contexts and as processes shaping human consciousness; composition and critical thinking beyond levels expected of freshmen.
PREREQUISITE: ENGL 1010 and 1020, with a minimum grade of $\geqslant \mathrm{C}\rangle$, or their equivalent. [G] *
ENGL 1010, 1020, and 2201 or 2202 or equivalents with a minimum grade of $\Leftrightarrow C \Leftrightarrow$ are prerequisites for all upper division courses in the Department of English.
ENGL 3100-19. Special Topics in Literature. (1-3). Topics are varied and in online class listings.
ENGL 3210. British Literature to 1750. (3). Survey of major authors, themes, and movements from the medieval period through the 18th Century.
ENGL 3212. British Literature of the Sixteenth Century. (3).
ENGL 3213. Literature of the English Civil Wars. (3).
ENGL 3214. Reason and Sensibility in British Eighteenth Century Literature. (3).
ENGL 3215. Shakespeare I. (3). Background in the study of Shakespeare and discussion of selected works.
ENGL 3220. British Literature since 1750. (3). Survey of major authors, themes, and movements from the Romantic period through the present.
ENGL 3221. British Literature of the Romantic Age. (3).
ENGL 3222. Art, I ndustry, and Society in Victorian Literature. (3).
ENGL 3224. British Literature of the Twentieth Century. (3).
ENGL 3325. African American Literature through the Harlem Renaissance. (3). Examination of works by black authors starting with the Colonial Enlightenment, continuing with slave narratives, and ending with the rise of the black novel.
ENGL 3326. African American Literature since the Harlem Renaissance. (3). Examination of African American literary tradition from the Harlem Renaissance to the present; Chicago writers, integrationist aesthetics of the 1950 s; black aesthetics of the 1960 es.
ENGL 3327. American Literature to 1890. (3).
ENGL 3328. American Literature since 1890. (3).
ENGL 3401. Childrenes Literature. (3). Children $>$ s literature through reading, discussion, and writing about history, characteristics, and authors of its major genres.
ENGL 3404. Studies in Popular Texts. (3). Selected genre of popular texts, such as science fiction, fantasy, crime, mystery, or biography. May be repeated for a maximum of 6 hours credit.
ENGL 3500. Practical English Grammar. (3). Extended study of the fundamentals of English grammar, sentence structure, usage, diction, punctuation, and spelling. Does not apply to the English major or minor.
ENGL 3501. Modern English Grammar. (3). Introduction to current grammatical theory; description of sounds, word structures, syntax, and semantics of English within theoretical frameworks.
ENGL 3511. Introduction to Linguistics. (3). Introduction to the nature and functions of human language, to its structural principles, and to its place in culture and society; emphasis on language diversity and change through history and contact; discussion of language and thought, origin of language, and other topics.
ENGL 3521. The American Language. (3). Changing nature and variety of American English, especially in vocabulary and usage, its range, formal, informal, written, colloquial, and standard and dialectal variations; shifting standards of usage especially reflected in dictionaries; and appropriateness dependent upon context; language as both reflector and shaper of thought.
ENGL 3601. Technical and Professional Writing. (3). Introduction to rhetoric and style of documents written by scientists, engineers, technical writers, and other professionals; extensive practice in writing reports, proposals, manuals, and correspondence.
[W]
ENGL 3602. Writing and Editing in the Professions. (3). Workshop in techniques of communicating effectively in business,
industry, and government; developing practical writing skills for technical publications such as reports, data analyses, and research articles; editing practices involved in packaging and distributing professional writing in printed form.
ENGL 3603. Engineering Communications. (3). Form and contexts of written and oral communications in engineering professions; extensive practice in oral reporting, written reports, manuals, and proposals. Does not apply to the English major or minor.
ENGL 3604. Persuasive Writing. (3). Study and practice of writing essays and reports with emphasis on persuasion; introduction to empirical and library research, application of rhetorical principles, and nature of evidence, including numerical; academic and professional writing, editing, and revision. [W,C]
ENGL 3606. Poetry Writing. (3). Exploration of the creative process within the forms and traditions of poetry. Emphasis on student $>$ s own work. [W]
ENGL 3607. Fiction Writing. (3). Exploration of the creative process within the forms and traditions of fiction. Emphasis on the students own work. [W]
ENGL 3701. Literary Criticism and Theory. (3).
ENGL 4001. Senior Honors Seminar I. (3). Intensive study of a problem in language or literature. Enrollment limited to English honors students.
ENGL 4101-10. Special Topics In English. (3). Topics are varied and in online class listings.
ENGL 4230. Chaucer and the Medieval World. (3). Studies of works by Chaucer and his contempories in their cultural context.
ENGL 4234. Milton. (3).
ENGL 4237. Shakespeare II. (3). Analysis of selected plays and study of various approaches to Shakespeare.
ENGL 4243. Studies in British Fiction. (3). Selected novels and short stories from a variety of periods in British literary history.
ENGL 4321. American Literature: Major Writers Before 1860. (3).
ENGL 4322. American Literature: Major Writers Since 1860. (3).
ENGL 4323. Southern Literature. (3).
ENGL 4345. Studies in American Fiction. (3). Selected novels and short stories from a variety of periods of American literature.
ENGL 4372. Major African American Authors through the Harlem Renaissance. (3). In-depth study of two or three authors prior to 1930, focusing on relationships among them and comparing their aesthetics. May be repeated for maximum of 6 hours credit.
ENGL 4373. Major African American Authors since the Harlem Renaissance. (3). In-depth study of two or three authors since 1930, focusing on relationships among them and comparing their aesthetics. May be repeated for maximum of 6 hours credit.
ENGL 4430. The Graphic Novel. (3). Close study of the nature and cultural significance of the graphic novel genre,
characterized by interplay between verbal and visual.
ENGL 4431. Contemporary British and Commonwealth Literature. (3). Relationships between literature of the United Kingdom and Commonwealth countries from 1960 to present.
ENGL 4442. Studies in World Literature. (3). Examination of literary texts from a variety of national traditions in languages other than English. Readings will be in English.
ENGL 4451. Studies in Women and Literature. (3). Literature and criticism by and about women.
ENGL 4452. Modern Drama. (3). American, British, and European drama from Ibsen to 1950.
ENGL 4453. Contemporary Drama. (3). American, British, and European drama from 1950 to the present.
ENGL 4461. The Bible as Literature. (3).
ENGL 4472. Major British Authors. (3). In-depth comparative study of two or three British authors.
ENGL 4501. History of the English Language. (3).
ENGL 4511. Language and Literature. (3). How linguistics can illuminate the analysis of literature, the nature of literary language, and the linguistic options open to a writer. [W]
ENGL 4521. Language and Society. (3). Place of language in society and how it creates and reflects social relationships;
geographical and social dialects, male/female differences, and language of various subgroups within our culture; intensive
examination of implications of language differences. [I]
ENGL 4530. Practicum in ESL. (3-6). Experience in observing and teaching, peer teaching, and work with an ESL specialist. Repeatable for a maximum of 6 hours. (S/U).
ENGL 4531. Methods and Techniques in ESL. (3). Methods and techniques of teaching English as a Second Language in various settings.
ENGL 4532. Skills Approaches and Assessment for ESL. (3). Approaches to evaluation and means of assessment of language skills, with special emphasis on English as a Second Language. [C]
ENGL 4533-6533. Issues and Techniques in English as a Foreign Language. (3). Skills, background, and approaches needed for teaching English outside the United States.
ENGL 4540-4550. Special Topics in Language and Linguistics. (3). Topics are varied and in online class listings.
ENGL 4599. Forms of Creative Nonfiction. (3). Study of various types of creative nonfiction and the techniques appropriate to each.
ENGL 4600. Creative Nonfiction Workshop. (3). Nature of nonfiction, critical approaches to the genre; practical experience in writing and revising text. May be repeated for a maximum of 6 hours credit with permission of instructor. PREREQUISITE: ENGL 3607.

ENGL 4601. Poetry Workshop. (3). The nature of poetry, critical approaches to the poem, and practical experience in writing
and revising text. May be repeated for maximum of 6 hours credit with permission of instructor. PREREQUISITE: ENGL 3606.
ENGL 4602-6602. Advanced Composition (3). Principles involved in writing clear expository prose; emphasis on application of these principles; analysis of readings and of student $\gg$ s writing. [W]
ENGL 4603. Fiction Workshop. (3). Nature of short story and longer forms of fiction, critical approaches to fiction, and practical experience in writing and revising text. May be repeated for maximum of 6 hours credit with permission of instructor.
PREREQUISITE: ENGL 3607.
ENGL 4604. Forms of Poetry. (3). A study of metrics, forms, and types of poetry in English with attention to the principal traditions and critical ideas associated with the writing of verse in English.
ENGL 4605. Forms of Fiction. (3). A study of how fiction works through analyzing the short story, the novella, and the novel with attention to technical developments.
ENGL 4606-15. Topics In Advanced Technical Writing. (3). Theories, contexts, and practices of writing in the world of technology; topics vary; extensive practice in writing, editing, and preparing technical publications.
ENGL 4616. The Publishing Process. (3). Steps in the publishing process from writing a manuscript to printing it, including the publishing of various genres throughout the world.
ENGL 4618. Reports and Manuals (4). Preparation of professional and academic reports, corporate publications, user manuals; audience and task analysis; application of design and visual rhetoric; technology tools intensive. Three lecture hours, 2 laboratory hours per week. PREREQUISITE: ENGL 3601.
ENGL 4619. Web Design and Online Writing. (4). Principles and techniques of creating online user help for software and designing usable web sites; emphasis on needs of technical writers in professional development environment; task analysis, information architecture, content management, single sourcing, visual rhetoric, navigation, usability testing; technology tools intensive. Three lecture hours, two laboratory hours per week. Students who have received credit for ENGL 4617 cannot take this course for credit. PREREQUISITE: ENGL 3601, or permission of instructor.
ENGL 4630. I nternship in Professional Writing. (3). Experience in technical, scientific, legal, government, or business writing with a professional in the field. Dependent upon availability. PREREQUISITE: 3601 and 3602 and permission of instructor.
ENGL 4711. The Author, the Text, the Reader, and the World. (3). Methodological reflection upon theory and practice of reading linguistic, literary, and rhetorical models. PREREQUISITE: 15 hours of English. [I]
ENGL 4900. Independent Study. (1-3). A selected topic or problem in the field of literature, language, or writing. Topic must not duplicate existing University courses. May be repeated for maximum of 3 hours credit. PREREQUISITE: permission of instructor.
ENGL 4996. Honors Thesis. (3). [W]

## (ENGR) ENGI NEERI NG

CHARLES W. BRAY, Ph.D., Associate Dean<br>Room 201A, Engineering Science Building<br>http://www.engr.memphis.edu/

ENGR 4001. Engineering Work Experience. (3). Off-campus work experience working on selected projects in coordination with the department chair or chair $\geqslant$ s designee in student $\geqslant$ s major department under direction of practicing engineer. Oral and written presentations may be required. May be repeated as many times as student chooses. PREREQUISITE: chair $\geqslant \mathrm{s}$ and CO-OP director $\geqslant \mathrm{s}$ approvals.
NOTE: Students participating in ENGR 4001 are considered to be full-time students for enrollment certification purposes.

## (ESCI ) EARTH SCI ENCES

Department of Earth Sciences
MERVIN J. BARTHOLOMEW, Ph.D., Chair
Room 107, Johnson Hall
http://des.memphis.edu/
Additional fees are charged for some Earth Sciences lecture and laboratory courses. See the online class listings or the Expenses section of the Bulletin.
ESCI 1003. Earth. (3) (GEOG 1003, 1103). Examination of Earth as a complex system in which the atmosphere, biosphere and geosphere interact with human actions to affect the environment; formation of rocks; shape of surface of Earth; changes in weather and climate; natural hazards. Two hours lecture, two hours laboratory per week. PREREQUISITE: one introductory natural science course, or permission of instructor.
ESCI 1010. Weather and Climate. (3). (GEOG 1010, 1001). Atmospheric processes and geographic distribution of radiation, moisture, pressure, and circulation interacting to create weather systems and storms; oceanic influences, earth-sun relationships, global climate patterns; human interaction with atmosphere. PREREQUISITE: two years of high school algebra. [G] •
ESCI 1011. Weather and Climate Laboratory. (1). (GEOG 1011). Laboratory exercises, observations, and experiments designed to apply scientific methods to lecture; observations of atmospheric phenomena and use instruments, both in lab and in field, in order to better understand what is involved in experimental problems. Two laboratory hours per week. PREREQUISITE or COREQUISITE: ESCI 1010. [G] *

ESCI 1020. Landforms. (3). (GEOG 1002, 1020). Agents and processes of landform development and geographic relationships of landscapes including volcanic, fluvial, glacial, and coastal environments; soil development and vegetation associations; environmental hazards to humans; maps and aerial photo interpretation as sources of environmental information. PREREQUISITE: two years of high school algebra. [G] •
ESCI 1021.Landforms Laboratory. (1) (GEOG 1021, 1022). Laboratory exercises, observations, and experiments designed to apply scientific methods to lecture subjects; topographic maps and aerial photographs are major information sources for interpretation and analysis; stereoscopes utilized for three-dimensional viewing; stream tables, soil profiles, and landscape models used to illustrate physical processes interacting to modify earth's surface. Two laboratory hours per week. PREREQUISITE or COREQUISITE: ESCI 1020. [G] •
ESCI 1040. Physical Geology. (4). (1101). (GEOL). Introduction to processes that form the rocks in the earth's crust; the earth's internal forces that make mountains and volcanoes; special emphasis on topics that impact the Mid-South, such as earthquakes. Three lecture hours, two laboratory hours per week. [G] *
ESCI 1050. Historical Geology. (4). (1102). (GEOL). Overview of history of earth and its life as interpreted from rock and fossil record; origins of continents, mountain ranges, ocean basins and natural regions of U.S. Three lecture hours, two laboratory hours per week. PREREQUISITE: ESCI 1040. [G] •
ESCI 1103. Environmental Geology. (4). (GEOL). Applications of Physical Geology to understanding, evaluating and solving problems created by natural hazards and those created by humans; study in management, utilization and preservation of our natural regions, finite space and resources. Three lecture hours, two laboratory hours per week. PREREQUISITE: ESCI 1040. [G] • ESCI 1301. Survey of World Regions. (3). (GEOG). Survey of economic, cultural and physical traits characteristic of developing and industrialized nations. [G]
ESCI 1401. I ntroduction to Cultural Geography. (3). (GEOG). Geographical aspects of human behavior; distributional patterns and interactions of such cultural characteristics as language, religion, politics, and economics. [G]
ESCI 2001. Earth Materials. (3). Formation and identification of basic minerals, rocks, soils, and natural energy materials; mandatory field trips (1-2.5 days each) in place of some laboratory hours. Two lecture hours and two laboratory hours per week. PREREQUISITE: ESCI 1020 or 1040.
ESCI 3200. Peoples and Cultures of the World. (GEOG). (Same as ANTH 3200). (3). Major ethnographic areas and selected cultures of world.
ESCI 3211. I nvertebrate Paleontology. (4). (GEOL). Fossil invertebrate animals and their importance in interpretation of ancient environments, evolution, and geologic time. Three lecture hours, two laboratory hours per week. PREREQUISITE: GEOL 1040, or permission of instructor. [W]
ESCI 3221. Principles of Conservation. (3). (GEOG). Development of conservation ethic and wilderness concepts; survey of environmental problems, land use, and energy and resource utilization; soil erosion and crop productivity relationships.
ESCI 3311. Mineralogy and Petrology. (4). (GEOL 3311). Classification and identification of minerals. igneous rocks, metamorphic rocks in hand specimen and under microscope; geological occurrence and use of minerals; genesis and occurrence of igneous and metamorphic rocks. Two lecture hours, four laboratory hours per week. PREREQUISITE: ESCI 1040. COREQUISITE: CHEM 1110/1111.
ESCI 3401. Historical Geography of the U.S. (3). (GEOG). Evolution of the cultural landscapes of the United States with emphasis on the interaction of environment and people in the development of this nation.
ESCI 3430. Economic Geography. (3). (GEOG). Spatial characteristics and distribution of economic activities.
ESCI 3451. I ntroduction to Urban Planning. (3). (GEOG). Introduction to regional and urban planning emphasizing spatial relationships of physical, economic, and cultural phenomena necessary in planning process.
ESCI 3512. Structural Geology. (4). (GEOL). Structures of the crust; geometry of folds and faults, rock deformation, criteria for recognizing structures, solution of geometrical problems. Three lecture hours, two laboratory hours per week. PREREQUISITE: ESCI 1040, MATH 1910, or permission of instructor. [C]
ESCI 3712. Sedimentology and Stratigraphy. (4). (GEOL). Origin and classification of sedimentary rocks and mutual relationship of sedimentary rock bodies both geographically and through geologic time. Lecture emphasizes comparison of modern depositional systems with their ancient counterparts. Laboratory emphasizes hand specimen analysis and preparation of geologic maps. Three lecture hours, two laboratory hours per week. PREREQUISITE: GEOL 1050 or 1103.
ESCI 3802. Oceanography. (3). (GEOL 3802). Origin, chemistry, water circulation, shoreline and deep water characteristics of oceans; its role in evolution and history of earth; marine life and its ecology.
ESCI 4101-6101. Global Geophysics. (3). (GEOP). Origin, evolution, structure of planet earth from geophysical perspective; accretion and composition of the earth; isotopic determination of ages; differentiation of oceanic and continental crust; mechanisms of plate tectonics; seismic structure, gravity and magnetic fields of earth. PREREQUISITE: permission of instructor.
ESCI 4120-6120. Geomorphometry. (3). (GEOG). Quantitative analysis of morphology of landforms; data acquisition from field work, topographic maps, digital terrain models; GPS and GIS used to derive, store, manipulate, analyze morphometric data. Course may be repeated. PREREQUISITE: GEOG 1020/1021, or GEOL 1040.
ESCI 4122-6122. Soil and Soil Processes. (3). (GEOG 4122). Processes and dynamics of soil profile development; major models of soil development examined and applied to soil genesis in Tennessee; application of soil techniques to archaeology, planning, earth sciences, and soil conservation and erosion problems; emphasis on field and laboratory techniques with field work in soil mapping and soil taxonomy. Two lecture hours, two laboratory hours per week.
ESCI 4201-6201. Urbanization and Environment. (3). (GEOG). Ways man has changed natural environment by urbanization and how physical features and processes influence development and function of cities.

ESCI 4202-6202. Geomorphology. (4). (GEOL). Description, origin and interpretation of landforms and their relationships to underlying structure and geologic history; processes acting on earth's surface, including active tectonics; weather; mass-wasting; climate change; and fluvial, shoreline, and glacial processes. Three lecture hours, two laboratory hours per week.
PREREQUISITE: ESCI 1103 or ESCI 1020/1021.
ESCI 4203-6203. Environmental Geophysics. (4). (GEOP 4201). Survey of shallow geophysical prospecting methods; seismic reflection and refraction techniques; electrical, magnetic and gravity field measurements; practical measurements and fundamental principles governing acquisition and interpretation of geophysical data for shallow subsurface investigation. Three lecture, two
laboratory hours per week. PREREQUISITE: permission of instructor.
ESCI 4211-6211. Physical Hydrogeology. (4). (GEOL). Movement, storage and development of groundwater; groundwater in the hydrologic cycle; aquifer characteristics and tests. Three lecture hours, two laboratory hours per week. PREREQUISITE: ESCI 1103 and one semester of calculus.
ESCI 4213-6213. Field Methods in Hydrology. (3). (GEOL 4213). Practice of field methods in solving hydrologic problems. PREREQUISITE: ESCl 4211, or permission of instructor.
ESCI 4214-6214. Climatology. (3). (GEOG 4211). Climatic elements and methods of data analysis; applications of climatology in agriculture, health, economics, and architecture. PREREQUISITE: ESCI 1010/1011 and PHYS 2110/2111.
ESCI 4215-6215. Physical Climatology. (3). (GEOG). Components of earth's energy balance, emphasis on solar radiation, heat transfer, and evapotranspiration. PREREQUISITE: ESC 1010/1011 and PHYS 2010/2011.
ESCI 4220-6220. Geology and the Hazards of Earthquakes. (3). (GEOP). Estimation of geological aspects and hazards associated with individual earthquakes and earthquakes on specific faults; earthquake rupture patterns, topographic expressions; estimating ages of prehistoric earthquakes, triggering, associated landslides and debris flows. PREREQUISITE: permission of instructor.
ESCI 4231-6231. Water Resources. (3). (GEOG). Hydrologic processes and their application to needs of cities, industry, agriculture, and recreation.
ESCI 4241-6241. Biogeography. (3). (GEOG). Principles underlying spatial distribution of plants, including physical, biotic, and historical controls; vegetation dynamics; survey of patterns and processes of North American vegetation.
ESCI 4251-6251. Environmental Hazards. (3). (GEOG). Interrelations between human beings and natural hazards; importance of policy decisions; planet wide climatic changes, potential changes in earth-sun relations, inadequate food production, local disasters, and nuclear contamination.
ESCI 4252-6252. Global Environmental Change. (3). (GEOP). Characteristics of natural systems; magnitude of human alteration of environmental systems; history of natural changes in climate and landscape; impact of changes. PREREQUISITE:
permission of instructor.
ESCI 4301-6301. Archaeology of North America. (3). (Same as ANTH 4301). Intensive study of various prehistoric cultures from earliest times until historic contact. PREREQUISITE: ANTH 1100, 1200, 1300, or permission of instructor.
ESCI 4307. Thematic Studies in China. (3). Geographic analysis of physical, cultural, and economic characteristics of China and neighboring regions.
ESCI 4308-12-6308-12. Special Topics in Regional Geography. (3). Geographic analysis of physical, cultural, economic characteristics of a selected world geographic region, including Europe, United States, Canada, Central America, South America. May be repeated for a maximum of 9 hours credit with a change in topic.
ESCI 4325-6325. Archaeological Field and Laboratory Techniques. (3). (Same as ANTH 4325). Instruction in field excavation, specimen preparation, use of survey instruments and photography, map making, archaeological record keeping; methods and techniques in archaeological laboratory analysis; emphasis on organization and supervision of laboratory procedures. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.
ESCI 4332-6332. Introduction to Geochemistry. (3). (GEOL). Geological and chemical processes that govern or control migration and distribution of elements and atomic species of earth in space and time. Three lecture hours per week. PREREQUISITE: ESCI 3312.
ESCI 4341-6341. Aqueous Geochemistry. (3). (GEOL). Physical chemistry of aqueous solutions as applied to geochemical processes on earth's surface. PREREQUISITE: CHEM 1120.
ESCI 4351-6351. Advanced Structural Geology, (3). (GEOL). Analysis of crustal structure; stress in rocks, mechanical interpretation of crustal structures. PREREQUISITE: ESCI 3512, MATH 1910.
ESCI 4352-6352. Old World Archaeology. (3). (3351) (Same as ANTH 4352). Old World cultures from first humans to early civilizations.
ESCI 4361-6361. Tectonics. (3). (GEOL). Principles and geometry of plate tectonics; development of plate tectonic theory; relationship between plate motions and regional tectonics; structural, stratigraphic, magmatic, and geophysical features of various tectonic regimes. PREREQUISITE: ESCI 3512, or equivalent.
ESCI 4370-79-6370-79. Special Topics in Archaeology. (3). May be repeated for a maximum of 9 hours credit with a change in topic.
ESCI 4400-6400. Reflection Seismology. (3). (GEOP). Theory, interpretation, implementation of reflection processing techniques used in oil exploration industry; direct, hands-on experience with processing and interpreting actual field datasets. Material will be accessible to seniors with quantitative backgrounds and all DES graduate students. PREREQUISITE: permission of instructor.
ESCI 4401-6401. Seismology. (4). (GEOP). Seismic wave propagation within the earth; historical context of earthquakes and earthquake source; common seismological techniques used to understand earth structure and source parameters. Three lecture
hours, two laboratory hours per week. PREREQUISITE: calculus through vector calculus, or permission of instructor.
ESCI 4431-6431. Urban Geography. (3). (GEOG). Allocation of land for urban uses; adjustments and adaptations to existing physical phenomena; patterns, functions, and forms of specific urban land areas; and some continuous problems of urban development and growth.
ESCI 4443-6443. Transportation Planning. (3). (GEOG). Planning for various transportation modes and networks and impact they have on land use and contemporary development problems.
ESCI 4502-6502. Computer Cartography. (3). (GEOG). Use of computer mapping programs as effective techniques for visual presentation of wide variety of data. Two lecture hours, two laboratory hours per week.
ESCI 4511-6511. Remote Sensing of the Environment. (4). (GEOG 4511). Survey of theory and application of using color, infrared, thermal, and radar images generated from satellite and aerial photographs for geographic, geologic, environmental, and planning purposes. Three lecture hours, two laboratory hours per week. PREREQUISITE: permission of instructor.
ESCI 4515-6515. Geographic Information Science. (3). (GEOG). Theoretical and practical understanding of fundamental GIS concepts, capabilities, and applications; nature of geographic data and issues of data input, data models, database design, spatial analysis, data output using ArcGIS software. Three lecture hours, two laboratory hours per week. PREREQUISITE: ESCI 1010 or 1020 or 1301 or 3430 or 4501, or permission of instructor.
ESCI 4521-6521. Quantitative Methods. (3). (GEOG). Introduction to quantitative methods in spatial analysis. [C]
ESCI 4522. GIS for Business and Social Sciences. (3). (GEOG). Introduction to the application of interactive computer mapping and geographic information systems software in business and social science decision making.
ESCI 4525-6525. Advanced Geographic Information Science. (3). (GEOG). Design and implementation of spatial analysis approaches within the context of GIS technology; development of a sound understanding of the operational basis of modern GIS technology. PREREQUISITE: GEOG 4515, or permission of instructor.
ESCI 4531-6531. Field Methods in Geography. (3). (GEOG). Basic methods of geographic analysis used in classifying, analyzing and reporting field generated data including field mapping, sampling procedures, questionnaires and archival and public document research. One and one-half lecture hours, three laboratory hours per week.
ESCI 4541. Geography Field Studies. (1-6). (GEOG 4541). Faculty conducted field trip emphasizing study of geographic phenomena. Location will vary. Topics may include physical landscapes, landaus patterns, cross-cultural analysis, micro and regional economics, or other geographical processes. Credit hours based on length of time in field. Requires field journal and report to receive credit. May be repeated for maximum of 6 hours credit with change in content. PREREQUISITE: permission of instructor and completion of special registration.
ESCI 4551. Urban Planning Studio. (3). (GEOG). Application of planning process to urban problems and preparation of plans for the urban area. PREREQUISITE: GEOG 3451 or permission of instructor.
ESCI 4610-19-6610-19. Special Topics In Geography. (3). (GEOG). Topics are varied and in online class listings.
ESCI 4621. Investigations in Geography. (1-3). ( GEOG 4621). Student, under faculty supervision, studies in-depth particular geographic topic. May be repeated for a maximum of 3 hours credit with change in content. PREREQUISITE: approval of instructor.
ESCI 4622. Geology Field Camp. (6). (GEOL). Preparation of structural and lithologic maps in prescribed geologic areas using topographic maps and aerial photographs. Instruments used are the alidade and the Brunton compass. Offered in summer school only. PREREQUISITE: ESCl 3312, 3512, and 3712. [I]
ESCI 4700-6700. Earth Science Internship. (1-9). (GEOG 4700). Experience working with agency in which knowledge of earth science can be utilized. May be repeated for a maximum of 9 hours credit. Credit allowed only after acceptance of report. PREREQUISITE: approval of instructor and department chair. (S/U)
ESCI 4701-6701. Earth Science Field Excursions. (1-2). (GEOL). Conducted field trips during spring vacation. About 30 hours of field work follow 2-4 hours of lectures. Open to nonmajors. Among areas which may be included are Ouachita-ArbuckleWichita Mountains of Oklahoma; Ouachita, Ozark dome and adjacent mineral districts; central and southern Appalachians; Gulf Coastal Plain; Death Valley, CA; and Grand Canyon, AZ. Check online class listings for specific location. NOTE: May be repeated for a maximum of 8 hours credit. Dates, hours and credits to be arranged. PREREQUISITE: permission of instructor.
ESCI 4721. Investigations In Geology. (1-3). (GEOL). Individual or group work on topics of current interest. May be repeated for maximum of 6 hours credit. PREREQUISITE: permission of instructor.
ESCI 4722. Investigations In Geophysics. (1-3). (GEOP). Individual or group work on topics of current interest in the broad field of geophysics. May be repeated for maximum of 6 hours credit. PREREQUISITE permission of instructor.
ESCI 4731. Senior Thesis. (1-3). (GEOL 4731). Original study on subject of significance to earth science to be carried on independently by student with faculty supervision. PREREQUISITE: senior standing in Geology.
ESCI 4801. Geographical Thought and Application. (3). (GEOG). Major concepts in environmental/earth sciences,
human/cultural, and economic/urban geography. Proseminar format requires review of readings with oral and written presentations. Focus on synthesis and application of geographic concepts to contemporary research themes. PREREQUISITE: 23 semester hours in Geography to include: ESCI 1010, 1020, 1011, 1021, 1301 or any 43 -course; ESCI 1401 or 3430, 3514 and two additional upper division courses selected from two of the following areas: human/economic, environmental/earth, or the techniques. Registration by permit only. [W, I]
ESCI 4841-6841. Biblical Archaeology. (3). (Same as ANTH 4841 and JDST 4841). Relationship between historical texts in Hebrew Bible and historical evidence from archaeological research in Israel and surrounding area; emphasis on how archaeological evidence and biblical narratives illuminate each other.

# (EXSS) Health and Human Performance 

Department of Health and Sport Sciences
MICHAEL H. HAMRICK, Ed.D., Chair
Room 106, Elma Neal Roane Fieldhouse
http://hss.memphis.edu/
EXSS 1102. Personal Health. (3). Concepts of personal health including chronic and infectious diseases, sexually transmitted diseases, mental health, substance use and abuse, health consumerism, sexuality, aging, and death and dying.
EXSS 2010. Resistance Training Applications. (2). Basic theory and practice of multiple resistance training modalities; resistance training tools in sports, rehabilitation, and physical conditioning; free weight, body weight, machine exercise modalities; basic resistance exercise programming and instructional methods.
EXSS 2020. Aerobics Training Applications. (2). Multiple aerobic training modalities; aerobic training tools for sports, rehabilitation, and physical conditioning.
EXSS 3050. Advanced Life Support for Exercise Conditioning and Testing. (3). Development of knowledge and skills related to anatomical and physiological changes that may result from exercise conditioning and testing; signs and symptoms of acute health related problems; first aid measures, CPR, use of an AED. PREREQUISITE: BIOL 2010/2011 and 2020/2021. (F/Su).
EXSS 3306. Elementary School Health and Wellness. (2). Basic health knowledge and skills essential toward enhancing health lifestyle among elementary school children; integration of wellness concepts and practices in all other subject disciplines of school curriculum; developing strategies for successful K-6 health and wellness instruction.
EXSS 3405. Anatomic Kinesiology. (3). (4403). Anatomic systems as related to purposeful movement of the human body; structure and function of musculoskeletal system. PREREQUISITE: EXSS 2101, 2020, BIOL 2010/2011 and 2020/2021. (S/Su). EXSS 3450. Psychological Aspects of Exercise. (3). (4602). Emphasis on the application of psychological principles in fostering motivation among individuals in exercise/physical activity settings. PREREQUISITE: BIOL 2010/2011 and 2020/2021. [W] ( $\mathrm{Sp} / \mathrm{Su}$ ).
EXSS 3502. Prevention and Care of Athletic Injuries. (3). Practical and theoretical aspects of treatment of athletic injuries in athletic training programs; supplies, training table, therapeutic equipment, and techniques in conditioning and bandaging. PREREQUISITE: HMSE 2102 or consent of instructor.
EXSS 3505. Principles of Health Fitness Instruction. (3). Principles of exercise; principles of writing exercise prescriptions based on case studies for apparently health and medically stable asymptomatic populations; calculating energy expenditure for variety of activities; health related effects of physical fitness emphasizing the relationship between physical activity and chronic diseases. PREREQUISITE: EXSS 2010, 2020, BIOL 2010/2011 and 2020/2021. COREQUISITE: EXSS 3506. (Sp/Su).
EXSS 3506. Principles of Health Fitness Instruction Practicum. (1) (4204). Acquisition and practice of laboratory/dinical skills pertaining to methods for measuring body composition, muscle strength, muscle endurance, flexibility, aerobic endurance. Course requires a 30 hour supervised clinical experience in the Wellness Evaluation and Resource Unit. A uniform may be required for this laboratory experience. PREREQUISITE: EXSS 2010, 2020, BIOL 2010/2011 and 2020/2021. COREQUISITE: EXSS 3505.
( $\mathrm{Sp} / \mathrm{Su}$ ).
EXSS 3603. Exercise Physiology I. (3). Anatomical and physiological bases for expressing, developing, and maintaining muscular endurance, strength, power, joint flexibility, body composition as well as various factors which may affect them. PREREQUISITE: EXSS 2010, 2020, BI OL 2010/2011 and 2020/2021. (Sp/Su).
EXSS 3605. Clinical Experience in Teaching Exercise and Sport Science, K-Middle School. (1). Observations and the teaching of mini-lessons in physical activity in an elementary school setting. COREQUISITE: PETE 3604. S/U.
EXSS 3700. Exercise Physiology Instruction. (3). Acute and chronic physiological adaptations to muscular activity; physiological bases for appropriate training programs for maximizing physical performance. PREREQUISITE: EXSS 2010, 2020, BIOL 2010/2011 and 2020/2021. (Sp/Su).
EXSS 3703. Exercise Physiology II. (3). Exercise performance including energy metabolism and regulation, cardiovascular physiology, environmental physiology; principles of physiological and biochemical assessment; interpretation of physiological and biochemical data; development of appropriate training programs to maximize performance efficiency. PREREQUISITE: EXSS 2010, 2020, BI OL 2010/2011 and 2020/2021. (Sp/Su).
EXSS 3800. Health Promotion Program Development and Administration. (3). (4003). Basic skills and principles of developing, implementing, evaluating, managing health promotion programs in a variety of settings including community, business, and corporate sectors. PREREQUISITE: EXSS 2010, 2020, BIOL 2010/2011, 2020/2021. (F/Su).
EXSS 3803. Motor Learning. (3). Theory and research concerning the behavioral and neurological bases for understanding the processes involved in motor skill learning and performance. PREREQUISITE: EXSS 2010, 2020, BIOL 2010/2011 and 2020/2021.
(Sp/Su).
EXSS 3853. Motor Behavior. (3). Basic theories and principles of motor learning and performance; developmental aspects of human motor behavior across the lifespan. BIOL 2010/2011 and 2020/2021. (Sp/Su).
EXSS 4000-6000. Exercise Testing Techniques and Interpretation Laboratory. (3). Acquisition and practice of laboratory/clinical skills pertaining to measurement techniques, tools and interpretation of physical performance and fitness; introduces theoretical and functional techniques of graded exercise testing for functional and/or diagnostic assessment. One lecture hour, four laboratory hours per week. PREREQUISITE: BIOL 2010/2011and 2020/2021; EXSS 2010, 2020, 3050, 3405, 3450, 3505, 3506, 3603, 3703, 3800, 3803; HPRO 2100, or permission of instructor. (F/Su).
EXSS 4010-6010. Dietary Supplements, Food and Drugs for Health Performance. (3). Role of nutrition in optimizing
performance and training adaptations; macro and micro nutrient intake, proper timing and amount of intake; analysis of validity of proposed ergogenic performance and/or structural adaptation. PREREQUISITE: permission of instructor. (F/Su).
EXSS 4015. Exercise Programming for Special Populations. (3). (3310). Principles of cardiovascular medicine related to therapeutic management of various disease states through exercise; medical consequences of various disease states; developing comprehensive rehabilitative programs to decrease physical disability. Variable hours of supervised laboratory/field experience may be required. PREREQUISITE: BI OL 2010/2011, 2020/2021; EXSS 2010, 2020, 3050, 3405, 3450, 3505, 3506, 3603, 3703, 3800, 3803; HPRO 2100. (F/Su).
EXSS 4020. Exercise and Sport Mechanics. (3). Biomechanical conditions of human movement; knowledge and skills needed to analyze and evaluate human motor performance in order to prescribe appropriate interventions to optimize it. PREREQUISITE: BI OL 2010/2011, 2020/2021; EXSS 2010, 2020, 3050, 3405, 3450, 3505, 3506, 3603, 3703, 3800, 3803; HPRO 2100. (F/Su).
EXSS 4406-6406. Exercise Testing and ECG I nterpretations. (3). Introduction to the methods of conducting ECG and cardiopulmonary exercise testing for asymptomatic and symptomatic populations; ACSM principles of exercise testing as well as methods of ECG interpretation will be covered. Variable hours of supervised laboratory/field experience may be required.
EXSS 4502. Advanced Prevention and Care of Athletic Injuries. (3). Advanced practical and theoretical aspects of treatment of athletic related injuries in athletic training programs; supplies, management, organization, injury recognition, evaluation and assessment, therapeutic modalities, bandaging, and techniques in conditioning and rehabilitation. PREREQUISITE: EXSS 3502.
EXSS 4603-6603. Advanced Methods of Strength Conditioning. (3). Advanced study of training principles for strength and conditioning programs and their underlying physiological bases. PREREQUISITE: BIOL 2010/2011, 2020/2021; EXSS 2010, 2020, $3050,3405,3450,3505,3506,3603,3703,3800,3803$; HPRO 2100 , or permission of instructor. (F/Su).
EXSS 4605. I nternship in Exercise and Sport Science. (3-9). Culminating experience allowing students the opportunity to demonstrate knowledge and skills in an appropriate professional setting. PREREQUISITE: completion of all course work in major and concentration. COREQUISITE: HMSE 4999. (S/U).
EXSS 4705-11-6705-11. Special Topics Workshop in Exercise and Sport Science. (3). Selected phases of exercise and sport science through group study. In-depth study of area of interest and need for exercise and sport scientists. May be repeated with a change in topic.
EXSS 4902-11-6902-11. Special Topics in Exercise and Sport Science. (1-3). Current topics in exercise and sport science. May be repeated with change in topic and content. Topics are varied and in online class listings.

## (FI R) FI NANCE, I NSURANCE AND REAL ESTATE

RONALD W. SPAHR , Ph.D., Chair<br>Room 402, Fogelman College of Business and Economics Administration Building<br>http://fcbe.memphis.edu/modules/general/Dp_finance.php?

Students must have junior standing and have met specific course prerequisites with a minimum grade of $\geqslant \mathrm{C}\rangle$ to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of $\boldsymbol{C})$ in each; (2) minimum of 2.25 GPA ( 2.5 for accounting majors) in all required lower division business courses and MATH 1830, and (3) 60 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).
A surcharge of $\$ 20$ per credit hour for 3000 and 4000 level courses and $\$ 20$ per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).
FIR 2220. Personal Financial Management. (3). Non-technical dealing with broad areas of budgeting, insurance, borrowing and credit purchases, home ownership, investment, taxes, and family financial planning. NOTE: If taken after student has received credit for FIR 3710 or 3810 , credit will not count for B.B.A. degree.
FIR 3220. Personal Investing. (3). To assist individual investors of all backgrounds in development and monitoring of an investment portfolio by explaining possible investment alternatives including terminology and analysis techniques to fulfill future financial goals. NOTE: Open to all University students. NOTE: this course may not be counted toward fulfilling the requirements for the Finance major.
FIR 3310. Real Estate Principles. (3). Basic terminology, principles and issues; market analysis, real estate law, instruments, legal descriptions, appraisal, investment, finance, brokerage, property management. Designed for non-real estate majors as well as a foundation for further study.
FIR 3410. Business Finance. (3). Fundamentals of business finance; time value of money, capital budgeting techniques, securities valuation, and cost of capital. PREREQUISITE: ACCT 2020, ECON 2120, ISDS 2710.
FI R 3710. Investments. (3). Principles of investment in stocks and bonds. Includes fundamental, economic, and technical analysis; measurable and unmeasurable aspects of risk; portfolio management; psychological aspects of the market. PREREQUISITE: FIR 3410.
FIR 3720. Financial Markets. (3). Survey of important funds markets, institutions and characteristics peculiar to them; sources of supply of and demand for funds in each market, and complex interrelations among several markets analyzed. PREREQUISITE: FIR 3410.

FIR 3770. Derivative Markets. (3). Use of futures, options, forwards, swaps with primary focus on practical application in financial markets. PREREQUISITE: FIR 3710.
FIR 3810. Principles of Risk and Insurance. (3). Nature and handling of risk in personal and business situations; emphasis on
property, liability and life exposures to loss. Designed for non-insurance major as well as a basis for advanced study.
FI R 4011-6011. Estate Planning and Law of Taxation. (3). Survey of law of taxation as applied to transmission of property by gift or death and its impact upon accumulations of wealth; estate planning from individual viewpoint designed to create, maintain, and distribute maximum estate possible.
FI R 4110-19. Special Topics. (3). Current topics in one of following areas: Finance, Insurance, Real Estate, or Business Law. Topics are varied and in online class listings. May be repeated once with change in topic area. PREREQUISITE: permission of instructor.
FIR 4310-6310. Real Estate Law. (3). Law and legal instruments as applied to real estate; needs of property owners and those engaged in real estate business.
FIR 4320. Real Estate Finance. (3). Terminology, legislation, principles, and analytical techniques pertaining to financing of real estate; perspective of lender, residential borrower, and income property borrower. PREREQUISITE: FIR 3410.
FIR 4340-6340. Real Estate Appraisal. (3). Basic terminology, principles, procedures, and issues; nature of value, principles of value, appraisal process, market approach, cost approach, capitalization of income approach, gross rent multiplier approach, and appraisal reports.
FI R 4350. Real Estate I nvestment Principles. (3). Principles and practices reviewed and evaluated; investment strategy, ownership forms, tax implications, cash flow analysis, measures of return, risk management, and property selection.
FIR 4440. I ntermediate Managerial Finance. (3). Analytical approaches to firmes financial decisions; current asset management, capital budgeting, cost of capital, capital structure determination, and dividend policy. PREREQUISITE: FIR 3410. FI R 4550. International Finance. (3). Financing international trade and investments; foreign exchange markets and exchange rates; balance of payments; current developments in international financial cooperation. PREREQUISITE: FIR 3410.
FIR 4610-6610. Cases In Managerial Finance. (3). Application of tools and principles introduced in previous courses to develop up-to-date problem solving techniques; cases approached from standpoint of top level management and utilize both quantitative and qualitative analysis. PREREQUISITE: FIR 4440.
FIR 4710. Commercial Banking. (3). Study of bank management and bank regulation; examination of conditions that lead to bank regulation and conditions that caused deregulation; exploration of current theories of profitable bank operations.
PREREQUISITE: FIR 3410.
FIR 4720-6720. Management of Financial Institutions. (3). Exposure to financial policies and decision-making that are peculiar to financial institutions in United States; management of institutions consistent with adequate standards of liquidity and solvency. PREREQUISITE: FIR 3410, 3720.
FIR 4770. Security Analysis and Portfolio Management. (3). Development of techniques for finding actual worth of securities, primarily stocks and bonds; selection, timing, diversification, and other aspects of supervising investment funds. PREREQUISITE: FIR 3710.
FIR 4810-6810. Property and Liability Insurance I. (3). Forms and functions of fire, marine, automobile, general liability and other types of property and liability insurance; emphasis on business and industrial applications.
FIR 4820-6820. Life and Health Insurance. (3). Functions of life and health insurance; emphasis on economic security needs, human behavior and the problems related to death and dying; individual life, health and annuity contracts and social insurance; concepts in risk selections and regulation.
FI R 4870. Risk Management. (3). Problems of risk manager in small and large firms, methods of handling risk that serve as alternatives to obtaining insurance, and brief survey of insurance as standard for comparisons.
FIR 4910. Problems in Finance, I nsurance, or Real Estate. (1-3). Student will carry on approved research projects in the major area under supervision of staff members. PREREQUISITE: senior standing and permission of department chair.
FIR 4911. I nternship in Finance, I nsurance, and Real Estate. (1-6). Internship in business organization to gain on-the-job experience in real-life environment. Project to be approved and supervised by department faculty. Credit allowed only after acceptance of report. PREREQUISITE: 2.75 overall GPA and completed 15 hours in Upper Division core.
FI R 4996. Senior Honors Thesis In Finance, Insurance, and Real Estate. (3). Independent research open only to those students enrolled in the honors program. Thesis supervised by area faculty member. PREREQUISITE: senior standing and permission of the Director of the College Honors Program.

## (FREN) FRENCH

Department of Foreign Languages and Literatures
RALPH ALBANESE, Ph.D., Chair
Room 375, Dunn Hall
http://fl.memphis.edu
FREN 0701. French for Reading Knowledge I. (3). Introduction to reading French; intensive drill in recognizing and interpreting grammatical structures, especially those peculiar to scholarly written language; emphasis on vocabulary building and on determining the meaning of words not previously encountered; reading of texts in French at sight or after preparation. No previous knowledge of French required. Does not fulfill any part of undergraduate language requirement and cannot be applied toward major. (S/U)
FREN 1010. Elementary French I. (3). (1101). Basic skills fundamental to language proficiency and culture. •
FREN 1020. Elementary French II. (3). (1102). Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: FREN 1010, or equivalent.

FREN 2010. Intermediate French I. (3). (2201). Comprehensive review of French grammar, exercises in writing, and readings in French literature and culture. PREREQUISITE: FREN 1020, or equivalent. *
FREN 2020. Intermediate French II. (3). (2202). More advanced readings. PREREQUISITE: FREN 2010, or equivalent. •
FREN 3301. Conversation and Composition. (3). PREREQUISITE: FREN 2020, or equivalent.
FREN 3302. Conversation and Composition. (3). PREREQUISITE: FREN 3301, or permission of instructor.
FREN 3401. French Civilization. (3). Culture of France as reflected in its history, social institutions, art, and music.
Recommended for Foreign Language, liberal arts, and International Business majors. PREREQUISITE: FREN 3301, or permission of instructor.
FREN 3411. Introduction to French Literature. (3). Selections from origins to present time; emphasis on textual analysis. PREREQUISITE: FREN 3301.
FREN 3791. French for Commerce I. (3). Introduction to French business terminology and forms of correspondence with regular readings of business, commercial and technical publications. PREREQUISITE: FREN 3301 recommended.
FREN 3792. French for Commerce II. (3). Continuation of French 3791. PREREQUISITE: FREN 3791, or equivalent.
FREN 4301-6301. French Phonetics. (3). Theory and practice of French sounds, especially recommended for teachers of French. PREREQUISITE: three years of college French, or permission of instructor.
FREN 4302-6302. Advanced Grammar. (3). Practical advanced grammar course concerned with grammatical, syntactical, and lexical usage of contemporary French.
FREN 4412-6412. Seventeenth and Eighteenth Century French Literature. (3). Classical theatre and critical theories; essay, nouvelle, and conte in 18th century. PREREQUISITE: FREN 3301. RECOMMENDED: FREN 3411.
FREN 4413-6413. Nineteenth Century French Literature. (3). Survey of literary movements and major authors with readings in all major genres. PREREQUISITE: FREN 3301. RECOMMENDED: FREN 3411.
FREN 4414-6414. Twentieth Century French Literature. (3). Survey of literary movements and major authors with readings in the novel, poetry and theater. PREREQUISITE: FREN 3301. RECOMMENDED: FREN 3411.
FREN 4415-6415. Francophone Literature. (3). Study of literature written in French from countries other than France. May be repeated for a maximum of 6 hours credit with a change in content and permission of instructor.
FREN 4780. I ndividual Studies in French. (1-3). Directed individual study in selected areas of French chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.
FREN 4791-99. Special Topics in French Literature, Language, or Civilization. (3). May be repeated for a maximum of 6 hours credit. PREREQUISITE: FREN 3301, or permission of instructor. RECOMMENDED: FREN 3411. Last Updated: 6/12/15

# (GERM) GERMAN 

Department of Foreign Languages and Literatures
RALPH ALBANESE, Ph.D., Chair
Room 375, Dunn Hall
http://fl.memphis.edu
GERM 0701. German for Reading Knowledge I. (3). Introduction to reading of German. Intensive drill in recognizing and interpreting grammatical structures, especially those peculiar to scholarly written language; emphasis on vocabulary building and on determining meaning of words not previously encountered; reading of texts in German at sight or after preparation. No previous knowledge of German required. Does not fulfill any part of undergraduate language requirement and cannot be applied toward major. (S/U)
GERM 1010. Elementary German I. (3). (1101). Basic skills fundamental to language proficiency and culture. *
GERM 1020. Elementary German II. (3). (1102). Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: GERM 1010, or equivalent. *
GERM 2010. I ntermediate German I . (3). (2201). Continued development of listening, speaking, reading, and writing skills. PREREQUISITE: GERM 1020, or equivalent. *
GERM 2020. I ntermediate German II. (3). (2202). Expansion of German skills, with more extensive listening comprehension practice and readings. PREREQUISITE: GERM 2010, or equivalent. *
GERM 3301. Conversation and Composition. (3). PREREQUISITE: GERM 2020, 2021, or equivalent.
GERM 3302. Conversation and Composition. (3). PREREQUISITE: GERM 2020, 2021, or equivalent.
GERM 3411. I ntroduction to German Literature and Culture. (3). German literature from 17th to 18th century.
PREREQUISITE: GERM 2020, 2021, or equivalent.
GERM 3412. I ntroduction to German Literature and Culture II . (3). German literature from 19th to 21st century. PREREQUISITE: GERM 2020, 2021, or equivalent.
GERM 3791. German for Commerce I. (3). German economy and society; German business terminology and forms of communication. PREREQUISITE: GERM 2020, or equivalent.
GERM 3792. German for Commerce II. (3). German economy and global market. German business terminology and forms of communication. PREREQUISITE: GERM 2020, or equivalent.
GERM 3900. German Culture and Society. (3-6). Intensive language and culture course; travel to German speaking country required. PREREQUISITE: permission of study abroad director.
GERM 4302. Advanced Grammar. (3). Special problems in grammar; recommended for majors and minors. PREREQUISITE: 3000 level German course or equivalent.
GERM 4443. Major German Writers of the Twentieth Century. (3). Selected works of Hesse, Thomas Mann, Kafka, Frisch, Duerrenmatt, Brecht, and Boell. PREREQUISITE: two courses from the group GERM 3301, 3302, 3411, 3412, or permission of instructor.
GERM 4451. The German Drama. (3). Survey of dramatic literature from sixteenth to twentieth centuries; readings from Reformation, Baroque, Enlightenment, Sturm und Drang, Classicism, Romanticism, Realism, and modern period. PREREQUISITE: two courses from the group GERM 3301, 3302, 3411, 3412, or permission of instructor.
GERM 4465. German Narrative Prose. (3). Reading of major prose writings from Romanticism to present; emphasis on the Novelle. PREREQUISITE: two courses from the group GERM 3301, 3302, 3411, 3412, or permission of instructor.
GERM 4466. German Poetry. (3). Overview of German poetry since 1600; emphasis on sociohistorical aspects, formal and structural analysis of selected works. PREREQUISITE: two courses from the group GERM 3301, 3302, 3411, 3412, or permission of instructor.
GERM 4480. Goethe. (3). Special emphasis on early and late poetry, Die Leiden des jungen Werthers, and Faust, part I. PREREQUISITE: two courses from the group GERM 3301, 3302, 3411, 3412, or permission of instructor.
GERM 4501. Applied German Linguistics. (3). Application of modern linguistic theories to learning German. PREREQUISITE: GERM 3301, 3302, or permission of instructor.
GERM 4511. The German Language: Development and Structure. (3). German language in its various stages of development. PREREQUISITE: GERM 3301, 3302, or permission of instructor.
GERM 4780. I ndividual Studies in German. (1-3). Directed individual study in selected areas of German chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit by permission of chair. PREREQUISITE: permission of instructor.
GERM 4791-99. Special Topics in German Language or Literature. (3). May be repeated for maximum of 6 hours credit. PREREQUISITE: two courses from: GERM 3301, 3302, 3411, 3412, or permission of instructor.

GREK 1010. Elementary Greek I. (3). (1101). Elements of grammar and syntax of ancient Greek; practice in reading and simple classical and New Testament passages. *
GREK 1020. Elementary Greek II. (3). (1102). Continuation of grammar and syntax of ancient Greek; practice in reading more advanced passages from classical and New Testament Greek. PREREQUISITE: GREK 1010, or equivalent. -
GREK 2010. Intermediate Greek I. (3). (2201). Comprehensive review of Greek grammar; extensive reading of classical and New Testament Greek texts. PREREQUISITE: GREK 1020, or equivalent. •
GREK 2020. Intermediate Greek II. (3). (2202). Readings in classical and New Testament Greek; emphasis on interpretive techniques and analysis of syntactic and rhetorical features. PREREQUISITE: GREK 2010 or equivalent. *
GREK 3111. Plato's Early Dialogues. (3). Reading and analysis of selected Socratic dialogues. PREREQUISITE: GREK 2020, or equivalent.
GREK 3511. Greek Tragedy. (3). Reading and analysis of selected tragedies of Aeschylus, Sophocles, and Euripides.
PREREQUISITE: GREK 2020, or equivalent.
GREK 3911. Plato's Apology, Crito. (3). Reading and analysis of dialogues of Plato that give a prelude to death of Socrates.
GREK 4441. Homer. (3). Reading and analysis of selections from Homer's Iliad and Odyssey. PREREQUISITE: GREK 2020, or equivalent.

# (HADM) HEALTH ADMI NI STRATI ON 

School of Urban Affairs and Public Policy<br>Division of Health Administration<br>CAMILLE BARSUKIEWICZ, Ph.D., Interim Director<br>Room 230, McCord Hall<br>http://healthadmin.memphis.edu

HADM 4101-6101. Health Systems. (3). Analysis of health and medical care systems with reference to public, private and voluntary agencies at local, state, regional, and national levels; orients administrators to health and medical care systems with which they may work. PREREQUISITE: junior or senior standing.

## (HEBR) HEBREW

## Department of Foreign Languages and Literatures <br> RALPH ALBANESE, Ph.D., Chair <br> Room 375, Dunn Hall <br> http://fl.memphis.edu

HEBR 1010. Elementary Hebrew I. (3). (1101). Principles of pronunciation; everyday expressions: basic sentence patterns through oral practice, writing and reading. -
HEBR 1020. Elementary Hebrew II. (3). (1102). Continued study of sentence patterns through oral and written practice. PREREQUISITE: HEBR 1010, or equivalent. -
HEBR 2010. I ntermediate Hebrew I. (3). (2201). Continued study of sentence patterns through oral and written practice.
PREREQUISITE: HEBR 1020, or equivalent. -
HEBR 2020. Intermediate Hebrew II. (3). (2202). Continued study of sentence patterns through oral and written practice. PREREQUISITE: HEBR 2010, or equivalent. -
HEBR 3301. Hebrew Conversation and Composition I. (3). Development of advanced oral and written communication skills in Hebrew. PREREQUISITE: HEBR 2020, or permission of instructor.
HEBR 3302. Hebrew Conversation and Composition II. (3). Continuation of HEBR 3301. PREREQUISITE: HEBR 3301, or permission of instructor.
(HIST) HISTORY
JANANN M. SHERMAN, Ph.D., Chair
Room 100, Mitchell Hall
http://history.memphis.edu
HIST 1110. The Development of World Civilization I. (3). (1301). Especially recommended for freshmen; traces forms of civilization from beginnings to 1500 .[G] •
HIST 1120. The Development of World Civilization II. (3). (1302). Especially recommended for freshmen; traces forms of civilization from 1500 to present. [G] •
HIST 2010. The United States to 1877. (3). (2601). United States from discovery to end of political reconstruction. [G] •
HIST 2020. The United State Since 1877. (3). (2602). United States from 1877 to present. [G] •

HIST 2030. History of Tennessee. (3). (3900). Political, economic, and social development of Tennessee from earliest times.
[G] •
HIST 3035. Technology and Culture in American History. (3). Interrelationship between technology and culture; emphasis on 19th and early 20th centuries.
HIST 3045. Quantification and History. (3). Concepts of quantification in history; survey of literature of quantitative history; practical work in quantitative methods in history. PREREQUISITE: COMP 1200 or its equivalent or successful completion of University s computer literacy examination. [C]
HIST 3121. England Before 1714. (3). Political, constitutional, cultural, social, and economic development of England from coming of Anglo-Saxons until Hanoverian accession in 1714.
HIST 3122. England Since 1714. (3). Development of England's democratic government, considering economic, social, intellectual, diplomatic, and imperial affairs.
HIST 3211. Colonial Latin America. (3). Political, economic, social and cultural development in Latin America from pre-conquest era to 1808.
HIST 3212. The Latin American Nations. (3). Major political, economic, and social trends in Latin America since 1808; emphasis on Argentina, Brazil, Chile, and Mexico.
HIST 3273. Islamic Civilization. (3). Survey of the development of Islamic religious, social, political, intellectual, and cultural traditions from the time of Muhammad through the 18th century; geographical focus is the Middle East, India, Asia, and Africa. HIST 3274. Modern Islamic World. (3). Survey of the Islamic World from 1800 to the present, focusing on the role of Islam in the political and social development of the Middle East, India, Asia, and Africa, as well as the emergence of Islamic communities in Europe and the Americas.
HIST 3275. History of the Jewish People. (3). History of Jewish people from antiquity to present; emphasis on their changing relationships to larger cultures in which they participated.
HIST 3281. History of Africa to 1500. (3). Human origins to the beginnings of African-European Atlantic trade in the 15th century; gathering-hunting societies; agriculture and technology; early African civilizations; classical age kingdoms and empires; Christianity, Islam, African religions; Indian Ocean world; Trans-Saharan trade network. NOTE: students who have earned credit for HIST 3280 may not receive credit for HIST 3281.
HIST 3282. History of Africa since 1500. (3). Origins of Atlantic era to present; African-European trade; slavery and slave trade; African Diaspora; kingdoms and empires; European settlement and apartheid in South Africa; economic and political changes of the 19th century; European colonial occupation; struggle for independence; Africa today. NOTE: students who have earned credit for HIST 3280 may not receive credit for HIST 3282.
HIST 3290. Traditional Asia. (3). Comparative survey of civilizations in India, China, J apan, and Southeast Asia, from their beginnings through the 18th century.
HIST 3291. Modern Asia. (3). Asia from 1800 to present, focusing on Asian reactions to colonialism, and rise of modern nation states in India, Japan, China, and Southeast Asia.
HIST 3300. The Ascent to Civilization. (3). (Same as ANTH 3300). Interdisciplinary integrative examination of nature of civilization through investigation of origins of civilization and comparative study of world's earliest civilizations. PREREQUISITE: 9 hours of history or anthropology, including either HIST 1110 or ANTH 1100. [I]
HIST 3301. Early Modern Europe, 1500-1800. (3).
HIST 3302. Modern Europe, 1800 to Present. (3).
HIST 3320. The Ancient World. (3). Survey of civilizations of ancient Egypt and the Near East, Greece, and Rome.
HIST 3370. Medieval and Renaissance Europe. (3). Political, religious, social, economic, intellectual, cultural, and artistic developments in Europe from the 6th to the 16th centuries; ways of thought and life; collapse and recovery after the fall of the Roman Empire; flourishing of High Medieval culture; disasters after 1300; rise of humanism; Italian and Northern Renaissance.
HIST 3506. Cultural and Intellectual History of Europe. (3). Topics in history of European culture and thought from late Middle Ages to twentieth century. [W]
HIST 3803. American Diplomatic History. (3). Though including the 18th and 19th centuries, course concentrates on 20th century; emphasizes relationship between foreign policy and domestic forces.
HIST 3811. United States Military and Naval History. (3). Developments since colonial period; emphasis on background and growth of national military and naval establishments, military and naval thought, difficulties accompanying modernization and assumption of global responsibilities, and problem of relationship between civilian and military-naval sectors in democracy.
HIST 3815. World War II. (3). Broad overview of origins, principal campaigns, and effects of World War II with some attention to domestic considerations; legacy of Great War, blitzkrieg, invasion of Europe, Pearl Harbor, Battle of Midway, defeat of Germany and Japan, and domestic impact of the war.
HIST 3817. Vietnam War in Global Perspective. (3). Traditional Vietnamese culture, its response to contact with the West and, more extensively, involvement of United States in the Indochina War.
HIST 3823. Economic History of the United States. (3).
HI ST 3840. United States Constitutional History. (3). Constitutional developments from colonial period to present, emphasis on English heritage, constitutional antecedents of revolutionary era, origins and growth of federal system under Constitution of 1787, and evolution of modern constitutional government in United States.
HIST 3863. Social and Intellectual History of the United States. (3). Survey of way Americans have thought about essential features of social and political order; development of and debate over central ideas of equality, freedom, and individualism that have
defined the order of the common life. [G] •
HIST 3881. African American History. (3) . (4881). History and culture of African Americans in light of their experiences; aspects of African American life and attitudes of dominant society within which African Americans lived; ways African American men and women shaped and nurtured their own lives, culture and history in U.S. [G] *
HIST 3905. History of Memphis. (3). Political, social and economic aspects of development of Memphis from foundation to present.
HIST 3920. The Old South. (3). Southern institutions prior to outbreak of Civil War.
HI ST 3930. The New South. (3). South from Civil War to present.
HIST 4003. The Philosophy of History. (3). History as a distinct discipline; thought of leading Western philosophers of history about nature of history in its two senses: history as actuality and history as thought about actuality. [W]
HIST 4012. Directed Readings, Honors. (3). Under the direction of faculty member, student reads about particular topic or topics. May be repeated for a maximum of 6 hours credit. PREREQUISITE: admission to Honors Program.
HIST 4014. Directed Readings. (1-3). Readings on particular topic in history under supervision of member of faculty.
HIST 4020-6020. Internship in History. (1-12). Supervised internships working with various governmental agencies, private foundations or businesses of interest to historians. May be repeated for up to 12 hours credit, of which no more than 6 hours may be counted toward the satisfaction of major requirements. PREREQUISITE: permission of department.
HI ST 4022-6022. Oral History. (3). Applied history, covering oral history theory, research, and interviewing procedures.
HI ST 4050-69-6050-69. Special Topics in History. (1-3). Intensive study of selected topics; topic announced in Schedule of Classes.
HIST 4126-6126. Victorian and Edwardian England. (3). Social, political, and cultural adjustments of England to experience of industrialization in 19th and early 20th centuries.
HI ST 4145-6145. History of Modern Germany. (3). Germany from origins of unification movement in Napoleonic Era through Second World War.
HIST 4160-6160. Russia to 1917. (3). Russia from earliest times to 1917; emphasis on the rise of serfdom and autocracy and evolution of revolutionary movement.
HIST 4162-6162. History of the Soviet Union. (3). Detailed study of 1917 Revolution and major developments in government, economy, cultural and social life, and international affairs that followed. [W]
HIST 4260-6260. The World Since 1945. (3). Global ideological, economic and political developments since World War II. Emphasizes rising affluence of industrial free market, movement of former colonies to independence, and growth in diversity among Soviet bloc nations.
HIST 4272-6272. Modern Middle East. (3). Political, diplomatic, social and religious developments in Middle East from 1800 to present.
HIST 4273-6273. I slamic Egypt. (3). Study of the political, economic, social, and cultural development of Egypt from the Islamic conquest (640) to the present.
HIST 4283-6283. History of South Africa. (3). Human origins to present with emphasis on economic and political history of 19th and 20th centuries; history examined within larger context of events throughout entire southern African region and globally; apartheid system and liberation ideologies such as socialism, Pan-Africanism, Black Consciousness explored through study of primary documents, film, music.
HIST 4288-6288. History of West Africa and the African Atlantic Diaspora. (3). West Africans from 15th century to present; Trans-Atlantic Slave Trade and African Diaspora in the Americas; economic and social history of period through study of primary documents, film, music.
HIST 4289. African Women's History. (3). Women of African continent from human origins to present; major epochs in African history; diversity of continent; theoretical issues related to gender through study of primary documents, fiction, film.
HI ST 4292-6292. History of Modern China, 1800 to the Present. (3).
HIST 4294-6294. History of Modern J apan, 1800 to the Present. (3).
HIST 4295-6295. Intellectual History of East Asia Since 1800. (3). Evolution of modern Chinese and Japanese thought.
HIST 4320-6320. Ancient Near East. (3). From beginning Mesopotamia down through the great oriental empires of Assyria,
Babylon, Persia.
HIST 4321-6321. The Greek Experience. (3). Politics, society and culture in ancient Greece to Alexander the Great.
HIST 4322-6322. The Roman World. (3). Hellenistic kingdoms and Roman Empire.
HI ST 4323-6323. Egypt of the Pharaohs. (3). Survey of ancient Egyptian civilization, covering major political and social developments, religion, writing and literature, Egypt s relations with the rest of Africa, and sample problems illustrating how Egyptologists make sense of the scattered remains from which our understanding of ancient Egypt must be built.
HIST 4361-6361. History of the Byzantine Empire. (3). Byzantine or East Roman Empire from 330 to 1453 and its influence on Slavic, Turkic, and Islamic peoples.
HIST 4372-6372. The High Middle Ages. (3). Summary of the Early Middle Ages, economic, technological, cultural, intellectual, and religious expansion after 1000; courtly love, Romanesque and Gothic art; limited government, church and state conflicts; reason vs revelation; universities, scholasticism, women, Judaism, science, Franciscans, heretics; life of ordinary people; disasters of the 14th century, roots of the Renaissance.
HIST 4380-6380. Renaissance Europe. (3). Rise of humanism during 14th century disasters; intellectual, economic, social, cultural, religious, and artistic developments of 14th through 16th centuries, emphasizing Italy, especially Florence; women, life of
ordinary people; guilds, republicanism and despotism, neoplatonism; Christian and civic humanism, Northern Renaissance.
HIST 4390-6390. Europe in the Age of the Reformation. (3). Characteristic political, social, economic, intellectual, and cultural developments and religious conflicts of late fifteenth and sixteenth centuries.
HIST 4401-6401. Europe in the Age of the Baroque. (3). Political crises, development of monarchial absolutism, rise of modern science, and cultural synthesis in seventeenth century.
HIST 4440-6440. The Era of the French Revolution. (3). The Old Regime, origins and development of Enlightenment thought, and revolutionary and counter-revolutionary movements in 18th century Europe.
HIST 4453-6453. Europe, 1815-1914. (3).
HIST 4461-6461. Europe, 1914-1945. (3).
HIST 4620-6620. Colonial America, to 1783. (3). Political development and economic, social and cultural institutions of English Colonies in America, including origins and conduct of American Revolution.
HIST 4630-6630. The New Nation, 1783-1815. (3).
HIST 4640-6640. J acksonian America, 1815-1850. (3).
HIST 4670-6670. Civil War and Reconstruction, 1850-1877. (3).
HIST 4680-6680. Emergence of Modern America, 1877-1914. (3). United States from end of Reconstruction to outbreak of World War I.
HIST 4701-6701. The United States, 1914 to the Second World War. (3). United States from outbreak of World War I to World War II.
HIST 4702-6702. United States from the Second World War. (3). The United States from World War II to present.
HIST 4823-6823. American Labor History. (3). Historical development of labor movement in United States; emphasis on social, economic, and political trends related to labor movement.
HIST 4824-6824. Business History. (3). Historical development of business in the United States; attention to social, economic, and political trends related to American business communities.
HIST 4831-6831. History of American Family. (3). Analysis of changes in family size and structure and relationships between family and society from colonial times to present.
HIST 4851-6851. History of Women in America. (3). History of women from discovery of America to present. [G] •
HIST 4853-6853. History of African American Women. (3). Social, political, economic, cultural history of African American women from the sixteenth century to the present.
HIST 4861-6861. Parks/ People/ Public Policy. (3). Comparative study of history and administration of public land areas in the United States, and of American conservation.
HIST 4863-6863. History of Childhood in America. (3). Historical consideration of children and childhood in American society from early 17th century to present. [W]
HIST 4871-6871. United States Urban History. (3). Development of American cities, including formation of local social, economic, and political institutions, and impact of urbanization on United States.
HIST 4879-6879. From Africa to Americas: African American History to 1820. (3). Arrival of Africans in western hemisphere; expansion of antebellum slavery into US lower south by 1820; African Diaspora; colonial slavery; impact of slavery on formation of United States; development of African American culture; relationships between enslaved and free Blacks, Europeans, Native American during colonial and early national periods. PREREQUISITE: HIST 3881, or AAAS 2100, or equivalent introductory survey course.
HIST 4880-6880. Slavery to Freedom to Segregation. (3). African Americans from 1820s to early 1900s; social, political, economic developments; antebellum slavery and freedom; impact of westward expansion; Civil War emancipation and post-war construction of freedom; development and impact of legal and extra-legal segregation; black nationalism and Pan-Americanism; Progressivism through beginnings of Great Migration. PREREQUISITE: HIST 3881, or AAAS 2100, or equivalent introductory survey course.
HIST 4882-6882. Civil Rights Movement: Roots, Protest, and Legacies. (3). Struggle for African American equality, with emphasis on key civil rights issues, events, leaders, and strategies. PREREQUISITE: HIST 3881, or AAAS 2100, or equivalent introductory course.
HIST 4941-6941. History of the American I ndian. (3). Role of Indian in American history.
HIST 4996. Honors Thesis. (3). Under direction of faculty member, and with approval of Honors Committee, student writes thesis based on research in primary and/or secondary sources. PREREQUISITE: admission to Honors Program. Credit cannot be earned for both HIST 4996 and 4998.
HIST 4998. Historical Research and Writing. (3). The nature of historical research and writing as practiced by professional historians; includes the writing of a substantial research paper. PREREQUISITE: 21 hours in history. Credit cannot be earned for both HIST 4998 and 4996.
HIST 4999. The Nature of Historical Inquiry. (3). A synthetic examination of the nature of historical inquiry as practiced by the discipline of history, including historical interpretation and controversy, analyses of historical sources, historical research and writing and integration of the various subfields of the discipline of history. PREREQUISITE: 21 hours in history. [I]

Room 106, Elma Neal Roane Fieldhouse
http://hss.memphis.edu/
HMSE 1100. Concepts of Fitness and Wellness. (2). Emphasis on individual responsibility for achieving optimal well-being and preventive health practices that promote healthful lifestyles and reduce risk factors.
HMSE 2102. First Aid and CPR. (3). Safety skills and techniques of immediate and temporary care in the event of injury or sudden illness. Includes necessary training and skill for CPR certification. Successful completion qualifies the student for First Aid certificate endorsed by the American Red Cross. This course may be taken to improve the grade for one, but not both, of the former courses.
HMSE 4305. Problems in Health and Sport Sciences. (1-3). Independent study and/or research project on human movement science problem, issue, or concern. PREREQUISITE: permission of instructor and coordinator of undergraduate studies. (S/U) HMSE 4999. Senior Project in Health and Sport Sciences. (3). Integrative study that culminates in discipline-specific research, service-learning, or international study tour. Professional level paper and presentation of work required. Completion of the Senior Test in respective major required. PREREQUISITE: all other course work, excluding internship, must be completed. COREQUISITE: EXSS 4605, NUTR 4605, or SLS 4605. [I]

# (HPRM) HOSPITALITY AND RESORT MANAGEMENT 

Department of Management<br>ROBERT R. TAYLOR, Ph.D., Chair<br>ROBERT M. O'HALLORAN, Ph.D., Director<br>Room 140D, Wilson School of Hospitality and Resort Management http://wilson.memphis.edu/

Students must have junior standing and have met specific course prerequisites with a minimum grade of $\geqslant \mathrm{C}\rangle$ to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of $\rangle$ in each; (2) minimum of 2.25 GPA ( 2.5 for accounting majors) in all required lower division business courses and MATH 1830, and (3) 60 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).
A surcharge of $\$ 20$ per credit hour for 3000 and 4000 level courses and $\$ 20$ per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).
HPRM 2003. Special Events. (1). Introduction to special events management and potential careers in this field. Hands on experience with special events while partnering with destination management company to work with planning and operations in multifaceted special events area.
HPRM 2004. Distinguished Speaker Series Events. (1). Series of lectures from high ranking professionals from the hospitality industry in areas of lodging, food service and tourism.
HPRM 2006. Professional Development. (1). Conducting a self-assessment; development of a resume and self promotion materials; presentation skills; social skills needed to obtain and retain career position; corporate communication skills.
HPRM 2007. Resort Management. (1). Currents events and trends in the resort and tourism industry; impact of external publics on resort industry; identifying resort management decision-making tools.
HPRM 2010. The Business of Hospitality. (3). Varied aspects of lodging, food service, clubs, cruise lines, natural attractions, man-made attraction, transportation, intrastructure; retail businesses; sports; special events and activities; outfitters, tour operators, travel management; destination marketing organizations.
HPRM 2050. Food and Beverage Operations. (3). Introduction to food and beverage operations with focus on both quantitative and qualitative control points in food service operation; food sanitation and safety; components of food as related to preparation, processing, sensory and nutritional quality; analysis of food service operation.
HPRM 2999. Purchasing in the Hospitality Industry. (1). Purchasing in commercial restaurants, hotels, food service, contract food service, institutional food service, catering, quick service.
HPRM 3010. Hospitality and Resort I ndustry Colloquium. (1). Introduction to hospitality and resort industry; presentations and discussions by major industry professionals; students submission of a synopsis of each speakers major points. PREREQUISITE: junior-level standing.
HPRM 3330. Managing Hotel and Resort Operations. (3) (4330). Management of critical resources for running hotel and resort operation in effective and efficient manner; customer services, service quality, and service delivery.
HPRM 3600. Entertainment Management. (3). Fundamental standards, techniques, practices of club, cruise, gaming, theme park, special events management. PREREQUISITE: HPRM 2010.
HPRM 4111. Internship in Hospitality and Resort Management. (1). Internship in structured learning environment in field. PREREQUISITE: permission of instructor.
HPRM 4315. Hospitality Human Resource Management. (3). Acquisition, utilization, and retention of human resources in hospitality industry; human resource planning, job analysis, recruitment, selection, orientation, training, development, motivation, associate relations, performance appraisal, legal issues. PREREQUISITE: MGMT 3110.
HPRM 4320. Hospitality Services Marketing. (3). Principles and models of services marketing with focus on applications to hospitality services industry; expansion of traditional marketing mix variables into additional development of hospitality service concepts, marketing plans, and service quality assessments. PREREQUISITE: MKTG 3010.

HPRM 4322. Advanced Food and Beverage Management. (3). (Same as NUTR 4322). Foundations of managing restaurants and associated beverage operations; planning and control procedures, human resources management, customer service, marketing strategies, and emerging technologies; relationship between food and beverage operations and overall hospitality organization. PREREQUISITE: MGMT 3110, MKTG 3010, or permission of department chair.
HPRM 4331. Advanced Resort and Lodging Management. (3). Issues, theories, and best practices of resort and lodging industry. PREREQUISITE: HPRM 3330, MGMT 3110, 3510.
HPRM 4340. I nformation Technology for Hospitality and Resort Management. (3). Framework for information technology, systems development methodologies, and strategic information systems planning; current issues relating to the hospitality industry; focus on using information technology in networked environment to achieve organizational goals and objectives.
HPRM 4350. Properties Development and Planning. (3). Problems and opportunities inherent in developing and planning resort and hospitality facilities; sequence of property development, conceptual and space planning, design criteria, and construction management; establishing appropriate facilities requirements, understanding industry practices, and implementing properties decisions with integrated design, operations, financial and real estate framework.
HPRM 4400. International Hospitality. (3). Issues, challenges and practices of global hospitality and tourism marketplace. HPRM 4401. Management of Tourism. (3). Tourism as a system; interaction of various parts of tourism; managers influence in tourism's success.
HPRM 4600. Trends in Hospitality and Resort Management. (3). Current issues and challenges of global hospitality and tourism industry. PREREQUISITE: HPRM 4111, 4315, 4320, and senior standing.
HPRM 4700. Integrative Leadership Challenge for the Hospitality Industry. (3). Capstone course integrating academic and experiential learning through service learning projects building on leadership skills. PREREQUISITE: HPRM 4111, $4315,4320$.
HPRM 4910. Hospitality and Resort Management Problems. (1-6). Approved research projects with faculty supervision. PREREQUISITE: senior standing and permission of department chair.
HPRM 4950-59. Special Topics in Hospitality and Resort Management. (3). Topics are varied and in online class listings. May be repeated with a change in topic. PREREQUISITE: permission of instructor.

## (HPRO) HEALTH PROMOTI ON

Department of Health and Sport Sciences MICHAEL H. HAMRICK, Ed.D., Chair Room 106, Elma Neal Roane Fieldhouse http://hss.memphis.edu/

HPRO 2100. Wellness Concepts and Practice. (3). Individual responsibility for achieving optimal well-being through preventive health practices that promote healthful lifestyles.

## (I CL) I NSTRUCTI ON AND CURRI CULUM LEADERSHI P

REBECCA ANDERSON Ph.D., Chair<br>Room 106D, E.C. Ball Hall<br>http://icl.memphis.edu/

ICL 3000. Principles of Teaching. (3). Research practices and application of principles of instruction that promote effective teaching and facilitate cognition. PREREQUISITE: EDPR 2111, LEAD 2010.
ICL 3901. Special Problems in Instruction. (1-6). Supervised individual investigation in area of instruction. PREREQUISITE: experience as teacher or satisfactory evidence of being qualified to benefit from course.
ICL 4001. Learning in the Urban Environment. (3). Use of appropriate knowledge and skills for managing total learning environment in both early and middle school setting; emphasis on development of skills that facilitate effective teaching through appropriate management techniques and involvement of parents and community members. Ten hours field experiences.
PREREQUISITE: LEAD 2010 SPED 2000.
ICL 4002. Fundamentals of Urban Middle Grades Education . (3). Teacher candidates develop knowledge of best practices for middle grades learning and cognition; identify, develop, and evaluate strategies and techniques of instruction that are sensitive to individual needs of children within a culturally and economically diverse population. Emphasis on planning, instruction,
assessment, and professional development. Clinical/field experiences: 10 hours. PREREQUISITE: Admission to TEP. Completion of all General Education courses. (F/Sp)
ICL 4003-6003. Teaching Middle School Language Arts . (3). Instructional strategies and assessment procedures relevant to the acquisition of reading, speaking, listening, writing, and thinking skills for students in the middle grades. Clinical/field Experience: 12 hours Undergraduates, 18 hours Graduates. PREREQUISITE: Admission to TEP. (F/Sp)
ICL 4004/ 6004. Teaching Methods in the Middle Grades: Mathematics. (3). Instructional techniques, curriculum and materials for teaching mathematics to middle school students with emphasis on problem solving. Clinical/field Experience: 12 hours Undergraduates, 18 hours Graduates. PREREQUISITE: Admission to TEP. (F/Sp)
ICL 4005/ 6005. Teaching Methods in the Middle Grades: Science. (3). Instruction in principles, techniques, and materials for teaching relationships among science, technology, and society, for the middle grades students. Clinical/field Experience: 12 hours Undergraduates, 18 hours Graduates. PREREQUISITE: Admission to TEP. (F/Sp)
ICL 4006/ 6006. Teaching Methods in the Middle Grades: Social Studies . (3) Instructional strategies and assessment procedures relevant to teaching social studies to students in the middle grades. Emphasis will be placed on how to address the

National Council of Social Studies Standards with middle school students. Clinical/field Experience: 12 hours Undergraduates, 18 hours Graduates. PREREQUISITE: Admission to TEP. (F/Sp)
ICL 4121-6121. Library Materials for Young People and Adults. (3). Evaluation and selection of books and related library materials for leisure interests and curriculum needs of young people and adults from junior high school up; extensive reading, introduction to selection criteria, bibliographic aids, authors and illustrators, and types of literature and information books.
I CL 4450. I ndividualized Instruction Practicum. (1-3). Implementation of instruction in individual and small group situations for learners experiencing difficulty in selected basic skills areas; requires design and delivery of tutorial type instruction under guidance of supervisory personnel. May be repeated for maximum of 9 hours credit. (S/U)
ICL 4701-09-6701-09. Workshops in Curriculum and Instructional Leadership. (1-9). Various areas of curriculum and elements of instruction explored. Active student participation included. See online class listings for specific workshop number and topic. May be repeated for maximum of 9 hours credit in any one topic. (S/U)
ICL 4715. Clinical/ Practicum. (2). Seminars and participation as assistant to classroom teacher; emphasis on teacher roles and on adapting subject discipline to school curriculum. PREREQUISITE: EDPR 2211, LEAD 2010. (S/U)
ICL 4761-6761. Aerospace Education in Schools (3). Aerospace content and flight experiences. Emphasizes classroom application.
ICL 4762-6762. Advanced Aerospace Education in Schools. (3). Theory, principles and practices related to historical development of aerospace; emphasis on both civilian and military uses of aerospace capabilities. Appropriate utilization of aerospace research, concepts, and $\geqslant$ spinoffs $\geqslant$ for instructional purposes in the classroom at all grade levels. PREREQUISITE: ICL 4761.
ICL 4800. Professional Seminar. (3). Senior seminar taken concurrently with student teaching which requires students to analyze and seek solutions to problems encountered in current practices and issues in education. Students draw upon each specialization within discipline to integrate and synthesize knowledge and experience in development of their roles as professional educational leaders. COREQUISITE: student teaching. (S/U) [I]
ICL 4901-4919. Student Teaching. (2-10). Full-time planned and supervised experience in a setting appropriate to student $\gg \mathrm{s}$ area of specialization providing opportunities to synthesize knowledge and skills and demonstrate professional competencies in educational setting. PREREQUISITE: approval from Teacher Education Director. COREQUISITE: ICL 4800. (S/U)
ICL 4901. Student Teaching in Kindergarten. (S/U)
I CL 4902. Student Teaching in Primary Grades. (S/U)
I CL 4903. Student Teaching in Preschool. (S/U)
ICL 4904. Student Teaching in Grades 1-8. (S/U)
ICL 4905. Student Teaching in Special Education: Modified. (S/U)
ICL 4906. Student Teaching in Special Education: Comprehensive. (S/U)
ICL 4907. Student Teaching in Secondary School. (S/U)
I CL 4908. Student Teaching in Health. (S/U)
ICL 4909. Student Teaching in Exercise Science and Education. (S/U)
ICL 4910. Student Teaching in Vocational Consumer Science. (S/U)
I CL 4911. Student Teaching in Music. (S/U)
I CL 4912. Student Teaching in Art. (S/U)
ICL 4913. Student Teaching in the Middle Grades. (S/ U)
I CL 4950-59-6950-59. Special Topics in Instruction and Curriculum Leadership. (1-3). Current topics in areas of curriculum and instruction at all levels. Topics are varied an in online class listings .
I CL 4960. Academic Content for Teaching. (1-9). Academic content areas in disciplines supportive of school curriculum. May be repeated to remove deficits for teacher licensure and with change of content. ( $F, S p$ ).

## (I DT) I NSTRUCTI ONAL DESI GN AND TECHNOLOGY

REBECCA ANDERSON Ph.D., Chair<br>Room 106D, E.C. Ball Hall<br>http:///icl.memphis.edu/

IDT 3600. Technology in Education. (3). (ICL 3600). Integration of varied uses of technology into classroom learning environment while increasing students technological knowledge and skills; word processing, databases, spreadsheets, authoring, internet browsers, presentation, communication. Five hours field experience required.

## (INTD) I NTERDI SCI PLI NARY STUDI ES

Interdisciplinary Studies Office Room 107, Scates Hall

The following courses, INTD 2100, 4100-4110, and 4120-4130, compose part of the interdisciplinary Environmental Studies Program described under the College of Arts and Sciences. Before offering any of these courses, an instructor must gain approval from the University $\geqslant$ Environmental Research, Issues, and Programs Committee (room 107, Scates Hall).
I NTD 2100. Introduction to Environmental Studies. (3). Interdisciplinary environmental science course that integrates
material from the physical, natural and social sciences including ecosystems, land and water resources, population dynamics and control, pollution, and environment and society.
I NTD 4100-4110. Topics in Biological-Physical Environment Studies. (3). Each offering of this course must be approved by the Environmental Research, Issues, and Programs Committee. A student may repeat this course when topics are different, but may not receive more than a total of 6 hours credit for INTD 4100-4110.
I NTD 4120-4130. Topics in Socio-Behavioral Environmental Studies. (3). Each offering of this course must be approved by the Environmental Research, Issues, and Programs Committee. May be repeated when topics are different, but may not receive more than a total of 6 hours credit for INTD 4120-4130.

## ( I NTL) I NTERNATI ONAL STUDI ES

Interdisciplinary Studies Office

Room 107, Scates Hall
http://cas.memphis.edu/isc/int//
I NTL 3700-09. Special Topics in International Studies. (3). Topics are varied and in online class listings. Open to all students.
I NTL 4601. Seminar in I nternational Studies. (3). Investigation of selected topics in international relations from interdisciplinary perspective. Individual research and presentation of major paper that integrates tools, data or concepts of two or more disciplines. PREREQUISITE: permission of Director of International Studies. [W, I]
I NTL 4911. I nternship in I nternational Studies. (1-6). Practical experience in international organization. Students placed for some period of time with governmental or private organization to obtain practical experience in foreign policy making, problems of development, and/or cross-cultural communication. Academic credit granted upon certification of cooperating agency and acceptance by faculty of written report by student. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of Director of International Studies.
I NTL 4912. Directed I ndividual Study. (1-6). Individually directed advanced reading and/or research in special areas of interest. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of Director of International Studies.

## (ISDS) DECI SI ON SCI ENCES

Department of Marketing and Supply Chain Management
MARLA ROYNE STAFFORD, Ph.D., Chair
Room 302 Fogelman College of Business and Economics
Administration Building
http://fcbe.memphis.edu/modules/general/Dp_marketing.php?
Students must have junior standing and have met specific course prerequisites with a minimum grade of $\geqslant$ Co be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of $\boldsymbol{C}$ in each; (2) minimum of 2.25 GPA ( 2.5 for accounting majors) in all required lower division business courses and MATH 1830, and (3) 60 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements). A surcharge of $\$ 20$ per credit hour for 3000 and 4000 level courses and $\$ 20$ per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).
ISDS 2710. Business Statistics (3). Introduction to basic statistical procedures for analysis and interpretation of business data; collection and presentation of data, probability theory, measures of central tendency and variability, sampling distributions, estimation of parameters, and principles of hypothesis testing. Introduction to a statistical software package. PREREQUISITE: MATH 1830.

ISDS 3510. Production and Operations Management. (3). Operations as a key element of organizational strategy from a competitive viewpoint. Integration of various techniques to facilitate solution to productivity and quality issues in both manufacturing and service industries using multifunctional approaches in the creation of goods and services. PREREQUISITE: ISDS 2710.
ISDS 3711. Analytical Tools for Business Decisions. (3). Applied analytical and qualitative methods for analysis of common business decision problems; regression, math programming and optimization; forecasting, computer simulation, and decision analysis. PREREQUISITE: ISDS 2710, or equivalent. [C]
ISDS 3760. Operations Research. (3). Introduction to decision making, concentrating on problem solving technique; emphasis on problem definition, model construction, and various solution techniques including linear programming, project analysis and control, queuing methods, and simulation. PREREQUISITE: ISDS 3711, MIS 2749 and 2755, or equivalent.
ISDS 4510. Production and Operations Management II. (3). Emphasis on entire production system; interface with engineering, role of materials management, relationship to data base management, and problems of systems coordination; master planning, value analysis, and organizational aspects of production environment critically examined. PREREQUISITE: MGMT 3110, ISDS 3510.

ISDS 4511. Supply Chain Management. (3). Competitive strategy, SCM planning, SCM design, inventory management basics, strategic sourcing; B2B relationships, performance measurement, SCM enabling technology. PREREQUISITE: MGMT 3110, ISDS 3510, MKTG 3610.
ISDS 4512. Productivity Management. (3). Total systems perspective toward analyzing productivity issues that affect organizational performance. Importance of correctly defining and measuring productivity and supporting activities to maintain it. PREREQUISITE: ISDS 3510, or permission of instructor.

(ITAL) ITALI AN<br>Department of Foreign Languages and Literatures<br>RALPH ALBANESE, Ph.D., Chair<br>Room 375, Dunn Hall<br>http://fl.memphis.edu

ITAL 1010. Elementary Italian I. (3). (1101). Basic skills fundamental to language proficiency and culture. •
ITAL 1020. Elementary I talian II. (3). (1102). Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: ITAL 1010, or equivalent. •
ITAL 2010. Intermediate Italian I. (3). (2201). Comprehensive review of basic grammar, exercises in conversation, writing, and cultural readings. PREREQUISITE: ITAL 1020 or equivalent. -
ITAL 2020. Intermediate Italian II. (3). (2202). Continued development of basic language skills through oral and written practice. PREREQUISITE: ITAL 2010, or equivalent. •
ITAL 3301. Conversation and Composition I. (3). Development of oral proficiency and writing skills. PREREQUISITE: ITAL 2020, or equivalent.
ITAL 3302. Conversation and Composition II. (3). Continued development of oral proficiency and writing skills. PREREQUISITE: ITAL 3301, or permission of instructor.
ITAL 3411. Introduction to Italian Literature. (3). Survey of major literary works from the Middle Ages to the present. PREREQUISITE: ITAL 3301 or permission of instructor.
ITAL 4441. Dante. (3). Study of the Vita Nuova and the Divina Commedia. Students taking this course do not receive credit for LALI 4441. PREREQUISITE: ITAL 2020, or permission of instructor.
ITAL 4780. Individual Studies in Italian. (1-3). Directed individual study in selected areas of Italian chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.
ITAL 4791-99. Special Topics in Italian Literature, Language, and Civilization. (3). May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

## (J APN) J APANESE

Department of Foreign Languages and Literatures
RALPH ALBANESE, Ph.D., Chair
Room 375, Dunn Hall
http://fl.memphis.edu
J APN 1010. Elementary J apanese I. (3). (1101). Basic skills fundamental to language proficiency and culture. • J APN 1020. Elementary J apanese II. (3). (1102). Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: JAPN 1010, or equivalent. *
J APN 2010. I ntermediate J apanese I. (3). (2201). Continued development of listening, speaking, reading and writing skills. PREREQUISITE: JAPN 1020, or equivalent. *
J APN 2020. I ntermediate J apanese II. (3).(2202). Expansion of Japanese skills with more extensive listening comprehension practice and readings. PREREQUISITE: JAPN 2010, or equivalent. *
J APN 3301. Conversation and Composition I. (3). PREREQUISITE: JAPN 2020, or equivalent.
J APN 3302. Conversation and Composition II. (3). PREREQUISITE: JAPN 3301, or equivalent.
J APN 3401. I ntroduction to J apanese Literature and Culture. (3). Japanese literature and culture through a selection of important literary works written since 1900. PREREQUISITE: JAPN 3301, or equivalent.
J APN 3900. J apanese Culture and Society. (3-6). Intensive language and culture course; travel to Japanese speaking country required. PREREQUISITE: permission of study abroad director.
J APN 4501. J apanese Linguistics. (3). Theory and hands-on data analysis in various aspects of Japanese linguistics, including syntax, semantics, and pragmatics. PREREQUISITE: JAPN 3301, 3302, or permission of instructor.
J APN 4780. I ndividual Studies in J apanese. (1-3). Directed individual study in selected area of Japanese chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

## (J DST) J UDAI C STUDI ES

DAVID PATTERSON, Ph.D., Director
Room 301, Mitchell Hall
http://cas.memphis.edu/isc/jdst
JDST 2850. Religions of Abraham: Judaism, Christianity, Islam. (3). (UNI V). Survey of development of several Near Eastern religious traditions; consideration of intellectual relationships among them. [G] •
J DST 3601. Judaism. (3). Fundamental principles of Judaism, its role in the cultural life of the Jewish people, and its influence on human civilization.
JDST 3661. Old Testament. (3).(4661). (Same as LALI 3661). Interdisciplinary examination of portions of Hebrew Bible, Mishnah, Midrash, and other texts along with commentaries. All texts will be read in translation.
J DST 3801. Jewish Thought I. (3). (UNIV 3801). Thinkers and texts that shaped Jewish thought and life in ancient and medieval times; Talmud, the Midrash, the Kabbalah, and such thinkers as Saadia Gaon, Solomon ibn Gabriel, Judah Halevi, Maiminides.
J DST 3802. Jewish Thought II. (3). Continuation of JDST 3801, from 16th century until modern times; concepts of God, humanity, nature, good and evil, making meaning out of life, and others.
JDST 4511. Holocaust Studies. (3). (Same as UNHP 4404, UNIV 4511). Interdisciplinary study of issues that arise out of the Holocaust; questions of good and evil, divinity and humanity, truth and responsibility. [W, I]
J DST 4671. Jewish Literary Texts. (3). Development of Jewish narrative traditions; Jewish poetry, fiction, drama studied from perspectives of different national cultures in which J ewish literature has emerged. All texts will be read in translation.
JDST 4700-4799. Special Topics. (1-3). Examination of selected topics announced in the online class listing.
J DST 4801. Jewish Mysticism. (3). Fundamental principles of Jewish mystical tradition; development of basic concepts; medieval mysticism, Kabbalah, Lurianic mysticism, Chasidism, modern mystical movements.
JDST 4820. Political History of Israel. (3). (Same as POLS 4820). Interdisciplinary study of political stages in the development of the State of Israel, from mid 19th century to current times, with particular attention paid to key figures in the Zionist movement.
J DST 4830. Israeli/ Arab Conflict. (3). (Same as UNIV 4830). Interdisciplinary examination of historical, political, and cultural dimensions of tensions that have existed between the Israelis and Arabs since the founding of the State of Israel, with particular attention to current situation.
J DST 4840-6840. Israel: Antiquity in Modernity. (3). (Same as ANTH 4840). Interdisciplinary examination of relationship between ancient traditions and modern issues in Israel; emphasis on relationship between historical conditions, conflicts, and interconnections, and new choices facing Israel.
J DST 4841-6841. Biblical Archaeology. (3). (Same as ANTH 4841). Relationship between historical texts in Hebrew Bible and historical evidence from archaeological research in Israel and surrounding area; emphasis on how archaeological evidence and biblical narratives illuminate each other.
J DST 4900. Independent Study. (3). Directed individual study or research. May be repeated once. PREREQUISITE: Completion of out-of-class learning contract and approval of director of Bornblum Judaic Studies.

## (J OUR) J OURNALI SM

JAMES REDMOND, Ph.D., Chair<br>Room 300, Edward J. Meeman J ournalism Building<br>https://umdrive.memphis.edu/g-journalism/

JOUR 1700. Survey of Mass Communication. (3). Social background, scope, functions, and organization of modern communication media, attention to all major mass communication media; philosophy and goals of modern journalism; impact on governmental, social and economic systems.
JOUR 2121. Media Writing. (3). Basic instruction in journalistic forms and style; use of computer in composition of news reports or articles and in solution of news writing problems; laboratory writing exercises on computer. One lecture hour, four laboratory hours per week. PREREQUISITE: Passing grade on the Journalism Department's Writing Proficiency Exam.
JOUR 2123. Editing. (3). Practice in headline writing, editing, and newspaper makeup and study of contemporary editing problems. PREREQUISITE: JOUR 2121.
J OUR 3120. Reporting. (3). Gathering news of university community with laboratory writing assignments. PREREQUISITE: for News Editorial students, J OUR 2121 and 2123; all other students, JOUR 2121. [W]
J OUR 3130. Feature Writing for Newspapers and Magazines. (3). Advanced practice in writing, publishing feature stories for magazines and newspapers; finding and developing publishable ideas; freelance techniques; advanced reporting skills; writing techniques with emphasis on leads, endings, description, effective use of anecdotes and quotations; critiques of student work.
PREREQUISITE: for News Editorial students, JOUR 2121, 2123, and 3120; all other students, JOUR 2121.
JOUR 3300. Survey of Advertising. (3). Exploration of creative function of advertising; emphasis on role of media.
J OUR 3324. Advertising Copy Writing and Layout. (3). Principles of advertising psychology in relation to proven techniques for writing effective copy; approximately half of course devoted to practice in writing copy and preparing rough layouts. Typing proficiency required. One lecture hour, four laboratory hours per week. PREREQUISITE: JOUR 2121, 3900, or permission of instructor.
J OUR 3400. Introduction to Public Relations. (3). Development, scope, and modern role of public relations; emphasis on problem solving, lectures, and application of major public relations tools and practices.
JOUR 3410. Public Relations Research. (3). Identifying, characterizing and evaluating stakeholder groups and alternative channels of communication; formal research procedures include sampling, instrument design, information gathering, data processing, analysis and reporting. [C]
J OUR 3421. Public Relations Writing. (3). Emphasis on communication tactics; plan, write, and produce public relations tools; audience and media selection; print and electronic media. Two lectures hours, two laboratory hours per week.
PREREQUISITE: JOUR 2121, JOUR 3400. [W].
J OUR 3500. Survey of Internet J ournalism. (3). Social, legal and ethical issues concerning online reporting; social impact online reporting on society; comparison of new medium and traditional mass media; analysis of online content; process of online production and development of production tools.
J OUR 3526. Digital Imagery in J ournalism. (3). Story construction and reinforcement utilizing digital imaging elements including selection, editing, ethics, and story reinforcement in journalism publications including print, desk-top, and electronic media. One lecture hour, four laboratory hours per week. PREREQUISITE: JOUR 2121.
JOUR 3625. Television News Writing. (3). Processing of news for radio and television; attention to present-day style used by electronic media. Two lecture hours, two laboratory hours per week. PREREQUISITE: JOUR 2121. [W]
JOUR 3649. Radio News Practicum. (3). Applied skills in producing, writing, reporting, and voicing daily news and information programming for campus radio station WUMR. One lecture hour, four laboratory hours per week. May be repeated for a maximum of six credit hours. PREREQUISITE: JOUR 3625, or permission of instructor. (S/U)
J OUR 3800. J ournalism Seminar. (1). Weekly presentation by media professionals on topics in their fields of journalistic expertise. Students prepare for discussion sessions through assigned readings. May be repeated for a maximum of 2 hours credit. PREREQUISITE: junior standing and permission of instructor.
JOUR 3900. Visual Journalism. (3). Computer design and production of printed materials using desktop publishing software to create simple fliers, brochures and newsletters. One lecture hour, four laboratory hours per week.
JOUR 4120-6120. Reporting Public Issues. (3). Analyzing and writing news reports about government, courts, energy, economy, taxes, education, environment, medicine and science; emphasis on relationship between current issues and public s need to be informed; topics vital to large urban society. PREREQUISITE: JOUR 3120 or 3625, or permission of instructor. [W] J OUR 4124-6124. Computer-Assisted Reporting. (3). Advanced use of computer technology and investigative techniques to access, analyze and develop database information in combination with traditional news reporting. PREREQUISITE: JOUR 3120, or permission of instructor. [W,C]
JOUR 4130. Writing Internship. (3). Work in practical assignments at local media under supervision of qualified practitioners. NOTE: Students who have received credit for JOUR 4330, 4430 or 4630 may not receive credit for JOUR 4130. PREREQUISITE: permission of sequence coordinator. (S/U)
JOUR 4140-6140. Publication Design and Production. (3). Basic principles of design and production for newspapers and magazines; typography, story and page design, graphics; copy, images and infographics and presentation in clear, well-organized way; headlines, titles, subheads, captions, and other copy. PREREQUISITE: JOUR 3130 and 3526, or permission of instructor. J OUR 4326. Advertising Research. (3). (3345). Fundamentals in advertising research; nature of the market, appropriate advertising strategies, message effectiveness and media audiences; primary and secondary research, sampling, questionnaire
design, survey, and data processing and analysis. PREREQUISITE: JOUR 2121, 3300. COREQUISITE: JOUR 4327. [C]
J OUR 4327. Media Planning. (3). Procedures for analyzing the advertising situation, writing advertising and media goals, and setting advertising appropriations. Use of a microcomputer program to develop and evaluate optimum advertising media schedules. NOTE: offered only in fall term. PREREQUISITE: JOUR 3300 and MKTG 3010.
J OUR 4328-6328. Strategic Advertising Campaigns. (3). Development of creative strategy and its execution to include layouts, audio tapes, slide shows, storyboards and sales promotion application. (Sp). PREREQUISITE: JOUR 3324, 4326, 4327, or permission of instructor. [W, I]
J OUR 4330. Advertising I nternship. (3). Work under supervision of qualified practitioners in local advertising agency; advertising department of newspaper, television, or radio station; or company advertising department. NOTE: Students who have received credit for JOUR 4130, 4430 or 4630 may not receive credit for JOUR 4330. PREREQUISITE: permission of sequence coordinator. (S/U ).
J OUR 4420. Public Relations Case Studies. (3). (4423). Case studies and typical public relations problems; planning and preparation of communications materials for various media; application of public relations techniques. PREREQUISITE: JOUR 3400. J OUR 4430. Public Relations I nternship. (3). Work experience as intern with public relations department or organization or on team project assigned by instructor; analysis of public relations plan and evaluation of results. NOTE: Students who have received credit for J OUR 4130, 4330 or 4630 may not receive credit for JOUR 4430. PREREQUISITE: JOUR 3400, 3410, and 3421, and permission of instructor. (S/U ).
J OUR 4440-6440. Public Relations Campaigns. (3). Application of theory, research data, and problem-solving techniques in the development of comprehensive public relations strategies. PREREQUISITE: JOUR 3400, 3421, 3410, JOUR 4420 recommended, or permission of instructor. [I]
J OUR 4500-6500. Mass Media Website Management I . (3). Creation of journalism/mass media organization World Wide Web sites including conceptualization, layout, and integration of traditional news and information products; theoretical and ethical issues involving mass media publishing content on the Internet including concepts of product placement and audience engagement with news, public relations, and advertising.
J OUR 4550-6550. Mass Media Website Management II. (3). Advanced techniques in design, creation, maintenance of mass media websites; advanced software practices and skills; complex web programming, interface design, information architecture, web multimedia. PREREQUISITE: JOUR 4500, or permission of instructor.
J OUR 4560-6560. Online J ournalism Presentation. (3). Advanced techniques in online journalism presentation using multimedia stories and story elements, including video, audio, photos and text. PREREQUISITE: J OUR 3900, 4500, 4550, or permission of instructor.
J OUR 4629. Television News Reporting. (4). Gathering and writing of news for all electronic media (radio, TV, cable); emphasis on fundamentals of reporting and audio-video electronic news gathering. PREREQUISITE: J OUR 3120, 3625, COMM 3801, or permission of instructor.
J OUR 4630. Broadcast News I nternship. (3). Work in practical assignments at local broadcast media under supervision of qualified practitioners. NOTE: Students who have received credit for JOUR 4130, 4330 or 4430 may not receive credit for JOUR 4630. PREREQUISITE: permission of sequence coordinator. (S/U)

J OUR 4639. Television News Producing. (4). Producing, writing, editing and using electronic equipment to assemble a television newscast; emphasis on performing the various tasks in a working newsroom. PREREQUISITE: JOUR 3120, 3625, COMM 3801, or permission of instructor. [C]
J OUR 4649. Television News Practicum. (1-3). Applied skills in producing, writing, reporting, voicing daily news and information programming for a television newscast. May be repeated for a maximum of 6 credit hours. PREREQUISITE: JOUR 3625 and permission of instructor. (A-F/IP)
J OUR 4655-6655. Seminar In Electronic Media. (3). Issues and problems confronting electronic media; analysis of the various professional, societal, and economic forces that affect broadcast journalism. Permit required.
J OUR 4700. Mass Communication Law. (3). Origin and development of legal principles affecting freedom of expression and provisions of laws of libel, slander, copyright, and other statutes limiting communication in fields of publishing and broadcasting. J OUR 4702-6702. Current I ssues In J ournalism. (3). Advanced study of recent, critical problems faced by mass media and complexities that cause them. [I]
J OUR 4708-6708. Mass Media Professional Ethics. (3). Classical approaches to ethics presented with their application to the day-to-day considerations journalism, public relations and advertising professionals must face in working with employers, local publics and the larger society which depends on a free flow of accurate information. [I]
J OUR 4712-6712. Mass Media and Cultures. (3). Designed for the professional communicator who needs to understand different cultures, both foreign and domestic; intercultural communication, comparison of cultural values and behaviors, the nature of news in different cultures, the international flow of news, growth and impact of global journalism, television, advertising, and public relations. [I]
J OUR 4716-6716. History of Mass Communication. (3). (3700). Major events, stories, personalities, and issues that have shaped development of mass communication from the advent of printing to the age of the Internet; history of American journalism. [I]
J OUR 4800-09-6800-09. Special Topics in J ournalism. (3). Intensive study of a single critical issue or current topic. May be repeated for a maximum of 6 hours credit.
J OUR 4830. Directed Individual Study. (1-3). Independent study and research, or practicum, or project under supervision. May be repeated for a maximum of 3 hours credit. PREREQUISITE: permission of instructor.

J OUR 4900-6900. Multimedia Mass Communication. (3). Using computers to learn processes/software/production design concepts involved in multi-media primarily designed for computer-to-computer communication. Involves digital editing of still images, off-line video editing, animation and production techniques for assembling all into a single CD or video to convey advertising, public relations, or news editorial concepts. PREREQUISITE: JOUR 3900, or permission of instructor.

## (LALI ) LANGUAGES AND LITERATURE

## Department of Foreign Languages and Literatures <br> RALPH ALBANESE, Ph.D., Chair <br> Room 375, Dunn Hall <br> http://fl.memphis.edu

LALI 1010. Special Studies in Foreign Languages I. (3). (1701). Freshman level instruction in languages not regularly offered by Department of Foreign Languages; offered if and when sufficient demand exists and instructors available. Although credit earned in LALI 1020-2020 may be used to satisfy foreign language requirements for degrees, students should be aware of two important points: (1) foreign language requirement for degrees in College of Arts and Sciences specifies that all hours must be in same language; (2) unless demand is sufficient and unless instructors are available, the University cannot offer enough courses to enable students to meet these requirements.
LALI 1020. Special Studies in Foreign Languages II. (3). (1702). Continuation of LALI 1010. Freshman level instruction in languages not regularly offered by Department of Foreign Languages; offered if and when sufficient demand exists and instructors available.
LALI 2010. Intermediate Studies in Foreign Languages I. (3). (2701). Continuation of LALI 1010 and 1020. Offered provided instructor is available and there is sufficient student enrollment.
LALI 2020. Intermediate Studies in Foreign Languages II. (3). (2702). Continuation of LALI 2010. Offered provided instructor is available and there is sufficient student enrollment.
NOTE: LALI literature courses may not be used to satisfy any part of the foreign language requirement. With the exception of LALI 4890, LAL literature courses do not apply toward a major or minor in any of the foreign languages.
NOTE: Courses in Greek and Roman literature in translation and mythology are listed under Classics.
LALI 3661. Old Testament. (3). (4661). (Same as JDST 3661). Disciplines of history, philosophy, literature, religion, and culture; understanding the meanings, messages, and world views contained in sacred Hebrew texts.
LALI 4010-29-6010-29. (3). Special Topics in Foreign Literatures. (3). Topics vary and are announced in the online class listing.
LALI 4441-6441. Dante. (3). Study of the Vita Nuova and the Divine Comedy in English translation.
LALI 4442. Italian Cinema from 1945 to Present. (3). Screening and discussion of major contemporary Italian movies in context of late 20th century Italian culture and society.
LALI 4493-6493. Contemporary French Literature. (3). Emphasis on widely translated, well-known works by major French writers; presented in English translation. [W]
LALI 4780. Individual Studies in Language and Literature. (1-3). Directed individual study in selected areas of language or literature chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.
LALI 4791-99. Special Topics in Foreign Literature, Language, or Civilization. (3). May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.
LALI 4890-6890. Literary Criticism. (3). Study of the history and theories of literary criticism as exemplified by texts selected from various literary traditions. PREREQUISITE: 6 hours of coursework in a foreign language at the 3000 level or above. [W,I]

## (LATN) LATI N

Department of Foreign Languages and Literatures
RALPH ALBANESE, Ph.D., Chair
Room 375, Dunn Hall
http://fl.memphis.edu
LATN 1010. Elementary Latin I. (3). (1101). Elements of grammar; practice in Latin composition and translation. *
LATN 1020. Elementary Latin II. (3). (1102). Completion of elementary Latin grammar, with additional readings.
PREREQUISITE: LATN 1010, or equivalent college level credit. *
LATN 2201. Intermediate Latin I. (3). (2201). Review of basic Latin grammar with reading selections from The Golden Fleece and Roman history. PREREQUISITE: LATN 1020, or the equivalent. *
LATN 2202. I ntermediate Latin II. (3). (2202). More advanced readings from major authors. PREREQUISITE: LATN 2010, or equivalent. *
LATN 3111. Roman Historians. (3). Readings and analysis of selections from Caesar, Livy, Tacitus, and Suetonius; emphasis on nature of Roman historiography. PREREQUISITE: LATN 2020.
LATN 3211. Vergil. (3). Reading and analysis of the Aeneid. PREREQUISITE: LATN 2020.
LATN 3912. Cicero. (3). Reading and analysis of De Amicitia and De Senectute. PREREQUISITE: LATN 2020.

LATN 4001. Latin Prose. (3). Reading, interpretation of original texts of one or more Latin prose authors; language, structure and content. May be repeated for a maximum of 9 credit hours. PREREQUISITE: LATN 2020.
LATN 4002. Latin Poetry. (3). Reading, interpretation of original texts of one or more major Latin poets; language, structure and context. May be repeated for a maximum of 9 credit hours. PREREQUISITE: LATN 2020.
LATN 4411. Roman Letter Writers. (3). Reading and analysis of Ciceross Letters. PREREQUISITE: LATN 2020.
LATN 4711. Elegy, Lyric, and Epigram. (3). Reading and analysis of selections from Catullus, Horace, Tibellus, Propertius, and Martial. PREREQUISITE: LATN 2020.

# (LBRY) UNIVERSITY OF MEMPHIS LIBRARIES 

SILVERNA V. FORD, Ph.D., Dean<br>Room 203, McWherter Library

LBRY 3900-09. Special Topics in Library Information. (3). Topics varied and announced in online class listings. May be repeated when topic varies.

(LEAD) LEADERSHIP

LARRY MCNEAL, Ph.D., Chair<br>Room 113, Patterson Hall<br>http://coe.memphis.edu/lead/

The Department of Leadership offers only graduate level degree programs but does provide courses as part of undergraduate degree programs offered by other departments in the college and University.
LEAD 2010. Teaching and Schools in Urban Settings. (3). Introduction to roles and responsibilities of teachers in urban school settings; evolution of educational policies and practices; organization and structure of schools; examination of schools as cultural systems; philosophical, historical, and legal approaches; field experience ( 5 hours). PREREQUISITE: sophomore standing. LEAD 3350. The Adult Learner. (3). (EDSV 3350). Variety of learning patterns and developmental characteristics of adult emphasis on applications in programs or other activities for adult learners.
LEAD 4000-6000. Foundational Studies: Education, Schooling and American Society. (3). Interdisciplinary study of educational policies and practices in American society; role and function of school and teachers; analysis of major problems and issues facing contemporary public education. Five hours of school visitation required. PREREQUISITE: upper division standing or bachelors degree.

## (LEGL) PARALEGAL STUDI ES

## BRODERICK NICHOLS, J.D., Assistant Dean for Undergraduate Programs <br> Room 218, John Willard Brister Hall http://www.uc.memphis.edu/paralegal.htm

LEGL 2400. Legal Ethics. (3). (UNIV 2400). Introduction to paralegal profession; organization of legal institutions; role of attorneys and paralegals in legal system; regulation, ethics, and professional responsibility. PREREQUISITE: ENGL 1010.
LEGL 2410. Introduction to Law. (3). (UNIV 2410). Introduction to American substantive and procedural law; origins and applications of legal theories and processes; case law analysis. PREREQUISITE: ENGL 1010.
LEGL 2420. Legal Research and Writing I. (3). (UNIV 2420). Research methods using legal encyclopedias, annotations, form books, reporters, codes, regulations, digests, and citations; style of legal memorandum and uniform citation. PREREQUISITE: ENGL 1010.

LEGL 3410. Contracts and Commercial Law. (3). (UNIV 3410). Survey of law affecting the formation, performance, and enforcement of contracts; the Uniform Commercial Code; consumer protection; debtor-creditor relations; and bankruptcy; emphasis on paralegalss role in contract and commercial cases. PREREQUISITE: LEGL 2400, 2410, 2420.
LEGL 3420. Torts. (3). (UNIV 3420). Survey of state and federal law treating civil injury to persons or property; common law and statutory torts, worker sompensation, and insurance; emphasis on paralegals role in preparing personal injury and compensation cases. PREREQUISITE: LEGL 2400, 2410, 2420.
LEGL 3430. Business Associations. (3). (UNIV 3430). Legal aspects of formation and operation of proprietorships, agencies, partnerships, and corporations; emphasis on paralegals role in drafting business documents and maintaining corporate records. PREREQUISITE: LEGL 2400, 2410, 2420.
LEGL 3440. Civil Procedure. (3). (UNI V 3440). Application of Rules of Civil Procedure to civil litigation in federal and state courts; jurisdiction; pleadings; discovery requests; trial and appellate practices; judgments; emphasis on paralegales role in civil litigation. PREREQUISITE: LEGL 2400, 2410, 2420.
LEGL 3450. Legal Research and Writing. II. (3). (UNIV 3450). Advanced study of legal research and writing methods; computerized legal research; format and style of trial memorandum and appellate brief. PREREQUISITE: 15 hours in LEGL paralegal courses including LEGL 2420. [W]
LEGL 3481. Family Law. (3). (UNIV 3481). Substantive and procedural law affecting the family; marriage; procreation; divorce; child custody and support; emphasis on Tennessee law and paralegal sole in family cases. PREREQUISITE: LEGL 2400, 2410,
2420.

LEGL 3482. Labor Law. (3). (UNIV 3482). Law affecting employment relations; NLRB and EEOC procedures; OSHA and ADA issues in the workplace; emphasis on paralegal s role in labor law cases. PREREQUISITE: LEGL 2400, 2410, 2420.
LEGL 3483. Computers in the Law. (3). (UNIV 3483). Detailed examination of practical, technical, and theoretical aspects of computer systems as applied in the modern law office; includes docket control, billing, communications, litigation support, and legal document production. PREREQUISITE: ISDS 2749.
LEGL 3484. Bankruptcy Practices. (3). (UNIV 3484). Intensive study of substantive and procedural law of bankruptcy; emphasis on applications and processes used by the paralegal when assisting in bankruptcy cases. PREREQUISITE: LEGL 2400, 2410, 2420.
LEGL 3485. Real Estate Practices. (3). (UNIV 3485). Substantive law of real property; acquisitions, characteristics, and transfer of interests in real estate; particular emphasis on the role of paralegals assisting real estate attorneys with realty transfers and closings in Shelby County, Tennessee. PREREQUISITE: LEGL 2400, 2410, 2420.
LEGL 3486. Criminal Law and Procedure. (3). Advanced approach to understanding substantive and procedural criminal law with emphasis on practical application; prima facie elements of substantive criminal offenses, defenses to specific crimes, constitutional limits on police and other governmental entities, probation and parole, and the juvenile justice system. PREREQUISITE: LEGL 2400, 2410, 2420.
LEGL 3487. Administrative Law and Procedure. (3). Advanced approach to understanding substantive administrative law with in-depth analysis of Administrative Procedure Act; agency rulemaking, investigations, due process, informal action and discretion, formal adjudications, judicial review.
LEGL 4410. Paralegal Internship. (3). Supervised work experience in appropriate legal setting; individual progress conferences arranged and evaluative reports developed. PREREQUISITE: LEGL 2420, 3450 and approval of paralegal internship contract. (S/U) LEGL 4450. Legal Research and Writing III. (3). Advanced legal research and writing involving development of offensive and defensive litigation strategies and preparation of state and federal trial court pleadings which utilize these strategies; survey of appellate process and preparation of appellant and appellee briefs. PREREQUISITE: LEGL 2420, 3450. Last Updated: 6/12/15

MATH 0990. Foundations of Geometry. (3). Axiomatic development of plane geometry; emphasis on concepts of symmetry, congruence and similarity, Pythagorean Theorem and special right triangle properties, area and volumes of special right triangle properties; area and volumes of special two- and three-dimensional figures. NOTE: will not count toward the 120-semester hour degree requirement for any degree. PREREQUISITE: two units of high school algebra or DSPM 0850.
MATH 1420. Foundations of Mathematics. (3). (1182). Algebra review and applications; functions, graphs, permutations, combinations; introduction to probability and statistics; problem solving. PREREQUISITE: two units of high school algebra or DSPM 0850. [G] •

MATH 1421. Honors Calculus I. (4). (1401). Concepts of differential calculus with emphasis on theory; limits, continuous functions, applications of the derivative. NOTE: students may not receive credit for both MATH 1421 and MATH 1910.
PREREQUISITE: permission of instructor.
MATH 1480. Mathematics for Elementary School Teachers. (3). Examination of mathematics taught at the elementary school level; problem solving, sets, algebraic thinking, number theory, rational numbers, real numbers. PREREQUISITE: two units of high school algebra or DSPM 0850.
MATH 1710. College Algebra. (3). (1211). Analysis of functions (linear, quadratic, polynomial, root, rational, exponential, logarithmic) using graphing calculators; partial fractions; synthetic division; conic sections; theory of equations; inequalities; applications. NOTE: only one of MATH 1710 or MATH 1730 may be used to satisfy degree requirements. PREREQUISITE: two years of high school algebra, or DSPM 0850.
MATH 1720. Trigonometry. (3). (1212). Circular functions; inverse circular functions, graphs of circular and inverse functions, identities, equations, angles, trigonometric functions, solution of triangles, elementary application of vectors; trigonometric form of complex numbers. NOTE: MATH 1720 and MATH 1730 will not satisfy a six semester hour degree requirement. PREREQUISITE: placement test recommended but not required; MATH 1710.
MATH 1730. College Algebra and Trigonometry. (4). (1213). Exponents, radicals, quadratic functions, inequalities; relations and functions; inverse, exponential and logarithmic functions; solution of algebraic systems; trigonometric functions, identities, equations and graphs; angle measurements; sum, difference, half-angle and double-angle formulas; solution of triangles, laws of sines and cosines. NOTE: MATH 1710 and 1730, or 1720 and 1730 will not satisfy a six semester hour degree requirement.
PREREQUISITE: two units of high school algebra, or DSPM 0850.
MATH 1830. Elementary Calculus. (3). (1312). Introduction to concepts and methods of elementary calculus of one real variable as related to rational, exponential, and logarithmic functions; nature of derivatives; differentiation; application of derivative; nature of integration: definite integral; applications of definite integral. NOTE: only one of MATH 1830 or 1910 may be used to satisfy degree requirements. PREREQUISITE: MATH 1710 (with a minimum grade of C), ACT Math subscore of at least 24 , or equivalent SAT Math score. [G] *
MATH 1900. Experiences with Calculus. (1). In-depth study of concepts introduced in MATH 1830 with focus on use of transcendental function. Students completing both MATH 1830 and 1900 will fulfill the required prerequisites for MATH 1920. PREREQUISITE: MATH 1830 with a grade of "A", and permission of instructor.
MATH 1910. Calculus I. (4). (1321). Introduction to calculus of one real variable; limits; continuity; derivatives; applications of derivatives including Newton $\geqslant$ s method, graphing techniques, optimization, indeterminate forms and $1 \geqslant$ Hospital $\geqslant \mathrm{s}$ rule; antiderivatives; includes transcendental functions. NOTE: only one of MATH 1830 or MATH 1910 may be used to satisfy degree requirements. Students may not receive credit for both MATH 1910 and MATH 1421. PREREQUISITE: MATH 1720 (with a minimum grade of C) or MATH 1730 (with a minimum grade of C), or satisfactory score on placement exam. [G] *
MATH 1920. Calculus II. (4). (2321). Integration and applications of the definite integral; techniques of integration and improper integrals; curves defined by Parametric equations; arc length and surface area; polar coordinates; infinite series, Taylor and McLaurin series. NOTE: students may not receive credit for both MATH 1920 and MATH 2421. PREREQUISITE: MATH 1910 or both MATH 1830 and 1900.
MATH 2000. Experiences in Mathematics. (3). Introduction to selected areas of mathematical sciences through application to modeling and solution of problems involving networks, circuits, trees, linear programming, random samples, regression, probability, inference, voting systems, game theory symmetry and tilings, geometric growth, conics, comparison of algorithms, codes and data management. PREREQUISITE: three years of high school mathematics, including two years of algebra and one year of geometry. [G]
MATH 2011-2019. Special Topics in Mathematics. (1-3). Topics are varied and in online class listings. PREREQUISITE: permission of instructor.
MATH 2110. Calculus III. (4). Multivariable calculus including three-dimensional analytic geometry and vectors, quadratic surfaces, arc length and curvature, limits and continuity, partial derivatives and their applications, tangent planes, optimization problems and Lagrange multipliers, multiple integrals, vector fields, line and surface integrals, Green $\geqslant \mathrm{s}$ theorem, Stokes' theorem, the divergence theorem. PREREQUISITE: MATH 1920.
MATH 2421. Honors Calculus II. (4). (1402). Differential and integral calculus with emphasis on theory; anti-derivatives, definite integrals, techniques of integration, sequences, and series. NOTE: Students may not receive credit for both MATH 2421 and
1920. PREREQUISITE: MATH 1421 or MATH 1920, and permission of instructor.

MATH 2422. Honors Calculus III. (4). Multivariable calculus; vectors and matrices, partial derivative and applications, multiple integrals, line and surface integrals, Green $\gg$ s and Stokes $\gg$ theorem. NOTE: Students may not receive credit for both MATH 2422 and 2110. PREREQUISITE: MATH 2421.
MATH 2701. Discrete Structures. (3). Elementary logic; sets, relations, functions, orderings, equivalence relations, partitions: finite sets, modular arithmetic; natural numbers, mathematical induction, strings, string programs, connectedness, traversals, graph algorithms. NOTE: students may not receive credit for both MATH 2701 and MATH 2702. PREREQUISITE: MATH 1910.
COREQUISITE: COMP 2701.
MATH 2702. Introduction to Proofs and Fundamentals of Mathematics. (3). Logic, algebra of sets; forms of proof including mathematical induction; elementary combinatorics and binomial theorem; paradoxes, basic number theory, cardinality.
PREREQUISITE: MATH 1910.
MATH 3120. Differential Equations. (3). (3391). Ordinary differential equations including series solutions. PREREQUISITE: MATH 2110.
MATH 3221. Elementary Number Theory. (3). Divisibility properties of integers; prime numbers; congruences; Diophantine equations; quadratic residues; number theoretic functions; Fermat $\geqslant$ s theorem and Euler ${ }^{2}$ s generalization; applications to cryptography; quadratic reciprocity law. PREREQUISITE: MATH 3242 , or one of MATH 2701, MATH 2702, or permission of instructor.
MATH 3242. Introduction to Linear Algebra. (3). Systems of linear equations, matrices, elementary row and column operations, determinants; vector spaces and subspaces; linear transformations. PREREQUISITE: MATH 2110, or MATH 1920 and one of MATH 2701, 2702, or permission of instructor. [C]
MATH 3402. Honors Mathematics I V. (4). Linear algebra and differential equations; vector spaces, bases, linear transformations, matrices, first and second order ordinary differential equations, systems, phase plane methods. NOTE: students with credit for this course cannot receive credit for MATH 3242 or MATH 3120. PREREQUISITE: MATH 2422.
MATH 3581. College Geometry. (3). Axiomatic systems; major results from plane geometry; affine, projective, elliptic, and hyperbolic geometry; applications of differential calculus. PREREQUISITE: MATH 1910 and 2702.
MATH 4010-19-6010-19. Special Topics in Mathematics and Statistics. (1-3). Topics are varied and announced in Schedule of Classes. PREREQUISITE: permission of instructor.
MATH 4082. Mathematics for Middle School Teachers. (3). Capstone course consisting of more thorough study of fundamental concepts involving numbers, operations, functions, spatial relationships, data analysis; Excel, graphing calculators, modern software. PREREQUISITE: permission of instructor.
MATH 4151-6151. History of Mathematics. (3). Development of mathematics from earliest times to present; problem studies; parallel reading and class reports. PREREQUISITE: 21 hours in MATH courses including MATH 2110 and one of MATH 2701, MATH 2702, or permission of instructor. [I]
MATH 4171-6171. Special Problems In Mathematics. (1-3). Directed individual study in selected area of mathematics chosen in consultation with instructor. Repeatable by permission of department chair. PREREQUISITE: permission of instructor.
MATH 4242-6242. Linear Algebra. (3). Linear transformations, polynomials, determinants, direct-sum decompositions, diagonalizable operators, rational and J ordan forms, inner product spaces, the spectral theorem. PREREQUISITE: MATH 3242. MATH 4261-6261. Abstract Algebra. (3). Groups; homomorphisms; rings; integral domains; polynomials; fields.
PREREQUISITE: MATH 2702 and 3242, or permission of instructor.
MATH 4350-6350. I ntroduction to Real Analysis I. (3). Real number system, functions and sequences, limits, continuity, differentiation; Riemann-Stieltjes integration, series of functions. PREREQUISITE: MATH 2110, 2702 and 3242. [W]
MATH 4351-6351. Introduction to Real Analysis II. (3). Integration theory; Riemann and Lebesgue integrals; partial differentiation, implicit function theorem. PREREQUISITE: MATH 4350, or permission of instructor.
MATH 4361-6361. Complex Variables. (3). Complex numbers; analytic functions; Cauchy-Riemann conditions; Taylor and Laurent series; integration. PREREQUISITE: MATH 2110.
MATH 4391-6391. Partial Differential Equations I. (3). Laplace transforms; Fourier series; introduction to partial differential equations. PREREQUISITE: MATH 3120.
MATH 4392-6392. Partial Differential Equations II. (3). Methods of characteristics; Greenes functions; existence and regularity of solutions of boundary value; Cauchy problems. PREREQUISITE: MATH 4391.
MATH 4402. Senior Honors Seminar. (3). In-depth study of one or more topics in mathematical sciences; emphasis on individual research and problem solving techniques; student writes and presents an Honors Thesis. PREREQUISITE: open only to senior Honors Students in mathematical sciences with permission of instructor.
MATH 4411-6411. Topology. (3). Introductory set theory; metric spaces; topological spaces; continuous functions; separation axioms; separability and countability axioms; connectedness and compactness. PREREQUISITE: MATH 2702 and either 3242 or 4350.

MATH 4721-6721. Numerical Analysis. (3). Derivation and application of computer-oriented, numerical methods for functional approximation, differentiation, quadrature, and solution of ordinary differential equations. PREREQUISITE: MATH 1920 and knowledge of some structured programming language.

JAMES E. JAMISON, Ph.D., Chair
Room 373, Dunn Hall
http://www.msci.memphis.edu/
MATH 1601. Introduction to Statistical Reasoning and Application. (3). Underlying ideas of statistical and quantitative thinking; randomization in sample survey methods and design of experiments; double blind experiments and observational studies; descriptive and summary statistics; measurement errors; probability models; normal approximation; tests of significance and pvalues, basic concepts of correlation and regression analyses; MI NITAB. NOTE: Math majors may not use this course as part of the major. PREREQUISITE: Two years of high school algebra or DSPM 0850.
MATH 4607-6607. Introduction to SAS Programming. (3). SAS program statement syntax and flow control; selecting and summarizing observations; combing, dividing and updating SAS dataset; input tailoring and output customization; SAS built-in functions SAS Macro Language Programming and other SAS packages such as SAS/GRAPH and SAS/IML. PREREQUISITE: Introductory course in statistics.
MATH 4611-6611. Introduction to Applied Statistics. (3). Binomial, hypergeometric, Poisson, multinomial and normal distributions, test of hypotheses, chi-square test, t-test. F-test, etc, nonparametric tests; correlation analysis. Credit earned for this course may not be applied toward requirements for the Mathematical Sciences major. Students who have a calculus background are encouraged to take MATH 4635 instead of this course. PREREQUISITE: 6 hours in mathematics at level of MATH 1710 or above (except MATH 1601).
MATH 4614-6614. Probability and Statistics. (3). Probability distribution; statistical methods of parameter estimation and hypothesis testing; comparisons of two population means, proportions, and variances; analysis of variance, linear models and multiple regression. Students may not receive credit for both MATH 4614 and MATH 4635. PREREQUISITE: MATH 1920 and 2701. MATH 4635-6635. Introduction to Probability Theory. (3). Basic probability theory, random variables, expectation, variance, covariance, moment generating functions; binomial, hypergeometric, Poisson, geometric, negative binomial, uniform, normal, exponential, Cauchy. chi-square, t , and F distributions; central limit theorem. functions of a random variable; bivariate, marginal, and conditional distributions. NOTE: Students may not receive credit for both MATH 4614 and MATH 4635. PREREQUISITE: MATH 1920.

MATH 4636-6636. Introduction to Statistical Theory. (3). Functions of two random variables; gamma, beta, multinomial, and bivariate normal distributions; Bayes estimators; maximum likelihood and methods of moments estimators; sufficient statistics, unbiasedness, confidence intervals, and hypothesis testing. PREREQUISITE: MATH 4335.
MATH 4637-6637. Statistical Methods. (3). Basic concepts of hypothesis testing; comparisons of two population means, proportions, and variances; analysis of variance; completely randomized designs, randomized block designs, Latin square designs; multiple comparisons; simple linear model and multiple regression; analysis of covariance. PREREQUISITE: MATH 4611 or 4635. MATH 4640-6640. Introduction to Probability Models. (3). Basic concepts of discrete Markov chains; branching processes; Poisson processes; applications to modeling of population growth; applications to modeling of spread of infectious disease. PREREQUISITE: MATH 4635.

# (MECH) MECHANI CAL ENGI NEERI NG 

J OHN I. HOCHSTEIN, Ph.D., Chair

Room 312A, Engineering Science Building http://www.me.memphis.edu/
Undergraduate and graduate level engineering courses require an additional $\$ 20$ per credit hour.
MECH 1307. Mechanical Engineering Computing I. (3). Introduction to computing techniques used in engineering; general problem solving and graphing techniques; word processing fundamentals; the World Wide Web.
MECH 1309. Mechanical Engineering Computing II. (3). Introduction to computer aided engineering tools; elementary computer programming; computer aided drawing.
MECH 1395. Honors Studies. (1). Participation in scholarly activities such as research and design programs within the college under the supervision of a faculty mentor. Successful completion requires the mentor s acceptance of a report documenting the student $\geqslant$ saccomplishments. Note: This course is intended for students in their first year of academic study and may be repeated for a maximum of three credits. PREREQUISITE: admission to the Honors Program.
MECH 2308. Engineering Graphics. (3). Drafting techniques as used in engineering practice. Introduction to AutoCAD. Not credited toward degree in Mechanical Engineering.
MECH 2332. Dynamics. (3). Kinematics and kinetics of particles and rigid bodies. PREREQUISITE: CIVL 2131. COREQUISITE: MATH 3120.
MECH 2395. Honors Studies. (1). Participation in scholarly activities such as research and design programs within the college under the supervision of a faculty mentor. Successful completion requires the mentor s acceptance of a report documenting the student $\geqslant$ s accomplishments. Note: This course is intended for students in their second year of academic study and may be repeated for a maximum of three credits. PREREQUISITE: Admission to the Honors Program.
MECH 3301. Engineering Analysis. (3). Mechanical Engineering applications of first and second order ordinary differential equations, Laplace transforms, and Fourier series to problems in the areas of heat transfer, vibrations, and fluid mechanics. PREREQUISITE: MATH 3120.
MECH 3310. Introduction to Thermal Systems. (3). Introduction to First and Second Laws of Thermodynamics and to conduction, convection, and radiation heat transfer with particular emphasis on engineering applications. Mechanical Engineering
majors may not use MECH 3310 to fulfill B.S.M.E. degree requirements. PREREQUISITE: MATH 2110.
MECH 3311. Engineering Thermodynamics I. (3). Laws of thermodynamics and their applications to engineering problems. PREREQUISITE: MATH 2110.
MECH 3312. Engineering Thermodynamics II. (3). Applications of thermodynamics laws; emphasis on real gases, real gas mixtures, combustion, gas cycles and vapor cycles. PREREQUISITE: MECH 3311, CHEM 1110/1111.
MECH 3320. Engineering Materials. (3). (3361). Nature of six main classes of materials: metals, polymers and elastomers, ceramics and glasses, semiconductors, superconductors and composites; mechanical, thermal, electrical and electronic, magnetic and optical properties of materials; environmental effects on performance of materials: creep, corrosion, oxidation; methodology for selection of materials for named applications. PREREQUISITE: CHEM 1110/1111. COREQUISITE: PHYS 2120/2121.
MECH 3321. Kinematics and Dynamics of Machines. (3). Velocity and acceleration analysis of linkages and mechanisms; force analysis of linkages and mechanisms and machinery such as IC engines; gyroscopic forces and moment-of-inertia determination; dynamic balance of rotors and reciprocating masses. PREREQUISITE: MECH 2332, 3341.
MECH 3322. Mechanics of Materials. (3). (Same as CIVL 3322). Analysis of components subjected to tension, compression, bending moment, torque; combined loading; Mohr stress circle; deflection of beams; simple treatment of column buckling.
PREREQUISITE: CIVL 2131.
MECH 3323. Mechanical Design and Analysis. (3). Methodology and practice in designing machine components by integrating principles from mechanics of materials, failure theory, fatigue, economics and other principles. PREREQUISITE: MECH 3322.
MECH 3325. Materials Laboratory. (1). Materials testing and evaluation. Three laboratory hours per week. PREREQUISITE: MECH 3320; PREREQUISITE or COREQUISITE: MECH 3322.
MECH 3331. Mechanics of Fluids. (3). Statics and dynamics of fluids; applications to measurement of properties of water and air flows. PREREQUISITE: MECH 2332.
MECH 3335. Fluids Laboratory. (1). Principles of fluid mechanics are demonstrated and verified; familiarization with instrumentation and techniques in organizing and reporting results of experimental investigations. Three laboratory hours per week. COREQUISITE: MECH 3331.
MECH 3341. Mechanical Engineering Analysis. (3). Engineering methods, classical analysis, computer techniques, and their interactions with mechanical engineering problems. COREQUISITE: MATH 3120. [C]
MECH 3395. Honors Studies. (1). Participation in scholarly activities such as research and design programs within the college under the supervision of a faculty mentor. Successful completion requires the mentor s acceptance of a report documenting the student $s$ accomplishments. Note: This course is intended for students in their third year of academic study and may be repeated for a maximum of three credits. PREREQUISITE: admission to the Honors Program.
MECH 4300. Senior Seminar. (1). Ethics, professionalism, presentations. Senior Survey required. FE exam is recommended. PREREQUISITE: senior status or permission of instructor.
MECH 4305-6305. Intermediate Fluid Mechanics. (3). Continuation of MECH 3331; introduction to various topics in advanced fluid mechanics, including: flow over immersed bodies; open channel hydraulics; compressible fluid flow; turbomachinery; measurements in fluid mechanics; and, inviscid flow. PREREQUISITE: MECH 3331.
MECH 4309-6309. Gas Dynamics. (3). Concepts in compressible flow, emphasis on real and ideal gas dynamic effects and nonequilibrium flow; application of numerical methods. PREREQUISITE: MECH 3312, 3331.
MECH 4311. Heat Transfer I. (3). Fundamentals of conduction, convection, and radiation heat transfer with emphasis on conduction and convection; introduction to heat exchanger design. PREREQUISITE: MECH 3331, 3341.
MECH 4312. Power Generation. (3). Application of thermodynamics, fluid mechanics and heat transfer to design and operation of power plants; economic operation of power generation, optimization of resources, and technical report writing. PREREQUISITE: MECH 3312. [W]
MECH 4313-6313. Heat Transfer II. (3). Principles of boiling, condensing, and radiation heat transfer; fundamentals of heat exchanger design. PREREQUISITE: MECH 4311.
MECH 4314. Fluid/ Thermal Systems Designs. (4). Design of piping systems; pipe size selection using economics; fluid meter selection; prime movers and piping systems; heat exchanger analysis, selection and design; economics of heat exchanger selection; analysis of fluid/thermal components as a system. Group project required. PREREQUISITE: MECH 4311. [I]
MECH 4315-6315. Heating, Ventilation and Air Conditioning. (3). Psychrometric analyses, heating and cooling loads of buildings and analysis of air conditioning systems. PREREQUISITE: MECH 4311.
MECH 4320. Mechanics of Materials II. (3). Stress-strain analyses of thin-walled cylinders and spheres, springs, laterally loaded struts, struts with initial curvature, rotating disks and cylinders; plastic yielding of beams and shafts; introduction to energy methods. PREREQUISITE: MECH 3320, 3322.
MECH 4322. Mechanical Design. (3). Analytical treatment of methods used in design process including creativity, probability, and optimization as applied to design process, from concept through preliminary design to final design. PREREQUISITE: MECH 3323.

MECH 4323. Machine Design. (4). Mechanical concepts and analysis applied to machine design. Integrating finite element method, statistical analysis and computerized design into design projects. Design projects accomplished through individual, team and class approaches. COREQUISITE: MECH 4322.
MECH 4324-6324. Computer Methods in Design. (3). Application of computer aided drafting packages to design of mechanical components and systems. Introduction to fundamental concepts and principles of finite element methods and design optimization. Design project assignments using computerized engineering software for analysis and design solution. PREREQUISITE:

MECH 3323, 3341.
MECH 4325-6325. Advanced Mechanics of Materials. (3). Beams on elastic foundations, experimental stress analysis, torsion of non-circular sections, curved beam theory, unsymmetrical bending. PREREQUISITE: MECH 3322.
MECH 4326-6326. Biomedical Systems Analysis-Mechanical. (3). (3326). Introduction to concepts used in analyzing living systems. Simulation of body functions with mechanical and computer models. Familiarization with design of mechanical bioengineering devices such as heart valves, heart-lung machines, renal dialysis machines. PREREQUISITE: MECH $2332,3322$.
MECH 4330-6330. Introduction to Composite Materials. (3). Introduction to fiber reinforced composite materials. Includes mechanical behavior, strength, design methodology, and implementation of computer aided design. PREREQUISITE: MECH 3320, 3322, 3341.
MECH 4331-6331. Turbomachinery. (3). Basic principles of fluid mechanics and thermodynamics with application to rotating devices; ideal and actual operating characteristics of pumps, fans, turbines and compressors; constraints on design of real systems. PREREQUISITE: MECH 3331.
MECH 4333-6333. Aerospace Propulsion Systems. (3). Fundamentals of air breathing and rocket propulsion devices; principles of combustion thermodynamics, gas turbine operation, solid and liquid propellants, performance evaluation, and atmospheric and space mission propulsion requirements. PREREQUISITE: MECH 3331.
MECH 4335. Thermodynamics and Heat Transfer Laboratory. (1). Instrumentation and measurement techniques used in thermodynamics and heat transfer studies; experimental verification of basic principles with emphasis on organizing and reporting of results. Three laboratory hours per week. COREQUISITE: MECH 4311.
MECH 4337-6337. Internal Combustion Engines. (3). Principles of Otto and Diesel cycle engines; effects of various fuels and fuel delivery systems, air induction systems, ignition systems, and pollution control techniques on engine performance.
PREREQUISITE: MECH 3312, 3331.
MECH 4340-6340. Manufacturing Processes. (3). Introduction to manufacturing processes: fundamentals of mechanical behavior of materials, manufacturing properties of materials; casting, bulk deformation, sheet metal forming, material removal processes; processing of polymers, ceramics and glasses, composite materials; powder metallurgy; fastening and joining processes; nontraditional manufacturing processes; economics of integrated design and manufacturing; recent developments in manufacturing. PREREQUISITE: MECH 3320, 3322.
MECH 4344. Mechanical Controls. (3). Fundamental classical control concepts; modeling of linear mechanical control systems; transient, accuracy and performance analyses and design of control systems using root locus sketch, Nyquist diagrams and Bode plots. PREREQUISITE: MECH 3321.
MECH 4345-6345. Design of Mechanisms. (3). Graphical and analytical mechanism synthesis techniques for path generation, function generation, rigid body guidance and optimization of force transmission characteristics. PREREQUISITE: MECH $3321,4322$.
MECH 4346-6346. Advanced Mechanical Controls. (3). Advanced design and modeling of mechanical control systems; review of digital and optimal control systems and simulation of control systems. PREREQUISITE: MECH 4344.
MECH 4350-6350. Principles of Biomechanics. (4). Biomechanics of tissues and structures of musculosketetal system; biomechanics of all joints; applications of statics, mechanics, linear viscoelasticity. PREREQUISITE: MECH 3320, 3322.
MECH 4360. Selection of Engineering Materials. (3). Detailed study of main classes of materials and their properties and uses; design criteria for various failure modes and selected environment case studies, technical tutorials and design exercises. PREREQUISITE: MECH 3320, 3322.
MECH 4365. Biomaterials. (3). Biocompatibility and biofunctionality; materials for bone and joint replacement; materials for the cardiovascular system; materials and artificial organs; dental restorative materials; materials for drug delivery; materials for ophthalmology. PREREQUISITE: MECH 3320, 3322.
MECH 4369. Process Heat Transfer. (3). Engineering concepts and fundamental principles dealing with single and two phase fluid dynamic and heat transfer to design and analysis of process heat transfer equipment. PREREQUISITE: MECH 4311.
MECH 4371-6371. Mechanical Vibrations. (3). Kinematics of harmonic and non-harmonic vibrations; system of one and several degrees of freedom, free and forced vibrations; self-excited vibrations. PREREQUISITE: MECH 3321.
MECH 4383-6383. Nondestructive Testing and Evaluation I. (3). Visual and optical methods; radiographic methods; ultrasonic testing; acoustic emission; magnetic methods; eddy current method; penetrant testing; standards, training and certification issues; case studies; projects. PREREQUISITE: MECH 3320, 3323, 3341.
MECH 4384-6384. Nondestructive Testing and Evaluation II. (3). Nuclear radiographic methods; acoustic and dynamic techniques; magnetic resonance testing; volatile liquid testing; thin layer chromatography; thermoplastic stress analysis; research techniques; case studies; projects. PREREQUISITE: MECH 4383
MECH 4391. Mechanical Engineering Projects. (1-3). Independent investigation of mechanical engineering problems in consultation with instructor. PREREQUISITE: senior standing.
MECH 4395. Honors Thesis Proposal. (3). Scholarly work in engineering requires advanced understanding in a particular field of study as well as the foundation in fundamental principles provided by the undergraduate curriculum. The student will work with an Honors Thesis advisor to identify a suitable thesis topic and to develop the advanced understanding required for scholarly study of that topic. A formal written and oral proposal must be accepted by the departmental honors committee for the successful completion of this course. PREREQUISITE: senior standing and approval by the departmental honors committee.
MECH 4396. Honors Thesis. (3). Original scholarly work is performed under the direction of an Honors Thesis advisor and reported in a thesis. Successful completion of this course requires an oral defense of the thesis and acceptance of the thesis by the departmental honors committee. PREREQUISITE: MECH 4395 and approval by the departmental honors committee.
MECH 4990-98-6990-98. Special Topics in Mechanical Engineering. (1-3). Topics are varied and in online class listings.

# (METH) MANUFACTURI NG ENGI NEERI NG TECHNOLOGY 

Department of Engineering Technology
DEBORAH J. HOCHSTEIN, M.S., Chair
Room 203, Engineering Technology Building
http://www.et.memphis.edu
METH 1711. Manufacturing Processes I. (3). Metal manufacturing processes, including traditional machining, computer numerical control, and thermal metal cutting/joining; measurement, layout, and inspection techniques as applied to integrated manufacturing systems; coverage of threads, fasteners, and geometric dimensioning and tolerancing. Two lecture hours, three laboratory hours per week.
METH 3386. Occupational Safety. (3). (TECH). Hazards and safety procedures for general industry and construction. METH 3401. Strength of Materials. (3). Force systems and their solution; that branch of mechanics dealing with forces and effects of forces including stress strain and deformation of bodies at rest; analysis of frames and mechanisms. PREREQUISITE: MATH 1910, PHYS 2010/2011. COREQUISITE: TECH 3044.
METH 3408. Industrial Materials (3). Material properties and the methods/standards used in testing these properties for metals, ceramics, polymers, and composites; emphasis on their mechanical properties; reinforced by testing in the laboratory, library and internet research, spreadsheet applications, reports, and oral presentations. Two lecture hours, three laboratory hours per week. PREREQUISITE: METH 3401, 3462. COREQUISITE: METH 3421.
METH 3421. Manufacturing Processes II. (3). Processes and techniques used to fabricate industrial materials into useful products; techniques covered include casting and molding, forming, separating, conditioning, assembling, finishing; CNC programming concepts and process design and control. Two lecture hours, three laboratory hours per week. PREREQUISITE: METH 1711. COREQUISITE: METH 3408.
METH 3440. Project Cost Evaluation. (3). Concept of project management and engineering economy; impact of economics in evaluation of alternatives and decision making; spreadsheet development of economic concepts; interest rate compounding effects; present future and annuity equivalent valuation; cash flow analysis; project cost and risk analysis; application of project management software. PREREQUISITE: TECH 3044.
METH 3462. Industrial Statistics. (3). Procedures for collecting, describing, presenting and statistically analyzing industrial data; basic probability theory; hypothesis testing and basic concepts of analysis of variance; introduction to Taguchi methods; spreadsheet software used for statistical analysis. PREREQUISITE: MATH 1710 or higher, and TECH 1010.
METH 3573. Dynamics and Design for Automation. (3). Analysis of rectilinear and curvilinear motion; kinematic analysis of mechanisms; design of mechanical systems; pulleys, gears, belts, motors. PREREQUISITE: TECH 3044, METH 3401, PHYS 2010/2011.
METH 4381-6381. Principles of Supervision. (3). Practical approach to supervisory management including functions of planning, organization, staffing, employee motivation; coverage of contemporary issues including legal aspect of supervision as well as other regulatory concerns, such as occupational safety, health and labor relations.
METH 4460-6460. Work Design, Improvement and Measurement. (3). Analytical techniques and concepts for work methods improvement, lean operation for production and distribution; performance measurement and evaluation; continuous improvement; fundamentals of human factors and ergonomics; work measurement using time study, predetermined time study systems, work sampling and development of standard data. COREQUISITE: MATH 4464.
METH 4462-6462. Statistical Quality Control. (3). Statistical methods for quality analysis and improvement; control charts for variables and attributes, industrial sampling; defect prevention using the Poka-Yoke System; reliability; acceptance sampling; Quality standards, continuous improvement; use of computer software for data analysis and presentation. PREREQUISITE: TECH 3044. [C] METH 4464-6464. Production Control Systems. (3). Functions of planning and controlling production and distribution operations; concepts of JIT, MRP, MRPII, ERP, and Japanese manufacturing techniques; analytical techniques and concepts for line balancing, production and process control, demand management and project management. COREQUISITE: METH 4460, or permission of instructor.
METH 4466-6466. Facility Design. (3). Integrated approach to design and layout for production and distribution facilities with respect to workstation design, material handling, project and resource planning, production control; use of Computer Aided Design, scheduling and analytical software. Team projects, reports and presentations. PREREQUISITE: METH 4460 and METH 4464, or permission of instructor.
METH 4472-6472. Computer Aided Drafting and Design. (3). Overview of CAD technology, hardware and software options; parametric solid modeling principles; applications to produce computer generated models, assemblies, photo-realistic renderings and working drawings. Two lecture hours, three laboratory hours per week. PREREQUISITE: TECH 1521, METH 1711, 3401. METH 4474-6474. Automation and Robotics. (3). (TECH). Concepts of automation applied to production, distribution, and industrial robotics. Two lecture hours, three laboratory hours per week. PREREQUISITE: TECH 1010 or CETH 1211. METH 4476-6476. Computer Aided Manufacturing. (3). (TECH). Computer numerical control programming by manual data input and distributed numerical control by computer assistance; system assessment of CNC machines; components, controls, and tooling for integrated manufacturing environment. Two lecture hours, three laboratory hours per week. PREREQUISITE: MATH 1730, METH 1711, 3421, and 4472 .
METH 4571. Tool Design. (3). Design of tooling and work holding systems for the integrated manufacturing environment; geometric dimensioning and tolerancing, fast change-over techniques, hydraulic and pneumatic circuits, achieving world class quality
through design. Two lecture hours, three laboratory hours per week. PREREQUISITE: METH 3401, 3421, 4472.
METH 4990-98. Special Topics. (1-3). Varied topics and in online class listings. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.
METH 4944. Senior Thesis. (3). (Same as CETH 4944, EETH 4944). Study and research in specific area culminating in an integrating experience through individual and/or group projects and technical reports. PREREQUISITE: METH 3440 and either ENGL 3601 or 3603 , and senior status within two semesters of graduation. Permission of department required. [W, I]

## (MGMT) MANAGEMENT

ROBERT R. TAYLOR, Ph.D., Chair

Room 202, Fogelman College of Business and Economics Administration Building http://fcbe.memphis.edu/modules/general/Dp_management. php?
Students must have junior standing and have met specific course prerequisites with a minimum grade of $\boldsymbol{C} \geqslant$ to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of $\geqslant$ in each; (2) minimum of 2.25 GPA ( 2.5 for accounting majors) in all required lower division business courses and MATH 1830, and (3) 60 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements). A surcharge of $\$ 20$ per credit hour for 3000 and 4000 level courses and $\$ 20$ per credit hour for $6000-9000$ level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).
MGMT 1010. Introduction to Business. (2). Acquaintance with major institutions and practices in business and coverage of elementary concepts of business; survey of functional areas of business and the activities of management; orientation for selection of major and information on business career opportunities. NOTE: if taken by students with 50 hours or more, credit will not count for B.B.A. degree.
MGMT 1011. Introduction to Management Lab. (1). Series of field trips, service learning project and other experiences related to hospitality and resort management; tour of property, management overview, decision making areas, Business Control Points. COREQUISITE: MGMT 1010.
MGMT 3110. Organization and Management. (3). Comprehensive survey of management functions, basic concepts, and management principles; coverage of planning and decision making, organizing, directing, and controlling; coordination of organizational resources to achieve objectives.
MGMT 3215. Management of Human Resources. (3). Personnel functions and basic concepts; human resource planning, job analysis, staffing, development, compensation, employee/labor relations, health and safety, industrial employee union representation, and impact of the EEO legislation.
MGMT 3510. Business Communication. (3). Communication theory applied to business and the professions; emphasis on effective writing; presentation of written and oral case solutions, letters, memoranda, reports, and employment applications; selection and use of research sources; consideration of business ethics, technology, and intercultural communication.
PREREQUISITE: MIS 2749, or equivalent. [W]
MGMT 4110-19. Special Topics in Management. (3). Topics varied and in online class listings. PREREQUISITE: permission of instructor.
MGMT 4240. Compensation and Performance Appraisal. (3). Systematic examination of administration of wage and salary as tool of management; use of job descriptions, job analysis, and job evaluation methods, instruction in techniques of rationalizing wage structures; analyses of some outstanding considerations that must be taken into account in installing and administering wage programs are made. PREREQUISITE: MGMT 3110, 3215, 3510.
MGMT 4251. Labor Relations. (3). Examination of historical, legal, and institutional relationship between labor and management; negotiating/collective bargaining process, administration of contract, establishment and utilization of grievance procedures, and current issues in labor management relations. PREREQUISITE: MGMT 3110, 3215, 3510.
MGMT 4260. Employee Staffing and Development. (3). Examination of processes related to recruiting, selecting, and developing qualified persons for employment in organizations; determination of staffing needs, recruitment of a sufficient applicant pool, utilization of selection tools, and offering orientation training programs for employee development; emphasis on legal context of selection decisions. PREREQUISITE: MGMT 3110, 3215, 3510.
MGMT 4420. Organizational Behavior in Business. (3). Human relations as applied to people at work in all kinds of organizations; emphasis on understanding of human behavior and motivation of employees to work together in greater harmony; fundamentals of organizational behavior, leadership and its development, organizational environment, and communication and group processes. PREREQUISITE: MGMT 3110, 3510.
MGMT 4461. Managerial Leadership. (3). In-depth examination of leadership in business organizations; critical evaluation of the meaning and practice of leadership; coverage of philosophy, psychology, and the process of leadership, including the process functions of creating vision, use of power and influence, being effective, and applying wisdom. PREREQUISITE: MGMT 3110, 3510.
MGMT 4510. International Business Communication and Negotiation. (3). Importance of business communication in conducting global business effectively; emphasis on organizational and interpersonal communication and negotiation skills needed in an integrated world economy; culture-based assumptions, contrasting cultural values, communication and negotiation strategies, verbal and nonverbal patterns, cultural shock, and country specific information. PREREQUISITE: MGMT 3510.

MGMT 4710. Strategic Management. (3). Advanced problems in determination, execution, and control of strategic management process in light of changing environments in which organizations operate. PREREQUISITE: MGMT 3110, 3510, and senior standing in The Fogelman College of Business and Economics. Enrollment limited to graduating seniors. [I]
MGMT 4810. International Management. (3). Introduction to issues in international business and exploration of environment facing firms in international arena; problems in planning, implementing, and controlling activities such as choosing foreign associates, selecting plant location, and dealing with labor, structure, legal constraints, and trade problems. PREREQUISITE: MGMT 3110, 3510.
MGMT 4820. Entrepreneurship. (3). Initiation process of new business venture. Participants as teams develop detailed development plan covering all phases of business initiation and development. PREREQUISITE: MGMT 3110, 3510.
MGMT 4910. Management Problems. (1-3). Student conducts approved research projects in his or her major area under supervision of staff members. PREREQUISITE: senior standing and permission of department chair.
MGMT 4911. Internship in Management. (1-6). Internship in business organization to gain on-the-job experience. Project to be approved and supervised by departmental faculty. Credit allowed upon acceptance of report. PREREQUISITE: 2.75 overall GPA and completed 15 hours in Upper Division core.
MGMT 4996. Senior Honors Thesis in Management. (3). Independent research open only to those students enrolled in the Honors Program. Thesis supervised by departmental faculty member. PREREQUISITE: senior standing and permission of the Director of the Honors Program.

(MIS) MANAGEMENT I NFORMATI ON SYSTEMS<br>Department of Management Information Systems<br>JASBIR S. DHALWAL, Ph.D., Chair<br>Room 300, Fogelman College of Business and Economics Administration Building http://fcbe.memphis.edu/modules/general/Dp_management.php?

Students must have junior standing and have met specific course prerequisites with a minimum grade of C$\rangle$ to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of $\widehat{\boldsymbol{c}}$ in each; (2) minimum of 2.25 GPA ( 2.5 for accounting majors) in all required lower division business courses and MATH 1830, and (3) 60 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements). A surcharge of $\$ 20$ per credit hour for 3000 and 4000 level courses and $\$ 20$ per credit hour for 6000 - 9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).
MIS 2749. Introduction to Business Microcomputer Applications. (3). (ISDS). Introduction to use of microcomputers for performing business activities; use of lab environment with direct instruction uses of current software and electronic communication. MI S 2755. Introduction to Management Information Systems. (3). (ISDS). Introduction to major concepts in business information systems; emphasis on use of information systems to solve business problems. PREREQUISITE: MIS 2749.
MIS 2770. Computer Hardware/ Software. (3). (ISDS). Provides experience working with common operating systems including UNIX, DOS/Windows, and Mainframe; file manipulation, editing functions, communication, and shell programming. PREREQUISITE: MIS 2749, 2755.
MIS 3745. Application Program Development I. (3). (ISDS). Introduction to business application programming; program development using languages and techniques widely employed in business environment. PREREQUISITE: MIS 2770.
MIS 3755. Application Program Development II. (3). (ISDS). Intermediate level business application program development using languages and techniques widely employed in business environment. PREREQUISITE: MIS 3745, or equivalent.
MIS 3765. Electronic Commerce Business Applications. (3). (ISDS). Basic electronic commerce concepts applied within context of supply chain management. PREREQUISITE: MIS 2749 and 2755.
MIS 3770. Systems Analysis Methods. (3). (ISDS). Overview of systems development life cycle; emphasis on current systems documentation through use of classical and structured tools and techniques for describing process flows and data flows, data structures, file and input/output design and program specifications, data gathering and information reporting activities, transition from analysis to design. PREREQUISITE: MIS 3745, 3775.
MIS 3775. Database Management. (3). (ISDS). Focus on designing programs written in a high-level language for business applications; selecting appropriate file organization; designing data models with electronic commerce implications; utilizing appropriate DBMS programs. PREREQUISITE: MIS 2770.
MI S 3780. Application Program Development III. (3). (ISDS).Advanced programming of business applications using current high level languages and techniques widely employed in business environment. PREREQUISITE: MIS 3745, or equivalent.
MI S 3790. Network Design and Management. (3). (ISDS). Introduction to business telecommunications concepts and terminology; decentralization of computer processing, communication links, communications oriented hardware and software, network design, and network management. PREREQUISITE: MIS 2770.
MIS 3885. Strategic Information Technology Project Management. (3). Principles, process, tools of modern project management; general business project management and information technology specific project management; strategic implications of project management to organizational strategy; use of currently available project management software tools to successfully plan
and execute projects. PREREQUISITE: MGMT 3110.
MI S 4110-19. Special Topics in Management I nformation Systems. (3). (ISDS). Topics varied and announced in online class listings. PREREQUISITE: permission of instructor.
MI S 4310. Global Information Technology. (3). (ISDS). Technology to facilitate the practice of global business; uses of systems and technology to gain and sustain competitive advantage; cultural and political aspects of global enterprise.
MI S 4760. Web Site Design. (3). (ISDS). Design, development, implementation and evaluation of business Web sites; global design and implementation issues. PREREQUISITE: MIS 3745.
MI S 4800. I nformation Resource Management. (3). (I SDS). Broad overview of information systems management function with particular attention to planning, organizing and controlling user services and to managing computer information systems development process. PREREQUISITE: MIS 3775 and 3790: PREREQUISITE or COREQUISITE: MIS 3770.
MIS 4910. Management Information Systems Problems. (1-3). (ISDS). Approved research projects in student's major area under supervision of staff members. PREREQUISITE: senior standing and permission of department chair.
MI S 4911. I nternship in Management Information Systems. (1-6). (ISDS). Internship in business organization to gain on-the-job experience. Project approved and supervised by area faculty. Credit allowed only after acceptance of report. PREREQUISITE:
2.75 overall GPA and completed 15 hours in Upper Division core.

MI S 4996. Senior Honors Thesis in Management I nformation Systems. (3). (ISDS). Independent research open only to those students enrolled in the honors program. Thesis supervised by area faculty member. PREREQUISITE: senior standing and permission of the Director of the College Honors Program.

## (MKTG) MARKETI NG

Department of Marketing and Supply Chain Management MARLA ROYNE STAFFORD , Ph.D., Chair
Room 302 Fogelman College of Business and Economics
Administration Building
http://fcbe.memphis.edu/modules/general/Dp_marketing.php?
Students must have junior standing and have met specific course prerequisites with a minimum grade of $\geqslant \mathrm{C}\rangle$ to be eligible for all 3000 and 4000 level courses. In addition to these requirements, students seeking a degree in the Fogelman College of Business and Economics must have (1) completed all required lower division business courses with a minimum grade of $\geqslant \mathrm{C}\rangle$ in each; (2) minimum of 2.25 GPA ( 2.5 for accounting majors) in all required lower division business courses and MATH 1830, and (3) 60 hours of course work including MATH 1830 and 9 hours of English (See B.B.A. Degree Requirements-General Requirements).
A surcharge of $\$ 20$ per credit hour for 3000 and 4000 level courses and $\$ 20$ per credit hour for 6000-9000 level courses has been approved by the Tennessee Board of Regents. The purpose of the surcharge on these business courses is to guarantee the continuous improvement of the college and compliance with the standards of the Association to Advance Collegiate Schools of Business International (AACSB International).
MKTG 3010. Principles of Marketing (3). Comprehensive study of structure and functions of marketing system in the firm, economy, and society; analysis of target markets, environments, and managerial aspects of marketing practices.
MKTG 3012. Consumer Behavior. (3). Why consumers behave as they do; psychological and sociological theories and principles applied to current marketing problems. PREREQUISITE: MKTG 3010.
MKTG 3140. Advertising and Sales Promotion. (3). Introduction to field of advertising including agencies, media, layout, copy, typography; emphasis on various media associated with sales promotion and on need to coordinate entire promotional mix.
PREREQUISITE: MKTG 3010.
MKTG 3320. Retailing Fundamentals. (3). Changing concepts of retailing from management viewpoint; principles that underlie successful operation of enterprises distributing products and services to ultimate consumers. PREREQUISITE: MKTG 3010.
MKTG 3410. Consultive Selling. (3). Basics of personal selling: preparation, personality development, communications, sales interview techniques, ethics, and career opportunities; selling skills developed via sales presentations, role playing, audio-visual selfobservation, and use of sales aids.
MKTG 3610. I ntroduction to Supply Chain Management. (3). Purchasing and supply management; operations management; transportation and logistics.
MKTG 3620. Global Logistics Management. (3). Analysis of logistics activities, distribution network alternatives, and customer service aspects; evaluation of logistics procedures and strategies and their appropriateness to different industries. PREREQUISITE: MKTG 3610.
MKTG 3630. Transportation Management. (3). Detailed analysis of freight traffic function within firm's logistics system; rate and classification systems, claim liability, shipping document procedures, carrier selection, and other aspects associated with organizing and operating traffic department. PREREQUISITE: MKTG 3610.
MKTG 3650. Strategic Sourcing and Purchasing. (3). Role of purchasing function within organization; purchasing process; procurement and commodity strategy; insourcing/outsourcing; supplies evaluation and selection; supplier management and development; global sourcing; cost and price analysis; negotiation; contract management; new product development.
MKTG 4080. Marketing Research. (3). Research methods and procedures used in marketing to solve business problems; traditional and innovative research designs, sampling, data analysis, dissemination of results; applications of analytical techniques; hypothesis testing, regression, analysis of variance; database marketing, data mining research. PREREQUISITE: ISDS 3711 and

MKTG 3010.
MKTG 4230. Services Marketing. (3). Broadens and applies marketing concepts and techniques in services industries and compares to tangible goods marketing, all within the framework of total quality management.
MKTG 4240. Relationship Marketing. (3). I mplementation of a direct marketing program, including telemarketing, cataloging, direct mail, electronic media, and direct response advertising, and how it fits into overall marketing strategies. PREREQUISITE: MKTG 3010.
MKTG 4410. Sales Management. (3). Sales management functions of recruiting and hiring, training and assimilating, planning, controlling and motivating, and sales analysis; role of personal selling in promotional mix and sales objectives of management. PREREQUISITE: MKTG 3010, 3410, and senior standing.
MKTG 4411. Sales Internship. (3). Internship in sales or sales-related position in an organization to gain on-the-job experience in preparing for successful sales jobs or careers. Project to be approved and supervised by department faculty. Credit for course allowed only after acceptance of student's written report. PREREQUISITE: MKTG 3410, 2.5 overall GPA, and completion of 15 hours of upper division core.
MKTG 4470. Negotiation Skills. (3). Emphasis on fundamental skills in negotiation across a variety of settings, including business, law, health care, and public administration; basics of both collaborative and competitive approaches, including planning tools and techniques; will address international focus.
MKTG 4530. International Marketing. (3). Bases and promotion of foreign trade; international marketing organizations and methods; technical and financial features of international marketing. PREREQUISITE: MKTG 3010.
MKTG 4570. Global Transportation, Tourism and Electronic Commerce. (3). Analysis of worldwide transportation of passengers, lodging industry and tourism destinations; electronic methods of tourism research; alternative distributions systems for purchase of travel related services. PREREQUISITE: MKTG 3010.
MKTG 4901. Management of Marketing Strategies. (3). Comprehensive study of marketing strategies implementation; computer simulated case studies; projects developed for integration of marketing practice in contemporary business applications. Student should take in final semester. PREREQUISITE: MKTG 3012, 3140.
MKTG 4910. Problems in Marketing. (1-3). Students carry on approved research projects in their major area under supervision of staff member. PREREQUISITE: senior standing and permission of department chair.
MKTG 4911. Marketing Internship. (1-6). Internship in business organization to gain on-the-job experience. Project to be approved and supervised by area faculty member. Credit allowed only after acceptance of student's written report. PREREQUISITE: 2.75 overall GPA and completed 15 hours of Upper Division core.

MKTG 4920-29. Special Topics in Marketing. (3). Topics are varied and in online class listings. May be repeated for a maximum of 6 hours credit with change in topic. PREREQUISITE: permission of department chair.
MKTG 4996. Senior Honors Thesis in Marketing. (3). Independent research open only to those students enrolled in the Honors Program. Thesis supervised by area faculty member. PREREQUISITE: senior standing and permission of the Director of the College Honors Program.

# (MUAP) APPLIED MUSIC 

Rudi E. Scheidt School of Music PATRICIA HOY, D.M.A., Director Room 123B, Music Building<br>http://music.memphis.edu

Applied music courses are divided into two broad categories: (1) small group or individual lessons in vocal or instrumental performance and (2) musical ensembles.
Individual lessons, vocal or instrumental performance are offered as INTRODUCTORY INSTRUCTION, LOWER DIVISI ON, AND UPPER DIVISION applied music (see explanation below). Individual lessons in vocal or instrumental performance are given by university faculty who are members of the relevant Applied Music Division.
All students who wish to enroll in applied vocal or instrumental performance must perform an audition for the members of the appropriate Applied Music Division or for a designate of the appropriate division. Because the number of students who can be accepted is limited, it is advisable that the student audition as early as possible to be assured a place with the requested teacher. Practice facilities are provided without charge, but there are additional fees for the individual lessons (see the explanation below under FEES), and a fee is required for certain practice room keys.
Examinations for courses in which the student is to receive credit for applied music in vocal or instrumental performance are called Board Exams. For Board Exams, each student performs musical selections and/or technical exercises of a grade of difficulty appropriate to the level of instruction in which the student is enrolled. The board hearing the exam is made up of the members of the appropriate Applied Music Division (for further information, see the explanation below under EXAMINATIONS).
Music majors at the University of Memphis are expected to participate in School of Music ensembles; each degree program has specific or general ensemble requirements (see above under the various degree requirements). Non-music majors enrolled at the University of Memphis as degree-seeking students may audition and, if accepted, enroll for applied instruction where staff time is available. If accepted at the Lower Division or Upper Division level for applied instruction, non-music majors must simultaneously enroll and participate in an ensemble sponsored by the School of Music.
Any student enrolled at the University of Memphis may audition for applied jazz lessons as space permits. Any student accepted for
applied jazz lessons must concurrently participate in an appropriate jazz ensemble or combo. Jazz ensemble assignments are made following the jazz auditions during registration week at the beginning of the semester.
All jazz and studio bass majors must simultaneously be enrolled in classical bass, MUAP 1541 until a level of proficiency equal to entrance into upper division is attained.
All jazz and studio guitar majors must take six semester hours of classical guitar which is the maximum allowable for credit toward the degree. If a student can meet the requirements in less time, and wishes to discontinue classical study, the student may do so with permission of the instructor and consultation with the jazz and studio faculty. In the event a student cannot meet the requirements after six semester hours of study, it is the student's responsibility to pursue classical guitar as an elective or until such time as requirements are met to the satisfaction of the guitar and jazz and studio faculty.
FEES: In addition to the regular student fees, all persons taking applied music will be assessed $\$ 75$ per semester for the half-hour lessons. Students registering for one (1) semester hour credit will receive one half-hour lesson per week. All others will receive one hour lesson per week regardless of credit hours at a fee of $\$ 150$. The integration courses, Artist Recital and Senior Project in Music, are taught as applied and require a $\$ 150$ fee. The Senior Composition Recital and Senior Project in Music History are also taught as applied but do not carry a fee.

## APPLIED MUSIC COURSES

| Introductory | $\underline{\text { Lower }}$ | $\underline{\text { Upper }}$ |
| :--- | :--- | :--- |
| $\underline{\text { Instruction }}$ | $\underline{\text { Division }}$ | $\underline{\text { Division }}$ |


| Instrument | 1 hour | 2-3 hours | 2-4 hours 4000 level 1-2 hours 6000 level |
| :---: | :---: | :---: | :---: |
| Trumpet | 1110 | 1111 | 4111-6111 |
| Horn | 1120 | 1121 | 4121-6121 |
| Trombone | 1130 | 1131 | 4131-6131 |
| J azz Trombone |  | 1132 | 4132 |
| Tuba | 1140 | 1141 | 4141-6141 |
| Euphonium |  | 1142 | 4142-6142 |
| Cornet | 1150 | 1151 | 4151-6151 |
| Sackbut | 1160 | 1161 | 4161-6161 |
| Piano | 1310 | 1311 | 4311-6311 |
| Harpsichord | 1320 | 1321 | 4321-6321 |
| Organ | 1330 | 1331 | 4331-6331 |
| Percussion | 1410 | 1411 | 4411-6411 |
| Ethnic Percussion | 1413 | 1414 | 4414-6414 |
| J azz Mallets | 1415 |  |  |
| Violin | 1510 | 1511 | 4511-6511 |
| Baroque Violin |  | 1512 | 4512-6512 |
| Viola | 1520 | 1521 | 4521-6521 |
| Cello | 1530 | 1531 | 4531-6531 |
| Bass | 1540 | 1541 | 4541-6541 |
| Guitar | 1550 | 1551 | 4551-6551 |
| Harp | 1560 | 1561 | 4561-6561 |
| Viola da Gamba | 1570 | 1571 | 4571-6571 |
| Voice | 1610 | 1611 | 4611-6611 |
| Flute | 1710 | 1711 | 4711-6711 |


| Oboe | 1720 | 1721 | $4721-6721$ |
| :---: | :---: | :---: | :---: |
| Clarinet | 1730 | 1731 | $4731-6731$ |
| Saxophone | 1740 | 1741 | $4741-6741$ |
| Jazz Saxophone |  | 1742 | 4742 |
| Bassoon | 1750 | 1751 | $4751-6751$ |
| Recorder | 1760 | 1761 | $4761-6761$ |
| Jazz Trumpet |  | 1112 | 4112 |
| Jazz Piano |  | 1312 | 4312 |
| Jazz Percussion |  | 1412 | 4412 |
| Jazz Bass |  | 1542 | 4542 |
| Jazz Guitar |  | 1552 | 4552 |
| Jazz Voice |  | 1612 | 4612 |

Applied Music Lessons consist of individual instruction on the above listed instruments as well as attendance at weekly studio classes run by the instructor for the individual instruments. Studio class attendance is required for music majors. Studio classes generally meet on Fridays at 12:35 p.m., but students should contact the instructor for the exact day and time their studio class meets. In addition, music majors enrolled in applied lessons must also attend the area workshops scheduled in their respective areas.
REGISTRATION: Students will register for lessons in the same manner and at the same time as they register for other courses; however, students may not be assigned to a course number until they have auditioned. Auditions are held in the Music Building during the pre-college counseling, advising and registration periods before each semester. Auditions may be scheduled in the Music Office, Room 123, Music Building. Any inquiries concerning credits or course numbers should be directed to the director of the School of Music.
CREDITS AND GRADES: Students may register for one or two hours credit per semester and will be assigned to individual lessons, a master class, or a combination of the two, commensurate with their level of performance. Additional credit may be earned at the lower division and upper division level. Students earning more than two credits per semester will be assigned additional practice and will be expected to perform at a higher level than those students registered for fewer credits. Grades are awarded on the same basis and have the same significance as in other subjects.
REPETITION OF COURSES: MUAP courses in individual lessons and major group instruction, small ensembles, and large ensembles may be repeated for credit but not for the purpose of improving the grade originally earned.
EXAMINATIONS: For an examination in applied music, students will prepare and perform for members of the faculty of the School of Music suitable musical selections and technical exercises of a grade of difficulty appropriate to their standing. Examinations are held in designated rooms on days set aside for this purpose near the end of each semester. Credit for the course will not be awarded to any student who fails to take the examination.
MUAP 1100. Class Piano for Non-Music Majors. (1). Beginning instruction in piano for non-music majors; development of basic reading and performance skills.
MUAP 1105. Class I nstruction in Piano I. (1). Basic technique, with emphasis on sight-reading. PREREQUISITE: MUTC 1001 or permission of instructor.
MUAP 1106. Class I nstruction in Piano II. (1). Playing of songs used in school music teaching; community songs, and hymns. PREREQUISITE: MUAP 1105; MUTC 1008, 1010.
MUAP 2107. Class Instruction in Piano III. (1). Simpler Bach chorales, more difficult songs and accompaniments, appropriate to the student's major field; memorization optional. PREREQUISITE: MUAP 1105; MUTC 1009, 1011.
MUAP 2108. I ndependent Studies in Piano Proficiency. (1). Piano repertoire and technique, accompaniments, harmonization, transposition, and sight trading to satisfy the core requirements of the piano proficiency exam. Requirements vary according the student's concentration area and the degree emphasis. PREREQUISITE: MUAP 2107; MUTC 1009, 1011. (T grade allowed).
MUAP 2201. Historical Techniques for Woodwind I nstruments. (1). Introduction to historical woodwind instruments; historical playing techniques for both historical and modern instruments.
MUAP 3301. Chamber Music for Keyboard. (1). Collaborative performance for pianist, harpsichordists, and organists with keyboard, brass, winds, strings, percussion, and vocalists; open to students in keyboard concentration and others through audition.
MUAP 3999. J unior Recital. (1).
MUAP 4004-6004. Orchestral Excerpts. (2). Study and performance of selected orchestral excerpts suitable for auditions. PREREQUISITE: permission of instructor.
MUAP 4260-69-6260-69. Special Topics in Applied Music. (1-3). Topics are varied and in the online class listings.
MUAP 4263-6263. Reed Making. (1). Laboratory course designed to give students the necessary skills to become independent
reed makers. For students of oboe or bassoon. May be repeated for credit.
MUAP 4801-6801. Individual Studies in Applied Music. (1-3). Directed individual instruction in applied area not listed under MUAP. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of director.
MUAP 4999. Artist Recital. (4). Integration course in which knowledge and skills developed in music history, music theory, and applied music courses are utilized systematically in the preparation and presentation of a public musical performance and of an accompanying descriptive paper. Taught as applied music, individual instruction. PREREQUISITE: a minimum of 4 hours upper division lessons; permission of the instructor. [I]
INTRODUCTORY INSTRUCTION: Any student may audition for lessons at the one-hour level except in organ; organ students must have the ability to play the piano before beginning organ instruction. A student may not receive more than four hours credit in any one area of major group instruction. The fee for major group instruction will be the same as for one half-hour lesson per week: \$50 per semester.
LOWER DIVISION COURSES: Applied music courses in the lower division include the study normally carried out during the freshman and sophomore years. Piano or instrumental students at this level should have had several years of intensive study prior to university entrance so that they have a secure, reliable, and well-grounded technique on the instrument. Organ students may begin at this level provided that they play the piano well and have reasonable ability in sight-reading. Those who do not meet this requirement will register for MUAP 1310. To be admitted to lower division study a student must first pass a qualifying examination. Students who fall short of the requirements for admission to the lower-division courses will be advised to register for major group instruction until deficiencies are eliminated. Course numbers will be repeated for each semester of study.
UPPER DIVISION COURSES: Promotion to the upper division does not follow automatically after the completion of four semesters of courses in the lower division but is made only on the recommendation of the upper division examining committee; such a recommendation will be made only if the student's proficiency as a performer bears promise of future artistic and professional qualities as a soloist. It is at this level that the student normally begins preparation for a recital.
JUNIOR RECITAL, ARTIST RECITAL, and SENIOR PERFORMANCE PROJ ECT: The Junior Recital is required for the Performance Concentration under the Bachelor of Music in Music degree. The Artist Recital is required for the Performance Concentration and the Sacred Music Concentration. The Senior Performance Project is required under the School of Music Concentration. The Artist Recital and the Senior Performance Project are integration courses for which the student must prepare both a public recital and a paper. To register for the Junior Recital and the Senior Performance Project, students must have successfully completed at least two years of credit in upper division lessons in their applied area. To register for the Artist Recital, students must have successfully completed at least four hours of credit in upper division lessons in their applied area. The Junior Recital must be approved by the appropriate applied music faculty through a hearing. Both the musical and the written portions of the Artist Recital and the Senior Performance Project must be approved by the appointed faculty committee through a reading and a hearing. Upon approval, the student may schedule a date for the public performance and make arrangements for the printing of the program. The public performance must be presented no later than two weeks after the date of the hearing.
SMALL, CHAMBER, AND SPECIALIZED ENSEMBLES: Advanced students are encouraged (and for certain degree plans are required) to participate in the following groups. Selection for membership is based on audition; courses may be repeated with the approval of the student's advisor. Three one-hour meetings per week.
MUAP 3101. Brass Ensemble. (1). Practical applications of brass performance techniques for a small chamber ensemble, one performer to a part; survey of brass chamber music. PREREQUISITE: permission of instructor.
MUAP 3104. Collegium Musicum. (1). Use of early musical instruments and voice in performance of early music; primary sources used in preparation of performances. PREREQUISITE: permission of instructor.
MUAP 3401. Percussion Ensemble. (1). Study and performance of selected traditional, contemporary, avant garde and pops percussion literature. Open to students in percussion concentration and others through audition.
MUAP 3402. Contemporary Chamber Players. (1). Ensemble of mixed and variable instrumentation; performance of repertoire written since 1900 and little known works of other periods. Primary goal of ensemble: to provide experiences in solving unique performance problems of contemporary music. PREREQUISITE: permission of instructor.
MUAP 3403. Orff Ensemble. (1). Study and performance of literature written for Orff instruments, including barred percussion, unpitched percussion, and recorder.
MUAP 3501. Chamber Music for Strings. (1). Study and performance of string chamber music repertory. Coaching sessions weekly with a member of music faculty. Open to music majors and non-majors through audition.
MUAP 3503. Double Bass Ensemble. (1). Study and performance of works for bass ensemble. Open to music majors and nonmajors through audition.
MUAP 3504. Guitar Ensemble. (1). Study and performance of works for guitar ensemble. Open to majors and non-majors through audition.
MUAP 3505. Cello Ensemble. (1). Study and performance of works for cello ensemble. Open to music majors and non-majors through audition.
MUAP 3506. Trombone Ensemble. (1). Study and performance of repertory for multiple trombones. Open to music majors and non-music majors through audition.
MUAP 3601. Chamber Choir. (1). Vocal ensemble specializing in choral music from the Renaissance to the present. Open to music majors and non-music majors through audition.
MUAP 3602. Opera Workshop. (1-6).
MUAP 3603. Opera Soloists. (1). Preparation and performance of role in major production of University Opera Theater. Audition required.

MUAP 3604. Opera Production Laboratory. (1-6).
MUAP 3701. Woodwind Ensemble. (1). Study and performance of original and transcribed works for varied combinations of woodwind instruments. Audition required.
LARGE MUSICAL ORGANIZATIONS
All music students must take a minimum of eight (8) semesters of ensemble. The exact number of large ensembles and other (or small) ensembles is determined by each division and major concentration. In addition, the designations of which ensembles will satisfy large ensemble requirements are determined by each division. Therefore, it is necessary to consult with your advisor for the specific outline for your applied area and degree program. Transfer students lacking sufficient large ensemble credits should consult with their advisor and/or the department chair to determine a method of rectifying the situation. Ensemble assignments are based on audition and may be repeated. Any exception to this general ensemble assignment policy may be made after a review of petitions by the director, the appropriate ensemble director, and the applied studio teacher.
MUAP 2001. Symphony Band. (1). Performance of traditional and contemporary wind compositions. Participants chosen from this ensemble for basketball pep-bands. Open to music majors and non-music majors.
MUAP 2002. Marching Band. (2). Selected ensemble that performs at all home football games and occasional out-of-town games in each season. Rehearsal approximately ten hours weekly. Open to music majors and non-music majors. [G]
MUAP 2003. Varsity Band. (1). Concert performance of traditional and contemporary wind compositions. Participants are chosen from this ensemble for basketball pep-bands and usually have participated in Fall marching band. Open to music majors and nonmusic majors.
MUAP 2004. University Gospel Choir. (1). Ensemble open to all students. Music includes contemporary gospel, spirituals, and gospel hymns. Serves as outlet for students interested in developing musical and personal capacities. Open to music majors as elective. Two class meetings per week.
MUAP 2007. Collegiate Choir. (1). Choir for music and non-music majors; study and perform choral literature from variety of style periods and origins.
MUAP 3004. University Wind Ensemble. (1). Select ensemble of instrumentalists. Study and performance of outstanding repertory for wind ensembles. Open to music majors and non-music majors through audition.
MUAP 3005. University Orchestra. (1). Study and performance of major orchestral literature. Additional opportunities for opera, chamber-orchestral and chamber ensemble performance. Audition required.
MUAP 3006. University Singers. (1). Study and performance of choral works from broad spectrum of choral literature; sacred, secular, accompanied and a cappella. Open to music majors and non-music majors through audition.
MUAP 3007. Opera Chorus. (1). Choral ensemble for opera productions with exploration of related stage techniques. Extra rehearsals at discretion of conductor. Audition required.
MUAP 3008. Oratorio Chorus. (1). Study and performance of major works primarily oratorio in nature. Open to music majors, non-music majors and the off-campus community. Audition required.
MUAP 3016. Sound Fuzion. (1). Preparation and performance of vocal/instrumental music from American popular culture. May be repeated for credit. Entrance by audition.

## J AZZ AND STUDI O ENSEMBLES

## Rudi E. Scheidt School of Music <br> PATRICIA HOY, D.M.A., Director Room 123B, Music Building http://music.memphis.edu

MUAP 1116. Class I nstruction in Piano: Jazz/ Pop/ Commercial. (1). Basic harmonic patterns, chord symbol realization, voicing, basic rhythmic patterns. PREREQUISITE: MUSE 1105, or equivalency exam.
MUAP 3012. University I nstrumental J azz Ensemble. (1). Study and performance of varied jazz styles, including repertory from standard big band literature and studio ensembles. Open to music majors and non-majors through audition. This course will meet large ensemble requirements for Music Industry majors only.
MUAP 3013. University Vocal Jazz Ensemble. (1). Study and performance of varied jazz styles, including repertory from standard big band literature and studio ensembles. Open to music majors and non-majors through audition. This course will meet large ensemble requirements for Music Industry majors only.
MUAP 3014. Recording Studio Instrumental Ensemble. (1). Ensemble performs and records works written by students in the Commercial Music program. This course will meet large ensemble requirements for Music Industry majors only.
MUAP 3015. Recording Studio Vocal Ensemble. (1). Ensemble performs and records works written by students in the Commercial Music program. This course will meet large ensemble requirements for Music Industry majors only.
MUAP 3103. Jazz Combo. (1). Practical application of basic jazz improvisatory skills; combo experiences in all jazz styles; traditional, bop, contemporary. Audition required.
MUAP 4103-6103. Jazz and Studio Ensemble Techniques. (3). (CMUS). Jazz and studio performance styles and practices, emphasizing ensemble rehearsal and conducting techniques, articulation, phrasing, balance and blend, line dominance, and recording studio performance skills. (F). PREREQUISITE: MUTC 3828.
MUAP 4895. Senior Project: Jazz and Studio Performance. (3). (CMUS). Project must include live and recorded performances demonstrating the student $\geqslant \mathrm{s}$ mastery of various styles of jazz and popular music performance. PREREQUISITE:

# (MUHL) MUSI C HI STORY, LITERATURE 

Rudi E. Scheidt School of Music<br>PATRICIA HOY, D.M.A., Director<br>Room 123B, Music Building<br>http://music.memphis.edu

MUHL 3301. History of Music to 1700. (3). Development of significant musical styles; attention to individual contribution of major composers. PREREQUISITE: MUTC 2008 or permission of instructor. (F) [W]
MUHL 3302. History of Music Since 1700. (3). Continuation of MUHL 3301. PREREQUISITE: MUTC 2008 or permission of instructor. (SP). [W]
MUHL 3303. Western Music History. (3). Study of major style periods in Western Music History for the non-performance student of music. [W]
MUHL 3304. Music History Review. (3). Review of genres, repertories, major figures, and development of western music. May not be used to fulfill any course requirement in the B.M. degree.
MUHL 4001-6001. Piano Repertory. (2). Survey of stringed keyboard repertory from Bach and his contemporaries to the present. Representative works analyzed regarding historical, stylistic, formal and aesthetic features. PREREQUISITE: junior standing in music or permission of instructor. (F)
MUHL 4002-6002. Song Repertory I. (2). Survey of solo literature from the Italian, British Isles, and German Schools of song. MUHL 4003-6003. Song Repertory II. (2). Survey of solo literature from the French, Scandinavian, and American Schools of song.
MUHL 4005-6005. History and Literature of the Organ. (3). Literature for the organ and its effect on and interaction with organ design.
MUHL 4008-6008. The Symphony. (3). Survey of development of the symphony for 18th century to present with focus on important composers and works; discussion of orchestration and form, aesthetics, performance practice.
MUHL 4009-6009. Choral Literature I. (3). Survey of choral repertories from Gregorian chant to 1700; contemporary performance practices; techniques of performing early choral music with modern mixed choirs.
MUHL 4010-6010. Choral Literature II. (3). Survey of choral repertories from 1700 to present; contemporary performance practices; problems of modern performance.
MUHL 4011-6011. String Quartet Literature. (3). History of string of quartet; survey of its music from Haydn to present; problems of performance.
MUHL 4012-6012. History of Chamber Music for Wind Instruments. (3). History of chamber music for brass and woodwind instruments from medieval through modernist periods; instruments, types of ensembles, musical sources, notation, repertory, and performance practice.
MUHL 4013-6013. Women and Music. (3). Investigation of roles women have played throughout history of Western art music, music they have composed, performed, inspired.
MUHL 4014-6014. Chamber Music for Piano. (3). Study of development of works for piano and one other instrument; piano trios, piano quartets; piano quintets; stylistic analyses of works from classic, romantic, and twentieth century repertory.
MUHL 4015-6015. Guitar Literature. (3). Basic repertory of classical guitar and its predecessors from the middle ages to the present.
MUHL 4020-6020. Solo Brass Literature. (3). Examination, evaluation and critique of solo repertoire for brass instruments. Reference books and material will be examined as well as the development of specific courses of study for each instrument. MUHL 4021-6021. American Amateur Brass Band. (3). History and circumstances of the American amateur band movement in the 19th and early 20th centuries; practical exploration of its musical repertory. PREREQUISITE: MUHL 3302, or permission of instructor.
MUHL 4022-6022. Early Chamber Music. (3). Study of repertories for small groups of strings and winds from the middle ages to 1700 .
MUHL 4030. Percussion Repertory. (3). Survey of available literature for percussion instruments.
MUHL 4259. Studies in Bibliography. (3). Bibliographic techniques in music history; study and cataloguing of standard reference materials; research practices and ethics. Preparation of the Senior Project prospectus.
MUHL 4260-69-6260-69. Special Topics in Music History. (1-3). Topics are varied and announced in the online class listings.
MUHL 4406. Twentieth Century Music. (3). Advanced study of music in its historical context from 1900 to the present. MUHL 4407-6407. The Opera and Music Drama. (3). Survey of opera before Richard Wagner; Wagner's music dramas and operas of his contemporaries; dramatic and musical significance of each phase of development of two forms. PREREQUISITE: MUHL 3301, 3302; or permission of instructor.
MUHL 4500-6500. String Repertory. (3). Histories, texts, methods, periodicals, orchestral studies, and solo and ensemble literature of the individual string instruments.
MUHL 4800-6800. World Musical Styles. (3). Musical styles and role of music performance in preliterate and folk societies throughout world. (SP)

MUHL 4801-6801. American Folk and Popular Music. (3). Folk and popular elements in American music; role of mass media, especially phonograph record, in utilizing and changing folk music; historical development and interrelationships of various musical styles ranging from 19th century minstrelsy to roots of rock and roll; emphasis on southern Anglo-American and Afro-American folk and popular musical styles. (F)
MUHL 4803. I ndividual Studies in Music History. (1-3). Directed individual study in selected areas of music history chosen in consultation with instructor. May be repeated for credit with permission of director. May be repeated for a maximum of 6 hours credit.
MUHL 4804-6804. Blues. (3). Stylistic development of blues music from its beginnings; its relationships to African-American and American culture and history. (F)
MUHL 4805-6805. History of Rock and Roll. (3). Stylistic origins and development of rock and roll music from its beginnings to the present.
MUHL 4806-6806. History of Jazz. (3). Stylistic origins and development of jazz; interaction of jazz and Western classical music styles.
MUHL 4807-6807. Memphis Music. (3). Most distinctive forms of folk and popular music in Memphis in the twentieth century; relationships to history, culture, and social patterns of the city and mid-south region; folk music background; blues, jazz, country music, gospel music, and rock and roll emphasized. (Sp)
MUHL 4999. Senior Project in Music History. (3). Preparation for an article length paper on original topic in music history or ethnomusicology under supervision of advisor. PREREQUISITE: minimum of 9 hours in advanced music history course and permission of instructor. [I]

# (MUI D) MUSI C INDUSTRY 

Rudi E. Scheidt School of Music<br>PATRICIA HOY, D.M.A., Director<br>Room 123 Music Building<br>http://music. memphis.edu

MUI D 1001. I ntroduction to Music Technology. (1). (CMUS). Basic introduction to music technologies available to the musician; introduction to software, hardware, and basic tenets of MIDI sequencing, notation, composition, studio audio production CR ROM availability, CD/DVD technology. PREREQUISITE or COREQUISITE: MUTC 1001 or MUTC 1012.
MUI D 2201. Introduction to Music Industry. (2). (CMUS). Exploration of all aspects of recording industry; career opportunities; on-stage and behind stage scenes; organization of music business; how music business generates and distributes revenue; day-to-day operations of record labels, studios, publishing, production, promotion, management companies.
MUI D 3103. Contemporary Songwriting and Production Techniques. (3). (CMUS). Process of developing an idea into a commercially viable song and applying production techniques for maximum commercial potential. PREREQUISITE: MUTC 2103, or permission of instructor.
MUI D 3105. Music Marketing, Promotion and Management. (3). Tactics, strategies and challenges involved in developing and managing the career of a contemporary recording artist including the creation of press packages, demo tapes, and other marketing materials in order to secure a record deal or promote an existing recorded project; exploration of all aspects of marketing and promotion, including concert and radio promotion, advertising and publicity, including the creation of a marketing plan and budget. PREREQUISITE: MUID 2201, MKTG 3010, MGMT 3110.
MUI D 3506. Internet Distribution of Commercial Music. (3). Independent music promotion; instruction on current state and future of internet distribution; how to develop an online fan-base, build a website, sell CDs, music downloads; broadcasting music on internet radio and securing internet recording contracts or distribution deals. PREREQUISITE: MUID 2201.
MUI D 3602. Recording I ndustry Contracts. (3). (CMUS). Extensive review of variety of major and ancillary recording industry agreements from perspective of songwriter or musician seeking to obtain management, production, publishing, or record deal; analysis, negotiation, and drafting of deal-memos and short-term contracts. PREREQUISITE: MUID 2201, 4603, FIR 3011, junior standing, and permission of instructor.
MUID 3800. Recording Studio Technology. (4). (CMUS). Detailed examination of basic theory, operational concepts and technologies upon which modern audio production is based; exploration of creative production techniques used to enhance music recordings. PREREQUISITE: sophomore standing, completion of MATH 1830, TECH 1811, and permission of instructor.
MUI D 3801. Computer-Based Audio Production. (2). (CMUS). Focus on needs of practicing audio engineer. Concepts and practices of using equipment commonly found in electronic music studios with emphasis on digital audio workstation; sampling, synthesis, MIDI, patching, editing, synchronization, signal processing and creative commercial production techniques.
PREREQUISITE: computer literacy, MUID 3800 and permission of instructor. NOTE: Basic computer operations will not be covered. Students must be proficient with Macintosh or Windows environment including; basic system operations, data backup functions, file manipulation, data translation and common application programs.
MUI D 3802. Audio Production: Technology and Practice. (3). (CMUS). Equipment, techniques, musical production values and technology commonly used in modern audio production. Designed to give music business major an understanding of production process and to enhance studio musician s ability to provide creative services during recording sessions. PREREQUISITE: sophomore standing and permission of instructor.
MUI D 4201. Studies in Commercial Music. (1-3). (CMUS). Class or supervised individual study of special problems in Commercial Music. May be repeated when course content varies.

MUID 4260-6260. Special Topics in Commercial Music. (1-3). Topics are varied and in online class listings.
MUID 4603-6603. Copyright and Music Publishing. (3). (CMUS). Copyright and other laws, rules, and industry customs that govern the creation and ownership of musical composition and sound recording; description and analysis of the role of publishing companies and performing rights societies in the exploitation of commercial music and tracking, collection, accounting and payment of royalties. PREREQUISITE: MUID 2201, junior standing, and permission of instructor.
MUI D 4800. Studio Recording. (4). (CMUS). Audio engineering on modern multi-channel recording equipment using commercial production techniques; emphasis on skills of console operation, microphone selection and placement, session set-up, preparing musical instruments for recording, editing, mixing and engineers artistic involvement in project. (SP). PREREQUISITE:
TECH 1811, MUID 3800, and permission of instructor.
MUID 4801. Problems in Commercial Music. (1-3). (CMUS). Supervised independent study. May be repeated for a maximum of 9 hours credit, but not for purpose of changing original grade. PREREQUISITE: permission of instructor.
MUI D 4802. Advanced Recording. (4). (CMUS). Advanced instruction in producing contemporary commercial recordings; application of production practice to recording assignments; advanced study of session technique, signal processing, mixing, editing, automation, synchronization, equipment and digital recording. PREREQUISITE: MUID 3801, 4800 and permission of instructor. MUID 4803. Advanced Media Production and Technologies. (4). (CMUS). Comprehensive application of production techniques in audio recording, audio/video production and multimedia production; emphasis on artistic sensitivity, musicality and aural imagery. PREREQUISITE: MUID 4802 and permission of instructor. PREREQUISITE or COREQUISITE: COMM 4825. Completion of JOUR 3900 and 4900 preferred.
MUID 4806. Fundamentals of Concert Sound Reinforcement. (3). (CMUS). Basic equipment and production techniques for providing live sound services; methods for handling various sized groups in diverse locations. PREREQUISITE: MUID 4800 and permission of instructor.
MUID 4810. Audio Production Practicum. (1-3). (CMUS). Supervised audio production activities. May be repeated for a maximum of 9 hours credit, but not for the purposes of changing original grade. PREREQUISITE: MUID 4800 and permission of instructor.
MUI D 4811. Studio Maintenance Practicum. (1-3). (CMUS). Troubleshooting and maintenance activities under the supervision of studio staff. A minimum of 42 clock hours of service for each credit hour is required. May be repeated for a maximum of 9 hours credit, but not for the purpose of changing original grade. PREREQUISITE: MUID 4800 and permission of instructor.
MUI D 4812. Concert Sound Practicum. (1-3). (CMUS). Diverse live sound reinforcement activities. A minimum of 42 clock hours of service for each credit hour is required. May be repeated for a maximum of 9 hours credit, but not for the purpose of changing original grade. PREREQUISITE: MUID 4800, 4806 and permission of instructor.
MUI D 4820. International Music Business. (3). (CMUS). Expands upon fundamental of domestic music business practice covered in previous classes through examination of business practices and infrastructure which drives global music marketplace; emphasis on cultural, media business, legal aspects affecting music industry and its global audience. PREREQUISITE: MUID 2201, 3602, 4603, senior standing and permission of instructor.
MUI D 4830. Trends in Business Practices and Technology. (3). (CMUS). Supervised directed study in cutting edge business practices and technologies impacting the recording industry; emphasis on commercial viability and business impact. Formal presentation of research required. PREREQUISITE: MUID 2201, 3602, 4603, junior standing and permission of instructor. MUI D 4840. Entrepreneurship in Commercial Music. (3). (CMUS). Creation of preliminary business plan for formation of music industry related business; explores motivation for starting a music business, the music marketplace, naming the business, financing, and operation. PREREQUISITE: MKTG 3010, MGMT 3510, 3410, J OUR 3900, senior standing, and permission of instructor.

MUI D 4850. Record Company Operations. (4). (CMUS). Students participate in actual administration and operation of the University of Memphis record label. Assignments include searching for, signing, and developing a new artist; preparation of marketing plans and budgets; supervision of the graphic design and manufacturing process; retail relations; and distribution. PREREQUISITE: MUID 2201, 3602, 4603, junior standing, and permission of instructor.
MUID 4898. Senior Project in Music Business or Recording Technology. (4). (CMUS). Comprehensive final project which demonstrates mastery of creative, technical, and business elements of commercial music industry. Intended to be taken during the student $\geqslant$ s last semester before graduation. PREREQUISITE: senior standing and permission of instructor. [I]
MUID 4899. Internship. (1-3). (CMUS). One semester of supervised field work experience in selected areas of the commercial music industry. A minimum of 42 clock hours of service for each credit hour is required. May be repeated for a maximum of 9 hours credit, but not for the purpose of changing original grade. PREREQUISITE: placement interview and permission of instructor.

## (MUS) MUSI C APPRECI ATI ON

Rudi E. Scheidt School of Music
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Room 123B, Music Building
http://music.memphis.edu
MUS 1030. Music Appreciation. (3). (MUHL 1101). Music of various Western and non-Western cultures and historical periods, including the creative process, the formal elements of music and musical styles, genres, and media. Attendance at some concerts required. NOTE: May not be used to satisfy requirements for degrees in Music. [G] •

MUS 1040. Music in America. (3). American music history, sources and current styles; elements of music, genre, and media. Attendance at some concerts required. NOTE: May not be used to satisfy requirements for degree in Music.

## (MUSA) SACRED MUSI C

Rudi E. Scheidt School of Music
PATRICIA HOY, D.M.A., Director
Room 123B, Music Building
http://music.memphis.edu
MUSA 4104-6104. Sacred Music in History and Practice I. (3). Survey of Jewish and Christian sacred music, exploring origins of styles, traditions, and current practices. (F-alternate years) PREREQUISITE: MUTC 2008.
MUSA 4105-6105. Sacred Music in History and Practice II. (3). (SP - alternate years) PREREQUISITE: MUTC 2008.
MUSA 4260-69-6260-69. Special Topics in Sacred Music. (1-3). Topics are varied and announced in the online class listings.
MUSA 4801-6801. Individual Studies in Sacred Music. (1-3). Directed individual study in selected areas of music chosen in consultation with instructor. May be repeated for credit with permission of director. May be repeated for a maximum of 6 hours credit.

# (MUSE) MUSIC EDUCATI ON 

Rudi E. Scheidt School of Music<br>PATRICIA HOY, D.M.A., Director<br>Room 123B, Music Building<br>http://music.memphis.edu

FIELDS OF ENDORSEMENT FOR TEACHING: For students in the School Music Concentration of the Bachelor of Music in Music degree, endorsement may be obtained in Instrumental Music and in Vocal Music. Normally, a student can expect to be recommended in only one of these areas. Vocal Music applicants should be able to play piano accompaniments of moderate difficulty, should possess an adequate solo voice for school music purposes, and should schedule a variety of large choral ensembles. Instrumental Music applicants should study one instrument of major emphasis and participate in large instrumental ensembles. Students in either area may satisfactorily meet piano and voice requirements with completion of MUSE 2108 and MUSE 1113 and their prerequisites. A graduation recital is required in both areas.
MUSE 1101. Class Instruction in Brass I nstruments. (1). Basic performance skills and teaching techniques on trumpet, trombone, French horn, baritone horn and tuba for those who intend to teach instrumental music in schools. (SP)
MUSE 1103. Class Instruction in Percussion Methods. (1). Basic performance skills and teaching techniques on snare drum, timpani, and keyboard percussion instruments for those who intend to teach instrumental music in schools. (F)
MUSE 1104. Class Instruction in Woodwind Instruments. (1). Basic performance skills and teaching techniques on clarinet, flute, saxophone, oboe, and bassoon for those who intend to teach instrumental music in schools. (SP)
MUSE 1112. Class Instruction in Voice. (1). Fundamentals of vocal production useful for all music teachers.
MUSE 1116. Class Instruction in Stringed Instruments. (1). Basic performance skills and teaching techniques on violin, viola, cello, or double bass for those who intend to teach instrumental music in schools. (F)
MUSE 1118. Class Instruction in Guitar for Non-music Majors. (2). Beginning instruction in classical guitar for non-music majors; development of basic reading and performance skills.
MUSE 1119. Guitar for the Classroom Music Teacher. (1). Basic guitar technique, chording and folk style accompaniments; prepares students for effective teaching in general music classes.
MUSE 2002. Foundations of Music Education. (3). Development of philosophical foundation for music education professionals; values, attitudes and work habits of the effective teacher will be stressed; field experiences and techniques of observation.
MUSE 3101. Functional Keyboard Skills. (1). Functional keyboard harmony and sight reading skills designed for keyboard majors. PREREQUISITE: MUTC 1009, 1011.
MUSE 3700. Basic Conducting. (2). Development of conducting skills; basic baton principles, rhythmic analysis, expressive techniques, phrasing, and multimetered problems; class meetings require performing as instrumentalist or vocalist as well as conductor. Three class hours per week. (F). PREREQUISITE: MUTC 3008.
MUSE 4201-6201. Individual Studies in Music Education. (1-3). Individual study of problems and opportunities faced by person who teaches music in schools; for classroom teachers, music teachers, supervisors, principals, and administrators. May be repeated for a maximum of 6 hours credit, but not for the purpose of changing original grade.
MUSE 4205-6205. Marching Band Techniques. (2). Organizing and conducting marching band; gridiron charting; marching procedures; study of precision drill, formation, pageantry. PREREQUISITE: permission of instructor.
MUSE 4208-6208. Band Literature. (3). History and evolution of wind instruments and wind instrument playing and the history and development of the wind band and its literature, with general background material on the specific composers involved. (SP) MUSE 4209-6209. Piano Tuning and Repair. (2). Concentrated study of basic techniques involved in piano tuning and adjustment. Some basic tools required.
MUSE 4211-6211. Vocal Diction I. (2). Phonetic study of English and Italian languages in detail; introduction and basic rules of Latin pronunciation; International Phonetic Alphabet transcription of songs and arias. Open to collaborative pianists only or by
permission of instructor . (Alternate years)
MUSE 4212. Vocal Diction II. (2). Phonetic study of Italian, French, and Spanish in detail, including IPA transcription of songs and arias and class performance. Other languages (Russian, Hebrew, etc.) may be covered as time permits. (Alternate years) MUSE 4213. Materials and Methods of General Music. (3). (4203). Philosophy, methods and materials for teaching nonperformance music classes in secondary schools, grade 7-12; demonstration and simulation of classroom teaching at this level. TEP Restricted. PREREQUISITE: MUSE 2002. (F)
MUSE 4215-6215. Jazz Ensemble Techniques. (1). J azz phrasing, articulation; ensemble settings; repertoire selection; administration of school jazz program. PREREQUISITE: permission of instructor.
MUSE 4251. Guitar Pedagogy. (3). Principles of and materials for teaching classical guitar.
MUSE 4260-69-6260-69. Special Topics in Music Education. (1-3). Topics are varied and in online class listings.
MUSE 4403. Materials and Methods of Instrumental Music 9-12. (3). Designed to prepare the instrumental music teacher to teach music concepts to intermediate and advanced players in mixed instrumental group settings. Instruction methodologies and materials, objectives, evaluation, motivation, and administration stressed. (F) PREREQUISITE: MUSE 2002 and junior standing in music.
MUSE 4405. Materials and Methods of Choral Music 7-12. (2). Selected materials and methods of practical concern to the vocal-choral music specialist; consideration of music series, scheduling techniques, voice class development, choral publishers, units of study. (F) PREREQUISITE: MUSE 2002 and junior standing in music. COREQUISITE: MUSE 4406.
MUSE 4501-6501. Piano Pedagogy I. (2). Training teachers for beginning through intermediate level piano instruction. Establishing strong artistic, musical and technical foundations. (F) PREREQUISITE: permission of instructor.
MUSE 4503-6503. Piano Pedagogy II. (2). Training teachers for advanced piano instruction; extensive readings from renowned artist-teachers and performers; development of ideation and memorization skills; observations and supervised practice teaching. (SP) PREREQUISITE: MUSE 4501 or permission of instructor.
MUSE 4505-6505. Collaborative Piano Techniques. (2). Performance class involving practical study of instrumental and vocal standard repertory and the problems of ensemble playing; facility in sight-reading and ability to assimilate music rapidly; score reading, transposition, and figured bass realization introduced as skills necessary to well rounded musicianship. (SP) PREREQUISITE: permission of instructor.
MUSE 4506. Introduction to Suzuki Talent Education for Strings. (3). Required of students who plan to serve as apprentice string teachers in U of M Suzuki Talent Education program. Basic instruction in Suzuki philosophy; participation with parents and children in Suzuki string classes.
MUSE 4508-6508. Principles of Suzuki Piano. (3). Suzuki philosophy applied to development of the child's abilities and role of teacher and parent. Students will analyze technical and musical instruction of beginning piano student. (F) PREREQUISITE: upper division piano skills.
MUSE 4509. Suzuki Violin Literature and Techniques I. (3). Literature and technique taught in Suzuki Violin School; fundamental technique, development of posture, tone and listening ability in beginning students; analysis of pedagogical material. Required of students who plan to serve as apprentice teachers in U of M Suzuki String Program. PREREQUISITE: MUSE 4506.
MUSE 4510. Advanced Suzuki String Pedagogy. (3). Literature and technique taught in Suzuki Violin School; emphasis on development of advanced student; laboratory experience in U of M Suzuki String Program. Required of students planning to be apprentice teachers in U of M Suzuki String Program. PREREQUISITE: MUSE 4509.
MUSE 4511-6511. Class Piano Pedagogy. (3). Group instruction techniques in teaching of beginning, intermediate, and early advanced piano. Emphasizes observation and practical application. For the piano major and/or prospective piano teacher. (SP) PREREQUISITE: upper division level in keyboard or permission of instructor.
MUSE 4513. Suzuki Violin Literature and Technique II. (3). Analysis of pedagogical materials and techniques introduced in volumes five and six of Suzuki Violin School. PREREQUISITE: MUSE 4509.
MUSE 4514-6514. Brass Pedagogy. (3). Examination of current literature, principles, methods and psychology in brass playing and teaching. Students will participate in videotaped teaching assignments which will be used to improve one-to-one teaching skills in the studio setting.
MUSE 4520-6520. Percussion Pedagogy. (3). Basic principles of and materials for teaching percussion instruments. MUSE 4521-6521. Woodwind Pedagogy. (3). Principles of and materials for teaching flute, oboe, clarinet, bassoon, and saxophone.
MUSE 4523. Vocal Pedagogy. (2). Basic principles of and materials for teaching young singers.
MUSE 4601. Integrative Arts. (3). (MUHL 4601). Cultural activities in their interrelation with each other and with corresponding historic and economic events. Open without prerequisite to non-music majors of junior and senior standing.
MUSE 4700. Instrumental Conducting. (3). Various problems encountered in preparation and conducting of instrumental scores; individual practice with opportunity for each student to conduct instrumental groups. Three class hours per week. PREREQUISITE: MUSE 2002, 3700.
MUSE 4701. Choral Conducting. (3). Various problems encountered in preparing and conducting traditional and contemporary vocal scores; rehearsal techniques; individual practice with laboratory groups. Three class hours per week. PREREQUISITE: MUSE 2002, 3700.
MUSE 4802-6802. Level I Orff-Schulwerk. (1-3). Basic Orff-Schulwerk techniques including body movement, soprano recorder, percussion, vocal performance, improvisation and arranging. PREREQUISITE: junior standing in music education or equivalent experience.
MUSE 4911. Student Teaching in Music. (9). Full-time planned and supervised teaching experience in music providing
opportunities to synthesize knowledge and skills and demonstrate professional competencies in educational settings. PREREQUISITE: MUSE 2002 and approval of music education faculty. COREQUISITE: MUSE 4999.
MUSE 4999. Professional Seminar. (3). Seminar to be taken concurrently with student teaching requiring student to analyze practices, solve problems and review timely material pertinent to the field of music education; emphasis on addressing concerns and questions arising in student teaching settings. PREREQUISITE: MUSE 2002. COREQUISITE: MUSE 4911.

## (MUTC) MUSI C THEORY AND COMPOSI TI ON

Rudi E. Scheidt School of Music<br>PATRICIA HOY, D.M.A., Director<br>Room 123B, Music Building<br>http://music.memphis.edu

Placement in the Music Theory sequence for undergraduates will be determined through examination. NOTE: Courses in Composition and Electronic Music may be repeated for credit but not for the purpose of improving the grade originally earned. MUTC 1001. Basic Music Theory. (3). For students who plan to major in music but do not meet minimum standards for MUTC 1008. Not allowable as credit toward the satisfaction of requirements for the major or minor. Two laboratory hours per week. MUTC 1008. Music Theory I. (3). Basic notation, scales, intervals, triads, key signatures; analysis and exploration of technical material and written exercises in historical areas of plain chant through late 16th century. PREREQUISITE: Theory placement exam. COREQUISITE: MUTC 1010.
MUTC 1009. Music Theory II. (3). Four part structures, all seventh chords, chorale harmonization figured bass realization; analysis and written exercises from historical area of early 17th century through J. S. Bach. PREREQUISITE: MUTC 1008, 1010. COREQUISITE: MUTC 1011.
MUTC 1010. Aural Theory I. (1). Beginning ear training; scales, intervals, triads, simple melodic lines and simple two part examples, sight singing of combination of tonal and modal materials. PREREQUISITE: Theory placement exam. COREQUISITE: MUTC 1008. (S/U)

MUTC 1011. Aural Theory II. (1). Ear training involving triads in sequence, two part examples, modulator melodies; sight singing of 17th and 18th century melodic examples. PREREQUISITE: MUTC 1010, 1008. COREQUISITE: MUTC 1009. (S/U ). MUTC 1012. Musicianship I. (3). Fundamentals of music theory, including notation, pitch, rhythm, meter, scales, modes, intervals, melodic structure, basic forms and improvisation; aural skills including melodic sight singing, melodic, intervallic, and rhythmic dictation, simple two-part structures.
MUTC 1013. Musicianship II. (3). Functional harmony, triadic inversion, seventh chords, cadence, voice leading; analytic procedures from common practice and popular repertoires; aural skills include all material in Musicianship I, plus functional harmonic progressions. PREREQUISITE: MUTC 1012.
MUTC 2008. Music Theory III. (3). Continuation of four part structure, part writing and figured bass; expanded harmonic materials from ninth chords through chordal mutation; formal and chordal analysis from Bach through mid-19th century.
PREREQUISITE: MUTC 1009, 1011. COREQUISITE: MUTC 2010.
MUTC 2010. Aural Theory III. (1). Ear training involving expanded harmonic materials, modulatory melodies, two part examples with modulation; sight singing of 18th and 19th century melodic examples. PREREQUISITE: MUTC 1011, 1009. COREQUISITE: MUTC 2008. (S/U)

MUTC 2012. Musicianship III. (3). Advanced functional harmony, secondary function, modulation, altered chords, chromatic chords, Neapolitan sixth, augmented sixth, mixture; aural skills include all material in Musicianship I and II, plus advanced functional harmonic progressions. PREREQUISITE: MUTC 1013.
MUTC 2013. Musicianship IV. (3). Expanded tonality, modal impressionist and jazz harmony, extended chords (11th and 13th), tonality in popular idioms, bitonality, polytonality, non-triadic chord constructions; overview of 20th century compositional techniques, basic orchestration; electronic compositional procedures. PREREQUISITE: MUTC 2012.
MUTC 2103. Music Theory: J azz/ Pop/ Commercial I. (3). (CMUS 2101). Basic harmonic structures, chord symbol realization, altered scales and modes, altered and extended chords, notation, articulation, rhythmic patterns; analysis of written and recorded jazz and pop music; transcription of recorded materials. Three lecture hours, one laboratory hour per week. (F). PREREQUISITE: MUTC 1009, MUAP 1116.
MUTC 2501. Composition. (3). Class instruction in free composition; emphasis on smaller forms. May be repeated for additional credit. PREREQUISITE: MUTC 1008. NOTE: Composition taught as applied music. Students receive the equivalent of one half-hour lesson per week. Fee for this instruction is $\$ 50$ per semester.
MUTC 2502. Composition. (3). Works for piano, voice, chorus, and small ensembles; study of style and analysis of works from music literature. May be repeated for additional credit. PREREQUISITE: MUTC 2501 or permission of instructor. NOTE: Composition is taught as applied music. Students receive equivalent of one hour lesson per week. Fee for this instruction is $\$ 100$ per semester. MUTC 2503. Composition/ Arranging: Jazz/ Commercial I. (2). (CMUS 2501). Emphasis on small instrumental and vocal works, basic style and form. May be repeated for a maximum of 6 hours credit. PREREQUISITE: MUTC 2501, or permission of instructor.
MUTC 2504. Composition/ Arranging: Jazz/ Commercial II. (2). (CMUS 2502). Emphasis on stage and jazz band arranging techniques. May be repeated for a maximum of 6 hours credit. PREREQUISITE: MUTC 2503, or permission of instructor.
MUTC 2511. Introductory Electronic Music. (2). Basic concepts of contemporary digital electronic music techniques including synthesizer operation, MIDI sequencing, and sampling and music notation by computer. PREREQUISITE: MUTC 2008 or permission
of instructor. FEE: \$50.
MUTC 3008. Music Theory IV. (3). Continuation of late 19th century harmonic structures; introduction of popular music and its notational symbols; introduction and use of 20th century techniques analysis and written examples from 20th century.
PREREQUISITE: MUTC 2008, 2010. COREQUISITE: MUTC 3009. [C]
MUTC 3009. Aural Theory IV. (1). Ear training involving expanded 19th century harmonic considerations, 20th century chromaticism and pandiatonicism, two part examples from both 19th and 20th centuries; sight singing emphasizing melodies of 20th century. PREREQUISITE: MUTC 2010, 2008. COREQUISITE: MUTC 3008. (S/U)
MUTC 3010. Aural Theory V. (1). Aural exploration of basic forms, cadences and styles of music; detailed aural analysis of modulatory elements within a piece. PREREQUISITE: MUTC 3008, 3009. (F). (S/U)
MUTC 3101. Orchestration. (3). Basic study of instruments of orchestra and band, terminology and techniques pertaining to that study; practical application by scoring for small and large instrumental combinations (F) PREREQUISITE: MUTC 3008, 3009, or permission of instructor.
MUTC 3102. Advanced Musical Analysis I. (3). Advanced theoretical analysis of large-scale compositions from late Medieval through early Classic periods; in-depth study of stylistic characteristics and theoretical techniques used in pieces studied PREREQUISITE: MUTC 3008, 3009. (F-even years) [W]
MUTC 3109. Advanced Musical Analysis II. (3). Advanced theoretical analysis of large-scale compositions from late Classic period through very recent works in last decade of twentieth century; in-depth study of stylistic characteristics and theoretical techniques used in pieces studied. PREREQUISITE: MUTC 3008, 3009. (S-odd years)
MUTC 3201. J azz Arranging/ Orchestration. (3). (CMUS). Arranging/orchestration for small to large ensembles in jazz and commercial music styles; idiomatic problems with vocalists, rhythm, electronic, wind, and string instruments in various jazz styles. PREREQUISITE: MUTC 2103.
MUTC 3501. Composition/ Arranging: J azz/ Commercial III. (2). (CMUS). Individual instruction for mixed ensembles and studio groups in various jazz and studio styles, standard and extended forms; introduction to line writing. May be repeated for additional credit. NOTE: Composition is taught as applied music. Students receive the equivalent of one hour lesson per week. Fee for this instruction is $\$ 100.00$ per semester. PREREQUISITE: MUTC 2504 , or permission of instructor.
MUTC 3825. Materials and Techniques of Improvisation I. (3). (CMUS). Development of improvisation skills on solo instruments or voice; basic chord patterns, scales, arpeggios; performance with rhythm section. (F). PREREQUISITE: permission of instructor.
MUTC 3826. Materials and Techniques of Improvisation II. (3). (CMUS). Analysis of melodic structures; motivic fragmentation and sequencing; extended harmonic structures, performance in small combo settings. (F). PREREQUISITE: MUTC 3825, or permission of instructor.
MUTC 3827. Materials and Techniques of Improvisation III. (3). (CMUS). Analysis and performance of music in standard styles, including bebop, Latin, fusion, and jazz/rock; contemporary mainstream, pan-chromatic, and free-form improvisation; performance with combos and large jazz ensembles. (F). PREREQUISITE: MUTC 3826, or permission of instructor.
MUTC 4106. Compositional Processes of the Twentieth Century. (3). (4101). Analysis and imitative writing of major composers of the twentieth century, from Debussy through the present. (S-even years)
MUTC 4202-6202. Seminar: Music Theory and Analysis. (3). Advanced course in theory, counterpoint, and analysis of literature. Contrapuntal and harmonic techniques. Research; theoretical problems from pedagogical point of view; writing in strict and free styles. Recommended as review course for graduate students. PREREQUISITE: permission of instructor. (F)
MUTC 4204. I ndividual Studies in Music Theory and Composition. (1-3). Directed individual study in selected areas of music theory and composition chosen in consultation with instructor. May be repeated for credit but not for the purpose of changing a grade.
MUTC 4205. Sixteenth Century Counterpoint. (2). Study of contrapuntal techniques of the sixteenth century. (S-odd years) MUTC 4206. Eighteenth Century Counterpoint. (2). Study of contrapuntal techniques of the eighteenth century. (F-even years)
MUTC 4207. Twentieth Century Counterpoint. (3). Study of contrapuntal techniques of the twentieth century. (F-odd years) MUTC 4209. Advanced Orchestration. (3). Continuation of MUTC 3101. Orchestration of works from nineteenth and twentieth centuries for full orchestra; study of representative orchestral scores from romantic and contemporary periods. PREREQUISITE:
MUTC 3101.
MUTC 4260-69-6260-69. Special Topics in Theory and Composition. (1-3). Topics are varied and announced in Schedule of Classes.
MUTC 4501-6501. Composition. (4). Composition in varied forms for large and small ensembles and solo instruments; analysis of contemporary works and practical application of techniques. May be repeated for additional credit. NOTE: Composition taught as applied music. Students receive equivalent of one hour lesson per week. Fee for this instruction is $\$ 100$ per semester.
PREREQUISITE: recommendation of upper division examining committee.
MUTC 4502. Composition for Non-Composition Majors. (3). Class instruction in free composition for students not majoring in composition. Practical experience in idea generation, form, development, and instrumentation. NOTE: Composition taught as applied music. Students receive equivalent of one half-hour lesson per week. Fee for this instruction is $\$ 50$ per semester. PREREQUISITE: MUTC 3008.
MUTC 4503. Composition/ Arranging: J azz/ Commercial IV. (3). (CMUS 4501). Individual instruction with emphasis on advanced line writing, fusion and contemporary mainstream styles, writing for full studio orchestra. May be repeated for additional credit. NOTE: Composition is taught as applied music. Students receive the equivalent of one hour lesson per week. Fee for this
instruction is $\$ 100.00$ per semester. PREREQUISITE: MUTC 3501, or permission of instructor.
MUTC 4504-6504. Introduction to Film/ Video Scoring. (3). (CMUS 4502). Basic problems of writing music for film and video: commercial and industrial productions, shorts and full length features, selection of appropriate styles, creating a master music list, writing from a cue sheet; introduction to editing room equipment: conversion of film frames to video, use of SMPTE time code and synchronization equipment, MIDI sequencer scoring from a digital audio workstation; project assignments in film and video formats. (Offered alternate years). PREREQUISITE: MUTC 2511, MUTC 3501, and either MUID 3801 or MUTC 4511 or 4505, or permission of instructor.
MUTC 4511. Intermediate Electronic Music. (2). Concepts of contemporary digital electronic music techniques including synthesizer operation, MIDI sequencing, and sampling as well as music notation by computer. The two hours credit earned from this course may be used as composition credit towards the composition concentration. FEE: \$100. PREREQUISITE: MUTC 2008 or permission of instructor.
MUTC 4512. Advanced Electronic Music. (2). Continuation of MUTC 4511. Emphasis on individual compositional projects. Includes investigation of electronic music possibilities of the Internet. May be repeated for credit, but only two hours may be used as composition credit in composition concentration. FEE: \$100. PREREQUISITE: MUTC 4511.
MUTC 4599. Senior Composition Recital. (3). Integration course for which students prepare and present a concert of their music and an accompanying descriptive paper. Taught as applied music, individual instruction. PREREQUISITE: a minimum of 4 hours in MUTC 4501 and permission of the instructor. [I]
MUTC 4896. Senior Project: Jazz and Studio Composition/ Arranging. (4) (CMUS). Project must include original compositions and original arrangements of existing compositions in a variety of styles. Project should include live performance, recorded album tracks, and film music. PREREQUISITE: MUTC 4503, 4504, or permission of instructor. [I] Last Updated: 6/12/15

Room 120A, Hayden Hall

http://cas.memphis.edu/nrotc
NAVY 1100. Navy Laboratory. (1). Two laboratory hours per week. [G]
NAVY 1101. Introduction to Naval Science. (2). Orientation and concepts of seapower; mission, organization, and warfare components of the Navy and Marine Corps. COREQUISITE: NAVY 1100.
NAVY 1104. Navy Laboratory. (1). (2203). Two laboratory hours per week. [G]
NAVY 1105. Seapower and Maritime Affairs. (3). (2202). U.S. naval history from the Revolution to the present with emphasis on major developments; present day concerns in seapower and maritime affairs. COREQUISITE: NAVY 1104.
NAVY 2204. Navy Laboratory. (1). (1103). Two laboratory hours per week. [G]
NAVY 2205. Naval Ships Systems I-Engineering. (3). (1102). Ship characteristics and types including ship design, hydrodynamic forces, stability, compartmentation, propulsion, electrical and auxiliary systems, interior communications, ship control, and damage control. COREQUISITE: NAVY 2204.
NAVY 2206. Navy Laboratory. (1). Two laboratory hours per week. [G]
NAVY 2401. Naval Leadership and Management. (2). Advanced study of organizational behavior and management in the context of the naval organization. Practical applications are explored by the use of experiential exercises, case studies, and laboratory discussions. COREQUISITE: NAVY 2206.
NAVY 3000. Naval Science Institute (NSI ). (8). Intensive six-week professional academic and training program conducted each summer at a naval installation by the Chief of Naval Education and Training for students entering the two-year NROTC Programs. The Naval Science Institute is the equivalent of the NROTC Basic Course. [G]
NAVY 3301. Navigation and Naval Operations I. (3). Piloting and celestial navigation including theory, principles, and procedures, use of charts, visual and electronic aids, and the theory and operation of magnetic and gyro compasses. Three class hours and two hours of Navy Laboratory* per week.
NAVY 3302. Navigation and Naval Operations II. (3). International and inland rules of the nautical road, relative-motion vector-analysis theory, relative motion problems, formation tactics, and ship employment. Three class hours and two hours of Navy Laboratory* per week.
NAVY 3310. Evolution of Warfare. (3). Historical development of warfare from the beginning of recorded history to the present focusing on the impact of major military theorists, strategists, tacticians, and technological developments. Three class hours and two hours of Navy Laboratory* per week.
NAVY 4000. Marine Corps Leadership Training. (6). Summer instruction ("Bulldog") conducted at the Marine Corps Officer Candidate School, Quantico, Virginia. Intensive six-week professional training program for Marine Option Junior Midshipmen; Marine Corps history and tradition, leadership under high stress situations, and effective management of men and materials in simulated combat conditions.
NAVY 4207. Naval Ships Systems II-Weapons. (3). Theory and employment of weapons systems. Processes of detection, evaluation, threat analysis, delivery, guidance, and explosives. Three class hours of Navy Laboratory* per week.
NAVY 4402. Naval Leadership and Ethics. (2). Naval junior officer responsibilities in naval administration; builds on and integrates the professional competencies developed in prior course work and professional training. Two class hours and two hours of Navy Laboratory* per week.
NAVY 4410. Amphibious Warfare. (3). Historical survey of the development of amphibious doctrine and the conduct of amphibious operations. Emphasis is placed on the evolution of amphibious warfare in the 20th century, especially during World War II. Three class hours and two hours of Navy Laboratory* per week.
*Navy Laboratory. Focuses on the requisite moral, leadership and physical qualifies for becoming a commissioned officer.

## (NURS) NURSI NG

MARJ ORIE LUTTRELL, Ph.D., Dean
Newport Hall
http://nursing.memphis.edu

* NOTE: In the repetition of NURS courses for the purpose of achieving a satisfactory grade, the theory and corequisite practicum courses are treated as one course. Both must be taken to improve the grade in either or both of the two courses. A maximum of one nursing course may be repeated. A student who drops or withdraws from a nursing course may re-enter that course only once. Additional fees are charged for some Nursing courses. See the online class listings or Fee in The Loewenberg School of Nursing section of the Bulletin.
NURS 2217. Foundations of Nursing. (3). Introduction to nursing process and concepts basic to practice of professional nursing; theory focus on development of nursing knowledge necessary for promotion of health and prevention of illness in individual. Three lecture hours per week. PREREQUISITE: admission to the Loewenberg School of Nursing. COREQUISITE: NURS 2218, *2219, 2220, 3000, 3101, 3400.
NURS 2218. Integrative Skills I. (1). Laboratory experiences focus on development of competency in performing basic clinical nursing procedures. Three laboratory hours per week. PREREQUISITE: admission to the Loewenberg School of Nursing.

COREQUISITE: NURS 2217, 2219, 2220, 3000, 3101, 3400.
NURS 2219. Foundations of Nursing Practicum. (2). Clinical experiences include provision of direct care of adult clients in secondary care and/or extended care settings. Six clinical laboratory hours per week. PREREQUISITE: admission to the Loewenberg School of Nursing. COREQUISITE: NURS *2217, 2218, 2220, 3000, 3101, 3400. (S/U).
NURS 2220. Dosage Calculation. (1). Introduction to systems of measurement used in medication administration; ability to determine safe dosages for all types of medications and intravenous fluids. One lecture hour per week. PREREQUISITE: MATH requirement, admission to Loewenberg School of Nursing.
NURS 3000. Pharmacology in Nursing. (3). Basic pharmacology of drugs in the major classifications; emphasis on action of a prototype on organ systems, its mechanisms of action, pharmacokinetics, toxicology and clinically important interactions with other drugs. PREREQUISITE: BIOL 2010/2011, 2020/2021, BI OL 1230/1231.
NURS 3001. Individualized Study. (1-3). Directed individualized approach to increase nursing knowledge, understanding, and skills according to student's needs and level objectives. Assessment of student determines content areas and clinical experience needed. May be repeated for a maximum of 6 hours credit . Credit not applied toward B.S.N. degree.
NURS 3101. Health Assessment. (3). Comprehensive health assessment of clients across life span. Expands interviewing and history taking. Health assessment skills emphasized. Two lecture hours, three laboratory hours per week. COREQUISITE: NURS 2217, 2218, 2219.
NURS 3107. Foundations of Professional Nursing for RNs. (1). Introduction to concepts basic to practice of professional nursing; special attention to developing student skills necessary to meet intellectual expectations of the University and nursing profession. PREREQUISITE: admission to the Loewenberg School of Nursing.
NURS 3117. Adult Health Nursing. (4). Application of nursing process to adults experiencing problems of adaptation requiring nursing intervention in acute and/or chronic illness; role of nurse in health promotion, restoration, and rehabilitation is emphasized. Four lecture hours per week. PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3118, 3119.

NURS 3118. Integrative Skills II. (1). Laboratory experiences focus on development of competency in performing complex clinical nursing procedures. Three laboratory hours per week. PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: NURS 3117, 3119.

NURS 3119. Adult Health Nursing Practicum. (3). Clinical experiences include provision of direct care of adult clients and their families in secondary and rehabilitative care settings. Nine clinical hours per week. PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3117, 3118. (S/U).
NURS 3127. Psychiatric Mental Health Nursing. (3). Theory and principles of nursing practice with clients experiencing psychosocial problems of adaptation. Three lecture hours per week. PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3128, 3129.
NURS 3129. Psychiatric Mental Health Nursing Practicum. (2). Use of nursing process for clinical application of theories and principles of psychiatric mental health nursing to acutely ill clients in secondary care settings; effective therapeutic communication skills emphasized. Six clinical laboratory hours per week in health care setting. PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3127. (S/U).
NURS 3217. Nursing Care of the Expanding Family. (2). Theory and principles of nursing practice with childbearing individuals and families to assist perinatal clients and families with problems of adaptation. Two lecture hours per week. PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400. COREQUISITE: *NURS 3219.
NURS 3219. Nursing Care of Expanding Family Practicum. (3). Use of nursing process for clinical application of theories and principles of nursing and family theory to childbearing families; health promotion, prevention and adaptation. Nine clinical laboratory hours per week in health care setting. PREREQUISITE: NURS 2217, 2218, 2219, 2220, 3000, 3101, 3400.
COREQUISITE: *NURS 3217. (S/U).
NURS 3227. Child Health Nursing. (2). Theory and principles of nursing practice with children experiencing health problems requiring short-term and/or long-term intervention; expansion of nursing role to include health maintenance and restoration of health. Two lecture hours per week. PREREQUISITE: NURS 3117, 3118, 3119. COREQUISITE: *NURS 3229.
NURS 3229. Child Health Nursing Practicum. (3). Use of nursing process for clinical application of theories and principles of nursing of children and their families. Focus on health promotion, prevention, and adaptation. Nine clinical laboratory hours per week in health care setting. PREREQUISITE: NURS 3117, 3118, 3119. COREQUISITE: *NURS 3227. (S/U).
NURS 3230. Gerontological Nursing. (3). (4333). Application of nursing process with elderly clients and significant others; theory and principles of nursing practice with aging and elderly clients discussed. PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3128, 3129.
NURS 3317. Perioperative Nursing (1). Theoretical foundation for perioperative practice during the intraoperative phase.
PREREQUISITES: NURS 3117, 3118, 3119. COREQUISITE: *NURS 3319.
NURS 3319. Perioperative Nursing Practicum (2). Application of perioperative nursing process with clinical practice in both the scrub/circulating nursing roles. Six clinical laboratory hours per week. PREREQUISITE: NURS 3117, 3118, 3119. COREQUISITE: *NURS 3317.
NURS 3327. Oncology Nursing. (3). Theory and principles of oncology nursing practice for both pediatric and adult cancer patient. PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129.
NURS 3400. Clinical Pathophysiology. (3). Overview of specific interruptions in normal function of selected human physiological systems, including disease processes, their manifestations, and therapeutic principles underlying treatment. Three lecture hours per week. PREREQUISITES: BIOL 1230/1231, 2010/2011, $2020 / 2021$.

NURS 4110-6110. Nursing Research. (3). Overview of nursing research; components of research studied; critiques of existing studies; emphasis on interpretation and application of research findings. PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229; EDPR 4541 or PSYC 3110 or SOCI 3311. For RN students: admission to the Loewenberg School of Nursing; EDPR 4541 or PSYC 3110 or SOCI 3311, or any approved statistics course. [W]
NURS 4117. Advanced Adult Health Nursing. (3). Application of nursing process with adult clients, families, and groups experiencing complex problems of adaptation; role of nurse expanded to include health maintenance, restoration, and rehabilitation of clients experiencing problems of adaptation requiring higher acuity levels of care. Three lecture hours per week.
PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. COREQUISITE: *NURS 4119.
NURS 4119. Advanced Adult Health Nursing Practicum. (3). Clinical experiences include direct care to adult clients, families, and groups in high acuity care settings. Nine laboratory hours per week. PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. COREQUISITE: *NURS 4117. (S/U).
NURS 4120-6120. Contemporary I ssues and Trends in Nursing and Health Care. (3). Factors which influence nursing and health care; promotes integration and synthesis of knowledge from previous nursing and general education courses to explore societal and political components that affect delivery of health care. Three lecture hours per week. PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. For RN students: admission to the Loewenberg School of Nursing.
NURS 4127. Community Health Nursing. (3). Overview of community based health care delivery system at local, state, and national levels; theories and principles of nursing care of communities and aggregates in public health and home health care settings; expands nursing role to coordinator of care. Three lecture hours per week. PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. COREQUISITE: *NURS 4129.
NURS 4129. Population-Focused Nursing Practicum. (2). (4020). Use of nursing and public health theories and principles to provide nursing care to populations with the community setting; emphasis on the geriatric population. Six laboratory hours per week. PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3129, 3217, 3219, 3227, 3229. COREQUISITE: *NURS 4127 (S/U).
NURS 4137. Emergency/ Trauma Nursing. (3). Application of nursing process with adult clients, significant others, and group experiencing emergency/trauma situations; resuscitation, health maintenance, restoration, and rehabilitation of clients experiencing problems of adaptation requiring acute emergency/trauma levels of care in Emergency Department setting.
NURS 4139. Emergency/ Trauma Nursing Practicum. (2). Provides students with opportunity to directly care for adult clients and their significant other(s) in emergency settings.
NURS 4227. Nursing Leadership and Management. (3). Theories of leadership, management, and change basic to functioning within economic, social and political realities of health care settings/systems; organizational assessment, decision making, collaboration, coordination, and evaluation emphasized. PREREQUISITE: NURS 4117, 4119. COREQUISITE: *NURS 4229.
NURS 4229. Nursing Leadership and Management Practicum. (4). Precepted experience using nursing leadership management theories and principles to coordinate nursing care of groups of patients. Twelve laboratory hours per week in hospital setting. PREREQUISITE: NURS 4117, 4119. COREQUISITE: *NURS 4227. (S/U). [C, I]
NURS 4327-6327. Nursing Leadership and Management for RNs. (3). Theories of leadership, management, and change basic to functioning within existing systems. Applications of conceptual models of nursing to contemporary practice. PREREQUISITE: Restricted to senior RN students. COREQUISITE: NURS 4329.
NURS 4329. Nursing Leadership and Management Practicum for RNs. (3). Precepted experience in selected roles using appropriate theories and models to guide practice. Nine laboratory hours per week in clinical setting. PREREQUISITE: Restricted to RN students. COREQUISITE: NURS 4327. (S/U). [C, I]
NURS 4331. Cultural Nursing. (3). Opportunity to observe nursing and health care in selected cultural environment. Tours and lectures provided to highlight salient features of nursing, health care and other points of interest. Travel to selected region required. PREREQUISITE: admission to Loewenberg School of Nursing.
NURS 4332. Cultural Diversity and Nursing. (3). Theory and principles of nursing practice related to cultural diversity and development of cultural competence in providing quality care to diverse patient populations. PREREQUISITE: NURS 3117, 3118, 3119, 3127, 3128, 3129.
NURS 4335. Ethical Dialogs. (3). Bioethical principles used to analyze ethical health care problems of the individuals, providers of care and coordinators of care; allocation of scarce health resources examined in contexts of delivery of care, institutional management and policy development. PREREQUISITE: all provider courses or permission of faculty.
NURS 4300-09. Special Topics in Nursing. (3). Topics are varied and in online class listings.
NURS 4800. I ndependent Study. (1-3). Directed study and/or research in selected areas of nursing. May be repeated for maximum of 7 hours credit. PREREQUISITE: senior standing and permission of faculty.

## (NUTR) NUTRITI ON

Department of Health and Sport Sciences MICHAEL H. HAMRICK, Ed.D., Chair Room 106, Elma Neal Roane Fieldhouse http://hss.memphis.edu/

NUTR 2202. Nutrition. (3). (CSED). Study of nutrients for the consumer; nutrition for preventive health throughout the life cycle.

NUTR 2302. Introduction to Foods. (3). (CSED). Scientific principles of food preparation, culinary techniques, menu planning emphasizing cultural ethnic foods; food safety, food sanitation, computerized nutrient analysis of foods. Two lecture hours, three laboratory hours per week.
NUTR 3002. Advanced Nutrition. (3). (4002). (CSED). In-depth study of nutrients and body utilization and discussion of current issues in nutrition. PREREQUISITE: NUTR 2202, CHEM 1110/1111, 1120/1121.
NUTR 3202. Nutrition for Health Care. (3). (CSED). Nutrition applications for health promotion and treatment of selected disease conditions. Required for admission to the Loewenberg School of Nursing at the University of Memphis. PREREQUISITE: BIOL 2010/2011, 2020/2021.
NUTR 3502. Advanced Foods/ Food Systems. (3). (CSED). Food systems management applications; procurement, production, and menu planning for groups; legislation and environmental issues; institutional equipment and design; human resource management; additional 16 hours of lab experiences in professional food service operations outside of classroom. PREREQUISITE: NUTR 2302.
NUTR 4102. Medical Nutrition Therapy. (3). (CSED). Nutrition assessment techniques; medical terminology and nutritional pharmacology; nutrition modalities for health promotion and selected conditions. PREREQUISITE: BIOL 2010/2011, BI OL
2020/2021, NUTR 2202, 3002 or permission of instructor.
NUTR 4112. Medical Nutrition Therapy II. (3). (CSED). Nutrition care process and pathophysiology for selected conditions; alternative nutrition therapies. PREREQUISITE: NUTR 4102.
NUTR 4212. Readings in Foods and Nutrition. (CSED).
NUTR 4322. Advanced Food Systems and Beverage Management. (3). (CSED). (Same as HPRM 4322). Foundations of managing restaurants and associated beverage operations; planning and control procedures, human resources management, customer service, marketing strategies, emerging technologies; relationship between food and beverage operations and overall hospitality organization. PREREQUISITE: NUTR 2302, MGMT 3110, MKTG 3010, or permission of instructor.
NUTR 4332. Purchasing and Financial Management of Food Systems. (3). (CSED). Problem solving related to food and beverage purchasing decisions; budgeting for food services; managerial finance, productivity indicators. PREREQUISITE: ACCT 2010, NUTR 3502, and completion of University General Education Program MATH requirement.
NUTR 4602-6602. Community Nutrition. (3). (CSED). Nutritional problems and practices of diverse ethnic, age, and socioeconomic groups; educational skill development for intervention; local regional, national, international agencies that address these nutritional needs. PREREQUISITE: NUTR 2202, or permission of instructor.
NUTR 4605. Internship in Nutrition. (3). Culminating experience allowing students the opportunity to demonstrate knowledge and skills in an appropriate professional setting. COREQUISITE: HMSE 4999. (S/U)
NUTR 4702-6702. Food Production Internship. (3). (CSED). Supervised field experience in the field of food production management; preparation for ServSafe, a food safety and sanitation certification.
NUTR 4722-6722. Catering I nternship. (3). (CSED). Supervised field experience in the field of catering.
NUTR 4802. Experimental Foods. (3). (CSED). Technology related to chemical properties of foods and the development of new food products. Critical thinking and problem solving skills used in the preparation and evaluation of food products. Two lecture hours, two laboratory hours per week. PREREQUISITE: NUTR 2302, CHEM 1131, 3311 or permission of instructor.
NUTR 4812. Advanced Human Metabolism. (3). (CSED). Biochemistry as it applied to dietetics; generation, storage, use of energy; metabolism of carbohydrate, protein, fat, and other macro/micro nutrients; control of metabolic processes in normal, anabolic, catabolic conditions. PREREQUISITE: BIOL 2010/2011, 2020/2021; NUTR 3002; CHEM 3311/3301, 3312/3302.
NUTR 4902-6902. Study Tour: Foods and Nutrition. (CSED).

## (PADM) OPEN LEARNI NG FI RE SERVI CES PROGRAM

School of Urban Affairs and Public Policy<br>Division of Public Administration<br>DOROTHY L. NORRIS, Ph.D., Director Room 136, McCord Hall http://padm.memphis.edu

Admission to PADM 3610, 3611, 3612, 3613, 3614, and 3615 is restricted to students seeking the Bachelor of Professional Studies degree in Fire Administration or Fire Prevention Technology through University College.
PADM 3610. Personnel Management for the Fire Service. (3). (POLS 3610). Personnel practices and management procedures; manpower planning, labor relations recruitment, selection, testing, performance appraisals, classification, motivation, politics, and management.
PADM 3611. Disaster and Fire Defense Planning (3). (POLS 3611). Concepts and principles of community risk assessment, regional and cooperative procedures and plans; relationship of structural, climatic and topographical variables to group fires, conflagrations, and natural disasters; pre- and post-occurrence factors; communications, planning, organizing, coordination, command and logistics.
PADM 3612. Fire Prevention Organization and Management. (3). (POLS 3612). Examines and evaluates techniques, procedures, programs and agencies involved with fire prevention; public and private fire prevention functions, licenses, permits, zoning, legal aspects, inspection, investigations, planning, arson, and incendiary analysis.

PADM 3613. Fire and Emergency Services Administration. (3). (POLS 3613). Overview of organization and management in modern fire service; management of equipment and personnel, fire department functions, planning, resource development, labor relations.
PADM 3614. Political and Legal Foundations of Fire Protection. (3). (POLS 3614). Legal basis for police power of government related to public safety; legal limitations and responsibility; liability of fire prevention organizations and personnel; review of judicial decisions. [W]
PADM 3615. The Community Risk Reduction for the Fire Services. (3). (POLS 3615). Sociological, economic and political characteristics of communities and their influence on fire problem; how to study community profiles and structures with consideration of economic, geographic, and sociological variables of fire threat.; examination of functional basis of community, diverse social roles of community agencies; study of fire services as complex organization in community.

(PADM) PUBLI C and NONPROFIT ADMI NI STRATI ON<br>School of Urban Affairs and Public Policy<br>Division of Public Administration<br>DOROTHY L. NORRIS, Ph.D., Director Room 136, McCord Hall http://padm.memphis.edu

PADM 3601. Public Administration. (3). (Same as POLS 3601). Concepts and practices of organization and management in executive departments, national, state, and local; analysis of bureaucracy, administrative theory, budgeting; personnel, administrative leadership. [W]
PADM 4101-6101. Political Statistics. (3). (Same as POLS 4101). Introduction to analysis of quantitative data; statistical hypothesis testing in fields of political science and public and health administration. PREREQUISITE: POLS 3100. [C]
PADM 4207-6207. Health Politics and Policy. (3). Introduction to the political, economic, and social forces affecting the health care system in the United States; emphasis on the development and comparison of health policies within the context of the stages of American policy making.
PADM 4221-6221. Issues in Urban Administration. (3). Politics, administration, and public policy in urban context; administrative aspects of selected governmental policy making processes; interrelationships of governments at various levels; urban challenges facing modern public administrators.
PADM 4225-6225. Applications in Urban Administration. (3). Tools and strategies of public and nonprofit administration to accomplish collective purposes, develop communities, enhance civic capacity toward improved quality of life in urban settings.
PADM 4226. I ntroduction to Nonprofit Organizations. (3). (Same as POLS 4226). Critical understanding of historical development and impact of public sector, dynamic environment of nonprofit organization and current issues of importance to nonprofit decision makers.
PADM 4227-6227. Issues in Nonprofit Administration. (3). Unique aspects of using financial information in nonprofit administration; principles and practices of nonprofit managerial and financial accounting; nonprofit budget and control issues; analysis of nonprofit financial statements. PREREQUISITE: PADM 4226.
PADM 4231. Administrative Internship. (3-12). (Same as POLS 4231). Supervised internship working with administrative branches of national, state, or local governments. Seminar sessions to discuss and analyze problems with which interns are working. May be repeated for a maximum of 12 hours credits. PREREQUISITE: permission of division.
PADM 4401-6401. Comparative Public Administration. (3). Examination of differing concepts and perspectives of public administration; variability in administrative systems, political power and control over public bureaucracies, education and recruitment of public bureaucrats; bureaucratic concept of public interest and responsiveness to the public.
PADM 4412-6412. Neighborhood Development and Social Entrepreneurship. (3). (Same as ANTH 4412). Role of various institutions and their relationship to developmental needs of inner city neighborhoods; evolution of American cities as context for understanding urban neighborhoods and poverty; role of government and foundations in shaping policy at local level; rise of neighborhood associations and non-profits as extensions of family values; contributing to better understanding of neighborhoods and various intervention strategies.
PADM 4710-19-6710-19. Special Topics in Public Administration. (1-3). In-depth study of selected topics and issues related to public and nonprofit administration. May be repeated for a maximum of 6 hours credit.

## (PETE) PHYSI CAL EDUCATI ON TEACHER EDUCATION

Department of Health and Sport Sciences MICHAEL H. HAMRICK, Ed.D., Chair Room 106, Elma Neal Roane Fieldhouse http://hss.memphis.edu/

PETE 2001. Skills in Individual Fitness and Applications to Teaching. (2). Knowledge, skills and techniques of teaching fitness; individual skill development; competency in instructional techniques of teaching fitness in school settings. PETE 2002. Educational Games and Team Sport Skills. (2). (EXSS 2002). Knowledge, skills, techniques of teaching educational games and team sports; individual skill development; competency in instructional techniques of teaching educational games in school settings.

PETE 2003. Skill Competence in I ndividual Sports. (2). (EXSS 2003). Knowledge, skills, techniques of teaching individual sport skills; individual skill development; competency in instructional techniques of teaching individual sport skills in school settings. Students select from a variety of different individual sports including but not limited to badminton, tennis, and golf.
PETE 2006. Educational Gymnastic and Movement Concepts. (2). Knowledge, skills, techniques of teaching educational gymnastics; individual skill development; competency in instructional techniques of teaching educational gymnastics in school settings.
PETE 2009. Educational Dance and Movement Concepts. (2). (EXSS 2009). Knowledge, skills, techniques of teaching educational dance; individual skill development; competency in instructional techniques of teaching educational dance in school settings.
PETE 3307. Psychosocial Aspects of Sport. (3). (EXSS 3307). Designed to help students develop understanding of psychological aspects of participation in sport; emphasis on research and theoretical frameworks related to performance enhancement and enjoyment in sport.
PETE 3308. Exceptional Learners in Physical Education. (3). (EXSS 3308). Nature and etiology of disabilities prevalent in children, knowledge and technical skills pertinent to the design of adapted physical activity programs and the teaching of physical activities for specific disabilities.
PETE 3604. Teaching Exercise and Sport Science, K-Middle School. (2). (EXSS 3604). Skills, activities, and resource materials for teaching elements of movement, educational games, educational gymnastics, and physical fitness to youth. COREQUISITE: EXSS 3605.
PETE 3800. Instructional Strategies in Physical Education. (3). Emphasis on development and application of developmentally appropriate instructional strategies in school based physical activity settings. Students initiate Professional Development Portfolios (PDF) and must be accepted into the Teacher Education Program to enroll in this course.
PETE 3903. Historical and Philosophical Aspects of Physical Activity. (3). (EXSS 3903). Development of the discipline of physical education through historical, philosophical, sociological and scientific bases. PREREQUISITE: Upper division standing and satisfactory completion of the English composition requirements. [W]
PETE 4200. Curriculum and Integrated Learning in Elementary School PE. (4). Emphasis on development and implementation of developmentally appropriate curriculum in early childhood and elementary school physical activity settings. Part of PETE Instructional Block taken in the Fall of Senior year. Block courses may be taught in local Professional Development Schools. Students must be accepted into the Teacher Education Program to enroll in this course. COREQUISITE: PETE 3800, 4300, and 4400.

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## (PHED) PHYSI CAL EDUCATI ON

Department of Health and Sport Sciences MICHAEL H. HAMRICK, Ed.D., Chair Room 106, Elma Neal Roane Fieldhouse http://hss.memphis.edu/
PHED 1003. Aerobics. (2). May be repeated once for credit. [G]
PHED 1004. Jogging. (2). May be repeated once for credit. [G]
PHED 1005. Conditioning for Varsity Sports. (2). Open only to varsity athletes, cheerleaders, and members of the pom pon
squad. May be repeated once for credit. [G] (S/U)
PHED 1006. Water Aerobics. (2). May be repeated once for credit. [G]
PHED 1007. Yoga, Stretching and Relaxation. (2). May be repeated once for credit. [G]
PHED 1008. Walking for Health and Fitness (2). May be repeated once for credit. [G]

PHED 1009. Fitness through Cross Training. (2). May be repeated once for credit. [G]
PHED 1010-19. Selected Physical Education Activities. (1-3). Current activities in physical education. See online class listings for specific activity. May be repeated with a change in topic. [G]
PHED 1015. Stationary Cycling. (2). Vigorous workout to lead toward improved levels utilizing several levels of intensity through cycling. May be repeated once for credit.
PHED 1016. Pilates. (2). Basic to advanced exercises; body awareness, coreline compression and technique. May be repeated once for credit.
PHED 1107. Yoga II: Stretching and Relaxation- Therapeutic Approaches. (2). [G]
PHED 1301. Weight Training with Machines. (2). [G]
PHED 1302. Free Weights and Machines. (2). [G]
PHED 1331. Camping. (2). [G]
PHED 1333. Backpacking. (2). [G]
PHED 1334. Rock Climbing. (2). [G]
PHED 1340. Introduction to Fly Fishing. (2). [G]
PHED 1361. Horseback Riding. (2). [G]
PHED 1412. Judo. (2). [G]
PHED 1413. Self Defense Techniques. (2). [G]
PHED 1441. Karate. (2). [G]
PHED 1442. Advanced Karate. (2). [G]
PHED 1443. Aikido. (2). [G]
PHED 1444. Kickboxing (2). [G]
PHED 1445. Tae Kwon Do. (2). [G]
PHED 1461. Basic Foil Fencing. (2). [G]
PHED 1501. Beginning Tennis. (2). [G]
PHED 1502. I ntermediate Tennis. (2). [G]
PHED 1521. Racquetball. (2). [G]
PHED 1522. I ntermediate Racquetball. (2). [G]
PHED 1541. Badminton. (2). [G]
PHED 1561. Bowling. (2). [G]
PHED 1562. I ntermediate Bowling. (2). [G]
PHED 1571. Golf. (2). [G]
PHED 1572. Intermediate Golf. (2). [G]
PHED 1711. Beginning Swimming I. (2). [G]
PHED 1712. Beginning Swimming II. (2). [G]
PHED 1713. I ntermediate Swimming. (2). [G]
PHED * 1722. Swimming - Lifeguarding. (2). [G]
PHED 1742. Conditioning Through Swimming. (2) . [G]
PHED 1743. Triathlon Techniques and Training. (2). [G]
PHED * 1771. Scuba. (2). [G]
PHED *1772. Advanced Scuba. (2). [G]
PHED 1782. Kayaking. (2). [G]
PHED 1783. Canoeing. (2). [G]
PHED 1784. Sea Kayaking. (2). [G]
PHED 1811. Rhythms for Elementary School. (2). [G]
PHED 1921. Basketball. (2). [G]
PHED 1923. Volleyball. (2). [G]
PHED 1924. I ntermediate Volleyball. (2). [G]
PHED 1931. Soccer and Field Sports. (2). [G]
PHED 2703. Water Safety Instructor. (3). Analysis, practice, and teaching of swimming and lifesaving skills and general water safety practice. Variable hours of supervised laboratory/field experience will be required. PREREQUISITE: experienced swimmer.
PHED 3406. Lifeguarding and Pool Management. (3). Theory and application of lifeguarding skills, pool management, records/reports and pool maintenance and sanitation. PREREQUISITE: PHED 1722 or Red Cross Lifesaving certificate; HMSE 2102 or Red Cross or Heart Association CPR/Basic Life Support.
*The prerequisite for these courses is Physical Education skills 1713.

PHIL 1101. Fundamental Issues In Philosophy. (3). Introduction to critical exploration of such issues as knowledge, reality, consciousness and the good life; readings from Plato, Descartes, Kant, Nietzsche, or more recent sources. [G] •
PHI L 1102. Values and the Modern World. (3). Introduction to such social and ethical questions as, "What makes a happy life? What justifies ideas of good and evil? How should we live with others? What is the role of science, religion, sex, and race in society?"[G] •
PHIL 1611. Elementary Logic. (3). Formal and informal reasoning emphasizing logic as practical method for problem solving. PREREQUISITE: two units of high school algebra or one unit algebra and one unit geometry.
PHI L 3001. Foundations of Western Philosophy: Classical Period. (3). History of philosophy from 7th century B.C. through early Middle Ages structured around major themes that shaped classical period, attention to cultural and historical settings in which they arose and to which they contributed; readings from philosophical and nonphilosophical sources. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.
PHI L 3002. Foundations of Western Philosophy: Modern Period. (3). History of philosophy from late Middle Ages through 19th century structured around major themes that shaped the modern period; attention to cultural and historical setting in which they arose and to which they contributed; readings from philosophical and nonphilosophical sources. NOTE: while this is a continuation of PHIL 3001, it may be taken separately. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.
PHI L 3411. Contemporary Moral Problems. (3). Such important contemporary moral issues as pornography and obscenity, capital punishment, abortion, human rights, $\rangle$ reverse discrimination, and civil disobedience; underlying philosophical ideas for each issue considered and discussed.
PHI L 3451. Existentialism. (3). Historical and comparative study of different existentialist writers and their relation to literature, religion, and psychology; readings from such writers as Kierkegaard, Nietzsche, J aspers, Heidegger, Sartre, and Camus.
PHI L 3452. Feminist Theory. (3). Selected ideas from the history on women from the Greeks to the present; developing methods and ideologies within contemporary theoretical approaches to feminist studies; diversity, equality and difference discussed by drawing on different epistemologies, such as existentialism and post-structuralism.
PHI L 3460. Nature, Mind, Knowledge. (3). The nature of mind, free will vs. determinism, personal identity and immortality, and the nature and possibility of knowledge.
PHIL 3511. Ethics. (3). Critical analysis of classical ethical theories and their application to problems of individual and society. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor. [W]
PHI L 3512. Science, Technology and Human Values. (3). Ethical problems growing out of development of modern science and technology; of such issues as relation of science to society, dehumanization of individual, impact of technology on environment, and modern warfare. Specific content of course varies each semester.
PHI L 3514. Biomedical Ethics. (3). Discussion of ethical problems raised by contemporary medical practices and biological innovations from standpoint of contemporary ethical theories including abortion, euthanasia, behavior modification, human experimentation and genetic engineering.
PHIL 3515. Environmental Ethics. (3). Discussion of ethical problems raised by human interaction with the environment; consideration of such questions as to what kind of entities one can have a duty. Specific issues may include the moral standing of future and possible humans, nonhuman animals, species and ecosystems. PREREQUISITE: PHIL 1101 or 1102 recommended.
PHIL 3621. Intermediate Logic. (3). Symbolic logic, including propositional calculus, lower functional calculus, and related topics. PREREQUISITE: PHIL 1611, or permission of instructor. [C]
PHIL 3701. The Human and the Divine. (3). Examination of one or more major religious movements with regard to their origins, doctrines, and philosophical significance; contrasting conceptions of deity, worship, and role of religion in how we think about ourselves and our roles in society.
PHI L 3702. Philosophy of Religion. (3). Selected religious doctrines and practices from standpoint of philosophy. Topics vary from semester to semester. Sequel to PHIL 3701, but may be taken independently.
PHIL 3721. Chinese Philosophy. (3). Introduction to Chinese philosophy; readings from primary source of Confucianism, Taoism, and Buddhism, supplemented by commentary from contemporary scholarship.
PHIL 3741. African American Philosophy. (3). Philosophical investigation of social and political themes which have developed historically in African American culture such as theories of social elevation, civil disobedience, race and racism, and black feminism. PHIL 3771. Philosophy In Literature. (3). Expression of philosophical ideas in literature; readings from philosophers, playwrights, novelists and poets.
PHI L 3781. Philosophy and Film. (3). An examination of some basic philosophical problems, integrating philosophical readings with films which illustrate positions that have been taken regarding the problems; enhance understanding and appreciation of both the philosophical problems and the films. PREREQUISITE: PHIL 1101 or 1102 recommended.
PHIL 3880. Problems In Philosophy. (3). An intensive study of selected philosophical problems. May be repeated for a maximum of 6 hours credit. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.
PHI L 4211-6211. Studies In Ancient Philosophy. (3). Readings from primary sources, supplemented by commentary from antiquity and modern scholarship, including Pre-Socratics, Plato, Aristotle, and Hellenistic period. May be repeated for a maximum of 9 hours credit with permission of the Departmental Undergraduate Advisor. PREREQUISITE: PHIL 3001 or permission of instructor. PHI L 4311-6311. Studies in Modern Philosophy. (3). Readings from major philosophers of 17th to early 19th centuries, supplemented by commentaries from modern and contemporary sources. May be repeated for a maximum of 9 hours credit with permission of the Departmental Undergraduate Advisor. PREREQUISITE: PHIL 3002 or permission of instructor.

PHI L 4421-6421. Philosophy of Mind. (3). Major issues and positions in recent philosophy of mind; behaviorism; reductive, non-reductive, and eliminative versions of materialism; functionalism; mental causation; phenomenal consciousness; psychoanalysis and the unconscious; computational and connectionist models of mind. PREREQUISITE: PHIL 1101, 1102, or 1611, or permission of instructor.
PHI L 4422-6422. Recent Anglo American Philosophy. (3). Major developments in philosophy in England and United States from 1900 to present, reading from such philosophers as Russell, Moore, Ayer, Wittgenstein, James, Dewey, Lewis, Quine and other contemporary authors. PREREQUISITE: PHIL 3002 or 4311 or permission of instructor.
PHI L 4441-6441. Recent Continental Philosophy. (3). Major figures in 20th Century European thought; phenomenology, existentialism, structuralism, critical theory, and hermeneutics. May be repeated for a maximum of 9 hours credit with permission of the Departmental Undergraduate Advisor.
PHI L 4551-6551. Social and Political Philosophy. (3). (3351). Major philosophical theories of man and the state; emphasis on concepts of society, culture, institutions, government, law, power, authority, rights, and obligation. Selected readings.
PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.
PHI L 4632-6632. Advanced Logic. (3). Nature of axiomatic systems, techniques of formalization, and logical foundations of mathematics. PREREQUISITE: PHIL 3621, or permission of instructor.
PHI L 4661-6661. Philosophy of Science. (3). Basic features and presuppositions of science; nature of scientific method, theories, explanation, and verification; emphasis on the natural sciences. PREREQUISITE: PHIL 1611, or permission of instructor. PHI L 4671-6671. Aesthetics. (3). Introduction to philosophical theories and assumptions concerning nature and role of art and possibility of aesthetic evaluation.
PHI L 4801-20-6801-20. Special Topics In Philosophy. (3). Epistemology, metaphysics, philosophy of language, philosophy of mind, logical theory, and axiology. Area to be covered appears in the online class listings the semester it is taught. May be repeated for maximum of 15 hours credit without changing an earlier grade if different areas are treated. PREREQUISITE: two courses in philosophy or permission of instructor.
PHIL 4891. Senior Honors Thesis. (3). Directed reading and research culminating in a Senior Thesis. Thesis topic to be selected by student with approval of thesis director before semester student intends to take course. Open only to senior honors students in philosophy. May be repeated in successive semesters for up to 6 hours credit.
PHI L 4994. Reading and Research. (1-3). Individual directed study in area of special interest. May be repeated in successive semesters for up to 6 hours credit.

## (PHYS) PHYSI CS

SHAH JAHAN, Ph.D., Chair<br>Room 216, Manning Hall<br>http://physics.memphis.edu

Additional fees are charged for some Physics lecture and laboratory courses. See the online class listings or the Expenses section of the Bulletin.
PHYS 1001. Introductory Laboratory. (1). (1101 lab). Laboratory experiments and techniques to accompany PHYS 1010.
Two laboratory hours per week. PREREQUISITE or COREQUISITE: PHYS 1010. [G] •
PHYS 1002. Astronomy Laboratory. (1). (1102 lab). Laboratory experiments and techniques to accompany PHYS 1020. Two
laboratory hours per week. PREREQUISITE or COREQUISITE: PHYS 1020. [G] •
PHYS 1010. Introductory Physics. (3). (1101). Phenomenological introduction to physics for non-technical students, providing an understanding of natural laws of motion, structure of matter, heat, sound, electromagnetics, light, atomic and nuclear physics. NOTES: Credit will not apply toward major or minor in the sciences, nor will it satisfy any part of science requirements in preprofessional curricula. PHYS 1001 must be taken concurrently to satisfy the General Education Program requirement. Three
lecture hours per week. [G] •
PHYS 1020. Survey of Astronomy. (3). (1102). Motions of earth and moon; apparent motion of stars and planets; orbits and properties of bodies in the solar system; stellar distances, properties, and evolution; our galaxy and others. NOTE: PHYS 1002 must be taken concurrently to satisfy the General Education Program requirement. Three lecture hours per week. [G]
PHYS 2010. General Physics I / Trigonometry . (3). (2110). Mechanics, heat, and sound. This course is recommended for students in pre-medical programs. NOTE: For first-time enrollees, PHYS 2011 must be taken concurrently. Three lecture hours
per week. PREREQUISITE: MATH 1720 or equivalent.
PHYS 2011. General Physics I Laboratory. (1). (2001). Laboratory experiments and techniques to accompany PHYS 2110. Two laboratory hours per week. PREREQUISITE or COREQUISITE: PHYS 2010.
PHYS 2020. General Physics II / Trigonometry. (3). (2120). Continuation of PHYS 2010. Magnetism, electricity, light, and modern physics. Recommended for students in pre-medical programs. NOTE: for first-time enrollees, PHYS 2021 must be taken concurrently. Three lecture hours per week. PREREQUISITE: PHYS 2010.
PHYS 2021. General Physics II Laboratory. (1). (2002). Laboratory experiments and techniques to accompany 2020. Two laboratory hours per week. PREREQUISITE or COREQUISITE: PHYS 2020.
PHYS 2110. Physics I for Science and Engineering / Calculus. (3). (2510). Principles of mechanics using methods of calculus; Newton's laws, kinetic and potential energy, linear and angular momentum. NOTE: For first-time enrollees, PHYS 2111 must be taken concurrently. Three lecture hours per week. COREQUISITE: MATH 1910. [G] •
PHYS 2111. Physics I for Science and Engineering Laboratory. (1). (2003). Laboratory experiments and techniques to
accompany PHYS 2110. Two laboratory hours per week. PREREQUISITE or COREQUISITE: PHYS 2110. [G] *
PHYS 2115. Classical Physics. (3). Principles of fluid dynamics, sound, heat, optics, special relativity. Recommended for all science and engineering majors. Required for physics majors. Three lecture hours per week. PREREQUISITE: PHYS 2010 or PHYS 2110.
PHYS 2120. Physics II for Science and Engineering / Calculus. (3). (2520). Continuation of PHYS 2110. Principles of electromagnetism using methods of calculus; Gauss's Law, current, resistance, capacitance, Faraday's Law, inductance. NOTE: for first-time enrollees, PHYS 2121 must be taken concurrently. Three lecture hours per week. PREREQUISITE: PHYS 2110 and MATH 1920. [G] •
PHYS 2121. Physics II for Science and Engineering Laboratory • (1). (2004). Laboratory experiments and techniques to accompany PHYS 2120. Two laboratory hours per week. PREREQUISITE or COREQUISITE: PHYS 2120. [G] *
PHYS 3010. Introduction to Modern Physics. (3). Principles and applications of quantum mechanics; atomic structure, nuclear and particle physics; solid state, radiation, molecular physics. Three lecture hours per week. PREREQUISITE: PHYS 2120 and MATH 2110. [C]
PHYS 3011. Theoretical Physics I. (3). Special mathematical techniques in solution of physical problems; emphasis on vector calculus, boundary value problems, eigen-value problems, and Fourier series. Three lecture hours per week. PREREQUISITE:
MATH 2110. [C]
PHYS 3012. Theoretical Physics II. (3). Continuation of PHYS 3011 covering complex variables, partial differential equations and special functions of physics. Three lecture hours per week. PREREQUISITE: PHYS 3011.
PHYS 3111. Mechanics I. (3). Advanced classical mechanics; includes statistics, dynamics of particles, rigid bodies, fluid flow, work, energy, momentum, force fields, and harmonic motion. Three lecture hours per week. PREREQUISITE: PHYS 2120. COREQUISITE: PHYS 3011 and MATH 3120.
PHYS 3211. Electricity and Magnetism I. (3). Electromagnetic fields and waves, dielectrics, induced electromotive force, magnetic energy, magnetic materials, Maxwell's equations, and reflection and refraction. Three lecture hours per week. PREREQUISITE: PHYS 2120, PHYS 3011, and MATH 2110.
PHYS 3610. Experimental Techniques I. (1). Introduction to independent experimentation and data analysis. Includes experiments in mechanics, electricity and magnetism, optics and modern physics. Three laboratory hours per week.
PREREQUISITE: PHYS 2120.
PHYS 3611. Experimental Techniques II. (1). Continuation of PHYS 3610. Three laboratory hours per week. PREREQUISITE: PHYS 3610.
PHYS 4000-09-6000-09. Special Topics in Physics. (3). Selected topics of current interest in physics not otherwise included in the curriculum. Three lecture hours or equivalent laboratory hours per week. PREREQUISITE: permission of instructor. PHYS 4020-6020. Biophysics. (3). (3040). Biomedical applications of physics, understanding electric potentials in biological systems, electrodynamics of nerves, interactions of photons and charged particles in biological materials; use of X-rays in imaging and treatment. Three lecture hours per week. PREREQUISITE: PHYS 2020 or PHYS 2120.
PHYS 4021-6021. Applied Radiation Physics. (3). Applied radiation and radioactivity; types of radiation, radiation measurement interaction with matter, and biological effects; radiation safety aspects emphasized. Three lecture hours per week. PREREQUISITE: PHYS 2120 or PHYS 2020 and MATH 1910.
PHYS 4040-6040. Medical Physics. (3). Physics of sensory, respiratory, and circulatory systems; physical basis of radiology and nuclear medicine. Three lecture hours per week. PREREQUISITE: PHYS 2120 or both PHYS 2020 and MATH 1910.
PHYS 4050-6050. Astrophysics I. (3). (3051). Principles of physics applied to the solar system, stars, light, telescopes.
Recommended for science and engineering majors interested in astronomy. Three lecture hours per week. PREREQUISITE: PHYS 2120 or both PHYS 2020 and MATH 1910.
PHYS 4051-6051. Astrophysics II. (3). Principles of physics applied to star birth and death, black holes, neutron stars, galaxies, quasars, beginning and evolution of the universe. Three lecture hours per week. PREREQUISITE: PHYS 3051.
PHYS 4060. Advanced Physics Methodology. (3). Students will perform advanced fundamental experiments in physics which will focus on the underlying physical principles, the scientific methodology of experimental research and detailed error analysis. PREREQUISITE: PHYS 3010.
PHYS 4110-6110. Nuclear Physics. (3). Properties of atomic nuclei, radioactive transitions, alpha, beta, and gamma decay; binding energy, nuclear forces and nuclear models. Three lecture hours per week. PREREQUISITE: PHYS 3010.
PHYS 4112-6112. Mechanics II. (3). (3112). Continuation of PHYS 3111. Three lecture hours per week. PREREQUISITE: PHYS 3111.
PHYS 4211-6211. Optics. (3). Brief review of geometrical optics; concentration on wave optics; polarization phenomena, interference, diffraction, coherence, holography, and scattering. Three lecture hours per week. PREREQUISITE: PHYS 3011 and PHYS 3211.
PHYS 4212-6212. Electricity and Magnetism II. (3). (3212). Continuation of PHYS 3211. Three lecture hours per week. PREREQUISITE: PHYS 3211.
PHYS 4222-6222. Environmental Physics. (3). (3410). Application of gas laws, transport laws, and heat transfer in environmental processes; environmental radiation (solar and terrestrial), energy system of atmosphere and hydrosphere, and energy resources and their impact upon environment. Three lecture hours per week. PREREQUISITE: PHYS 2020 or 2120.
PHYS 4230-6230. Electronics. (4). (3510). Theory and application of electronic devices; emphasis on scientific instrumentation. Laboratory oriented course including basic semiconductors, integrated circuits, and microprocessors. Three lecture hours, three laboratory hours per week. PREREQUISITE: PHYS 2120 .

PHYS 4410-6410. Introduction to Quantum Theory. (3). Experimental basis of quantum theory; development of Schrodinger equation and its solution of simple systems; selected applications in atomic and molecular structure. Three lecture hours per week. PREREQUISITE: PHYS 3010, PHYS 3111, and PHYS 3211.
PHYS 4510-6510. Thermodynamics. (3). Mathematical treatment of thermodynamics, including such topics as work, energy, enthalpy, entropy, reversible and irreversible processes, equilibria, specific heats, and phase transitions. Three lecture hours per week. PREREQUISITE: PHYS 2120 and PHYS 3011. [W]
PHYS 4610-6610. Solid State Physics. (3). Such topics as lattice vibrations, specific heats, electrical and thermal conductors in solids, magnetism. Three lecture hours per week. PREREQUISITE: PHYS 4410. [I]
PHYS 4910. Seminar. (1). Special projects, reports and investigation of current literature and research. May be repeated for maximum of 2 hours credit. PREREQUISITE: permission of instructor. (S/U).
PHYS 4990. Research in Physics. (1-4). Collaboration with faculty member on problem of mutual interest. Two to eight laboratory or equivalent hours per week. May be repeated for maximum of 4 hours credit. Students expected to complete prospectus in collaboration with faculty member before registering. PREREQUISITE: PHYS 3010 and permission of instructor.

## (POLS) POLI TI CAL SCI ENCE

SHANNON LINDSEY BLANTON, Ph.D., Chair<br>Room 437, Clement Hall<br>http://polisci.memphis.edu

POLS 1100. American Government. (3). (2211). Development, structure, and processes of American system of government, including framing principles of U.S. Constitution and Bill of Rights; structure and roles of President, Congress, and Supreme Court, and citizen participation in governing. [G]
POLS 1101. Introduction to Ancient Political Thought. (3). Inquiry into fundamental questions of ancient political thought, such as: Who should rule? What is justice? What is a good political order? What are the duties of citizens? What is the foundation of morality? [G]•
POLS 1102. Introduction to Modern Political Thought. (3). Inquiry into fundamental questions of modern political thought, such as origin of political society, proper rights of citizens, legitimate purposes of government, meaning of justice and good society. [G]
POLS 1301. Governments of the World. (3). (2301). Comparison of institutions, issues, processes and policies in a variety of political systems ranging from European to Asian or African countries. [G]
POLS 1501. International Relations. (3). (2501). Consideration of all major forms of political interaction (conflict competition, and cooperation) between and among global actors in world arena. [G]
POLS 3102. Religion and Politics. (3). Survey of role of religion and religious belief in politics; emphasizes role of religious institutions in international arena and national politics and effects of religion on behavior and political beliefs. PREREQUISITE: POLS 1100, 1101, or 1102.
POLS 3211. State and Local Governments. (3). Role of state governments in Federal System, political institutions, elections; organization, functions, and problems of state government; emphasis on Tennessee government. PREREQUISITE: POLS 1100, or permission of instructor.
POLS 3213. Introduction to the Study of Public Policy. (3). Public policy formulation process and some of the major substantive areas of policy concern in America; emphasis on framework for identifying and analyzing substance of public problems, policy making and policy administration. PREREQUISITE: POLS 1100, or permission of instructor.
POLS 3215. Interest Groups in American Politics. (3). Role and impact of interest groups within American political system, including group theory, tactics, and group relationships with various governmental institutions. PREREQUISITE: POLS 1100, or permission of instructor.
POLS 3216. Political Parties end Elections. (3). Political parties and elections in the American political system; emphasis on party organization and activities, campaign strategies and techniques, voting behavior, and two-party system. PREREQUISITE: POLS 1100, or permission of instructor.
POLS 3217. The Political Media. (3). Interactions between the political world and the commercial media, emphasizing the variety of methods used by political elites to influence political perceptions. PREREQUISITE: POLS 1100, or permission of instructor.
POLS 3218. The Chief Executive. (3). (4219). Contemporary American presidency; Constitutional roots for growth of presidential power; roles of persuasion, reputation, and prestige in shaping foreign and domestic policy; presidential elections; conflicts between executive, legislative, and judicial branches. PREREQUISITE: POLS 1100, or permission of instructor.
POLS 3219. The Judicial Process. (3). (4220). Judicial selection, civil and criminal trial procedure, organization of state and federal courts, U.S. Supreme Court decision making process; issues surrounding judicial review. PREREQUISITE: POLS 1100, or permission of instructor.
POLS 3220. The Legislative Process. (3). (4217). Origins, organization, functions, and activities of the U.S. Congress. PREREQUISITE: POLS 1100, or permission of instructor.
POLS 3302. Western European Government and Politics. (3). Comparative study of selected political systems of Western European States. PREREQUISITE: POLS 1301.
POLS 3304. African Politics. (3). Comparative study of politics in Africa; emphasis on current problems, with attention to historical, political, and socioeconomic dimensions. PREREQUISITE: POLS 1301.
POLS 3306. Latin American Government and Politics. (3). Forms of organization, functions and operations of government in

Latin America; emphasis on development of political institutions and present day trends. PREREQUISITE: POLS 1301.
POLS 3309. Government and Politics of Middle East. (3). Analysis of organization and functions of governments in area dominated by tenets of Islam; examination of origin and development of Arab-Israeli conflict. PREREQUISITE: POLS 1301.
POLS 3401. Legal/ Political Thought: Classical. (3). Question of justice and its relation to law and politics; emphasizes confrontation between classical and modern views. PREREQUISITE: PHIL 1101, or PHIL 1102, or POLS 1101, or POLS 1102, or permission of instructor.
POLS 3402. Legal/ Political Thought: Modern. (3). Question of justice and its relation to law and politics; emphasizes confrontation between early and recent modernity. PREREQUISITE: PHIL 1101, or PHIL 1102, or POLS 1101, or POLS 1102, or permission of instructor.
POLS 3405. Introduction to Law and Jurisprudence. (3). Sources, functions, and processes of law. PREREQUISITE: PHIL 1101, or PHIL 1102, or POLS 1101, or POLS 1102, or permission of instructor.
POLS 3505. International Organizations. (3). Theories and concepts of organization of international policy focused on the institutions, both formal and informal, through which much international interaction occurs. PREREQUISITE: POLS 1501, or permission of instructor.
POLS 3506. American Foreign Policy. (3). Domestic sources, implementation, and content of U.S. foreign policy. PREREQUISITE: POLS 1100 or 1501.
POLS 3509. Contemporary Problems in International Relations. (3). Studies or problems in area of world politics. May be repeated for credit once, with change of content. PREREQUISITE: POLS 1501, or permission of instructor. [W]
POLS 3601. Public Administration. (3). (Same as PADM 3601). Concepts and practices of organization and management in executive departments, national, state, and local; analysis of bureaucracy, administrative theory, budgeting, personnel, and administrative leadership. [W]
POLS 3700-09. Special Topics in Contemporary Politics. (3). Topics of contemporary significance in politics.
POLS 4101-6101. Political Statistics. (3). (Same as PADM 4101). Introduction to analysis of quantitative data, and statistical hypothesis testing in the fields of political science and public and health administration. [C]
POLS 4200-6200. Environmental Law, Policy and Regulation. (3). Survey of the principal federal laws, policies and regulations concerning environmental use and protection.
POLS 4211-6211. Constitutional Law: National Powers. (3). Relationships and controls of three branches and nature of division of power between nation and states; emphasis on role of Supreme Court as arbiter in constitutional system. PREREQUISITE: POLS 1100, or permission of instructor. [W]
POLS 4212-6212. Constitutional Law: The Origins and Evolution of Civil Liberties in the United States. (3).
Background, role, and legitimate extent of civil rights and liberties in the United States. PREREQUISITE: POLS 1100, or permission of instructor. [G] •
POLS 4222-6222. Urban Politics. (3). Roles and processes of politics and governance in urban America in contest of global, social; economic influences on cities and suburbs.
POLS 4223-6223. Issues in Urban Politics. (3). Selected issues in urban politics and policy.
POLS 4226. Introduction to Nonprofit Organizations. (3). (Same as PADM 4226). Critical understanding of historical development and impact of public sector, dynamic environment of nonprofit organization and current issues of importance to nonprofit decision makers.
POLS 4230-6230. Legislative Internship. (3-12). Supervised internship working with Tennessee General Assembly or other legislative bodies on current legislative programs. Seminar sessions to discuss and analyze problems with which interns are working. May be repeated for total of 12 credits. (S/U) PREREQUISITE: permission of department.
POLS 4231. Administrative Internship. (3-12). (Same as PADM 4231). Supervised internship working with administrative branches of national, state, or local governments. Seminar sessions to discuss and analyze problems with which interns are working. May be repeated for a maximum of 12 hours credit. PREREQUISITE: permission of department
POLS 4305-6305. Post-Soviet Governments and Politics. (3). Analysis of institutions, issues, processes and domestic policies of states comprising the former Soviet territory, with special emphasis on Russia and Ukraine. PREREQUISITE: POLS 1301.
POLS 4307-6307. Government and Politics of Communist China. (3). Institutions of government, political process, political elites, political groups and political socialization in Communist China. PREREQUISITE: POLS 1301.
POLS 4312-6312. Government and Politics of Japan. (3). Analysis of the political culture, government institutions, political processes and developmental changes on contemporary Japan. PREREQUISITE: POLS 1301.
POLS 4315-6315. Revolution and Political Violence. (3). Comparative analysis of forms and causes of political violence within nations; revolutions, ethnic conflict, secessionist movements, terrorism. PREREQUISITE: POLS 1301. [W]
POLS 4317-6317. Transitions to Democracy. (3). Comparison of transition from authoritarian rule to democracy in Latin America, Asia, Africa, Eastern Europe; consideration of institutional design of democracy and impact of culture on democratic transition and consolidation. PREREQUISITE: POLS 1301. [I]
POLS 4399. Research and Studies Abroad. (1-6). Supervised field research and studies in selected foreign countries. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of the department.
POLS 4401-6401. Modern Political Ideologies. (3). Major ideologies affecting modern politics; ideologies of democracy, communism, and fascism as well as capitalism and socialism, racism, and nationalism, and ideologies of developing or "third" and "fourth world" nations. PREREQUISITE: PHIL 1101, or PHIL 1102, or POLS 1101, or POLS 1102, or permission of instructor. POLS 4405-6405. Origin and Development of American Political Thought. (3). Origin and development of political thought
in United States from colonial to present time; emphasis on relation between political thought and political institutions and practices. PREREQUISITE: PHIL 1101, or PHIL 1102, or POLS 1101, or POLS 1102, or permission of instructor. [G] •
POLS 4415. African-American Political Thought to 1900. (3). Thought of representative African-Americans upon fundamental questions of justice, right, persuasion, power and accommodation prior to the twentieth century. PREREQUISITE: POLS 1100, 1101, or 1102.
POLS 4416. African-American Political Thought from 1900. (3). (4414). Thought of representative African-Americans upon fundamental questions of justice, right, persuasion, power and accommodation in the twentieth century. PREREQUISITE: POLS 1100, 1101, or 1102.
POLS 4504-6504. International Law. (3). Nature, scope, duties, rights, and evolutionary trends of international law.
PREREQUISITE: POLS 1501, or permission of instructor.
POLS 4506. Problems of American Foreign Policy. (3). Studies or problems of American foreign policy. May be repeated for a maximum 6 credit hours with permission of instructor. PREREQUISITE: POLS 1100 or 1501. [I]
POLS 4508-6508. Theories and Concepts in International Relations. (3). Theoretical approaches to study of international politics; consideration of various schools of thought, methods, and substantive literatures. PREREQUISITE: POLS 1501, or permission of instructor. [W]
POLS 4510-6510. Politics of the Global Economy. (3). Consideration of manner in which political processes affect and are affected by economic processes at global level. PREREQUISITE: POLS 1501, or permission of instructor.
POLS 4511-6511. International Conflict. (3). Sources of conflict between nations; characteristics of international system, national attributes, decision making.
POLS 4701. Policy Perspectives. (3). Senior capstone seminar requiring students to analyze and solve series of problems in public policy. Students draw upon each subfield of discipline and utilize variety of skills and methods in addressing issues of domestic, foreign and comparative policy. PREREQUISITE: 15 hours of political science courses. PREREQUISITE: POLS 1100, or permission of instructor. [W,I]
POLS 4702. Independent Study. (1-3). Independent investigation of research problem or directed reading in selected area of political science under tutorial supervision of member of political science faculty. May be repeated for maximum of 6 hours credit. PREREQUISITE: permission of department chair.
POLS 4709. Mock Trail Competition. (3). Experiential learning about the U.S. legal system, jurisprudence, trial court procedure, the work that attorneys do. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.
POLS 4710-19-6710-19. Special Topics in Political Science. (3). Intensive study of selected topics in political science.
POLS 4820. Political History of I srael. (3). (Same as JDST 4820). Interdisciplinary study of political stages in the development of the State of Israel, from mid 19th century to current times, with particular attention paid to key figures in the Zionist movement.

## (PSYC) PSYCHOLOGY

ARTHUR C. GRAESSER , Ph.D., Chair<br>Room 202, Psychology Building<br>http://www.psyc.memphis.edu

PSYC 1101 or 1102 or 1200 is a prerequisite for all other courses in the Department of Psychology. Either PSYC 1101 and 1102 or 1200 is required for either the major or minor in Psychology.
PSYC 1200. General Psychology. (3). Introduction to psychology as a science of behavior; history of psychology; research strategies; biological bases of behavior; learning; memory; intelligence; motivation; emotion ; personality; psychological disorders; techniques of therapy and applied science. Honors sections are frequently available.
PSYC 1300. Psychology as a Profession. (3). Career options within the field; clarification of and post baccalaureate goals. Students will complete a personal plan that specifies long-term goals and how to achieve those goals. PREREQUISITE: PSYC 1101, 1102, or 1200.
PSYC 3000. Introduction to Psychological Research. (4). (3002). Survey of logical and methodological considerations common to all research and an overview of the range of observation, measurement and laboratory procedures employed, and presentations of their own research by various members of the faculty. Three lecture hours, two laboratory hours per week. [W]
PSYC 3001. Psychological Statistics. (4). Introduction to use of statistics in psychology, with emphasis on elementary theory of measurement and computation; measures of central tendency and variability, tests of significance, correlation procedures, and an introduction to multivariate analyses, analysis of variance, and nonparametric procedures. Three lecture hours, two laboratory
hours per week. PREREQUISITE: Completion of MATH 1420, or one of MATH 1830, MATH 1910, MATH 2000. [C]
PSYC 3101. Psychology of Personality. (3). Introduction to development and functioning of normal person; variety of representative theoretical orientations examined; emphasis on psychoanalytic theories and other contemporary theoretical viewpoints.
PSYC 3102. Abnormal Psychology. (3). Basic concepts of psychopathology with emphasis on the development of behavior deviations, description of various neurotic and psychotic reactions, and an introduction to methods of psychotherapy.
PSYC 3103. Child Psychology. (3). Patterns of cognitive, interpersonal, and behavioral development from birth through early adolescence; psychological effects of genetic, organic and environmental influences as the child matures.

PSYC 3106. Social Psychology. (3). (3302). Analysis of behavior and experience of individuals in group settings, examining such topics as leadership, social influence, and intergroup and intragroup relations.
PSYC 3303. Thinking and Cognitive Processes. (3). Overview of fields of cognitive psychology and cognitive science, including perception and attention, short and long-term memory, language, problem solving, reasoning, and decision making.
PSYC 3304. Perceptual Psychology. (3). Introduction to empirical and theoretical issues in perception; emphasis on classical and contemporary issues and approaches to perception pertaining to how information from environment is transformed, organized, represented and used by the perceiver in adapting to physical world.
PSYC 3305. Learning and Memory. (3). Survey and analysis of basic processes involved in acquisition and retention of new behaviors and alteration of existing behaviors in animals and humans; examination of central theoretical concepts and issues in learning.
PSYC 3306. Physiological Psychology. (3). Survey of physiological processes underlying sensation, perception, motivation and emotion, motor systems, unlearned and learned behavior patterns, memory and other psychological functions.
PSYC 3307. Animal Behavior. (3). Synthesis of comparative psychological and ethological approaches to study of animal behavior; behavior genetics, species specific behaviors, behavior as a basis for phyletic classification, and major behavioral dimensions related to phylogenesis.
PSYC 3506. Human Sexuality. (3). Survey of existing knowledge of human sexual behavior; physiological, anatomical, psychological and cultural components; normative sexual functioning; such topics as sexual deviation, sexual dysfunctions, and types of treatment are also considered.
PSYC 3507. Alcohol, Drugs and Behavior. (3). Survey of behavioral pharmacology, mechanism of action for major drugs of abuse and their behavioral effects; survey of routes of administrations and factors that govern or affect drug absorption, distribution, metabolism, and excretion. Although not required, some knowledge of biological concepts would be useful.
PSYC 3508. Industrial and Organizational Psychology. (3). Application of psychological concepts and methods to phenomena in industrial and organizational settings, with emphasis on personnel selection, classification and evaluation, employee attitudes, morale and motivation, and psychological analysis of the condition of work.
PSYC 3509. Applying Psychology in the Community. (3). Principles of psychology applied to real-life, community issues; methodologies and techniques, with emphasis upon the behavior analytic approach; descriptions and discussions of actual programs addressing a variety of community issues such as youth violence, traffic safety, and productivity in the workplace.
PSYC 3510. Deviance: Its Role in History and Culture. (3). (2201). Introduction to concept of deviance from prehistory to present; emphasis on vilification and glorification of deviant behavior according to time, place and customs. [G]
PSYC 3512. Health Psychology. (3). Survey of the biopsychosocial model of health. Explores psychological influences on health, illness, and responses to those states, as well as the psychological origins and outcomes of health interventions. PREREQUISITE: PSYC 3000
PSYC 3520. Legal and Forensic Psychology. (3). Intersection of psychology and law; role of forensic psychologist in criminal investigation, trial procedures, risk assessments, evaluations.
PSYC 3601. Psychology of Evil. (3). Concept of "evil" in human social history and the contemporary world.
PSYC 3700. Peer Advising. (3). Discussion of theories, research, and practices related to undergraduate development, retention, success; classroom participation as well as research and practical experience. PREREQUISITE: permission of department.
PSYC 3900. Practicum in General Psychology. (3). Meet one hour per week plus attend all classes of a section of PSYC 1200 to assist students. Keep office hours to answer questions and grade student work. PREREQUISITE: permission of department. S/U PSYC 4010-29. Special Topics in Psychology. (1-3). Topics are varied and in online class listings.
PSYC 4030. Issues in Psychotherapy Research. (3). Examination of research evidence pertaining to basic questions about psychotherapy and its effectiveness. Readings include both classic contributions and current research findings.
PSYC 4032. Research Methodology. (3). Discussion of advanced topics in methodology. In addition, student completes all phases of a research project, including question formulation, literature review, design, data analysis, and report writing. Research projects evolve from individual student interests. PREREQUISITE: PSYC 3000, or permission of the instructor.
PSYC 4034. Children's Social Relationships. (3). Examines children's social relationships, particularly peer relationships; social cognitive processing; developmental implications of group status and dyadic friendships; behavioral interactions among peers; impact of reputation on peer group status; gender differences in peer relations; parent management of peer activities; and analyses of conflict and of aggressors and their victims. PREREQUISITE: successful completion of a course in child psychology and permission of instructor.
PSYC 4040-49. Honors Special Topics. (3). Topics varied and in online class listings.
PSYC 4101. History of Psychology. (3). Comprehensive survey and critical analysis of the philosophical and scientific antecedents of contemporary psychology. PREREQUISITE: PSYC 3001, 3000, and three hours in 3100 series and three hours in 3300 series. Enrollment preference granted to seniors in their final semester. [I]
PSYC 4305. Mind, Brain, and Intelligence, Honors. (3). (Same as UNHP 4302 and UNIV 4520). Interdisciplinary studies of cognition, behavior, emotion, intelligence, and brain mechanisms; synthesis of research contributions from cognitive science, neuroscience, artificial intelligence, and philosophy. [I]
PSYC 4401. Introduction to Clinical Psychology. (3). (3503). Advanced seminar for students considering graduate study in psychology; clinical assessment, diagnosis, and intervention; research in behavioral medicine, forensic, and child clinical psychology. PREREQUISITE: PSYC 3001, 3000, 3101, 3102, or permission of instructor.
PSYC 4503. Special Problems in Psychology. (1-3). Student, under faculty supervision, may read intensively in specialized area, conduct psychological research and/or, obtain field experience in community institutions where psychological principles are
applied. NOTE: PSYC 4503 and PSYC 4504 may be taken for a combined total of 9 hours credit, no more than 6 hours credit with any one faculty member. PREREQUISITE: permission of the department. (S/U). [I]
PSYC 4504. Directed Research. (3). Majors receive first hand research experience under tutorship of individual faculty member. Students may work individually or in small groups depending upon project. Projects conform to set of guidelines available from department. NOTE: PSYC 4503 and PSYC 4504 may be repeated for a combined total of up to 9 hours credit, no more than 6 hours credit with any one faculty member. PREREQUISITE: permission of department. (S/U).
PSYC 4505. Special Problems in Behavioral Neuroscience. (3). Specialized reading and research conducted under direction of faculty supervisor and with approval of behavioral neuroscience committee. NOTE: PSYC 4505 and 4506 may be taken for a combined total of 9 hours credit, no more than 6 hours credit with any one faculty member.
PSYC 4506. Directed Research in Behavioral Neuroscience. (3). Individual or group research conducted under direction of faculty supervisor and with approval of behavioral neuroscience committee. NOTE: PSYC 4505 and 4506 may be taken for a combined total of 9 hours credit, no more than 6 hours credit with any one faculty member.
PSYC 4507. Internship in Psychology. (3). Supervised field placement in a department approved site. Includes 30 classroom hours and 120 placement hours. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor, completion of 55 or more credit hours, satisfactory completion of PSYC 3001 and 3000 , minimum overall and psychology grade point average of 3.0. (S/U)
PSYC 4996. Honors Senior Thesis. (3). Original research conducted under direction of faculty supervisor, and with approval of Honors Committee. PREREQUISITE: admission to Honors Program. (S/U)
PSYC 4997. Senior Thesis in Behavioral Neuroscience. (3). Original research conducted under direction of faculty supervisor and with approval of behavioral neuroscience committee. PREREQUISITE: permission of behavioral neuroscience advisor.

## Last Updated: 6/12/15

# RUSS 1010. Elementary Russian I. (3). (1101). Introductory survey of Russian grammar and phonetics. • <br> RUSS 1020. Elementary Russian II. (3). (1102). Continuation of RUSS 1010. PREREQUISITE: RUSS 1010, or permission of 

 instructor.RUSS 2010. Intermediate Russian I. (3). (2201). Comprehensive review of Russian grammar, exercises in spoken and written Russian. PREREQUISITE: RUSS 1020, or permission of instructor. *
RUSS 2020. Intermediate Russian II. (3). (2202). Continuation of RUSS 2010. PREREQUISITE: RUSS 2010, or permission of instructor.
RUSS 3301. Russian Conversation and Composition (3). Development of advanced oral and written communication skills. PREREQUISITE: RUSS 2202 or permission of instructor.
RUSS 3302. Russian Conversation and Composition (3). Continuation of RUSS 3301. PREREQUISITE: RUSS 3301, or permission of instructor.
RUSS 3441. Early Nineteenth-Century Russian Literature. (3). Survey of major writers and works of the first half of the 19th century, including Pushkin and Gogol.
RUSS 3442. Nineteenth-Century Russian Realism. (3). Survey of major writers and works of the last half of the 19th century, including Dostoevski and Tolstoi.
RUSS 3443. Twentieth-Century Russian Prose. (3). Survey of Russian literature since 1900, including selected writers and works of the pre-revolutionary and Soviet periods and Russian emigre literature.
RUSS 4780. Individual Studies in Russian. (1-3). Directed individual study in selected areas of Russian chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit by permission of department chair. PREREQUISITE: permission of instructor.
RUSS 4791-99. Special Topics in Russian. (3). May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

## (SLC) SPORT AND LEI SURE COMMERCE

Department of Health and Sport Sciences<br>MICHAEL H. HAMRICK, Ed.D., Chair<br>Room 106, Elma Neal Roane Fieldhouse<br>http://hss..memphis.edu/

SLC 4102-11-6102-11. Special Topics Workshop in Sport and Leisure Commerce. (1-6). Selected phases of sport and leisure commerce through group study, in-depth study in area of interest and need for leaders in sport and leisure commerce. May be repeated for credit when topic varies.
SLC 4902-11-6902-11. Special Topics in Sport and Leisure Commerce (1-3). Current topics in sport and leisure commerce. May be repeated with change in topic. Topics are varied and in online class listings.

## (SLS) SPORT AND LEI SURE STUDI ES

> Department of Health and Sport Sciences MI CHAEL H. HAMRICK, Ed. D., Chair Room 106, Elma Neal Roane Fieldhouse http://hss.memphis.edu/

SLS 2105. Foundations of Sport and Leisure Management. (4). Explores and analyzes sport and leisure management from philosophical, historical, and organizational perspectives. Course includes 40 contact hour clinical experience.
SLS 2605. Field Experience in Sport and Leisure Studies. (1-3). Allows students entering Sport and Leisure Studies program early, supervised practical experiences in a variety of sport and leisure service areas. (S/U).
SLS 3005. Computer Applications in Sport and Leisure. (3). History and application of computers and information systems; emphasis on hardware and software relevant to sport and leisure programs as well as applications of common computer programs to specific leisure service and sport management situations. [C]
SLS 3103. Outdoor Recreation and Education for Urban America. (3). Analysis of concepts and issues associated with outdoor recreation and education with an emphasis on urban citizen; outdoor recreation behavior in terms of individual dynamics of participation, resources for outdoor recreation, outdoor education, and outdoor leadership; achieves balance among practical information, theory, and information from current research. This course may be taken to improve the grade for one, but not both, of the former courses.
SLS 3104. Commercial Recreation and Tourism. (3). Survey of urban commercial recreation with special emphasis on travel and tourism; sport and athletics, theaters, fitness centers, amusement and theme parks, aquatic areas, risk recreation, and historical areas, as well as the travel and tourism industry.

SLS 3105. Sport and Leisure as Popular Culture. (3). The analysis of the production and consumption of sport and leisure as an aspect of contemporary popular culture; relationship between sport and leisure and the economy, the media, politics, and the experience of class, race, gender, ethnicity, and nationality. NOTE: SLS 3105, 3205, and 4205 must be successfully completed in order to satisfy the Writing Intensive requirement. [W]
SLS 3202. Park and Recreation Resource Management. (3). Management, operation, and maintenance of areas and facilities within field of recreation and parks; identification, acquisition, allocation, development, and management of land and water resources through environmentally sound techniques.
SLS 3204. Organizational Analysis of Sport and Leisure. (3). Analysis of the organization and administration of sport and leisure service organizations; organizational structuring; goals, objectives, and policy development; planning process; personnel development; risk management; conflict resolution as applied to sport and leisure services.
SLS 3205. Area and Facility Management. (3). Planning, development, and maintenance of sport and leisure facilities; inspection, comprehensive recreation surveys, and planning a layout. This course may be taken to improve the grade for one, but not both, of the former courses. NOTE: SLS 3105, 3205, and 4205 must be successfully completed in order to satisfy the Writing Intensive requirement. [W]
SLS 3305. Leisure and Recreation Program Development. (3). Planning techniques in regard to citizen surveys, leisure and recreation needs analysis, leisure and recreation activity selection, and leisure and recreation program design, promotion, and evaluation.
SLS 3600. Event Management. (3). Basic concepts pertaining to production of sporting events, both amateur and professional; planning, organizing, publicizing, and conducting an event. PREREQUISITE: SLS 3205.
SLS 3605. Financial Management in Sport and Leisure. (3). Basic finance and accounting applied to managerial control of sport and leisure organizations; feasibility analysis, formulation and development of operating budgets, financial forecasting, ownership models, taxation issues, and revenue production.
SLS 3650. Sport Information and Public Relations. (3). Basic knowledge and understanding of media relations in both amateur and professional sport; special emphasis is placed on building and maintaining an effective media relations program; writing for media, public relations, and business communications.
SLS 3905. Leisure and Recreation for People with Disabilities. (3). Examination of role of leisure and recreation for persons with special needs including individuals with physical, emotional, mental, and social disabilities.
SLS 4001. Park and Recreation Visitor Management. (3). Visitor management as it relates to design and management of visitor interpretive and educational services; attended and unattended services including interpretive talks, living interpretation, audio devices, self-guided tours, exhibits, and educational publications. This course may be taken to improve the grade for one, but not both, of the former courses.
SLS 4105. Leadership in Leisure Services. (3). Concepts of leisure leadership through group discussion, activity, role-playing, gaming, lecture, and class projects.
SLS 4125. Gender, Race, and Class Considerations in Urban Sport and Leisure. (3). Socially constructed categories of class, race, and gender, and their influence on perceptions of the body; way these categories shape institutionalization, practice, and representation of sport and leisure is discussed with an emphasis on promoting unbiased and non-prejudicial sport and leisure cultures. PREREQUISITE: SLS 3105, or permission of the instructor.
SLS 4135. Sport and Popular Culture in Global Perspective. (3). Nature, meaning, and significance of sport, leisure, and popular culture across selected nations. Identification and systematic analysis of persistent problems in American sport and popular culture as well as cultural interstices in emerging global village; cultural conflict, cultural resistance, and cultural imperialism. PREREQUISITE: Social Sciences requirement, SLS 3105, or permission of instructor.
SLS 4155. Sport and Leisure Governance. (3). Development and enforcement of policy by and within governing bodies and systems specifically for local, national, and international sport and leisure organizations. PREREQUISITE: SLS 3105, 4145, or permission of instructor.
SLS 4165. Sport, Leisure, Commerce and the Global City. (3). Synergies and disjunctures between the U.S. and global sport and leisure marketplace. PREREQUISITE or COREQUISITE: SLS 3105, or permission of instructor.
SLS 4175. I nternational Perspectives on the Management of Sport and Leisure Organizations. (3). Management of sport and leisure organizations in a global context.
SLS 4205. Legal and Ethical Aspects of Sport and Leisure. (3). Legal and statutory regulations relevant to sport and leisure programs in urban context; emphasis placed on promotion of ethical decision-making and practices in field of sport and leisure; developing statement of principles/values, and code of ethics; identification and compliance with relevant legal and statutory regulations; contracts; trademarks, licensing, and copyright. PREREQUISITE: SLS 3204, or permission of instructor. NOTE: SLS 3105, 3205, and 4205 must be successfully completed in order to satisfy the Writing Intensive requirement. [W]
SLS 4500. Sport and Leisure Marketing. (3). (SLS 4005). Basic marketing concepts with applications to the uniqueness of the sport and leisure industry; event marketing, sponsorship, licensing, sport information and public relations. PREREQUISITE: SLS 3105.

SLS 4605. I nternship in Sport and Leisure Management. (3-9). Culminating experience allowing students the opportunity to demonstrate knowledge and skills in an appropriate professional setting based upon their training and experience. Represents a culminating experience and can only be conducted when all other course work is complete. PREREQUISITE: senior status and permission of advisor and coordinator of internships. COREQUISITE: HMSE 4999. (S/U).

It is strongly recommended that students take SOCI 1111 before taking other courses in the department.
SOCI 1111. Introductory Sociology. (3). Introduction to concepts, methods and theoretical perspectives in sociology. Basic principles of sociological reasoning introduced through lectures, reading assignments, and micro-computer instruction. [G] • SOCI 2100. Sociology of International Development. (3). Social change in an increasingly interdependent world; introduction to development theory and how relations among countries condition changes within them; cultural conflict, social inequality, education and ideology, industrialization, urbanization, multi-national corporations, population problems, quality of life indicators. [G] -
SOCI 3112. Contemporary Social Problems. (3). (1112). Sociological approaches to understanding contemporary social problems; magnitude, causes, consequences, and possible solutions to various problems such as poverty, racism, sexism, problems of aging, crime, and population.
SOCI 3311. Social Statistics. (3). Application of basic statistical concepts and techniques to social analysis; description of data for single variables and for relationships between two variables; tests of significance for relationships between two variables involving sample data; use of packaged statistical computer programs for single- and two-variable analysis. [C]
SOCI 3322. Methods of Social Research. (3). Overview of process of social research; selection and formulation of problem, design of research, methods of investigation, analysis and interpretation of data, and report preparation; emphasis on data collection techniques. PREREQUISITE: SOCI 3311.
SOCI 3401. Social Inequality. (3). Unequal distribution of power, property, and prestige and social relations of dominance and subordination in the American class system; how and why this inequality develops and persists; differences in life chances and options across different social classes.
SOCI 3420. Sociology of the South. (3). Political economy and major institutions in the South and implications for different races and classes; the South since World War II, including the Civil Rights movement.
SOCI 3422. Racial and Ethnic Minorities: A Socio-Historical Approach. (3). Comparative study of racial and ethnic minorities in United States, how inequality is institutionalized in such areas as employment, education, political participation, and social relations; emphasis on how subordinate groups resist oppression and initiate social change. [G] •
SOCI 3432. Sociology of Gender. (3). Traditional conceptions of masculinity and femininity and modifications of these resulting from economic, demographic and cultural changes; socialization for masculine and feminine roles and variations in these roles throughout life cycle; class, race, occupational and other institutional differences in sex roles.
SOCI 3501. Sociology of Deviant Behavior. (3). Problems in applying definitions of deviance in everyday life; theories about causes and consequences of deviance critically reviewed; types of deviance analyzed, ranging from interpersonal violence to various forms of sexual expression.
SOCI 3541. Criminology. (3). (3521). Nature and significance of criminality; etiology of illegal behavior; trends in social reactions to crime and criminals; evolution of biological, psychological, and sociological theories of criminal behavior.
SOCI 3701. I ndividual and Society. (3). Basic theory and research dealing with study of human behavior in social situations; emphasis on communication processes, socialization, social roles, social self, and interaction in group contexts.
SOCI 3820. Sociology of Education. (3). Sociological analysis of education and its functions, school and community relationships; problems of social change and educational adjustments.
SOCI 3831. Marriage and the Family. (3). American family patterns, including mate selection, man-woman relationships, marital satisfaction, parent-child communication, divorce, alternative lifestyles and other contemporary issues.
SOCI 3860. Sociology of Religion. (3). Role of religion in modern society; relationship between religion and other spheres of life; sociological examination of cults, sects, churches, and religious movements; causes and consequences of religious beliefs and practices.
SOCI 3940. Social Change. (3). A critical assessment of explanations and patterns of social change from a global perspective; emphasis on social institutions, social movements/revolutions, democratization, culture, technology, population dynamics, and environmental transformation.
SOCI 4210. Rise of Sociological Theory. (3). Nature, grounds, and explanatory powers of various forms of sociological theory; analysis of bases for scientific and philosophical assumptions and social and political contexts; major theorists including Durkheim, Marx, Weber, Simmel.
SOCI 4211-6211. Contemporary Sociological Theory. (3). Major frameworks of 20th century sociological thought, including theoretical schools of functionalism, exchange theory, critical theory, symbolic interactionism, phenomenological sociology, and ethnomethodology; current social and political trends and issues.
SOCI 4312-6312. Intermediate Social Statistics. (3). Multivariate analysis of social data; use of computer programs for data management and statistical analysis. PREREQUISITE: SOCI 3311, 3322, or equivalent, or permission of the instructor.
SOCI 4413. Globalization, Culture, and I nformation Technology. (3). Effects of the global digital divide; use and application of various information technologies.
SOCI 4420. Racial Inequality. (3). Relations of dominance and subordination in the United States; social and political experiences of African Americans, Asian Americans, and Latinos, especially strategies employed to resist oppression and reduce inequality.

SOCI 4442. Sociology of Poverty. (3). Structural sources of inequality and how experiences of poverty are shaped by race, gender and age. [W]
SOCI 4460. Black and White Women in the South. (3). How history of South and political-economic structure has shaped black and white women's work, family, community activities, and relationships; emphasis on collaboration and competition aspects, identity issues, and demographic characteristics; focus on the Memphis area. [W]
SOCI 4541. Sociology of Aging. (3). Ageism in sociocultural contexts; current beliefs, values, and norms regarding aging; structural location of aging in society; and implications of ageism in employment, poverty, private and institutional housing, crime, physical illness and mental illness.
SOCI 4631. Cities in Change. (3). Historical transformation of urban communities and urban life; impact of globalization on local places; class, race and ethnic segregation in urban and metropolitan communities; immigration; urban political, economic and social change in comparative perspective. [W]
SOCI 4641. Sociology of the Global Environment. (3). Examination of interactions between physical environment in which we live and human societies which we have created; emphasis on crises of global environment and efforts toward sustainable development.
SOCI 4842-6842. Sociology of Occupations and Professions. (3). Sociological analysis of division of labor, occupational groupings, career patterns, and professional associations in modern American society; meaning of work.
SOCI 4851. Medical Sociology. (3). Examination of human arrangements and their human legitimations within which variations in human biology are discovered, defined, diagnosed, described, and disposed of as "disease."
SOCI 4852. Sociology of Mental Illness. (3). Definition, taxonomy, models; epidemiology, demographics of class, age, sex, race, residence, marital status; media images, public policy, delivery systems, examines personal experiences and social stigma; explores expression of emotions, assertiveness training, anger management, suicide, codependency, divorce recovery, alcoholic family roles; surveys sociotherapeutic responses; social stress.
SOCI 4900-09-6900-09. Special Topics in Sociology. (3). Special areas of sociology not otherwise included in the curriculum.
SOCI 4912. Directed Individual Study. (1-6). Individually directed advanced reading and/or research in special areas of interest. May be repeated for maximum of 6 hours credit. PREREQUISITE: permission of department chair.
SOCI 4923. Social I nstitutions and the Life Cycle. (3). Analysis of social institutions from life cycle perspective; social institutions studied from perspective of their specific function for and appropriateness to specific stages of life cycle development.
[W]
SOCI 4980-6980. Honors Special Topics in Sociology. (3). Topics are varied and in online class listings. May be repeated for a maximum of 9 hours credit. PREREQUISITE: admission to the Honors Program in Sociology.
SOCI 4998. Honors Thesis. (3). Original research conducted under the direction of a faculty mentor. May be repeated in successive semesters for a maximum of 6 hours credit. May be taken by honors students in addition to or instead of SOCl 4999. PREREQUISITE: admission to the Honors Program in Sociology.
SOCI 4999. Senior Thesis Seminar. (3). Analysis of process and practice of sociological inquiry; emphasis on integration of sociological theory, research methods, statistics, and knowledge of a substantive area through formulation and completion of original research project. Research problem will be formulated and executed by student with consultation and supervision of instructor. PREREQUISITE: SOCI 3311, 3322, 4210 or 4211, and nine upper division hours. [W,I]

## (SPAN) SPANISH

Department of Foreign Languages and Literatures
RALPH ALBANESE, Ph.D., Chair
Room 375, Dunn Hall
http://fl.memphis.edu
SPAN 1010. Elementary Spanish I. (3). (1101). Basic skills fundamental to language proficiency and culture. *
SPAN 1020. Elementary Spanish II. (3). (1102). Further development of basic skills fundamental to language proficiency and culture. PREREQUISITE: SPAN 1010, or equivalent. *
SPAN 2010. Intermediate Spanish I. (3). (2201). Comprehensive review of Spanish grammar, exercises in writing conversation, and readings in Hispanic literature and culture. PREREQUISITE: SPAN 1020, or equivalent. *
SPAN 2020. Intermediate Spanish II. (3). (2202). More advanced readings. PREREQUISITE: SPAN 2010, or equivalent. * SPAN 3301. Conversation. (3). Designed to help students develop oral proficiency; diverse opportunities for self-expression. Not intended for students with native or near-native proficiency in Spanish. PREREQUISITE: SPAN 2020, or equivalent.
SPAN 3303. Composition. (3). Designed to develop adequate writing skills; compositions analyzed to identify and avoid frequent grammatical errors and to avoid interference from English. Not intended for students with native or near-native proficiency.
PREREQUISITE: SPAN 2020 or equivalent.
SPAN 3311. Intermediate Conversation. (3). Designed to develop strong conversational and listening skills; includes wide variety of activities, exposure to different pronunciations and native conversational speed; selected readings to help expand vocabulary. Not intended for students with native or near-native proficiency. PREREQUISITE: SPAN 3301, or permission of instructor.

SPAN 3312. Advanced Conversation. (3). Further vocabulary expansion, precision in diction, and ability to express and
understand non-technical subjects. Required of majors and minors. PREREQUISITE: SPAN 3311, or permission of instructor. SPAN 3313. Advanced Composition. (3). Designed to develop strong command of written language; emphasis on style, organization and exposition of content as opposed to grammatical analysis. PREREQUISITE: SPAN 3303, or permission of instructor. SPAN 4302-6302. Advanced Grammar. (3). Special problems in grammar; recommended for majors and minors.
PREREQUISITE: 3000 level Spanish course, or equivalent.
SPAN 4306-6306. Applied Spanish Linguistics. (3). Current research in linguistics, psycholinguistics and sociolinguistics and their contribution to second language teaching and second-language learning.
SPAN 4410-6410. Spanish Literature and Civilization. (3). Survey of literary movements and major figures with readings in literature and civilization. Required of majors. PREREQUISITE: 3312, or equivalent.
SPAN 4431. Contemporary Spanish Prose. (3). Spanish prose from Generation of 1898 to present. PREREQUISITE: SPAN 4410, or permission of instructor.
SPAN 4432. Contemporary Spanish Poetry and Drama. (3). Spanish poetry and drama from Generation of 1898 to present. PREREQUISITES: SPAN 4410 or permission of instructor.
SPAN 4510-6510. Spanish American Literature and Civilization. (3). Survey of literary movements and major figures with readings in literature and civilization. Required of majors. PREREQUISITE: SPAN 3312, or equivalent.
SPAN 4561. Pre-Contemporary Spanish American Prose Fiction. (3). Development of Spanish American novel and short story from beginnings through 20th century. PREREQUISITE: SPAN 4510.
SPAN 4562. Contemporary Spanish American Prose Fiction. (3). Spanish American novel and short story of 20th century. PREREQUISITE: SPAN 4510.
SPAN 4563-6563. Spanish Literary Genres. (3). Spanish peninsular literature; selections from origins to present time; emphasis on textual analysis. PREREQUISITE: SPAN 4410, or permission of instructor.
SPAN 4701. Spanish for Commerce I. (3). Spanish business terminology and correspondence. PREREQUISITE: any 3000-level Spanish course, or permission of instructor.
SPAN 4702. Spanish for Commerce II. (3). Business concepts and documents. PREREQUISITE: any 3000 level Spanish course, or permission of instructor.
SPAN 4780. Individual Studies in Spanish. (1-3). Directed individual study in selected areas of Spanish chosen in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.
SPAN 4790-99. Special Topics in Literature and Linguistics. (3). Literary topics include medieval literature, Golden Age, 19th century literature, and Spanish American drama. May be repeated for maximum of 6 hours credit. PREREQUISITE: permission of instructor.

## (SPED) SPECI AL EDUCATI ON

Department of Instruction and Curriculum Leadership<br>REBECCA ANDERSON, PhD., Chair<br>Room 106D, E.C. Ball Hall<br>http://icl.memphis.edu/

SPED 2000. Issues of Human Diversity. (3). Overview of special education including historical and legal perspectives of the field, characteristics of each exceptionality, and educational and community services utilized by exceptional persons and their families. Field experience: 5 hours.
SPED 3002. Independent Study in Special Education. (1-6). Opportunity for self-directed study and/or research under supervision. PREREQUISITE: consent of department.
SPED 3201. Behavioral Support for Students in Diverse Settings. (3). Identification and education of students with behavioral excesses, including those who have been certified as seriously emotionally disturbed; causative factors, characteristics, appropriate educational placement alternatives and practices. Practicum ( 30 hrs .) with students with emotional/behavioral disorders and/or pervasive developmental disorders. PREREQUISITE: SPED 2000.
SPED 3401. Academic Support for Diverse Learners. (3). Historical and current practices in providing services for students with learning disabilities and related learning problems; characteristics, current research-based instructional practices; special education teacher's role in implementing support services. Practicum ( 30 hrs .) with students with learning disabilities.
PREREQUISITE: SPED 2000.
SPED 3501. Support for Students with Mental Retardation. (3). Definitions, etiology, and characteristics associated with mild to severe mental retardation; examination of evaluation, services and strategies used in educational, prevocational, and transitional settings; access and use of assistive technology. Practicum ( 30 hrs .) with students with mental retardation.
PREREQUISITE: SPED 2000.
NOTE: SPED 3800, 3801, 3802, and 3803 must be taken as Corequisites. The Prerequisites for this sequence are SPED 2000, 3201, 3401, 3501, ECED 4500, ELED 4240, 4242, and admission to TEP.
SPED 3800. Methods, Materials and Curriculum for Learners with Mild Disabilities. (3). Curriculum, methods, and materials applicable to special educational needs of learners with mild disabilities in primary, intermediate and secondary levels; emphasis on programming techniques and implementation of appropriate interventions in special education or regular settings PREREQUISITE/COREQUISITE: see NOTE above.
SPED 3801. Practicum with Learners Having Mild Disabilities. (3). Planning and implementation of special education
methods and materials with learners having mild disabilities PREREQUISITE/COREQUISITE: see NOTE above. (S/U)
SPED 3802. Assessment of Learners with Disabilities. (3). Tests and measurements used with learners having disabilities; diagnostic achievement testing as related to instructional planning. Includes other major assessment instruments and procedures used in evaluation of mild to severe exceptionalities. PREREQUISITE/COREQUISITE: see NOTE above.
SPED 3803. Behavior Management for Learners with Disabilities. (3). Advanced strategies for managing social behaviors of learners with mild to severe disabilities; techniques for eliminating maladaptive behaviors, managing aggressive and antisocial students, and teaching appropriate social skills. PREREQUISITE/COREQUISITE: see NOTE above.
SPED 4000-6000. Methods, Materials and Curriculum for Learners with Moderate/ Severe Disabilities. (3). Curriculum, methods, and materials applicable to special educational needs of learners with moderate to severe disabilities; emphasis on educational and vocational skills that facilitate normalization and independent living. PREREQUISITE: SPED 3800, 3801.
COREQUISITE: SPED 4001.
SPED 4001. Practicum with Learners Having Moderate/ Severe Disabilities. (3). Planning and implementation of special education methods and materials with learners having moderate to severe disabilities. PREREQUISITE: SPED 3800, 3801.
COREQUISITE: SPED 4000. (S/U).
SPED 4101-10. Special Topics in Special Education. (1-3). Investigation in selected areas of special education. Topics are varied and in online class listings.
SPED 4513-6513. Assistive Technology, Transition I ssues, and Community Based Instruction. (3). Transition issues, life skills, vocational education to prepare students having significant exceptionalities for community living; legal and family concerns; effective transition programming; familiarity with available community resources and interagency collaboration; augmentative/alternative communication. PREREQUISITE: SPED 3501 or 4900.
SPED 4601-6601. Accommodations for Students with Physical/ Health I mpairments. (3). (3601). Educational and environmental modifications; accommodations to facilitate learning and vocational skills in general and special education; characteristics and etiology of mild to severe physical/health disabilities; supportive educational, medical, therapeutic interventions. Practicum ( 30 hrs.) with students with physical/health disabilities. PREREQUISITE: SPED 2000.
SPED 4801-10-6801-10. Workshop in Special Education (1-9). For professionals in field of special education. Intensive examination of current methodologies, research, issues and trends in various areas of exceptionalities. See online class listings for specific workshop title.
SPED 4900-6900. Consultation with School/ Family/ Community. (3). Professional development issues which impact on educator interaction with students, parents and other professionals, including the development of communication and consultation skills. Practicum included.

## (SWRK) SOCI AL WORK

## School of Urban Affairs and Public Policy Division of Social Work <br> JEROME BLAKEMORE, Ph.D., Director <br> Room 114, McCord Hall <br> http://cas.memphis.edu/Socialwork/

SWRK 2910 and 2911 are prerequisites for all other courses in the Division of Social Work; may be taken after earning 40 credit hours, as specified in the note accompanying the requirements for the major; and are required of Social Work Majors.
SWRK 2910. Social Work Profession and Practice. (3). Overview of social work as profession, including introduction to its value base, knowledge base, and skill base; and roles of social workers in social service agencies. Community laboratory experience required. Two and one-half lecture hours, one and one-half laboratory hours per week. NOTE: The following courses are to be taken prior to or concurrently with SWRK 2910: ENGL 1020, ANTH 1200; and two courses with a minimum grade of "C" from the following: SOCl 1111, PSYC 1200, POLS 1100, or ECON 2120.
SWRK 2911. Social Response to Human Need. (3). Introduction to historical and contemporary issues related to American social welfare systems; analysis of impact on vulnerable populations, value implications, change processes, and culturally relevant concepts of need. Volunteer experience required. NOTE: The following courses are to be taken prior to or concurrently with SWRK 2911: ENGL 1020, ANTH 1200; and two courses, with a minimum grade of "C", from the following: SOCI 1111, PSYC 1200, POLS 1100, or ECON 2120.
SWRK 3902. Human Behavior and Social Environment. (3). Overview of human development from birth through old age; focus on interaction of biological, psychological, and socio-cultural factors; major developmental theories, transitional phases, and variant lifestyles; relevance to social functioning and social work practice. PREREQUISITE: SWRK 2910 or 2911 and BIOL/MMCS 1010/1011, or permission of instructor.
SWRK 3903. Social Work Practice I. (4). Overview of traditional social casework methodology; emphasis on theoretical approaches and generalist practice; beginning applications of case study model. PREREQUISITE: SWRK 2910, 2911, 3902, or permission of director.
SWRK 3904. Social Work Practice II. (3). Continuation of SWRK 3903, with emphasis on application of theory through assessment, intervention planning, use of community resources, and functions of social workers; extensive case analysis. PREREQUISITE: SWRK 3903.
SWRK 3906. Social Work Practice III. (3). Theory and application of group dynamics concepts as applied to individual in group, committee and community structures and functions, roles of social worker in these settings. PREREQUISITE: SWRK 2910,

2911, and 3903. COREQUISITE: SWRK 4830 and 4840.
SWRK 3920. Social Welfare Policies and Programs: Theory and Application. (3). Overview of social welfare policy development and methods; programs resulting from these efforts; influence of competing value orientations; exposure to differing models of policy analysis; and implications for professional practice including the role of social work in developing, implementing, and evaluating social programs. PREREQUISITE: SWRK 2910 and 2911. COREQUISITE: SWRK 3930.
SWRK 3930. Social Work Research. (3). History and methods of social work research including scientific thinking, application of statistical operations, and systematic approaches to acquisition of social work knowledge. PREREQUISITE: SWRK 2910 and 2911 and SOCl 3311.
SWRK 4830. Field Instruction in Social Work I (3). Supervised internship in social service agency or program. Minimum two days per week required. PREREQUISITE: SWRK 3904. COREQUISITE: SWRK 3906 and 4840.
SWRK 4831. Field Instruction in Social Work II. (4). Continuation of supervised internship. Minimum three days per week required. PREREQUISITES: SWRK 4830 and 4840. COREQUISITE: SWRK 4841.
SWRK 4833. Religion and Spirituality in Social Work Practice. (3). Importance of religion and spirituality in shaping belief systems; psychosocial development; development of social policy; significance of religious institutions in providing social services; examines how religion and spirituality influence the individual, family, community.
SWRK 4840. Integrative Field Seminar I. (2). Integration of social work theory with field instruction experiences.
COREQUISITE: SWRK 4830 and 3906.
SWRK 4841. Integrative Field Seminar II. (2). Continuation of SWRK 4840. COREQUISITE: SWRK 4831.
SWRK 4911-19. Special Topics in Social Work. (3). Topics of contemporary interest in social work profession and in social welfare practices. PREREQUISITE: SWRK 2911, or permission of instructor.
SWRK 4933. Directed Individual Study. (1-4). Directed advanced reading, field study and/or research in special areas of social work, not otherwise provided in curriculum. NOTE: no more than 4 hours may be taken in any one semester. May be repeated for maximum of 6 hours credit. PREREQUISITE: Social Work major and permission of director, Division of Social Work.
SWRK 4934. Child Welfare Policy and Services. (3). Historic overview and contemporary application of child welfare policy; problems in policy development; contemporary American child welfare services in both public and private domains. PREREQUISITE: SWRK 2910, 2911, and 3920.

## (TECH) TECHNOLOGY

Department of Engineering Technology DEBORAH J. HOCHSTEIN, M.S., Chair Room 203, Engineering Technology Building http://www.et.memphis.edu
TECH 1010. Computer Applications In Technology. (3). Introduction to computer applications using PC's networked to TigerLAN; file management; spreadsheets; programming; Internet application in technology.
TECH 1411. Introduction to Technology. (1). Emphasis on engineering technology programs relative to content and opportunities upon graduation; professionalism and ethics technical careers; communication in technical careers; activities related to various technological disciplines; approaches to basic research techniques and problem solving.
TECH 1521. Graphics and Descriptive Geometry. (3). Orthographic projections, sections, pictorials; drafting with instruments, sketching, and introduction to computer aided drafting. Auxiliary views and revolutions, profiles, vector graphics and developments. Two lecture hours, three laboratory hours per week.
TECH 3044. Analysis for Engineering Technology. (4). Application of mathematical, scientific, and engineering principles to solution of technology problems, using a variety of examples from various major areas in Technology; analyze and provide acceptable solutions to ascending order of well designed problems using language and techniques or related technological disciplines and selected areas of mathematics, such as algebra, trigonometry, calculus, applied industrial statistics, and differential equations. Three lecture hours, three laboratory hours per week. PREREQUISITE: MATH 1910. [C]
TECH 3691. Construction Estimating. (3). Fundamentals of commercial and light frame estimating; emphasis given to conducting a quantity survey, including unit and overhead costs.
TECH 3940. Analytic Approaches to Public Fire Protection. (3). Systems analysis and its use and limitations in fire protection and other problem areas; illustrated with case studies and models using the systems approach to fire suppression and prevention. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology. [C] TECH 3942. Fire Related Human Factors. (3). Dynamics of human behavior in fire incidents related to building design, codes and ordinances, and other fire prevention practices. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology.
TECH 3944. Fire Protection Structure and Systems Design. (3). Design principles involved in protection of structure from fire involvement empirical tests and prediction procedures; control detection, and suppression system design practices; fundamentals of hydraulic design of sprinkler and water spray systems with recent innovations. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology.
TECH 3945. Fire Investigation and Analysis . (3). Procedures and techniques for collection, comparison, and analysis of physical evidence related to fire origin; principles of evidence of ignition phenomenon and propagation variables; legislative, economic, psychological, and sociological variables of incendiary fire, role of insurance and government programs. PREREQUISITE: students of B.P.S. degree in Fire Administration or Fire Prevention Technology program.

TECH 3946. Fire Dynamics. (3). Fire propagation phenomenon in both fuel and air regulated phases; variables in pre- and postflash over fire development; geometric, material, gaseous, fluid flow, and thermodynamic parameters; compartment and building fire models. PREREQUISITE: student of B.P.S. degree in Fire Administration or Fire Prevention Technology program.
TECH 3947. Applications of Fire Research. (3). Fire research and its application; transfer and implications of available research results for fire prevention and protection programs; national and international studies and research developments. PREREQUISITE: student of B.P.S. degree in Fire Administration or Fire Prevention Technology program.
TECH 3948. Managerial Issues in Hazardous Materials. (3). Examination of federal regulatory issues, hazard identification and vulnerability analysis, multi-agency contingency planning, response personnel, multi-agency response resources and systems; discussion of agency policies, public education and emergency information systems, health and safety issues, command post dynamics, strategic and tactical considerations, recovery and termination procedures. PREREQUISITE: enrollment in B.P.S. degree in Fire Administration or Fire Prevention Technology program.
TECH 4510. Construction Planning and Scheduling. (3). Principles of planning, scheduling, organizing, and controlling construction projects; studies in critical path method (CPM) and PERT, with resource leveling and financial scheduling; computer applications in CPM and PERT emphasized.
TECH 4999. Engineering Technology Projects. (1-3). Independent investigation of engineering technology problems in consultation with instructor. May be repeated for a maximum of 6 hours credit. PREREQUISITE: senior standing.

## (THEA) THEATRE

Department of Theatre and Dance ROBERT A. HETHERINGTON, M.A., Chair Room 143, Theatre and Communication Building https://umdrive.memphis.edu/g-theatre/www/

NOTE: In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000-and 4000-level courses in the Department of Theatre and Dance.
THEA 1030. Introduction to Theatre. (3). (1551). Experiential, conceptual, historical, and cultural study of theatre as a unique form of artistic expression and mirror of human experiences and values throughout the world; survey of constituent elements of a theatrical work and its major forms of expression. Attendance at live theatre productions required. [G] *
THEA 1411. Basic Oral Interpretation. (3). Introduction to interpretation of literature in performance; develop and heighten performer's responsiveness to the literary text.
THEA 1561. I ntroduction to Design. (3). Historical and conceptual survey of basic elements of production, scenery, costumes, lighting, sound, and their relation to theatrical production process.
THEA 2501. Stage Movement. (3). Introduction to movement as basic element of actor's craft; freeing the body/mind in order to understand. develop, recognize natural physical actions and rhythms and their application to stage. PREREQUISITE: permission of instructor. [G]
THEA 2511. Introduction to Technical Production. (3). Lecture/laboratory covering all phases of craft skills and equipment involved in technical theatre production. Required lab work.
THEA 2512. Introduction to Theatre Graphics. (3). Introduction to graphic communication processes of technical theatre. Mechanical drafting and CAD for scenery, properties, sound and lighting design; poster and program graphics. (Offered alternate years)
THEA 2530. Acting for Non-Majors. (3). Introduction to craft of acting; development of actor's individual potential through basic technique; performance of short scenes in class.
THEA 2531. Performance Fundamentals. (3). Synergy of text, voice, and movement in the development of the performer's instrument. PREREQUISITE: permission of instructor.
THEA 2532. Acting I. (3).. Development of character through dramatic action utilizing monologue, scene, improvisational work.
Two lecture hours, two laboratory hours per week. PREREQUISITE: THEA 2531, or permission of instructor.
THEA 3212. Dynamics of Vocal Production I. (3). Interrelation of body and voice in performance; freeing the voice through posture related breathing; exploring phonation through body dynamics; using consonant energy in text. Two lecture hours, two laboratory hours per week. PREREQUISITE: permission of instructor.
THEA 3213. Dynamics of Vocal Production II. (3). Further explorations in the interrelation of body and voice in performance particularly pitch and resonance, consonant, tonal, and structural energies in text. PREREQUISITE: THEA 3212, or permission of instructor.
THEA 3412. Directing Experiments. (3). Theatrical image; creative exercises in imaginative use of space, time, and materials as they relate to stage direction and design. (Offered alternate years)
THEA 3505. Movement Styles. (3). Mime, theatre related to dance and period movement styles. PREREQUISITE: THEA 2501, or permission of instructor.
THEA 3506. Stage Combat. (3). Rapier, dagger, and unarmed combat. PREREQUISITE: permission of instructor.
THEA 3511. Stagecraft. (3). Lecture/laboratory includes theatre terminology, theatre forms, production organization, job descriptions, and safety; scenery construction to include painting, flat scenery, three-dimensional scenery, and introduction to steel materials. Required lab work. (Offered alternate years) PREREQUISITE: THEA 2511.
THEA 3531. Acting II. (3). Development of partnership work within scenes. Two lecture hours, two studio hours per week.

PREREQUISITE: THEA 2532, or permission of instructor.
THEA 3532. Acting III. (3). Development of ensemble work within scenes. Two lecture hours, two laboratory hours per week. PREREQUISITE: THEA 3531, permission of instructor.
THEA 3551. Audition Preparation Performance Laboratory. (2). Exploration of audition process from material selection to final presentation; practical business information (resume, photo and job opportunities. PREREQUISITE: permission of instructor. THEA 3561. Principles of Scene Design. (3). Application of principles to various theatrical conventions and configurations.
(Offered alternate years)
THEA 3562. Principles of Costume Design. (3). Techniques of costume design with special attention to character interpretation and design visualization. Open to non-majors with permission of instructor. (Offered alternate years).
NOTE: THEA 3601, 3602, 3603, 3604, 3605, 3606, 3607, 3608, and 3609 include preparation for and participation in departmental theatre productions. Individualized work is in the form of supervised laboratory situations. Running crews for season productions selected from participating labs. Each course may be repeated for a maximum of 3 hours credit with permission of the instructor.
THEA 3601. Management and Publicity Production Laboratory. (1).
THEA 3602. Costumes Production Laboratory. (1).
THEA 3603. Lighting Production Laboratory. (1).
THEA 3604. Sound Production Laboratory. (1).
THEA 3605. Scenery Production Laboratory. (1).
THEA 3606. Props Production Laboratory. (1).
THEA 3607. Make-up Production Laboratory. (1).
THEA 3608. Dance Production Laboratory. (1).
THEA 3609. Stage Management Production Laboratory. (1). May be repeated for a maximum of 3 hours credit with permission of instructor.
THEA 4210-19-6210-19. Special Topics in Theatre. (1-3). Topics are varied and in the online class listings. May be repeated for a maximum of 9 hours credit when topic varies.
THEA 4220-6220. Acting for the Musical Theatre. (3). Exploration of techniques that allow the performer to fuse the act of acting and singing. PREREQUISITE: THEA 2532, MUAP 1100, 1610, or equivalency exam/audition and permission of instructor. THEA 4221-6221. Stage Dialects. (3). Transcription for International Phonetic Alphabet (IPA). Voice and dialect technique for conveying dramatic intention and character. PREREQUISITE: permission of instructor.
THEA 4222-6222. Asian Theatre. (3). History and theory of traditional and contemporary theatre forms in Asia; study of cultural and social history. PREREQUISITE: permission of instructor. Offered alternate years.
THEA 4441. Performance Repertory. (3). Group performance in dramatic and narrative theatre styles as well as dance and theatre movement. May be repeated for a maximum of 9 hours credit. PREREQUISITE: prospective students must audition for and be cast in the Memphis Moving Line Company.
THEA 4455. Directing Narrative Theatre. (3). Directing techniques for staging literary texts not originally written for the theatre. Includes script adaptation of short stories, poetry, and non-fiction prose. Directing projects required. (Offered alternate years) PREREQUISITE: THEA 4521, or permission of instructor.
THEA 4457-6457. Vocal Styles for Performance. (3). Exploration of language based characterization as it evolves from structure and style of text. PREREQUISITE: THEA 3212, or permission of instructor.
THEA 4501-6501. Advanced Movement Styles. (3). Study in physical theatre styles. Varied semester topics: performance art; fighting styles for period weapons, physical theatre techniques for theatre teachers, choreographers and directors. May be repeated for a maximum of 6 hours credit when content varies. PREREQUISITE: permission of instructor.
THEA 4503-6503. Creative Dramatics. (3). Basic techniques and theories for use of dramatization in elementary and secondary education. Includes socio-drama, dramatization of school subjects and daily concerns, and improvisation and creation of dramatic plays.
THEA 4514-6514. Theatrical Rendering Techniques. (3). Materials and techniques for rendering theatrical space and scenic, costume, lighting, and properties design elements.
THEA 4515-6515. Scene Painting. (3). Lecture/laboratory covering techniques of painting scenery for stage. PREREQUISITE: THEA 3561. (Offered alternate years)
THEA 4516-6516. Technical Direction. (3). Lecture/ laboratory for theatre technicians includes production organization and safety, engineering, rigging, materials control and supply ordering. PREREQUISITE: THEA 3511. (Offered alternate years)
THEA 4521. Principles of Stage Direction. (3). Exploration of conceptual, planning and implementation skills of stage director from script interpretation to rehearsal and performance; attention to both traditional and non-traditional theatrical modes. Directing projects required. (Offered alternate years) PREREQUISITE: THEA 3412, or permission of instructor.
THEA 4531-6531. Acting Styles. (3). Development of acting styles as influenced by environments of historical periods. May be repeated for maximum of 6 hours credit with change of course content. PREREQUISITE: THEA 3532, or permission of instructor.
THEA 4532-6532. Mask Performance. (3). Creation and performance of the character mask; development of the mask from construction to character realization. PREREQUISITE: permission of instructor.
THEA 4541. Internship. (1). Supervised work in actual university, community, or professional theatre productions on internship basis. Credit varies with amount of time and responsibility involved. May be repeated for a maximum of 12 hours credit. PREREQUISITE: permission of Director of Theatre.
THEA 4549-6549. Theatre History. (3). Shaping forces and theatrical forms from early civilization to present time; emphasis on

## Western culture. (Offered alternate years)

THEA 4551-6551. Dramatic Literature I. (3). Comprehensive survey of dramatic literature from Greeks to 20th century; emphasis on problems of production. (Offered alternate years)
THEA 4552-6552. Dramatic Literature II. (3). Comprehensive survey of dramatic literature from 20th century to present; emphasis on problems of production. (Offered alternate years)
THEA 4553. Directed I ndividual Studies in Theatre. (1-3). For advanced student who wishes to do concentrated study in specific area of theatre. May be repeated for maximum of 9 hours credit. PREREQUISITE: permission of instructor.
THEA 4554-6554. Visual History for Theatrical Design I. (3). Design aesthetics of selected historical periods from ancient times through Victorian era as applied to theatrical design. PREREQUISITE: permission of instructor. (Offered alternate years) THEA 4555-6555. Scenic Technology. (3). Lecture/laboratory using traditional and contemporary materials and scenic techniques including rigging, metals and welding, wood working, and plastics. PREREQUISITE: THEA 3511, or permission of instructor. (Offered alternate years)
THEA 4556-6556. Lighting Technology. (3). Study of technical principles that support areas of theatrical lighting design; instrumentation and equipment, electricity and electronics, control systems, operational and maintenance principles and procedures for stage electricians. (Offered alternate years)
THEA 4557-6557. Costume Technology. (3). Intermediate costume construction techniques employing both traditional and experimental methods for sewing; brings costume design from concept to reality. PREREQUISITE: THEA 3562, or permission of instructor. (Offered alternate years)
THEA 4558-6558. Visual History for Theatrical Design II. (3). Design aesthetics of selected historical periods from Victorian era through 20th century as applied to theatrical design. PREREQUISITE: permission of instructor. (Offered alternate years)
THEA 4559-6559. Theatre of the African Diaspora. (3). Exploration of selected playwrights and theatre practitioners of West and South Africa, Caribbean, and African-American descent. Course includes performance projects. May be repeated for a maximum of 6 hours credit when content varies. PREREQUISITE: permission of instructor. (Offered alternate years)
THEA 4561. Scenic Design Studio. (3). Application of design principles to study of analysis, design process, and graphic skills; creative expression and portfolio development also stressed. (Offered alternate years)
THEA 4562. Lighting Design Studio. (3). Lecture/seminar/practicum investigation of art of lighting design; script analysis, design approaches and methodologies, procedures and practices for working designers, cue techniques, design styles and forms, and criticism of lighting design. Research project work and staged scenes required. PREREQUISITE: THEA 4556, or permission of instructor. (Offered alternate years)
THEA 4563. Costume Design Studio. (3). Theories and techniques of aesthetics of costume design as applied to contemporary theatre; script analysis for costume design; character and period interpretation through line, color, and fabric. (Offered alternate years)
THEA 4571-6571. Playwriting. (3). Theory and principles of writing plays for stage. Practice in writing either short or long play. May be repeated for maximum of 9 hours credit. (Offered alternate years) PREREQUISITE: permission of instructor. [W]
THEA 4582. Script Interpretation. (3). Exploration of the script as blueprint for realization of artistic stage image. Special attention given to plot, structure, character treatment, and language style as they relate to performance, direction, and scenography. (Offered alternate years) PREREQUISITE: major or minor in Department of Theatre and Dance. [W,I]
THEA 4591. Theatre Management. (3). Procedures and practices for stage management; theatrical production management; box office; publicity and promotion for theatre and performing arts; comparative study of commercial, educational, and amateur theatre operations. (Offered alternate years) [C]
THEA 4592-6592. Theatre Architecture And Facilities Planning. (3). Processes and techniques employed by theatre planners in design and construction/renovation of theatrical spaces and structures; survey of theatre forms, historical development of theatrical structures and spaces, programming methods and procedures, specification, renovation techniques, multi-use structure concepts, and consultation procedures and practices. (Offered alternate years) PREREQUISITE: permission of instructor.
THEA 4595-6595. Sound Technology. (3). Technical principles that support areas of theatrical sound design; digital and analog equipment, audio signal theory and technologies, systems design, software, and operational principles and procedures for theatrical sound engineers. (Offered alternate years)
THEA 4596. Sound Design Studio. (3). Lecture/seminar/practicum investigation of the art of theatrical sound design; script analysis, creative design processes and aesthetics, cue techniques, design styles and forms, procedures and practices for working designers and criticism of sound design. PREREQUISITE: THEA 4595, or permission of instructor. (Offered alternate years) THEA 4631-6631. Acting for Film and Television. (3). Educational experience for actor in media of film and television, concentrating on dramatic, commercial and documentary areas. (Offered alternate years) PREREQUISITE: permission of instructor. THEA 4982. Honors Seminar. (3). Intensive study of particular problems in theatre and dance. May be repeated for a maximum of 12 hours credit when topic varies. PREREQUISITE: permission department chair
THEA 4999. Senior Honors Thesis. (3). Supervised independent research project. Open only to students enrolled in the Theatre and Dance Honors Program. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission department chair.

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# (UNHP) UNI VERSI TY HONORS PROGRAM 

MELINDA L. JONES, Ph.D., Director<br>Room 204, Scates Hall<br>http://honors.memphis.edu/

UNHP 1100. The Honors Forum. (1). Weekly meeting of Honors students. Discussion led by faculty and/or students on various topics. Honors credit requires grade of "B" (3.0). May not be repeated to improve former grade.
UNHP 1101. Honors Humanities: The Global Challenge. (3). An interdisciplinary investigation of current global controversies and issues, integrating literature, art, and other forms of cultural expression. Honors credit requires grade of " B " (3.0). Substitutes for a Humanities/Fine Arts General Education requirement for Honors students.
UNHP 1102. Honors Social Science: The Global Challenge. (3). An interdisciplinary exploration of economic, human, cultural, and political dimensions of globalization. Honors credit requires grade of "B" (3.0). Substitutes for a Behavioral/Social Science General Education requirement for Honors students.
UNHP 3114. Honors Thesis Workshop. (1). Series of weekly meetings to provide prospective Honors thesis writers with the background and resources necessary to produce quality independent research. PREREQUISITE: third-year standing in Honors, or permission of the Director of the University Honors Program. (S/U).
UNHP 3250-3299. Special Topics. (1-3). To accommodate student interests and faculty inspiration. May feature scholars-inresidence, museum exhibits, or other timely opportunities. Innovation in content and format encouraged. May be repeated for credit as topic varies. May not be repeated to improve a former grade.
UNHP 3407. Evolutionary Perspectives. (3). Principles of anthropology, biology, chemistry, and geology as applied to evolutionary thoughts and processes. Three lecture hours per week. PREREQUISITE: 8 semester hours of Natural Science courses. UNHP 4150-4199. Contemporary Issues. (3). Selected contemporary issues to be approached in terms of demographic, social, economic, political, cultural, and historical dimensions; perspectives from social sciences and humanities; emphasis on social policies as problem solving strategies. Varied topics based on broad thematic areas such as public education; race and ethnic relations; criminal justice system; religion in public life; role of media in political discussion. May be repeated for credit as topic varies. May not be repeated to improve a former grade.
UNHP 4250-4299. Cross-Cultural Perspectives. (3). Emphasis on global environment; area study or thematic approach with consideration of demographic, social, economic, political, cultural, and historical dimensions; perspectives from social sciences and humanities. May include such topics and areas as concept of the Third World, the non-western mind, the Middle East, Eastern Europe, Japan, or post-colonial Africa. May be repeated for credit as topic varies. May not be repeated to improve a former grade. UNHP 4302. Mind, Brain, and Intelligence, Honors. (3). (Same as PSYC 4305, UNIV 4520). Interdisciplinary studies of cognition, behavior, emotion, intelligence, and brain mechanisms; synthesis of research contributions from cognitive science, neuroscience, artificial intelligence, and philosophy.
UNHP 4350-4399. Science and Technology. (3). Emphasis on relationship between science and technological innovation on the one hand and ethics, values, and public policy on the other. Includes basic science content suitable for non-science majors, as well as perspectives from social sciences and humanities. May include varied topics such as environmental issues, biomedical engineering, space program, artificial intelligence, human factors analysis, the mind and the brain. May be repeated for credit as topic varies. May not be repeated to improve a former grade.
UNHP 4404. Holocaust Studies. (3). (Same as JDST 4511, UNIV 4511). Synthesizing knowledge and methodologies from several disciplines; contexts and implications of the Holocaust; encompass periods before, during, and after the event to explore questions of human values and responsibility; research paper, journal, writing for oral presentation, and essay exam. Intended for seniors. [W,I]
UNHP 4450-4499. Interdisciplinary Special Topics. (3). Themes and topics that lend themselves to interdisciplinary discussion and analysis. Emphasis on texts and primary sources, as well as innovative teaching formats. May be team-taught by faculty from two or more disciplines. May apply toward Honors Certificate. May be repeated for credit as topic varies. May not be repeated to improve a former grade.
UNHP 4900. Advanced Honors Projects. (1-3). Designed for individuals or small groups of students working collaboratively. Students encouraged to design own projects. May include reading, research, discussion group, or experiential projects. Advanced projects assume sufficient background for advanced level. Credit varies according to project. Application to department and college honors programs at their discretion. Letter grade unless student application for credit/no credit approved before registration. May be repeated for a maximum of 9 hours credit. May not be repeated to improve a former grade.
UNHP 4999. Honors Thesis. (3). In conjunction with a faculty mentor, most often from student's major department. Guidelines for students and faculty and applications available from Honors Office. Preliminary applications should be completed two semesters in advance. Formal applications due before final examinations week in semester preceding semester in which credit sought. Letter grade unless student application for credit/no credit approved before registration. Honors credit requires grade of "B" (3.0). May not be repeated to improve a former grade.

## (UNI V) University College

DAN L. LATTIMORE, Ph.D., Dean
Room 218, J ohn Willard Brister Hall

Additional fees are charged for some University College lecture and laboratory courses. See the online class listings or the Expenses section of the Bulletin.
UNI V 1005. Directed Study. (1-3). Directed study at introductory level. Student may seek permission to study under faculty direction in an area not routinely taught. May be repeated for maximum of 6 hours credit. PREREQUISITE: approval of Out-of-Class Learning and Baccalaureate Contracts.
UNIV 1310. The Ancient World. (3) Peoples and cultures of ancient people; introduction to archaeology; classical worlds of Africa, Europe, Asia, the Americas. Key archaeological readings and films are utilized.
UNI V 2110. Field Experience. (1-6). Supervised on-site training in basic skills. May be repeated for a maximum of 6 hours credit. PREREQUISITE: Approval of Out-of-Class Learning and Baccalaureate Contracts. (S/U)
UNIV 2304. Gender and Society. (3). Sources, development, and effect of gender hierarchy on self-concept, quality of life, and ability to effect social change; subordination of women of different classes, races, and ethnicities across nationalities, cultures, and centuries; symbol, myth, and psychology in human development and gender divisions of power within historical struggle for control of world's wealth. [G]
UNI V 2860. Historical/ Philosophical Perspectives on Cultural Confrontations. (3). Interdisciplinary examination of causes and effects of conflicts between and within cultures. Examines notion of cultural unity, issues of cultural identify, and categories used to construct cultural positions; European, African, Asian, and Native-American cultures studied in order to assess historical and philosophical viewpoints that influence understandings of contemporary society.
UNI V 3200. Aviation Administration. (3). Administrative principles as applied to airport operations, general aviation, government operations and enforcement, airline companies, and manufacturing companies; emphasis upon Federal Aviation Administration regulations that govern and guide the administrator in these areas.
UNI V 3300. Medical I llustration Techniques I. (3). Special techniques used by illustrators working in medical settings.
UNIV 3301. Medical Illustration Techniques II. (3). Further instruction in special techniques used by illustrators working in medical settings. Work with case problems.
UNIV 3302. Biomedical Photography. (3). Special techniques used by photographers working in medical settings.
UNI V 3500-3599. Thematic Studies. (3-9). Interdisciplinary courses about significant problems, themes, or ideas.
UNI V 3527. Making the Humane City. (6). [W]
UNI V 3531. American Experience: Images and Narrative. (3). Organized around "images" and "narratives"; utilizes a variety of cultural materials to enhance appreciation of the peoples and experiences that define the term "American."
UNI V 3550. Clash of Cultures. (3). Multi-leveled, complex, and consequential clashes that have shaped American culture and much of the modern world.
UNI V 3580. Hebrew and Greek Legacy. (3). Interdisciplinary examination of salient ideas, values, and traditions of ancient Hebraic and Greek cultures, with emphasis on those ideas and values that have most significantly influenced the modern world; understanding of ideas and values enhanced through comparison with selected non-Western traditions. [G] *
UNI V 3581. Faith, Reason, and I magination. (3). Interdisciplinary examination of religious, rationalist, and aesthetic viewpoints as distinctive ways of understanding what is fundamental to human experience. Exploration of historical development of each of these modes of understanding and examination of tensions that exist among them in modern world. [G] *
UNI V 3700-3739. Special Topics. (1-6). Topics are varied and in online class listings.
UNI V 4000. Community Internship. (3). Extensive professional preparation as an intern in a community setting that may limit student's enrollment in other courses. PREREQUISITE: permission of student's department chair. Note: students enrolled in UNIV 4000 are considered to be full time students for enrollment certification purposes.
UNI V 4110. I nternship. (3-6). Supervised training in work related to student's educational objectives. PREREQUISITE: approval of Out-of-Class Learning and Baccalaureate Contracts. (S/U).
UNI V 4380. I ndependent Study. (1-3). Directed individual study or research. Students who have identified area of study pertinent to their coordinated study program, that is not routinely taught, may pursue the study under direction of faculty member. May be repeated for a maximum of 6 hours credit. PREREQUISITE: approval of Out-of-Class Learning and Baccalaureate Contracts.

UNI V 4500-4599. Advanced Thematic Studies. (3-9). Advanced interdisciplinary courses about significant problems, themes, or ideas.
UNI V 4511. Holocaust Studies. (3). ( Same as JDST 4511, UNHP 4404). Synthesizing knowledge and methodologies from several disciplines; contexts and implications of the Holocaust; encompass periods before, during, and after the event to explore questions of human values and responsibility; research paper, journal, writing for oral presentation and essay exam. Intended for seniors. [W,I]
UNI V 4520. Mind, Brain, and Intelligence. (3). (Same as PSYC 4305 and UNHP 4302).
UNIV 4527. The Developing Adult. (3). Early, middle, and late adulthood; social relationships; retirement issues and options; choice in living arrangements; end-of-life concerns.
UNI V 4529. Character and Society in Contemporary America. (6). (3529). [W, I]
UNI V 4700-09. Advanced Special Topics. (3-6). Advanced examination of selected topics in online class listings
UNIV 4830. Israeli/ Arab Conflict. (3). (Same as J DST 4830). Historical, political, cultural dimensions of tensions that have existed between Israelis and Arabs since the founding of the State of Israel with attention to current situation

UNIV 4990. Project Planning Seminar. (1). Selected and individualized methodology related to identifying, planning, conducting, analyzing, and reporting research related to the culminating special project. PREREQUISITE: Senior Standing and approved baccalaureate contract or interdisciplinary degree guidelines and permission of Associate Dean. (S/U). UNIV 4995. Senior Project. (3). Academic research or other creative activity resulting in tangible project to demonstrate synthesis of student's Coordinated Study. PREREQUISITE: Completion of UNIV 4990 or equivalent and approval of a learning contract for the project. Students will receive an in-progress grade or a letter grade. [W, I]

## (UNI V) EXPERI ENTI AL LEARNI NG

DAN L. LATTIMORE, Ph.D., Dean
Room 218, John Willard Brister Hall
http://www.uc.memphis.edu/
A portfolio describing and documenting knowledge gained through experience or non-traditional instruction may be prepared by a University College student for assessment by a faculty member. This learning must be related to the Coordinated Study. (See Expenses and Aid and Academic Regulations sections for more details.) That faculty assessor recommends the descriptive title, level, and amount of credit to be assigned by the dean of University College. A maximum of 31 hours may be applied to a degree. Credit is posted to the student's transcript as follows.
UNIV 1900. Introductory Level Experiential Learning in (descriptive title).
UNIV 2900. Intermediate Level Experiential Learning in (descriptive title).
UNIV 3900. Advanced Level Experiential Learning in (descriptive title).

# (WMST) WOMEN'S STUDI ES 

Interdisciplinary Studies Office
NELE HEMPEL , Ph.D., Director
Room 107, Scates Hall
http://cas.memphis.edu/isc/wmst
WMST 2100. Introduction to Women's Studies. (3). Exploration of racially diverse women's experience, focus on contemporary issues; overview of different disciplinary and theoretical approaches to understanding women's status.
WMST 4340. Independent Study. (3). Readings and writing assignments designed to further the student's understanding of a specialized area within women's studies.
WMST 4380-99. Special Topics in Women's Studies. (3). Topics are varied and in online class listings. Last Updated: 6/12/15


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[^1]:    PETE 4300. Curriculum and Integrated Learning in Middle and Secondary School Physical Education. (4). (EXSS 4808 and 4809). Teaching strategies, management techniques, curricula planning, evaluation and research for effective physical education teaching in grades 7-12. Part of PETE Instructional Block taken in the Fall of Senior year. Block course may be taught in local Professional Development Schools. Students must be accepted into the Teacher Education Program to enroll in this course. COREQUISITE: PETE 3800, 4200, and 4400.
    PETE 4400. Learner Assessment in School Based Physical Education. (3). Emphasis on assessment techniques, tools, resources and their application to assessment in school based physical activity programs. Part of PETE Instructional Block taken in the Fall of Senior year. Block courses may be taught in local Professional Development Schools. Students must be accepted into the Teacher Education Program to enroll in this course. COREQUISITE: PETE 3800, 4200, and 4300. [C]
    PETE 4800. Professional Seminar: Preparing Educational Leaders in Physical Education. (3). Senior seminar taken concurrently with student teaching which requires student to analyze and seek solutions to problems encountered in current practices and issues in education and specific to physical education; integrate and synthesize knowledge and experiences in development of role as professional education leader. The student's Professional Development Portfolio (PDP) is assessed as part of this course. Student must be accepted into the Teacher Education Program to enroll in this course. COREQUISITE: student teaching. [I]
    PETE 4909. Student Teaching in PETE. (9). Full-time planned and supervised experience in a setting appropriate to student's area of specialization; synthesize knowledge and skills; demonstrate professional competencies in educational settings. PREREQUISITE: approval from Teacher Education Director. COREQUISITE: PETE 4800.

[^2]:    Last Updated: 6/12/15

