## 2008-2010 Graduate Catalog

MIDDLE TENNESSEE STATE UNIVERSITY

INTELLIGENCE PLUS CHARM GOOD FOR
established 1911

## Statement of Mission

Middle Tennessee State University unites the closeness of a small college with the opportunities of a large dynamic public university where students explore their intellectual potential and realize the promise in their futures. Grounding students in the arts and sciences, the University offers an integrated, technological, innovative education that prepares leaders for the economic, political, civic, and social life of the region and beyond.

The University is dedicated to promoting openness and educating a diverse student body from across the nation and around the world through comprehensive undergraduate and select master's and doctoral programs. MTSU prepares students to live productively and to become lifelong learners; to employ scientific knowledge and an understanding of culture and history; to think logically, critically, and creatively; to communicate clearly; to make sound judgments; to acquire working knowledge of a discipline or group of related disciplines; and to participate as citizens in the global community. The MTSU community creates knowledge through research and uses scholarship to enhance teaching and public service.

The University fosters an environment conducive to learning and personal development; recruits exceptional faculty and maintains support services to assist instruction; provides re-
sources to encourage research, creative activity, and service; develops individual, corporate, and public support; encourages excellence in athletics and recreational activities; establishes academic partnerships that support student-centered learning; works continually to strengthen and enhance the academic core; and supplies resources to accomplish its mission.
A major public institution of higher learning, MTSU is a member of the State University and Community College System of Tennessee.

## Vision

The Academic Master Plan creates a strategic blueprint that defines the University's vision, underscoring MTSU's commitment to leadership in higher education and to building Tennessee's future. It commits the University to achieving excellence in academics and to advancing student-centered learning. To this end, the University employs emerging technologies while honoring a sense of community, history, and tradition. Selective new academic programs strengthen partnerships with appropriate constituencies.

Approved December 2004


## Graduate Studies Calendar, 2008-10

## Calendar subject to change as conditions may require.

Please note: Admission to graduate studies consists of dual admission to the College of Graduate Studies and an individual graduate program for all degree-seeking students. Deadlines for application may differ for international and domestic students. Individual program deadlines may also differ from those of the College of Graduate Studies. Refer to the deadlines both within and following the University Calendar for details. When there are two deadlines stated, the earlier deadline takes precedence for receipt of all application materials at the College of Graduate Studies. Refer to the Glossary of Terms pages for additional information.
Please see RaiderNet (www.mtsu.edu/pipelinemt) each semester for registration, fee payment, drop/add, and other important dates.
Contact MTSU Testing Services at www.mtsu.edu/~countest/ for information on registering for all entrance exams.

## Fall Semester 2008

April 1

June 1

August 1

August 1

August 25
September 1
September 8
September 19
September 30
October 1

October 11
October 11-14
October 18
October 31 Last day to file theses and dissertations
November 10-21 Early Registration for Spring semester
November 21 Comprehensive Examination results
due in College of Graduate Studies
November 27-29 Thanksgiving Holiday-NO CLASSES
December 3
December 4
December $5 \quad$ Last day to remove "I" grades for December graduation
December 5-11 Final examinations

December 10 Completed Spring 2009 Graduate Assistantship contracts due in College of Graduate Studies
December 13
December 15 Commencement Deadline for submission of final grades

## Spring Semester 2009

August 1

October 1

December 10

January 1

January 15
January 19
January 29
February 13
February 24
March 1

March 9-13
March 13
March 14
March 27
March 28
April 1

International Applicants Only: Spring 2009 application deadline to College of Graduate Studies
Domestic Applicants: Spring 2009 application deadline to College of Graduate Studies
Completed Spring 2009 Graduate Assistantship contracts due in College of Graduate Studies
International Applicants Only: Summer 2009 application deadline to College of Graduate Studies
Classes begin
Martin Luther King Holiday-NO CLASSES
Last day to file Intent to Graduate form for May graduation
Fall semester Graduate Academic Suspension Appeal Applications due Graduate Academic Suspension Hearings Domestic Applicants: Summer 2009 application deadline to College of Graduate Studies
Spring Break-NO CLASSES University Holiday-All offices closed Written Doctoral Qualifying Examinations begin
Last day for filing theses and dissertations for May graduation
Written Master's and Specialist's Comprehensive Examinations begin International Applicants Only: Fall 2009 application deadline to the College of Graduate Studies

April 6-17 Early registration for Summer and Fall
April $27 \quad$ Comprehensive Examination results due in College of Graduate Studies Last day of classes
Study Day-NO CLASSES
Completed Summer 2009 Graduate Assistantship contracts due in College of Graduate Studies
May 1 Last day to remove "I" grades for May
May 1-7
May 9
May 11 graduation
Final examinations
Commencement
Deadline for final grades

## Summer 2009 Full Term (May 11-August 7)

January 1

April 1

April 30

May 11
May 25
June 1

June 5
June 12
June 20
June 23
June 26
June 27
July 3
July 27
July 31
August 1

August 1

August 6-7
August 8
August 10

March 1 Domestic Applicants: Summer 2009 application deadline to College of Graduate Studies
International Applicants Only: Summer 2009 application deadline to College of Graduate Studies International Applicants Only: Fall 2009 application deadline to College of Graduate Studies
Completed Summer 2009 Graduate Assistantship contracts due in College of Graduate Studies
Classes begin
Memorial Day Holiday-NO CLASSES Domestic Applicants: Fall 2009 application deadline to College of Graduate Studies
Last day to file Intent to Graduate form for August graduation
Spring semester Graduate Academic Suspension Appeal applications due Written Doctoral Qualifying Examinations begin
Graduate Academic Suspension Hearings
Last day for filing theses and dissertations for August graduation
Written Master's and Specialist's Comprehensive Examinations begin Independence Day Holiday-NO CLASSES
Comprehensive Examination results due in College of Graduate Studies Last day to remove "I" grades for August graduation
International Applicants Only: Spring 2010 application deadline to College of Graduate Studies Graduate Studies
Completed Fall 2009 Graduate Assistantship contracts due in College of Graduate Studies
Finals examinations
Commencement
Deadline for final grades

Summer S1-May Term (May 11-May 29)
For additional important dates see Summer 2009 Full Term
May 11
Classes begin
May $25 \quad$ Memorial Day holiday-NO CLASSES
May 29 Final examinations
June $5 \quad$ Last day to file Intent to Graduate form for August graduation
June 26 Last day for filing Theses and Dissertations for August graduation

## Summer S2-June Term (June 1-July 2)

For additional important dates see Summer 2009 Full Term
June $1 \quad$ Classes begin
June $5 \quad$ Last day to file Intent to Graduate form for August graduation
June 26 Last day for filing Theses and Dissertations for August graduation
July 1-2
Final examinations

## Summer S3-July Term (July 6-August 7)

For additional important dates see Summer 2009 Full Term
June 5
June 26

## July 6

August 6-7

## Summer R-RODP

For additional important dates see Summer 2009 Full Term
June 1
June $5 \quad$ Last day to file Intent to Graduate form for August graduation
June 26 Last day for filing Theses and Dissertations for August graduation
August 7
Final examinations

## Fall Semester 2009

April 1

June 1

August 1

August 1

August 29
September 7
September 14

International Applicants Only: Fall 2009 application deadline to College of Graduate Studies Domestic Applicants: Fall 2009 application deadline to College of Graduate Studies
Completed contracts for Fall 2009 Graduate Assistantship due in College of Graduate Studies
International Applicants Only: Spring 2010 application deadline to College of Graduate Studies Classes begin Labor Day Holiday_NO CLASSES Last day to file Intent to Graduate form for December graduation

September 25
October 1

October $6 \quad$ Graduate Academic Suspension Hearings
October 17 Written Doctoral Qualifying Examinations begin
October 17-20
October 24
November 6
November 9-20
November 25
November 26-28
December 9
December 10
December 10

December 11
December 11-17
December 19
December 21
Summer term Graduate Academic Suspension Appeal Applications due
Domestic Applicants: Spring 2010 application deadline to College of Graduate Studies

Fall Break—NO CLASSES
Written Master's and Specialist's Comprehensive Examinations begin
Last day to file theses and dissertations for December graduation Early Registration for Spring semester Comprehensive Examination results due in College of Graduate Studies Thanksgiving Holiday-NO CLASSES Last day of classes Study day-NO CLASSES Completed Spring 2009 Graduate Assistantship contracts due in College of Graduate Studies

Spring Semester 2010
August

October 1

December 10

January 1

January 14
January 18

February 12
February 23
March 1

March 8-12
March 12
March 13
March 26

January 28 Last day to file Intent to Graduate form
International Applicants Only: Spring 2010 application deadline to College of Graduate Studies
Domestic Applicants: Spring 2010 application deadline to College of Graduate Studies
Completed Spring 2010 Graduate Assistantship contracts due in College of Graduate Studies
International Applicants Only: Summer 2010 application deadline to College of Graduate Studies
Classes begin
Martin Luther King Holiday-NO CLASSES for May graduation
Fall semester Graduate Academic Suspension Appeal Applications due Graduate Academic Suspension Hearings Domestic Applicants: Summer 2010 application deadline to College of Graduate Studies
Spring Break-NO CLASSES
University Holiday-All offices closed Written Doctoral Qualifying Examinations begin
Last day for filing theses and dissertations for May graduation

March 27
April 1

April 5-16
April 26
April 28
April 29
April 30

April 30
April 30-May 6
May 8
May 10

Written Master's and Specialist's Comprehensive Examinations begin International Applicants Only: Fall 2010 application deadline to College of Graduate Studies
Early registration for Summer and Fall sessions
Comprehensive examination results due in College of Graduate Studies Last day of classes
Study Day-NO CLASSES
Completed Summer 2010 Graduate Assistantship contracts due in College of Graduate Studies
Last day to remove "I" grades for May graduation
Final examinations
Commencement
Deadline for final grades

## Summer 2010 Full Term (May 10-August 6)

January 1

March 1

April 30

May 10
May 24
June 1

June 4
June 11
June 19
June 22
June 25
June 26
July 5
July 26
July 30
August 1

August 1

International Applicants Only: Summer 2010 application deadline to College of Graduate Studies
Domestic Applicants: Summer 2010 application deadline to College of Graduate Studies
Completed Summer 2010 Graduate Assistantship contract due in College of Graduate Studies Classes begin
Memorial Day Holiday-NO CLASSES Domestic Applicants: Fall 2010 application deadline to College of Graduate Studies
Last day to file Intent to Graduate form for August graduation
Spring semester Graduate Academic Suspension Appeal applications due Written Doctoral Qualifying Examinations begin
Graduate Academic Suspension Hearings Last day for filing theses and dissertations for August graduation Written Master's and Specialist's Comprehensive Examinations begin Independence Day Holiday-NO CLASSES
Comprehensive Examination results due in College of Graduate Studies Last day to remove "I" grades for August graduation
International Applicants Only: Spring 2011 application deadline to College of Graduate Studies
Completed Fall 2010 Graduate Assistantship contracts due in College of Graduate Studies

August 5-6
August 7
August 9

Finals examinations
Commencement Deadline for final grades

## Summer S1-May Term (May 10-May 28)

For additional important dates see Summer 2010 Full Term
May 10
May 24
May 28
June 4
June 25

## Classes begin

 Memorial Day Holiday-NO CLASSES Final examinations Last day to file Intent to Graduate form for August graduationLast day for filing theses and disserta- tions for August graduation

## Summer S2-June Term (May 31-July 2)

For additional important dates see Summer 2010 Full Term

May 31
June 4
June 25
July 1-2

## Summer S3-July Term (July 6-August 6)

July 6
July 5-6

## Summer R-RODP

For additional important dates see Summer 2010 Full Term

May 31
June 4
June 25
August 6

Classes begin
Last day to file Intent to Graduate form for August graduation Last day for filing theses and dissertations for August graduation

For additional important dates see Summer 2010 Full Term
June $4 \quad$ Last day to file Intent to Graduate form for August graduation
June $25 \quad$ Last day for filing theses and dissertations for August graduation Final examinations
Classes begin Last day to file Intent to Graduate form for August graduation Last day for filing theses and dissertations for August graduation Final examinations Classes begin

## Domestic Application Deadlines

Although applications are accepted on a rolling basis (up to the start of the term), to be guaranteed consideration for admission to individual programs, applications must be received by the following dates (unless specific programs indicate earlier dates).
June 1 Application deadline for Fall admission October 1 Application deadline for Spring admission (previous year)
March 1 Application deadline for Summer admission

## International Application Deadlines <br> Unless specific programs indicate earlier dates

April 1
August 1
January 1

## Individual Program Application Deadlines

For students to be guaranteed consideration for admission into a program, applications must be complete. All required materials must be submitted by the specified date. Incomplete applications will be held until all required materials have been received. Individual programs determine if an applicant's file will be considered for review after the deadline. Applicants who wish to be considered for entry into a program for another term must submit a readmission application for the subsequent term. Submitted materials are retained for twelve (12) months from the original submission.

## Program Fall Deadline Spring Deadline <br> English (M.A. and Ph.D.) February 1 <br> If applying for assistantship (assistantships begin in fall terms)

Public History (Ph.D.) February 15 September 15
NOTE: Programs not listed follow the College of Graduate Studies application deadlines.

[^0]
## Directory of Information

The course offerings and requirements of Middle Tennessee State University are continually under examination and revision. This catalog presents the offerings and requirements in effect at the time of publication, but there is no guarantee that they will not be changed or revoked. This catalog is not intended to state contractual terms and does not constitute a contract between the student and the institution.

Middle Tennessee State University 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.
The institution does not warrant or represent that any student who completes a course or program of study will necessarily acquire any specific skills or knowledge or will be able to successfully pass or complete any specific examination for any course, degree, or license.
Current information may be obtained by calling or writing the following sources:
General inquiries .................................Campus Operator
(615) 898-2300
Graduate College ..... 898-2840
Dean. ..... 898-2840
Associate Dean ..... 898-5331
Program Inquiries
Prospective students ..... 898-7630
Current students. ..... 898-2840
International students, ..... 898-2068
Graduate assistantships, scholarships ..... 898-5589
Housing reservations

$\qquad$
Housing and Residential Life 898-2971
$\qquad$ and Services 898-2238
$\qquad$ 898-2772
Majors and course offerings ............. School or Department
offering program
Night classes ................................Continuing Education andOff-campus classes .....................Continuing Education andDistance Learning 898-2177
Parking regulations.........Parking and Transportation Services ..... 898-2850
Reenrollment requirements.

$\qquad$
Graduate Admissions898-2840Registration.......................................... Scheduling Center
Student life, activities.

$\qquad$
Student Affairs 898-2440
$\qquad$ 898-2877
Testing arrangements $\qquad$ Testing Services 898-2863Transcripts
$\qquad$ Records Office 898-2600
Veterans $\qquad$ Records Office 898-2601
Women's issues. $\qquad$ Women's Center 898-2193

## Visit online at www.mtsu.edu/graduate

## Administrative Officers

## University

President Sidney A. McPhee, Ed.D.
Executive Vice President and Provost
Kaylene Gebert, Ph.D.
Senior Vice President John W. Cothern, J.D.
Interim Vice President for Student Affairs and
Vice Provost for Enrollment and Academic Services Debra K. Sells, Ed.D.
Vice President for Development and University Relations William J. "Joe" Bales, M.S.
Vice Provost for Research and Dean, College of Graduate Studies
Michael Allen, Ph.D.
Dean, College of Basic and Applied Sciences Thomas J. Cheatham, Ph.D.
Dean, Jennings A. Jones College of Business E. James Burton, Ph.D.

Dean, College of Continuing Education and Distance Learning Mike Boyle, Ph.D.
Interim Dean, College of Education and Behavioral Science
Harold D. Whiteside, Ph.D.
Dean, College of Liberal Arts John N. McDaniel, Ph.D.
Dean, College of Mass Communication Roy Moore, Ph.D.
Dean, College of University Honors John R. Vile, Ph.D.
Dean, Walker Library Don Craig, M.L.S.

## The Tennessee Higher Education Commission

Katie Winchester, Chair, Dyersburg
Jack Murrah, Vice-Chair, Hixon
Dale Sims, Vice-Chair, State Treasurer
A.C. Wharton Jr., Secretary, Memphis

Riley C. Darnell, Secretary of State
John Morgan, Comptroller
Robert White, Johnson City
Charles Mann, Columbia
Sue Atkinson, Nashville
Gregory P. Isaacs, Knoxville
Carolyn Morrison, Cookeville
Cato Johnson, Bartlett
Gary Nixon, nonvoting ex officio, Executive Director, State Board of Education
David C. Holt, voting ex officio, University of Tennessee-Memphis
Jessica Brumett, nonvoting ex officio, Tennessee Technological
University

## The Tennessee Board of Regents

Phil Bredesen, Governor and Chair
Gionni Carr, Student Regent
Agenia Clark, 7th Congressional District
Janice Donahue, Faculty Representative
Gregory Duckett, 9th Congressional District
John Farris, At-Large West Tennessee
Ken Givens, Commissioner of Agriculture
Judy T. Gooch, 3rd Congressional District
Matthew Harris, Student Representative
Jonas Kisber, 8th Congressional District
Fran Marcum, 4th Congressional District
Paul W. Montgomery, 1st Congressional District
Pamela Fansler, 2nd Congressional District
Millard Oakley, 6th Congressional District
Tim Webb, Acting Commissioner of Education


## The Graduate Council

## Graduate Council Mission Statement

The Graduate Council plays a crucial role in the oversight and planning of all MTSU graduate courses and graduate degree programs, in establishing criteria for the

appointment and reappointment of graduate faculty, in assessing graduate student issues and concerns, and in recommending to the dean of the College of Graduate Studies University-wide policies and procedures for implementation. The Graduate Council advises in the modification of existing programs and in the approval and implementation of any new programs. All student activities leading to advanced degrees proceed under policies and regulations established and reviewed by academic programs, the Graduate Council, and the College of Graduate Studies.
The Graduate Council provides leadership in the pursuit of excellence in scholarly activity and serves as an advocate in obtaining resources for graduate programs. Only full-time MTSU faculty holding membership on the graduate faculty may serve on the Graduate Council. Council members are appointed by the president to serve three-year terms with three representatives per college. Two graduate student representatives who meet all graduate academic standards are also appointed. To ensure continuity and institutional memory in the creation and implementation of policies and procedures, one third of the council members rotate off each year and are replaced by five new faculty members representing each college. Graduate students are appointed to the council each academic year, and the graduate college dean, associate graduate college dean, and the six academic deans serve as ex officio members. The vice chair, who conducts meetings in the absence of the chair and who serves as chair-elect, is elected annually. The chair, in consultation with the dean of the College of Graduate Studies, is responsible for setting the council's agenda.

## Accrediting Agencies and Memberships

AACSB - The Association to Advance Collegiate Schools of Business<br>Accrediting Council of Education in Journalism and Mass Communication<br>American Association of Colleges for Teacher Education<br>American Council on Education<br>Association of State Colleges and Universities<br>Conference of Southern Graduate Schools<br>Council for Accreditation of Counseling and Related Educational Programs<br>Council of Applied Master's Programs in Psychology

Council of Graduate Schools in the United States
National Association for Sport and Physical Education
National Association of Industrial Technology
National Association of Schools of Music
National Council for Accreditation of Teacher Education
Southern Association of Colleges and Schools
Tennessee College Association
Teachers College Association of Extension and Field Services
Tennessee Conference of Graduate Schools

# Academic and Student Services 

Middle Tennessee State University has a large and beautifully landscaped campus of approximately 500 acres and 172 permanent buildings totaling over 4.5 million square feet. Campus buildings are shown on a map printed in this catalog.

## Alumni Association

The mission of the Middle Tennessee State University Alumni Association is to foster sound relationships between the University and its alumni and to provide a strong force for the advancement and support of the University by its alumni. A board of directors governs the association and the Alumni Relations Office facilitates the programs and services of the association. Establishing and promoting scholarships is an ongoing endeavor of the Alumni Association. The Alumni Relations Office is located at 2259 and 2263 Middle Tennessee Blvd. Visit www.mtalumni.com or call 1-800-533-MTSU.

## Department of Art Slide Library

Located in Andrew L. Todd Hall 223, the Slide Library is a resource for the art faculty and for the University population at large. The library's 50,000 slides and 8,000-image digital database include examples of art from the prehistoric to contemporary eras.

## Athletics

The MTSU athletics program strives for excellence in the development of its student-athletes and the quality of its several sports teams. The program supports the academic, athletic, and social education of its student-athletes by encouraging them to develop the values of respect for themselves and others and to take pride in achievement and making positive contributions to the communities in which they live.

MTSU is committed to quality athletic programs that bring the campus community together and promote a sense of pride and tradition in academic and athletic excellence. Athletics also brings the University regional and national recognition and provides a link between the University and its alumni and the community at large. It helps generate alumni and public support for all aspects of the University. The athletics program provides quality faculty and leadership to campus programs. It gives students, faculty, and alumni opportunities for innovative public service activities such as the "Reading Raider" program, which has partnered with area elementary schools to promote student reading skills. It uses athletic, financial, and physical resources to maintain and develop athletic programs to accomplish the mission of the University.

The University is a member of the Sun Belt Conference and National Collegiate Athletic Association, competing in NCAA Division I in all sports. MTSU is represented annually in baseball, basketball, cross-country, football, golf, tennis, indoor track, and outdoor track for men and by basketball, crosscountry, golf, soccer, softball, tennis, indoor track, outdoor track, and volleyball for women.

Both full-time and part-time students are admitted to all home football, basketball, and baseball games by presenting their valid ID cards at the gate. Athletic events in other sports require no admission and are open to the public and campus community. The ticket office is located at Floyd Stadium Gate 1A. Additional ticket information can be obtained by phoning (615) 898-2103 or 1-888-YES-MTSU or visiting GoBlueRaiders.com!

MTSU's Title IX coordinator is Forrestine Williams, 220 Cope Administration Building, (615) 898-2185.

## Cafeterias

Four University locations offer wholesome food for students at reasonable rates: the Grill in Keathley University Center; RFoC (Real Food on Campus), McCallie Dining Hall in Corlew; RaiderZone, James Union Building; and CyberCafe in Woodmore. There are four additional satellite locations for take-out foods and beverages in Walker Library, Business and Aerospace, Bragg Mass Communication, and Lightning's Limo in the Floyd Stadium breezeway near Murphy Center. They are operated for the benefit and convenience of the students, faculty and their guests and other guests on the campus who may be attending conferences or other official functions. Several different meal plans are available for those who are interested.

## Career and Employment Center

The University provides a year-round, centralized placement service for students and alumni through the Career and Employment Center located in Keathley University Center, Room 328. Satellite offices can be found in the following locations: Jennings A. Jones College of Business, BAS S123; College of Basic and Applied Sciences, JH 309; College of Education and Behavioral Science, KUC 328; College of Liberal Arts, TODD 226; College of Mass Communication, COMM 130. The program is designed to assist prospective graduates and alumni in securing career positions. Each year employers from business, industry, government, and education conduct oncampus interviews with students in the Career Center. Other placement services include the development of reference files for credentials, career job listings, part-time and summer employment opportunities, and the career library. Students seeking part-time jobs in the community may apply through the Student Employment Center, (615) 898-2500. Referrals to prospective employers will be made. Students may visit the Career and Employment Web site at www.mtsu.edu/~career.

## Center for Historic Preservation

One of two Centers of Excellence at MTSU, the Center for Historic Preservation (histpres.mtsu.edu/histpres) was established in 1984. It is a research and public service institute committed to the preservation, protection, enhancement, and sensitive promotion of the historic environment. Through its varied projects, programs, and activities, the center responds directly to the needs and concerns of communities and organizations working to include heritage in their future economic development strategies. Providing leadership and assistance on a local, state, regional, and national basis, the center's work falls within four initiatives.

Rural preservation recognizes the unique heritage, resources, and problems of rural areas and small towns. The overall goal is to create a heritage infrastructure for successful, long-term project development in small towns that have outstanding resources but lack the expertise to use heritage resources for cultural and economic improvement. National Register nominations for individual buildings, historic districts, and cemeteries are an ongoing priority of this initiative. The Tennessee Century Farm Program, established in 1985 in partnership with the Tennessee Department of Agriculture, is centered on program expansion, new publications, agritourism potential, and regional conservation planning for farms that have been in the same family for at least 100 years. The Rural African American Church Project, established in 1997 in partnership with African American heritage groups and the National Trust for Historic Preservation, is a continuing project that document's the state's historic black churches.

Heritage education addresses the use of local historic resources as teaching tools in the K-12 grades. The center works closely with school systems and community heritage organizations to guide and assist them in preservation and education projects. The center administers Teaching with Primary Resources in Tennessee, a program of the Library of Congress that promotes the classroom use of the digital images of this vast national collection across the state. The center director also serves as the senior editor of the Tennessee Historical Quarterly, a valuable tool for high school and college teachers.
The Tennessee Civil War National Heritage Area (histpres .mtsu.edu/tncivwar) was created by Congress in 1996. The Heritage Area focuses on the preservation, interpretation, and heritage development of the multiple legacies of the Civil War and Reconstruction era in Tennessee. The center is the only university unit in the nation to serve as the administrative head of a National Heritage Area, which are partnership units of the National Park Service. The Heritage Area provides technical services to institutions, agencies, and property owners across the state and develops funding partnerships with groups, governments, and institutions which work with the center to establish joint projects and programs of long-lasting benefit to the state and nation. As part of the Heritage Area effort, the center plays an active role in the Alliance of National Heritage Areas and assists the alliance's Heritage Development Institutes, which are professional training workshops held across the nation. The alliance provides support for student interns who participate in the workshop programs.

Heritage diversity focuses on incorporating the stories and traditions of all Tennesseans into the history and preservation of the state. Identifying, documenting, and assisting in the interpretation of historic African American schools, cemeteries, farmsteads, and businesses and contributions to the arts are a part of this initiative. National Register documentation of Tennessee and southern sites associated with the civil rights movement are continuing projects. Women in architecture and preservation as well as women involved in farming across the state are important issues addressed by the center. The center works with the National Park Service to document and develop preservation alternatives for National Register-eligible properties along the Trail of Tears in Tennessee. In cooperation with the MTSU Department of Sociology and Anthropology, the center has partnered with archaeology staff and students on projects associated with the sensitive interpretation of sites of prehistoric Native American habitation.

Graduate-level staff teach two historic preservation courses each year for the Department of History and direct a large number of theses. The center funds a limited number of graduate research assistantships and fellowships each year. Graduate and undergraduate students work at the center to assist staff on a variety of applied research and public service projects, gaining valuable interdisciplinary experience to supplement their in-class training. The Downtown Heritage Center in Murfreesboro, provides a learning lab for students to address real-world issues in preservation and history.
The center's largest history project, The Tennessee Encyclopedia of History and Culture Online Edition, is a partnership among the center, the Tennessee Historical Society, and the University of Tennessee Press. With ongoing revisions, the encyclopedia Web site is a comprehensive reference for the state's history.

## Center for Popular Music

The Center for Popular Music (CPM) is an archive and research center devoted to the study of American popular music from the Colonial era to the present. It was established in 1985 as one of sixteen Centers of Excellence at universities in the Tennessee Board of Regents system. The center's mission is to promote research and scholarship in American popular music and to foster an appreciation of America's diverse musical culture. To carry out this mission, the CPM maintains a large research library and archive; presents public programs that interpret various aspects of American vernacular music; engages in original research projects; and disseminates the results of research through publications in various media.

The CPM's library and archive is one of the largest and best popular music research collections in the country. Materials in the center's archive and library fall into three broad categories. First are extensive holdings of the various types of media in which music has been fixed and sold as a commodity. These include print materials such as sheet music, song books, song broadsides and songsters, and sound recordings in formats ranging from cylinders to compact discs. The center's sound archive is one of the largest in the country and consists of approximately 170,000 commercial sound recordings as well as
many hours of unique unpublished recordings of music and interviews. The CPM's sheet music collection of approximately 70,000 items is the largest in the Southeast, and its library of gospel songbooks is one of the most extensive of any repository not associated with a religious organization. Second are various materials that are needed to study popular music in all its musical, cultural, historical, technological, and commercial contexts, including items such as photographs, posters, playbills, concert programs, trade catalogs, news clippings, and personal papers of musicians, songwriters, and business people. Third are books, periodicals, and other reference materials about popular music. The center has one of the largest and most comprehensive libraries of books and periodicals about popular music in the country.
Materials in the center's collection do not circulate but are available to anyone doing research on American popular music. The center's resources support undergraduate, graduate, and faculty research in a variety of disciplines and departments. In keeping with one of the aims of the Centers of Excellence program, the Center for Popular Music serves as a research resource for people far beyond the bounds of the University. Center staff members have fielded research queries from every state in the union and from foreign countries representing every continent except Antarctica. Authors, journalists, media producers, performers, and students writing dissertations have all made use of the center's archive and library.
The center's public programs include lectures, conferences, symposia, and concerts of contemporary and historical popular music.

## Child Care Lab

The MTSU Child Care Lab, located in the Womack Lane Building on Homecoming Circle, provides quality care for children ages 3-5 whose parents are MTSU students. In the Fall and Spring semesters, first priority is given to families who need Monday/Wednesday/Friday care OR Tuesday/Thursday care; second priority is given to families who need full-time care (Monday-Friday). In the Summer term only, first priority is given to students who need full-time child care. In addition to educational programming, a hot lunch and two snacks are provided daily. The MTSU Child Care Lab serves as a lab/observation experience for students enrolled in various MTSU courses. Hours of operation are Monday-Friday, 7:00 a.m.-5:00 p.m., whenever classes are in session (including finals). For more information, call (615) 898-2970 or visit the Web site at www.mtsu.edu/childcare.

## Disabled Student Services

Disabled Student Services offers a wide variety of services to students with disabilities. The office acts as an advocate for disabled students at the University, surveying the needs of these students and developing programs to meet those needs. Information and assistance can be obtained by calling (615) 898-2783, visiting the office located in Keathley University Center, Room 120, or by visiting the Disabled Student Services Web site at www.mtsu.edu/~dssemail. MTSU's ADA/504
coordinator is Watson Harris, 119 Cope Administration Building, (615) 898-5366.

## Endowed Chairs

Several academic programs are enriched through the establishment of Chairs dedicated to the support of a particular discipline. The chairholders may be full-time faculty members or may be individuals from the appropriate business or professional field who are on campus for special seminars or lecture series.

Two Chairs, funded by gifts to the University Foundation, are administered through the Economics and Finance Department, of which the chairholders are members. More information is available through that department. The Chairs are

## Martin Chair of Insurance <br> Weatherford Chair of Finance

MTSU houses nine Chairs of Excellence, established with a combination of private, University, and state funds. They are
The Jennings A. Jones Chair in Free Enterprise
Jennings A. Jones College of Business
The Jennings and Rebecca Jones Chair
in Urban and Regional Planning
Jennings A. Jones College of Business
The John Seigenthaler Chair in First Amendment
Studies
College of Mass Communication
The Dr. Carl Adams Chair in Health Care Services
Interdisciplinary
The National HealthCare Chair in Nursing
School of Nursing
The Robert E. and Georgianna West Russell Chair in
Manufacturing Excellence
Engineering Technology Department
The Katherine Davis Murfree Chair in Dyslexic
Studies
Interdisciplinary
John C. Miller Chair in Equine Reproductive
Physiology
School of Agribusiness and Agriscience
Mary E. Miller Chair in Equine Health
School of Agribusiness and Agriscience

## Albert Gore Sr. Research Center

The Albert Gore Sr. Research Center preserves and makes available for research a variety of historical documents and photographs. Its collections focus on the history of politics and public policy and on Middle Tennessee State University and the region it serves. The Gore Center assists a variety of researchers, including undergraduates; graduate students; MTSU administrators, faculty, and other scholars; the media; and citizens of the local community. The center is named for Albert Gore Sr. (B.S., MTSU '32), whose papers from his Congressional career (1939-1970) form the largest and one of the most important collections in the repository.

## Health, Wellness, and Recreation Center

This recently renovated facility houses Student Health Services, MTSU Campus Pharmacy, and the Recreation Center.
Student Health Services accommodates students on an outpatient basis only. Students must be enrolled at the time they seek service to be eligible for care. Services include consultation for individual problems and treatment of minor illnesses and injuries, lab tests, FAA physicals, women's health clinic, and a dispensary. Health Services personnel include board certified physicians, certified mid-level practitioners, and registered nurses. Appointments are available by calling (615) 898-2988.

MTSU Campus Pharmacy, a part of Health Services, serves students, faculty, and staff and their dependents. A drivethrough option adds to the convenience.
Recreation Center, considered one of the best facilities in the region, includes the Campus Recreation Office, which administers a comprehensive recreation program for students, faculty, staff, alumni, and MTSU affiliate members. After a recent $\$ 34$ million expansion, the facility is now almost $220,000 \mathrm{sq}$. ft. There are new office areas; a multi-purpose room for wellness education programming and meeting; six basketball/volleyball courts; six racquetball courts; a three-lane indoor track; a 4,000-sq.-ft. aerobic room; and a 2,800 sq. ft . sport club/dance room; more than $10,000 \mathrm{sq}$. ft. of free weights; a $4,000 \mathrm{sq}$. ft. cardio room with a variety of exercise machines; an expanded outdoor equipment rental area; an indoor swimming pool, 33 meters $\times 25$ yards, with water slide and diving board; a new equipment checkout area; locker rooms; a rock-climbing wall; a 4 -ft. deep outdoor swimming pool and sun deck with four sand volleyball courts adjacent; and a challenge course that also includes an Alpine climbing tower.

Campus Recreation also maintains several intramural fields for competitive opportunities between campus groups and organizations. A Sports Club Complex on East Main Street also offers recreational opportunities for specific sport teams. This complex houses a sports club facility, running/walking track, and four sports fields.
The Recreation Center is open seven days a week but is closed during Fall Break, Thanksgiving holidays, Christmas holidays, and Spring Break. The schedule may be adjusted during other University holidays and for certain special University events. More information on programs or the center may be obtained by contacting the Campus Recreation Office at (615) 8982104 or by visiting www.mtsu.edu/~camprec.

## Housing and Residential Life

More than 3,200 students in 22 residence halls and apartments make their homes on the MTSU campus. Information may be obtained from Housing and Residential Life, Keathley University Center 300.

Philip C. Howard Music Library

Located within Instructional Media Resources in McWherter Learning Resources Center, Room 101, Howard Music Library houses audio and video recordings and equipment, musical scores, and reference materials. Anyone with a valid MTSU ID may borrow scores. Recordings circulate only to faculty and staff but may be used by anyone in-house. The Howard Music Library is part of the School of Music. (See also School of Music in this catalog.)

## Information Technology

The MTSU Information Technology Division (ITD) supports computing and information technology resources on campus. ITD manages the campus network and MTSU's primary academic and administrative computing systems; provides telecommunication services for the campus; promotes and supports instructional technology, including faculty consultation and training and maintenance support for all campus technology-based classrooms; provides technical support and training for the use of microcomputer hardware and software; provides a $24 / 7$ help desk during the semester; supports MTSU's primary administrative applications including student information, human resources, finance, PipelineMT, and the data warehouse; and administers the STA (Student Technology Assistant) program, the campus ID system, and the MTSU Web site.

Any MTSU student or faculty or staff member may have an account on the central server for accessing on-campus resources and state, regional, national, and international networks including the Internet. Students may activate their accounts at www.mtsu.edu/changepw, on any Internet-accessible computer. The account will be ready to use within 10 minutes. Faculty and staff accounts are created upon completion of an application. The application forms are available online at www.mtsu.edu/itd/forms and at the Information Technology Division Office, Cope Administration Building, Room 3.
For more information, call the ITD help desk at 898-5345 or e-mail help@mtsu.edu.

## Instructional Media Resources (Media Library)

Instructional Media Resources (IMR), located in McWherter Learning Resources Center, Room 101, manages a large collection of videotapes, DVDs, laserdiscs, audio tapes, CDs, and CD-ROMs. It also features study rooms and carrels, an open computer lab with both Macintosh and Windows computers, laser printers and scanners, and typewriters available for walkin use by faculty and students. Faculty members may check out all materials, reserve IMR materials, and place their own multimedia resources on reserve in the Media Library for use by their students. Staff and students may view video materials in the Media Library and may check out audio materials.

## Instructional Technology Support Center

The Instructional Technology Support Center (ITSC), in the McWherter Learning Resources Center, provides facilities, training, and support for the use of instructional technology by MTSU faculty, MTSU students, and K-12 teachers. The ITSC consists of several related units and facilities, including Audio/Visual Services, Instructional Media Resources, two computer labs, a graduate student multimedia development center, a twenty-first century classroom, and a satellite webcasting center.
Two PC computer labs and one PC/Macintosh computer lab are available in the ITSC for use by faculty and students. A description of the hardware and software in the computer labs and a monthly listing of open hours are posted on the ITSC Web page (www.mtsu.edu/~itsc). Graduate students can create multimedia projects or presentations at four multimedia development stations in the ITSC.

Audio/Visual Services maintains an inventory of audio/visual equipment for faculty check-out, repairs campus audio/visual equipment, provides dubbing services, records off-air programming for classroom use, and supports satellite services. Audio/Visual Services also offers professional video production services for MTSU faculty and administrators, including studio production, remote production, postproduction, and satellite uplinks and downlinks.
Instructional Media Resources (Media Library) - See above.
The Satellite and Webcasting Center offers quality educational programming to $\mathrm{K}-12$ schools by satellite to many rural Tennessee counties and by cable television to viewers in Rutherford and other middle Tennessee counties. We also webcast our programs to viewers across the state. The satellite facilities can be scheduled by units across campus for local, statewide, or national broadcast of special events and programs. Both digital and analog C-band transmission options are available.

## Intercultural and Diversity Affairs

The Office of Intercultural and Diversity Affairs provides a welcoming and supportive environment for minority students. The office also serves as a link between ethnic minority students and the University community. The mission of the Office of Intercultural and Diversity Affairs is to provide support services for students; to assist in achievement of life goals; and to increase academic, social, cultural, moral, and physical development. In addition, the director of Intercultural and Diversity Affairs is an advocate for the needs of the ethnic minority student population. Services offered include registration assistance, financial aid, counseling, academic referral, tutoring, mentoring, and programming in multicultural awareness. More information may be obtained by calling (615) 898-2987 or writing to MTSU P.O. Box 88 , Murfreesboro, TN 37132 or by visiting the Web site at www.mtsu.edu/~mulcuaf/.

## Keathley University Center and James Union Building

The Keathley University Center and James Union Building are service-oriented buildings for the use of the campus community. Services and facilities include

- a modern, self-service bookstore;
- a complete-service post office with individual mailboxes available;
- a mini-market with a variety of snacks;
- meeting rooms, ballroom, and auditorium for clubs, organizations, and campus-sponsored programs;
- diversified programs which include movies, musical groups, speakers, dances, and cultural events all planned and presented by student committees; and
- food services including the Keathley University Center Grill and James Union Building banquet and luncheon services.


## Libraries and Archives

Numerous library and archive resources are located on the MTSU campus. Copying of materials housed in these facilities is permitted only in compliance with federal copyright statutes and in accordance with departmental rules and regulations. Resources include the Department of Art Slide Library, Center for Popular Music, Gore Center, Howard Music Library, Instructional Media Resources, Walker Library, and Women's Studies Library. Detailed information about each is in this section.

## McWherter Learning Resources Center

The McWherter Learning Resources Center provides the opportunity for a different approach to learning. Completed in 1975, this unique 65,000 square-foot facility received national recognition for the award-winning design and is still considered a model by other institutions throughout the region. The McWherter Learning Resources Center is the primary facility for teacher education programs and provides instructional technology support to faculty and programs at MTSU as well as area school districts.

In addition to the Instructional Technology Support Center, the support areas of Photographic Services and Publications and Graphics have the dual responsibility of producing materials for classroom use and for serving the entire University community's photography and publication needs. Also housed in the facility is the WMOT-FM radio station.

## Off-Campus Student Services Center

The Off-Campus Student Services Center serves as an information and referral center for students, especially for those returning to formal studies or beginning college for the first time as adult learners. The center is an advocate for the needs
of adult learners. Workshops designed to help the adult learner succeed in entering college are offered. Located in Keathley University Center, Room 320, the center helps make available the services of various other University offices to students on campus at hours other than regular business hours. Students may pick up a variety of forms so that their concerns may be forwarded to the appropriate offices. The center also provides a place to meet and share ideas with other adult learners. A student organization called OWLS (Older Wiser Learners) is coordinated through the center. Additional information is available by calling (615) 898-5989.

## Murphy Center

Charles $M$. Murphy Center is a multipurpose building for instruction, recreation, athletics, and convocations. This versatile structure provides facilities that enhance total health, physical education, recreation, and safety programs as well as hosting outstanding athletic and entertainment events. The complex includes the Monte Hale Basketball Arena, two auxiliary gymnasiums, four handball courts, classrooms, two dance studios, an indoor track, men's and women's dressing rooms, and weight training equipment.

## Statement of Community Standards and Expectations

Middle Tennessee State University is committed to the ideal of developing and nurturing a community of scholars. The choice to associate or affiliate with the MTSU community is freely made by students, staff, and faculty; nevertheless, it is assumed that each person who joins the community will accept and practice the following core values and expectations:

1. Value of Honesty. The notion of personal honesty and academic integrity is central to the existence of the MTSU community. Community members will not engage in cheating, plagiarism, or fabrications of any type. All members of the community will strive to achieve and maintain the highest standards of academic achievement.
2. Respect for Diversity. The MTSU community is composed of individuals representing different races, ethnicities, sexual orientations, and cultures. The community embraces and celebrates this diversity as a pillar of its strength.
3. Commitment to the Community. Citizens of the MTSU community will be good stewards of the University's resources and will not engage in conduct which damages or exploits the community.
4. Freedom of Expression. The MTSU community is a marketplace of ideas and opinions. Community members are encouraged to freely communicate their ideas and opinions concerning issues both within and outside the community.

## Student Access to Educational Records

This policy may be found on page 49 of this catalog.

## James E. Walker Library

James E . Walker Library is an important resource for a quality education. The centrally located facility, opened in January 1999, contains print and electronic research collections and a variety of services to support course assignments, term papers, general reference, projects, and student research. Through partnerships and carefully selected databases, the library provides access to a broad selection of information and research from both local and worldwide sources. The building offers a variety of individual and group study areas as well as close to 300 computers for accessing information resources. Special features of the library include group studies, two instruction rooms for learning how to use library resources, Special Collections, and an Adaptive Technologies Center to meet needs of students with disabilities.
Librarians are available to help with reference, research, and information questions. Students are encouraged to ask for help. With a University ID card and PipelineMT account, students can access all books, periodicals, and electronic databases in the library collection from within the building and from their campus dorms, and most library resources are available from off-campus locations. Classes as well as individual instruction sessions are offered on the use of library resources, and research guides are published to provide further information about collections and services.

More information can be found on the library's Web site at http://library.mtsu.edu/ or by calling (615) 898-2772.

## Women's Center

The June Anderson Women's Center (JAWC) has been serving individuals at MTSU since 1977. The office is located on the main floor of the James Union Building, Room 206, and provides a safe space for students to meet together, discuss issues, and organize projects. The JAWC offers information and referral services that connect individuals with needed campus and community resources including a free legal clinic available to all MTSU members each month during the academic year and a yearly Fellowships, Grants, and Scholarships for Women booklet. Staff members and volunteers organize a number of campus programs on gender, diversity, and empowerment issues, such as a monthly career/professional development brown bag series and annual events that raise awareness of sexual assault, domestic violence, body image, and women's contributions to society. Students are invited to attend JAWC activities, and the office has a student volunteer program available to those interested in getting more involved. Additional information about the Women's Center's activities or services is available by calling (615) 898-2193 or by visiting www.mtsu.edu/~jawc.

## Women's Studies Program Library

The Women's Studies program, located in JUB 308, maintains a collection of materials related to women's and gender studies. Most volumes circulate.

# International Programs and Services 

## International Programs and Services Office Keathley University Center 124

The University provides immigration advisement through the International Programs and Services Office (IPSO). IPSO is responsible for issuing I-20 and DS-2019 documents used for securing visas. IPSO serves as a liaison among faculty members, administrators, and international students. The office caters to a variety of international student needs, including housing, academic matters, community affairs, and programming.

## Admission

Admission to graduate studies at MTSU is two-fold, entailing both admission to the College of Graduate Studies and admission to an individual academic program. An applicant applies to the College of Graduate Studies, and the application is forwarded to the individual program for consideration upon receipt of all application materials. The College of Graduate Studies is responsible for the admission of all graduate students to the University. Applicants must meet the admission standards for the College of Graduate Studies and be admitted to an individual graduate program. All inquiries and correspondence regarding admission should be addressed to the College of Graduate Studies. Application information including forms, requirements, and instructions may be obtained by contacting the college or via www.mtsu.edu/graduate.
The College of Graduate Studies requires official or attested university records, with certified translations if the records are not in English. Notarized copies are not acceptable. International applicants whose highest degrees are from universities outside the United States may be required to have their credentials evaluated by an acceptable evaluation service. A list of acceptable evaluation services is listed on the College of Graduate Studies Web site. University catalogs are not mailed overseas. The MTSU Graduate Catalog is available online. Applicants residing outside the United States at the time of application can apply for the Fall and Spring Semesters only. Applicants who are already in the United States and in F1 or J1 status may also apply for Summer.

## Residency

IPSO determines residency for international students. All international students will be considered out-of-state for tuition purposes until they apply for and receive in-state status. Those who believe they meet the in-state criteria may obtain an application and submit it to the IPSO office. The completed
form and supporting documentation should be submitted one month prior to the term. Failure to file for residency may result in student payment of out-of-state tuition. Students will be informed of the residency decision by mail.

## Immigration

It is the student's responsibility to see that he/she is in legal immigration status. All immigration documents should be kept in a safe place. According to U.S. Citizenship and Immigration Services (USCIS), F1 and J1 students must be enrolled full time (minimum 9 hours) during Fall and Spring semesters. Summer enrollment is optional. Also, USCIS requires that F1 and J1 applicants meet all admission requirements prior to the first date of enrollment. No conditional enrollment is possible.

## Proof of English Proficiency

International students who will be attending the University on a visa and who are not native speakers of English or graduates of a United States undergraduate or graduate institution must submit a Test of English as a Foreign Language (TOEFL) score (minimum score of 195 computer-based, 525 paper-based, or 71 Internet-based), University of Michigan English Language Institute (UMELI) test score (minimum score of 85), International English Language Testing System (IELTS) score (minimum score of 6), or E.L.S. instruction (completion of level 112) as a demonstration of English proficiency in order to be admitted to graduate studies at MTSU. Applicants who cannot obtain locally a TOEFL Bulletin of Information for Candidates should write for it well in advance to

TOEFL Services
Educational Testing Services
P.O. Box 6151

Princeton, New Jersey, U.S.A., 08540-6151
Inquiries concerning the TOEFL program should be directed to
TOEFL Program Director
Educational Testing Service
Princeton, New Jersey, U.S.A., 08540
(609) 771-7100 or (877) 863-3546

For information on UMELI testing, contact
International English Institute
1226 16th Avenue, South
Nashville, TN 37212
Phone: (615) 327-1715 or 327-1716
For information on IELTS testing, contact
IELTS International
100 East Corson Street, Suite 200
Pasadena, CA 91103
(626) 564-2954

E-mail: ielts@ieltsintl.org
For information on E.L.S., contact
E.L.S. Language Centers
www.els.edu
E-mail: nsh@els.edu

## Financial Aid

International students in F1 or J1 status must provide verification of financial support prior to admission as required by the United States Citizenship and Immigration Services (USCIS). There are no academic or need-based scholarships available for nonimmigrant visa holders.

## Deadlines for Completed* Files

Fall semester: June 1 of same year; Spring semester: October 1 of previous year; Summer semester: March 1 of same year. (Applications received after these dates may be reviewed on a case-by-case basis.) Based on time requirements to obtain the necessary documentation, international applicants are encouraged to apply four months or more before the admission deadline.
*NOTE: A completed file contains ALL acceptable materials required for admission.

## Orientation Information

All F1 students must attend IPSO orientation before they can register for classes. Information concerning IPSO orientation is sent with the final acceptance letter.

## Health and Accident Insurance

All international students in F1 or J1 status must obtain and present evidence of health and accident insurance as a condition of admission and continued enrollment at MTSU. Minimum requirements for coverage set by the Tennessee Board of Regents are specified on the insurance form provided by IPSO.

## Application to MTSU

## Nonimmigrants

1. Complete graduate application for admission (www.mtsu.edu/graduate/ apply.htm); online applications are preferred.
2. Submit $\mathbf{\$ 3 0 . 0 0}$ nonrefundable application fee (money order or check with routing numbers); Visa and MasterCard are accepted for online applications.
3. Submit evidence of freedom from tuberculosis. Upon receiving and processing applicant's application, IPSO will determine the appropriate form and send notification of which form to use.
4. Submit evidence of two rubeola vaccinations. Applicants should consult the MTSU Student Health Services Web site for current information on immunization requirements (www.mtsu.edu/~mthealth).
5. Submit a financial statement demonstrating resources sufficient to cover expenses to study at MTSU.
6. Submit official TOEFL (computer-based minimum score 195, paperbased minimum score 525 , Internet-based minimum score 71), UMELI (minimum score 85), IELTS (minimum score 6), or E.L.S. level 112. We do not accept any other than ETS official test scores for the TOEFL.
7. Submit completed insurance form for F 1 and J 1 applicants.
8. Submit a front and back copy of I-94, if applicable.
9. Submit a front and back copy of I-20 or DS-2019, if applicable.
10. Student must have official transcripts sent from all institution(s) directly to the external evaluation service, if required. If transcripts are written in a foreign language, an official translation in English and an official nontranslated transcript must both be sent. A syllabus of each class may be required in order to receive course substitution credit.
11. Submit official GRE or GMAT score. We can only accept copies if our institution code (1466) is listed as a score recipient.
NOTE: Applying online will expedite the processing of the application. In the event that a paper application is used, sending all documents except transcript(s) and test scores in one envelope will expedite processing of the application. The University will assign a student ID number for record-keeping purposes only. The student ID number should be on all correspondence sent to the College of Graduate Studies. All materials received become the property of MTSU and cannot be returned to the student or forwarded to a third party.


## Continuing Education and Distance Learning

## Credit Area

## Distance Learning Courses

Distance learning courses, coordinated through the College of Continuing Education and Distance Learning, include courses via videoconferencing, correspondence, and online.

## Videoconferencing Courses

Videoconferencing courses send the instructor's "live" lectures at MTSU to students at remote sites. Sites include Franklin and Columbia State Community College. The videoconferencing classrooms are equipped with TV monitors and microphones so that students and instructors can interact. The instructor will visit the remote sites during the semester to assure that each student will have an opportunity to meet him/her in person. The instructor is also available during office hours at MTSU by phone, e-mail, or in person.

## Correspondence Courses

Correspondence courses involve individual, independent instruction of a student by an instructor on a one-to-one basis. Typically, this entails home study as well as the exchange of materials and evaluations. Interaction and feedback between correspondence course faculty and students take the forms of written assignments, testing, evaluations, guidance, and assistance via such media as telephone, fax, e-mail, and other electronic technologies. More information may be obtained via e-mail at distance@mtsu.edu or by calling (615) 898-5332.

## Online Courses

Online courses are accessed over the Internet through MTSU's course management system. Only students with strong experience on the Internet should register for an online course. Students are required to have access to a computer and the Internet. A photo ID must be presented at all exams. All other assignments and quizzes will be available through the Internet. Students may be required to attend an orientation, mid-term, or final exam on campus. Additional information may be obtained by visiting www.mtsu.edu/online.

More information is available by calling (615) 898-5611.

## Evening School

The College of Continuing Education and Distance Learning serves students attending MTSU at night by assisting with registration, accepting payment of fees/fines for the Business Office, providing catalogs, making IDs, issuing parking permits, and offering other services to students outside regular daytime business hours. More information is available by contacting the Evening School Office, (615) 904-8391, or at www.mtsu .edu/~learn/credit/.

## Off-campus Program

Credit courses are regularly scheduled at several off-campus locations in middle Tennessee, including Smyrna, Franklin, and Columbia State Community College. Efforts are made to service any special requests for off-campus credit courses by business and industry, school systems, and agencies. For more information, call (615) 898-2121 or visit www.mtsu .edu/~learn/credit/.

## Summer School

The College of Continuing Education and Distance Learning directs the summer school, which includes a substantial number of credit courses.

## Regents Online Degree Program (RODP)

Middle Tennessee State University and each of the colleges and universities in the Tennessee Board of Regents (TBR) system are working cooperatively to allow students to earn college degrees entirely online or through other off-campus delivery formats. The joint program is called the Regents Online Degree Program (RODP).
Students are able to complete all degree requirements without traveling to campus. In addition to online and off-campus degree programs, a number of departments offer graduate students the opportunity to complete portions of their degrees online or in other distance-learning formats. The following programs are available:

Master of Science in Professional Studies (M.P.S.): This degree is offered through RODP and is an interdisciplinary graduate degree program designed for working adults who wish to pursue graduate professional studies. This degree consists of 33 hours of interdisciplinary coursework in the areas of leadership, communication, strategic planning and assessment, organizational structure, and research/data analysis. For information about courses and degree requirements, contact the College of Graduate Studies or the College of Continuing Education and Distance Learning.
Master of Education with a Major in Advanced Studies in Teaching and Learning (M.Ed.): This RODP master's degree program in education is designed to provide advanced professional preparation in the area of reading and language arts for practicing teachers. Admission is limited to fully licensed teachers who are currently teaching in classrooms. For information about courses and degree requirements, contact the Department of Elementary and Special Education or the College of Graduate Studies.
Master of Science in Nursing (M.S.N.): This RODP degree offers concentrations in Nursing Education, Nursing Administration, Nursing Informatics, and Advanced Practice: Family Nurse Practitioner. Registered nurses with bachelor's degrees in areas other than nursing may complete a bridge program in order to
be eligible for admission to the M.S.N. For more information on graduate nursing programs, contact the School of Nursing.

## MTSU Online Degrees:

Master of Education with a Major in Administration and Supervision (M.Ed.): Coursework for this degree can be completed in a traditional campus setting, through online courses, or with a cohort group located in various community settings throughout the middle Tennessee region. Students interested in any of these options should contact the Department of Educational Leadership or the College of Graduate Studies.

Master of Education with a Major in Administration and Supervision and a Concentration in Library Science (M.Ed.): The focus of this program is school librarianship. Graduates are eligible to apply for licensure as public school librarians in the state of Tennessee. Students in this concentration can complete all degree requirements online. For information on this program, contact the Department of Educational Leadership.

## Educational Specialist with a Major in Curriculum and Instruction

 (Ed.S.): This degree program is for persons holding a master's degree and is designed for advanced study in the field to meet specific professional goals. The specializations in ESL and Technology and Curriculum Design are offered entirely online. Additional information about this degree and these two specializations can be obtained by contacting the Department of Educational Leadership.Specialization in Teaching English as a Second Language (ESL): This program addresses the main areas of proficiency for teachers of English as a Second Language. Graduates of this program typically serve the needs of students whose first language is not English and those of the school districts where those students are enrolled.
Specialization in Technology and Curriculum Design: This program offers students a means of refining curriculum and instructional design skills by completing courses that promote research-based practices in technology, the development of deep learning, and effective curriculum design.

Students should contact individual departments for the most current information on specific distance learning opportunities available to graduate students. For the most current information on degree requirements, available programs, and application procedures, contact the College of Graduate Studies at (615) 898-2840 or graduate@mtsu.edu.

## Professional Development

## A World of Opportunities

The mission of the Professional Development (PD) division is to provide test preparation and certificate programs as well as specialized continuing education programs to those interested in developing their professional expertise.
The college's PD initiative promotes and provides diverse opportunities that enhance the professional and personal lives of middle Tennessee residents. Diverse educational opportunities, quality programs, and dedicated services provide access to the vast and valuable resources of the University, the region, and beyond.

## Business and Industry

PD serves the business community by providing training opportunities to enhance professional development, certification, and business performance. MTSU faculty members as well as outside experts provide up-to-date, relevant programs in skills training through organizations such as Achieve Global, the American Society for Quality, Project Management Institute, the Association for Operations Management (APICS), the American Payroll Association, and the Society of Human Resource Management and in areas such as real estate, Lean, Six Sigma, OSHA, Spanish for business, and Tennessee business tax.

## Government and Education

The government and education area works with all branches of government and establishes programs to enhance the professional development of K-12 educators. Available are programs such as ACT Preparation, LSAT Preparation, Conversational Spanish I and II, Survival Spanish for Business, Survival Spanish for Law Enforcement, and Sign Language. Professional development is also offered in conjunction with the Tennessee Government Finance Officers Association.

## Health Care

This area offers valuable continuing education for professionals and unique training opportunities for those interested in the health care field. Programs include Emergency Medical Technician, test preparation for the Allied Health field, CPR, Continuing Education for Health Care Professionals, Nursing CEUs, and Spanish for Health Care Professionals.

## On-Demand/Online

MTSU offers hundreds of on-demand and online courses. These courses cover a wide range of topics and are generally more affordable for those who don't require college credit. They cover topics including computer applications, languages, finance, entrepreneurship, nonprofit management, and health care.

## Technology

Training programs are available in technology areas and applications such as HTML, ASP, CGI, FrontPage, Dreamweaver, MOS certification, and much more.

## Workforce Development and Corporate Training

PD offers customized, on-site training to business, industry, and government based on specific organizational needs. Professional development certification programs, seminars, workshops, and short courses that focus on timely and leading-edge topics are presented on and off campus. Those benefiting from such programs include human resource managers, engineers, lawyers, accountants, emergency medical technicians, government officers, payroll administrators, and physician groups. Inquiries should be directed to PD at (615) 898-2462.

More information can be obtained by contacting the College of Continuing Education and Distance Learning, (615) 8982177. Additional information may be obtained by visiting www.mtsu.edu/learn.

# Graduate Student Bill of Rights and Responsibilities 

The Graduate Council and the College of Graduate Studies have approved in principle the document Graduate Student Bill of Rights and Responsibilities.

## Rights

1. Graduate students have a right to be respected as individuals of merit and as junior colleagues of faculty. The student's vulnerability must not be exploited in any way by faculty, administration, or staff. (Reference: Faculty Handbook, Ethics Guidelines, Section IV, I.B., I.C.2, page 2)
2. Graduate students have a right to an accurate and timely description of the availability and the likelihood of financial and resource support within their program and within the University and will be given an equal opportunity to compete for support for which they are eligible.
a. Prospective and currently enrolled graduate students should be provided a thorough description of the requirements and qualifications necessary for holding teaching assistantships and graduate assistantships and receiving financial support from the University.
b. Prospective and currently enrolled graduate students should be provided a thorough description of the requirements and qualifications for all academic and financial awards in their programs and in the Graduate Catalog. They are to be assured that competition for any and all academic awards will be available to eligible graduate students and that evaluation for such awards will be fair and objective. They also should be informed of the procedures for evaluating applicants.
3. Graduate students have a right to be informed of specific requirements for achieving an advanced degree. Each department should communicate clearly these requirements to its students, and it should notify currently enrolled students in writing of any changes. Prospective and currently enrolled graduate students have a right to know of the normal time to complete a degree within a specific graduate program.
4. Graduate students have a right to a nonbiased evaluation of their progress toward achieving an advanced degree (Constitution of the Student Government Association, Art. II Sec. 3). The criteria should be clearly understood by the graduate advisor and student.
5. If a graduate student requests an explanation, reasons for unsatisfactory performance on preliminary, qualifying, or comprehensive examinations should be given in writing.
6. Graduate students have a right to substantive feedback and regular guidance concerning their academic performance.
a. Graduate students and their thesis/dissertation directors should arrive at and maintain a mutually
agreeable schedule of evaluative/supervisory conferences.
b. Graduate students must be notified in writing of unsatisfactory performance before any attempt is begun to dismiss them from a graduate program. Only the dean of the College of Graduate Studies can dismiss a student from a graduate program for academic reasons and normally only upon the recommendation of the graduate program coordinator and department chair. Graduate students have the right to appeal for cause any decision affecting their academic standing as a graduate student. Cause excludes grade appeals, which are under the purview of the MTSU Grade Appeals Committee. The burden of responsibility rests with the appellant to provide a timely, cogent, and convincing written documentation of the facts upon which the appeal is based. Further information may be obtained from the appeals document from the Graduate Council, Section III.
7. Graduate students have a right to freedom from unlawful discrimination in any actions, including those based on gender, race, age, sexual orientation, disability, and religious or political beliefs. (Constitution of the Student Government Association, Art. II Sec. 1.2.6; MTSU Policies and Procedures Manual IV: 07:06, IV:07:16:i). University grievance procedures should be available upon request at the Graduate College. Opportunities for informal resolution should also be explained to the student when appropriate.
8. Graduate students have a right to reasonable confidentiality in their communications with professors. (Constitution of the Student Government Association, Art. II Sec. 4; MTSU Policies and Procedures Manual II:02:00)
a. In general, a student's performance or behavior should not be discussed by a professor with other students.
b. Discussion among faculty of a student's performance should be of a professional nature and should be limited to the student's academic performance and fitness as a graduate student: the substance of the communication should be based on need-to-know, relevant information.
9. Graduate students have a right to refuse to perform tasks if those tasks are not closely related to their academic or professional development as part of their defined responsibilities.
10. Graduate students have a right to receive fair recognition for their efforts and contributions to cooperative research projects, including co-authorship of publications. Due efforts and recognition should be determined prior to the project commencement whenever possible.
11. Graduate students should be represented in the deci-sion-making process relative to graduate issues in their
departments and programs; however, the representation is program specific, possibly taking many different forms. Graduate students should have the opportunity annually to evaluate their professors in writing without fear of retribution.
12. Graduate students have a right to review vitae of faculty members within their degree programs/departments who are qualified/eligible to serve on their graduate committees. These vitae should be made available at the time the students are accepted into their programs to aid them in selecting their committee members.

## Responsibilities

1. Graduate students have a responsibility to read and become familiar with the Graduate Catalog and the Student Rights and Responsibilities booklet.
2. Graduate students have a responsibility to complete and submit all documents required for admission to the College of Graduate Studies and to their departments.
3. Graduate students have a responsibility to conduct themselves in all academic activities in a manner befitting the professorate. Graduate students' behavior should be a credit to themselves, the degree program/department, and the University. (Student Rights and Responsibilities booklet)
4. Graduate students have a responsibility to devote appropriate time and energy toward achieving the advanced
degree within a reasonable time frame as specified by their graduate programs.
5. Graduate students have a responsibility to uphold ethical norms and honesty in research methodology and scholarship. (Student Rights and Responsibilities booklet; MTSU Policies and Procedures Manual I:01:24; "A Statement of Graduate Students' Research Rights and Responsibilities at MTSU's Jennings A. Jones College of Business")
6. Graduate students have a responsibility to not misrepresent themselves academically. It is a Class A misdemeanor to misrepresent academic credentials. Any graduate student who misrepresents his or her credentials to gain admission into MTSU will be subject to disciplinary action from the University which may include dismissal from the University.
7. Graduate students have a responsibility to communicate regularly with faculty members and advisors, especially in matters related to research and progress within the graduate program.
8. Graduate students are encouraged to participate in the campus community to the extent that they are able and to enrich the campus in whatever ways possible, including contributing to the following:
a. the academic development and the social environment of the department in which they are pursuing the advanced degree and
b. decision making relative to graduate student issues in the department, student government, and university.


## GRADUATE PROGRAMS

GJraduate degrees are planned to help fulfill specific purposes. Doctoral degrees are offered to educate university, community college, and junior college teacher/scholars in the fields of English, history, chemistry, economics, literacy studies, and human performance. The Specialist in Education degree is offered to educate administrators, teachers, and counselors at advanced levels for elementary and secondary schools.

Four degrees-the Master of Education, the Master of Arts in Teaching, the Master of Science in Teaching, and the Master of Business Education-are offered to educate public school teachers, supervisors, counselors, and administrators. The Master of Arts, the Master of Science, the Master of Professional Studies, and the Master of Social Work degrees are offered to prepare candidates for further graduate study and research, for teaching at the junior college level, for professional positions in a variety of fields, and for positions of leadership with state and federal agencies. The Master of Business Administration is offered to prepare candidates for leadership positions in business and industry, the Master of Criminal Justice is offered to prepare leaders in the criminal justice system, and the Master of Fine Arts is offered to individuals seeking advanced technical preparation in the recording industry.

THE FUNCTION OF EDUCATION ISTOTCTR THATMT intelligence plus chara Ood for

## Glossary of Terms

Admission to degree status-Admission to the College of Graduate Studies as a graduate student for the purpose of seeking a graduate degree. This status requires completing a graduate admission application; meeting all entrance and test requirements; transmittal of relevant official transcripts; payment of an application fee; approval by the graduate program/department; and approval by the College of Graduate Studies. In the case of international students or domestic students whose highest degree is from an institution outside the United States, an external evaluation of the relevant official transcripts from an evaluation source such as WES must occur for all non-English transcripts.
NOTE: Some graduate programs allow applicants to begin taking classes prior to an admission decision whereas others prohibit such enrollment. An applicant should seek information from the relevant graduate program about its policy.

Admission to non-degree status—Admission to the College of Graduate Studies as a post-baccalaureate student for the purpose of officially taking graduate courses but not seeking a graduate degree through MTSU. This status requires completing a graduate admission application; transmitting relevant official transcripts; payment of an application fee; and approval by the College of Graduate Studies. Not all graduate courses are open to non-degree students; thus the student should consult with the director of graduate study in the department.

Advancement to candidacy-Status of the student who has completed all or a substantial portion of the curriculum and has successfully passed either the culminating examination (comprehensive exams for master's students or preliminary exams for doctoral students). Advancement to candidacy is recognition that the student is prepared to commence the thesis or dissertation research. For non-thesis students it verifies that the student has completed all degree requirements and is eligible for graduation. Advancement form is submitted to the College of Graduate Studies by the director of graduate studies and identifies the members of the thesis or dissertation committee.

Cognate—Six semester hours of related coursework.
Comprehensive examination-An examination given to master's and specialist's students, generally during the last semester of coursework. The examination for all students may be oral, written, or a combination of both modes. It may be taken no more than twice. The purpose of this examination is to assess the candidate's knowledge of a broad academic field and to evaluate whether the candidate has attained certain standards and/or requirements necessary to successfully complete the program. If the examinations are written, they are to be kept on file in the department. The student has the right of access to his or her graded exam for a period of five (5) years.

Concentration-A curricular component of a graduate program representing a well-recognized subset or branch of the discipline. A concentration appears on the student's graduate transcript.

Conditional admission-The granting of temporary admission into a graduate program with certain stipulations being placed upon the student. Continuation in the program as a degree-seeking student is contingent upon fulfilling specific requirements described in the conditional admission letter. Conditional admission into the College of Graduate Studies may be granted if the applicant has less than the minimum requirements, i.e., either the required minimum grade point average for graduate study or the test scores (but not both) are not met. Such admission is at the discretion of the graduate dean.

Continuous enrollment-Enrollment during the regular academic year (Fall and Spring Semesters) unless the academic program requires year round enrollment. Continuous enrollment is expected of all students from initial enrollment until completion of dissertation for doctoral students and until completion of thesis for all specialist's and master's students. Students in non-thesis programs should maintain continuous enrollment through their culminating experience.

Degree plan-The degree plan specifies the courses which the student is required to take to complete the curricular requirements. This form must be filed and approved prior to completion of 21 hours at the master's and specialist's levels and 30 hours at the doctoral level (or earlier if required by the graduate program) by the pertinent graduate program personnel (e.g., graduate advisor, director of graduate studies, etc.), and the dean of the College of Graduate Studies (or designee). The form may be amended as needed by submitting an approved Change of Degree Plan Form.

Director of graduate studies-A faculty member appointed to serve as the principal officer of a graduate program with respect to curricular and other relevant matters.

Full-time/part-time graduate status-See student load, page 47.

Graduate advisor-A faculty member appointed by the department and approved by the College of Graduate Studies to advise graduate students and provide curricular planning counseling. Graduate students should consult with their graduate advisors prior to or immediately upon being admitted to a graduate program. A list of graduate advisors may be obtained from the graduate program or the relevant department.

Graduate analyst-A staff member within the College of Graduate Studies assigned to assist the individual graduate student with respect to all relevant administrative matters from the point of admission through graduation.

Graduate status-Status whereby a post-baccalaureate student is declared eligible to enroll in graduate courses at MTSU. The granting of graduate status does not necessarily mean that one has been admitted to a graduate program. (Also see hold and admission.)

Graduation requirements-Those academic and other requirements necessary for successful completion in order to be eligible for receipt of the degree. In general, the requirements in existence at the time of matriculation are those which must be fulfilled. These requirements are listed in the graduate catalog of that year. Changes in a graduate curriculum may occur while a student is enrolled. If so, the student will have the option of fulfilling the new requirements or following the original plan in existence at the time of matriculation. This is subject to "stop-out" limitations and course availability. (See stop-out.)

Hold-A block placed on registration (or transcripts). For example, a registration hold will be placed on all non-admitted, degree-seeking applicants having graduate status after their first semester.

Intent to graduate-Indication that the candidate is planning to complete all degree requirements during the current term. An Intent to Graduate Form must be filed by the candidate by the date listed on the College of Graduate Studies Web site for the semester of planned graduation. This authorizes release of the student's file for final evaluation and authorizes information to be collected for issuance of the diploma.

Major—A field of study representing a well-recognized discipline in which a graduate program is offered. A major appears on the student's graduate transcript.

Major professor-The faculty member providing the primary scholarly research mentorship to the graduate student. The major professor serves as the director or chair of the thesis or dissertation committee.

Matriculation-The first semester of enrollment after admission to a graduate program.

Minor-A freestanding curricular component of a graduate program representing an academic discipline. This designation verifies that scholarly expertise in the minor field has been achieved in addition to that attained in the major discipline.

Plagiarism-The use or reproduction of material from another person's work (e.g., publications, productions, or intellectual property) without revealing the source and/or clearly acknowledging the degree of dependency. If materials are reproduced verbatim from another source, or even reproduced in large part with only minor modification, proper citation must occur. To avoid allegations of plagiarism, clearly cite the source and use quotations marks to identify the excerpts, or clearly acknowledge the source by indenting and single-spacing the reproduced selections.

Preliminary examination-The second of a set of doctoral examinations which are taken at the end of coursework and are preliminary to entering the dissertation phase. Preliminary examinations may be both written and oral and are inclusive of coursework and supplementary readings. Students should consult with their advisors as to the individual program policy on timing and content of examinations.

Qualifying examination-An examination given to doctoral students to assess the level of mastery of knowledge in the discipline and to determine if the student is qualified to continue as a candidate for the doctoral degree. Individual programs often require the successful completion of the qualifying examination after the first year of the doctoral program. Students should consult with their advisors as to the individual program policy on timing and content of examinations. Written portions of the examination are to be kept on file in the department for a period of five (5) years, and the student has the right of access. Passing the examination is a milestone in academic achievement by a doctoral student.

Prerequisites-Courses which are required for completion in order to provide the necessary academic background for subsequent graduate coursework. Prerequisites are determined and monitored by the individual graduate program.

Readmission (reenrollment)—Applications for readmission must be filed if a graduate student fails to maintain continuous graduate enrollment. If granted, the student may reenroll for the identified term. Readmission, if granted, is based on competitiveness with current applicants and is not guaranteed. The department or program should be consulted for its readmission policy.

Repeat policy-The number of graduate courses possible for repetition for the purpose of grade replacement is limited to two. These two courses may not exceed 8 credit hours.

Satisfactory progress-Successful advancement of a student toward his/her degree objective in the judgment of the faculty and dean of the College of Graduate Studies. To be deemed as making satisfactory progress, a graduate student must maintain a cumulative GPA of 3.00 (3.25 in doctoral programs) or greater and must successfully complete sufficient and appropriate graduate courses. These graduate courses must apply toward the graduate curriculum in a manner consistent with completion of the degree objective and within the established time limit.

70/30 Rule—A curricular stipulation for master's degree candidates specifying that no more than 30 percent of the total degree hours may be dually listed as undergraduate/graduate hours. Candidates with more than 30 percent of the degree program dually listed as undergraduate/graduate hours cannot graduate until the balance is attained. Normally, no more than 3 credits of thesis research (course 6640) will be applied toward the minimum degree hour requirement. Careful curricular planning in consultation with the graduate advisor is essential.

Specialization-A curricular component of a graduate program representing a well-recognized subset or branch of the discipline. A specialization does not appear on the student's graduate transcript.

Stop-out—Events in life such as family leave, illness, or military duty may result in a student being unable to maintain continuous enrollment. In such a case, students may request permission to interrupt their studies on a temporary basis. A stop-out is the period of time during which a student fails to register for successive academic sessions. If the stop-out period exceeds one academic year (Fall and Spring Semesters), the student may be required to fulfill degree requirements in existence at the time of reenrollment, rather than those in place at the original matriculation. A formal request to stopout must be filed by the student, endorsed by the director of graduate studies in their department, and approved by the dean of the College of Graduate Studies. A stop-out may be utilized no more than one time during the time limit for the degree program.

Time limits-The time elapsed from matriculation during which a student is required to complete all degree require-
ments. Master's and specialist's students have six years from matriculation to complete all degree requirements. Doctoral students have ten years from matriculation to complete all degree requirements. These time limits are subject to extension but only for compelling reasons. If an extension is to be granted, it must be supported by the graduate program and approved by the dean of the College of Graduate Studies.

Transfer credit—Student's coursework taken at other colleges and universities which is formally transferred to the MTSU graduate record. In general, only coursework taken while in graduate status prior to attending MTSU will be transferred and only if those courses were not used in partial satisfaction of degree requirements at the previous university. Transfer credit should demonstrate equivalency to existing MTSU courses acceptable for the graduate degree and requires the approval of the student's director of graduate studies and the dean of the College of Graduate Studies during the first semester of enrollment at MTSU. In general, credits completed seven (7) or more years prior to admission to a degree program at MTSU will not be considered for transfer.


# Admission to the College of Graduate Studies 

The University welcomes applications from individuals qualified for graduate study. Admission to graduate studies at Middle Tennessee State University is two-fold, entailing both admission to the College of Graduate Studies and, in the case of degree-seeking students, admission to an individual academic program. An applicant initially applies to the College of Graduate Studies. Upon receipt of all required materials and assuming the applicant meets the admission standards of the College of Graduate Studies, the application is then forwarded to the individual program for consideration. Applications for admission should be completed online (www.mtsu.edu/graduate). Paper applications are available from the College of Graduate Studies or from this catalog. In accepting admission to the College of Graduate Studies, a graduate student assumes responsibility for knowing and complying with the regulations and procedures set forth in this catalog, as well as any amendments or revisions which may ensue.

Graduate applicants must have earned a bachelor's degree although for some programs a master's degree is required for admission. Under certain conditions undergraduate seniors with 98 semester hours of credit may be eligible to take graduate coursework. (See the section on Eligibility to Enroll in Graduate Courses below.)

Applicants admitted to graduate programs as degreeseeking students are those working toward a graduate degree. Degree-seeking students must be recommended for admission by the graduate program/department and approved by the dean of the College of Graduate Studies.

Students (with the exception of those interested in teaching licensure or master's +30 ) not seeking a degree are classified as non-degree students. Non-degreeseeking students must be admitted to the College of Graduate Studies. They are not admitted into a specific program. Non-degree students may take classes not restricted to students admitted into specific programs. Non-degree seeking students may take courses for a reasonable period of time as determined by the dean of the College of Graduate Studies.

NOTE: Non-degree-seeking students are not permitted to enroll in graduate courses in the Jennings A. Jones College of Business.

Students interested in obtaining a teaching license or working on master's +30 hours should apply for admission to either the Initial Licensing Track or the Master's +30 Track.

All applicants to the College of Graduate Studies must have an overall undergraduate grade point average (GPA) of 2.75 (on a 4.00 scale) to be considered for unconditional admission. (Also see conditional admission.) Applicants who attended graduate school at another institution must have a minimum cumulative GPA of 3.00 on all graduate work and a minimum of 2.75 on all undergraduate work to be considered for unconditional admission. International students on an F1 visa must meet requirements for unconditional admission.

Individual programs may have higher admission requirements than those of the College of Graduate Studies. Applicants should consult the departmental pages for individual program admission requirements.
The College of Graduate Studies notifies all students of formal admission to both the College of Graduate Studies and to individual graduate programs. Notification of admission to the College of Graduate Studies alone does not imply admission to a specific program.

## Admission as a Degree-Seeking Student

All applicants wishing to pursue a graduate degree objective at MTSU must formally apply for admission to the College of Graduate Studies as degree-seeking students.

At least three months prior to the anticipated date of registration, all degree-seeking applicants must submit the following materials to the College of Graduate Studies:

1. an application for admission, preferably submitted online;
2. a nonrefundable application and processing fee (required of all applicants) should accompany the application; applications are NOT processed until the fee is paid);
3. official transcripts certifying coursework from each college or university attended. Official transcripts must be mailed directly from the institution to MTSU and must be received prior to completion of the first semester of enrollment except for the M.B.A., for which all transcripts must be received prior to enrollment. Unofficial transcripts
may be used for the initial registration in graduate courses as a demonstration of eligibility for graduate status.
a. If the applicant obtained the bachelor's degree at MTSU, only transcripts of work not posted on the MTSU transcript will be required.
b. If the applicant obtained the bachelor's degree at another institution, that latter transcript is required. Transcripts of work not posted on the baccalaureate transcript are also required. All post-baccalaureate transcripts are also required.
c. If the applicant earned a graduate degree at another institution, that latter transcript is also required. Transcripts of all post-baccalaureate work not appearing on the graduate transcript are also required. For international applicants, official or attested university records, with certified translations if the records are not in English are required. Notarized copies are not acceptable.
d. Any applicant whose highest degree is from a university outside the United States may be required to have his or her credentials evaluated by an acceptable evaluation service. A course-by-course report is required. A list of acceptable evaluation services is listed on the College of Graduate Studies Web site.
4. letters of reference, resumes, and portfolios may be required by the graduate program. Please refer to the relevant graduate program information section of this catalog for additional information, including where these are to be submitted, if required.
5. satisfactory scores on the Graduate Record Examination (GRE), Miller Analogies Test (MAT), or Graduate Management Admissions Test (GMAT) tests. The GRE, MAT, or GMAT result is used in the evaluation of the academic qualifications of all graduate applicants. However, admission decisions will be based on the overall academic record of the applicant (particularly in comparison with other applicants being accepted into the program), as well as other relevant materials such as letters of recommendation.
NOTE: Both ETS and the GRE Board have advised that a combined GRE score should not be used as an absolute cutoff for admissions decisions but rather should be used as part of an overall evaluation of applicants. The GRE Board statement reads: A cutoff score based only on GRE scores should never be used as a sole criterion for denial of admission. The College of Graduate Studies subscribes to this principle.
All International applicants who will be attending the University on a visa and who are not native speakers of English or are not graduates of a United States undergraduate or graduate institution must supply a minimum score of 195 (computer-based), 525 (paper-based), or a 71 (Internet-based) on the Test of English as a Foreign Language (TOEFL), taken within the last two years; 85 on the University of Michigan English Proficiency Exam (UMELI); 6 on the International English Language Testing System (IELTS); or have completed level 112 of E.L.S. instruction as a demonstration of English proficiency.

International applicants on F and J visas must provide verification of financial support prior to admission as required by the United States Immigration and Naturalization Service. An affidavit of support is not required for admission; however, international students (F1) requiring issuance of Form I-20 must supply sufficient evidence of financial support for the applicant and all members of his/her family requiring issuance of dependent Form $\mathrm{I}-20$. Further information may be obtained from the International Programs and Services Office.
Undocumented aliens may be admitted to MTSU as out-of-state students and are not eligible for federal financial aid.
Each graduate program may have additional requirements including application deadlines. Applicants should refer to the section of this catalog entitled Graduate Program Information, peruse the graduate program description in this catalog, and/or contact the director of graduate studies in the relevant program for specific requirements. In general, applicants may not apply more than 6 credit hours taken while in non-degree seeking status toward any degree program. Upon notification of admission by the College of Graduate Studies to a specific graduate program, the admitted student should contact the director of graduate studies for information on any required prerequisite courses. It is advisable to speak with a departmental academic advisor before enrolling in any graduate course.
An applicant not meeting University or program requirements for admission as a degree-seeking student may appeal to the individual program for special consideration. If recommended for admission by the program, the dean of the College of Graduate Studies has final approval or denial authority.
If an applicant fails to meet the deadline for submitting all materials for admission, it will be necessary for the applicant to reapply for admission. All materials submitted will be retained for one year from the date of submission.

## Admission as a Non-Degree Student

Non-degree student admission is available to qualified applicants who wish to enhance their post-baccalaureate education, yet who do not seek a graduate degree. International students on an F1 visa may not be admitted to graduate study as non-degree students. Applicants wishing to be admitted as non-degree graduate students must

1. complete an application for graduate admission to the College of Graduate Studies;
2. pay an application fee;
3. submit an official transcript certifying receipt of the bachelor's or post-baccalaureate degree. Official transcripts must be mailed directly from the institution to MTSU and must be received prior to completion of the first semester of enrollment. Unofficial transcripts may be used for the initial registration in graduate courses as a demonstration of eligibility for graduate status.
Not all courses offered at the University are available for non-degree students. Enrollment in specific courses may be limited to degree seeking students only. Information concerning eligibility for specific graduate courses may be obtained from individual departments. It is advisable to speak with a departmental academic advisor before enrolling in any graduate course.
NOTE: Non-degree-seeking students are not permitted to enroll in graduate courses in the Jennings $A$. Jones College of Business.
Non-degree-seeking students who wish to change to degree-seeking status must meet College of Graduate Studies' admission requirements and specific graduate program admission requirements to be eligible for consideration.
If transfer to degree-seeking status is approved, appropriate semester hours earned while a non-degree student may be applied toward a degree program if approved by the director of graduate studies and the dean of the College of Graduate Studies.

## Conditional Admission

Occasionally degree-seeking applicants may not meet all the requirements necessary to be recommended for unconditional admission. For example, they may have a low undergraduate grade point average or have low test scores. However, the overall application materials may suggest there is substantial potential for academic success, thus making outright denial counterproductive. In these cases, conditional admission into the College of Graduate Studies may be granted by the dean of the College of Graduate Studies upon the recommendation of the graduate program. Continuation as a degreeseeking student within an individual academic program is contingent upon fulfilling specific requirements stipulated in the conditional admission letter. Conditionally admitted students are not eligible to hold graduate assistantships until all conditions of admission are satisfied.

## Admission of MTSU Faculty Members and/or Administrators

Members of the faculty and/or administration of MTSU are eligible for admission to the College of Graduate Studies just as any other applicant. They may not
take over 6 semester hours of coursework during any semester. Faculty at the rank of assistant professor or higher or administrators of equivalent ranks may not be admitted to any doctoral program. If instructors who are in a doctoral program are appointed to assistant professor rank, they must discontinue the doctoral program.

## Misrepresentation of Academic Credentials

It is a Class A misdemeanor to misrepresent academic credentials. A person commits the offense of misrepresentation of academic credentials who, knowing that the statement is false and with the intent to gain admission to MTSU, represents orally or in writing that such person has

1. successfully completed the required work and has been awarded one or more degrees or diplomas from an accredited institution of higher education;
2. successfully completed the required coursework and has been awarded one or more degrees or diplomas from a particular institution of higher education; or
3. successfully completed the required coursework for and has been awarded one or more degrees or diplomas in a particular field or specialty from an accredited institution of higher education.

Any applicant who misrepresents his or her credentials will be subject to disciplinary action from the University which may include dismissal from the University.

## Eligibility to Enroll in Graduate Courses

Ordinarily only graduate students should register for courses numbered 5000 or above. However, any MTSU undergraduate student having completed 98 semester hours of undergraduate credit is eligible to take graduate courses, except in Business Administration, Accounting, English, and Information Systems.
Undergraduate students wishing to take graduate courses must obtain permission from the graduate program and the College of Graduate Studies. Permission is not guaranteed. Not all graduate courses are offered to undergraduate students. If courses are taken for graduate credit while an undergraduate, they may be applied toward a graduate degree at the discretion of the individual graduate program if the earned credit is not used toward the granting of another degree.
Students may not enroll in 7000-level courses in the Departments of Elementary and Special Education and Educational Leadership unless they are seeking an Education Specialist or doctoral degree. Non-degreeseeking students are not permitted to enroll in 7000level courses.

## Readmission (Reenrollment)

The College of Graduate Studies should be contacted for all matters concerning readmission. A previously enrolled student may reapply online on our Web site (www.mtsu.edu/graduate). A readmission application is required from any student who missed more than one semester (excluding summers), regardless of the reason. For non-degree-seeking post-baccalaureate students, readmission is granted at the discretion of the graduate dean and is subject to space limitations with degree seeking students given preference for enrollment.

For degree-seeking students, each graduate program may have a specific readmission policy and should be contacted for information. Readmission requires the recommendation of the graduate program and approval by the dean of the College of Graduate Studies. Some graduate programs regularly allow readmission for individuals who have missed no more than one semester or if the "stop-out" period is less than one year; others are more restrictive due to program capacity, curriculum, and ongoing quality improvement. Students seeking to be readmitted must meet the requirements of new applicants.

## Reenrollment Following Suspension

Suspended graduate students who wish to resume graduate studies after the period of suspension must reapply to the program. Readmission of a suspended graduate student is not guaranteed. If readmission is granted to a suspended student, reenrollment cannot occur until at least one term (exclusive of Summer) has elapsed following suspension. In other words, if students suspended in the Fall apply to reenroll, they are not eligible for reenrollment prior to Summer. Students suspended in the Spring or Summer may apply for reenrollment in Spring of the following academic year.

## Auditing Courses

A student who chooses to audit a course is one who enrolls and participates in a course without expecting to receive academic credit. The same registration procedure is followed and the same fees charged as for courses taken for credit. An audited course is not applicable to any degree or certificate.
Regular class attendance is expected of an auditor. Students interested in auditing a course should discuss course requirements with the instructor prior to enrolling. Failure to meet course requirements may result in an auditor being removed from the course at the request of the instructor. A successful audit will be
recorded on the transcript with the designation NC. Any petition to change from audit to credit or credit to audit must be processed by the last day in the semester in which a class may be added to the student's schedule of classes. Requests to change from credit to audit after the deadlines must be approved by the dean of the College of Graduate Studies.

## Hours before and after the Master's Degree for Teachers

The Tennessee Board of Education has ruled that teachers may count graduate work received toward the next pay raise, per current guidelines. No credit will be given for repeated work. The student must request the Office of Teacher Licensure to send proper credentials to the State Department of Education and/or to the applicable local officials. The student is responsible for maintaining current knowledge of which graduate courses and hours are acceptable for licensure.

## Registration

The registration guide contains information concerning registration procedures. The most current information regarding registration and availability of courses will be found online on RaiderNet.

## Student Identification Cards

All students must have a permanent ID card with a magnetic strip on the back. The card is required for a variety of services on campus including cashing checks, admission to athletic and special events, admittance to the Recreation Center, checking out library materials, obtaining meal tickets, and using RAIDER FUND\$. The ID card will be validated automatically when all fees are paid.
The first card is issued at no charge; however, there is a $\$ 10$ charge for replacing lost or stolen IDs. If the card breaks or is damaged, it should be returned to the ID office and a new card will be issued at no charge.

## Immunizations and Health Certificates

There are requirements related to health concerns for all students wishing to study at MTSU. The State of Tennessee requires full-time students entering colleges, universities, and technical institutes with enrollment of greater than 200 students to provide proof of two (2) doses of measles, mumps, and rubella (MMR) vaccine on or after the first birthday, or proof of immunity to measles
if date of birth is 1957 or after, prior to the first day of classes of the students' initial attendance The state of Tennessee also mandates that MTSU provide information concerning Hepatitis B infection and Meningococcal disease to all students entering MTSU for the first time. All new graduate students will need to electronically sign a waiver form before they can register. This form is located within PipelineMT. For further information concerning these Tennessee Immunization laws, and exemptions from compliance and forms, please contact Student Health Services.

Students will not be allowed to register for classes until acceptable forms are on file in the Student Health Services Office. More information may be obtained by calling 615-898-2988.
International students are also required to file a certificate from a licensed U.S. physician or other qualified medical authority, verifying freedom from tuberculosis, within 30 days from the first day of classes. Failure to do so will result in denial of enrollment. In the event that a student either has tuberculosis or has potential tuberculosis requiring treatment, continued enrollment will be conditional 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 medical
treatment program. International students should be aware that they must purchase health insurance before they are allowed to enroll.

## Catalog

This catalog is produced for the convenience and benefit of graduate applicants and enrollees and is revised every two years. In the interim period, changes in University and/or graduate program requirements may be approved which apply to new applicants or admittees (see page 8 for additional information). Thus the information contained herein should not be construed as binding or inferred as an academic contract. New graduate students should request a copy of graduate program requirements in existence at the time of matriculation. These will be the requirements which must be fulfilled to obtain the degree. Notwithstanding, should graduate requirements change while a student is still enrolled, he/she will have the choice of opting for the new requirements or following the original plan in existence at matriculation, subject to any necessary substitutions. Students who fail to maintain continuous enrollment will need to meet current standards for readmission. Students are also encouraged to consult the departmental/program graduate student handbook in the specific program of study.


## Expenses

The question of costs while attending the University is important to every student. It is difficult, however, to accurately estimate yearly expenditures; expenses vary according to the nature of the curriculum, the place of residence (whether in-state or out-of-state), and the student's own habits and needs. It is possible to live simply and to participate in the life of the student community on a modest budget. The best help the University can offer the student in budget planning is to provide available figures for expenses.
Health service and admission to athletic events are available to any currently enrolled student. The payment of the appropriate fees will permit any combination of graduate and undergraduate courses to be taken that may be required or approved. Charges for all coursework will be assessed by course level. The University reserves the right to correct errors in student fee assessments and charges which are discovered subsequent to initial billings and fee statements.
All fees are for the academic year 2008-2009 and are subject to change by action of the Tennessee Board of Regents. The new fee amounts will be published each year when approved by the Tennessee Board of Regents (usually around July 1). The updated rates will be available in July on the MTSU Web site at www.mtsu.edu/~bursarmt.

## Registration Fees

| Maintenance Fees |  |
| :--- | ---: |
| In-State Students |  |
| Full-time (per semester) |  |
| Undergraduate (12 hours and over) | $\$ 2,151.00$ |
| Graduate (10 hours or more) | $2,886.00$ |
| Part-time (per credit hour) |  |
| $\quad$ Undergraduate | 189.00 |
| Graduate | 305.00 |
| Out-of-State Students* |  |
| Full-time Students (per semester, 12 hours and over) | $7,597.00$ |
| Undergraduate | $8,332.00$ |
| Graduate | 662.00 |
| Part-time Students (per credit hour) | 778.00 |
| $\quad$ Undergraduate |  |
| Graduate | 699.00 |
| Program Services Fee | 59.00 per hour |
| Full-time |  |
| Part-time |  |

59.00 per hour
*Included in these rates are charges for out-of-state tuition as follows:

1. $\$ 5,446.00$ for full-time students
2. $\$ 473.00$ per credit hour for part-time students

NOTE: The rates quoted above are those in effect for the 2008-2009 academic year. A portion of the Program Services Fee is allocated to the Parking and Transportation Services department; upon payment of all registration fees, students are eligible to receive a student parking permit.

## Materials Fees

Agribusiness and Agriscience
Applies to ABAS 2400, 3400, 4400, $4460 \quad \$ 150$ per course

## Biology

BIOL 1030/1031, 1110/1111, 1120/1121, 2010/2011, 2020/2021,
3000, 3010/3011, 3020/3021, 3030, 3040, 3210/3211, 3250/3251, 4080/4081, 4110/4111, 4130/4131, 4140/4141, 4180/4181,
4210/4211, 4220/4221, 4270, 4280, 4290, 4300/4301, 4360, 4430, 4440, 4450, 4460/4461, 4510, 4550, 4560/4561, 4570/4571, 4580/4581, 4590, 4720/4721, 4750, 5010/5011, 5020/5021, 5030, 5040, 5130/5131, 5140/5141, 5180/5181, 5220/5221, 5460/5461, 5510, 5560/5561, 5570/5571, 5580/5581, 6080/6081, 6290, 6330/6331, 6360, 6380/6381, 6390/6391, 6410, 6430, 6440, 6450, 6590, 6620,6720/6721, 6750 \$5 per credit hour

## Chemistry

Applies to PSCI 1030/1031; CHEM 1010/1011, 1020/1021,
1110/1111, 1120/1121, 2030/2031, 2230/2231,
2880, 3010/3011, 3020/3021, 3530/3531, 3880, 4230/4231, 4330/4331, 4340/4341, 4350/4351, 4360/4361, 4430/4431, 4530, 4630/4631, 4780, 4880
\$5 per credit hour

## Art

Applies to ART 1610, 1620, 1630, 1640, 2130, 2200, 2230,
2310, 2325, 2510, 2620, 2710, 2810, 3140, 3200, 3210, 3220,
3240, 3325, 3330, 3520, 3530, 3550, 3560, 3610, 3620, 3650,
3720, 3730, 3770, 3820, 3830, 3930, 4000, 4100, 4110, 4120,
4130, 4140, 4280, 4290, 4300, 4310, 4320, 4390, 4400, 4510,
4520, 4530, 4640, 4710, 4720, 4730, 4770, 4810,
4820, 4830
$\$ 20$ per credit hour
Concrete Management
Applies to CIM 3060, 3070, 3080, 3100, 3200, 3600, 4010, 4050, 4060,
4100, 4150, $4200 \quad \$ 15$ per course

## Special Course Fees

Aerospace Flight Instruction Program Fees

Use of aircraft
For instruction
For use of simulators
Jennings A. Jones College of Business
Applies to ACTG, BUAD, BLAW, BCEN,
ECON, FIN, INFS, MGMT, MKT, QM
(excludes ECON 2410 and 2420 and QM 2610)

Private Instruction Music Fees
Charged to all music private instruction courses
$\$ 20$ per credit hour
\$115-235 per hour $\$ 12-35$ per hour
$\$ 20-70$ per hour
$\$ 175$ for 1 credit hour \$325 for 2-3 credit hours

Distance Education Fee
(MTSU online and correspondence courses)
\$10 undergraduate credit hour $\$ 15$ graduate credit hour

Concrete Management Certification Fees
Applies to CIM 3000, 3050

## Nursing Testing Fees

Applies to NURS 3000, 3030, 3170, 3350, 3530, 3550,
3570, 4210, 4330, 4350, 4530, 4550, 4570
$\$ 34$ per course

## Fall 2008-Summer 2009 Regents Online Degree Program Fees

Regents Online Degree Program (RODP) courses are charged per hour and viewed separately from MTSU courses so as not to mix with the full-time cap applicable to MTSU courses. RODP fees are computed in addition to any MTSU course fees and do not apply to the full-time maximum for MTSU registration fees.

| In-State Resident - Maintenance Fees |  |
| :--- | ---: |
| $\quad$ Undergraduate | $\$ 189.00$ per hour |
| $\quad$ Graduate | 305.00 per hour |
| Out-of-State Resident |  |
| $\quad$ Undergraduate | 662.00 per hour |
| $\quad$ Graduate | 778.00 per hour |
| Online Course Fee <br> $\quad$ Undergraduate/Graduate | 76.00 per hour |

## Summer 2009 Registration Fees

NOTE: Fees are charged per hour for all classes. NO maximum applies for summer.

## In-State Students

Undergraduate
Graduate
Out-of-State Residents
Undergraduate
Graduate
Program Services Fee
Late Registration (nonrefundable)
100.00


## Campus Housing Expenses Fall 2008-Summer 2009

## Reservations

Fall and Spring Semesters, required prepayment \$300.00
Spring Semester only, required prepayment \$150.00
Summer Session, required prepayment \$175.00

Fall 2008-Spring 2009

| Building | Type of <br> Accommodation |  | Fall <br> 2008 |
| :--- | :---: | :---: | :---: |
|  | Single | $\mathrm{N} / \mathrm{A}$ | N 2009 |

NOTE: Room rents are subject to change by action of the Tennessee Board of Regents. Each student will pay the amount in effect at the time of registration. Apartment summer sessions noted with an asterisk are available only to those residents who have signed a license agreement and made prepayments for the subsequent academic year beginning in August.
*Residence hall summer sessions are restricted to specific locations.

## Summer 2009 Term Building Rates

Deere, Nicks

| Type of <br> Accom. | All <br> Summer | S1 | S2 | S2/S3 | S3 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Private | $\$ 1,987.75$ | $\$ 458.75$ | $\$ 764.50$ | $\$ 1,529.00$ | $\$ 764.50$ |
| Shared | $\$ 1,165.00$ | $\$ 268.90$ | $\$ 448.05$ | $\$ 896.10$ | $\$ 448.05$ |


| Building | Type of <br> Accommodation <br> (Restrictions Apply) | All <br> Summer |
| :--- | :--- | :---: |
| Scarlett | Private bedroom, <br> four-person apartment | $\$ 504.40$ |
| Womack | (Restrictions Apply) <br> Single Students | $\$ 1,486.26$ |
|  | One bedroom, shared | $\$ 1,661.20$ |
|  | Two bedroom, shared |  |
|  | One bedroom, unfurnished | $\$ 2,568.90$ |
|  | One bedroom, semifurnished | $\$ 2,972.52$ |
|  | Two bedroom, unfurnished | $\$ 2,928.00$ |
|  | Two bedroom, furnished | $\$ 3,322.40$ |

## Other Applicable Charges

| Admission application fee |  |
| :---: | :---: |
| Undergraduate | \$ 25.00 |
| Graduate | 25.00 |
| International | 30.00 |
| Automobile registration-academic year: |  |
| Faculty/administration/staff | 125.00 |
| Executive Parking Permits | 180.00 |
| Student permits** | n/c |
| Automobile registration-summer only: |  |
| Faculty/administration/staff | 33.00 |
| Student permits | n/c |
| Diploma insert (after the first) | 10.00 |
| Dissertation binding ( 1 original and 4 copies) |  |
| Thesis binding (master's degree) ( 1 original and 3 copies) | copies) 37.00 |
| Extra copy thesis (or dissertation binding) | 9.20 |
| Graduate entrance tests: |  |
| Miller Analogies | 70.00 |
| Graduate Record Exam-subject | 130.00 |
| ID card replacement | 10.00 |
| Aerospace Flight Instruction Program Fees |  |
| Use of aircraft \$115 | \$115-235 per hour |
| For instruction \$12 | \$12-35 per hour |
| For use of simulators \$20 | \$20-70 per hour |
| Nursery school, semester |  |
| Infants and toddlers, 2 days/week | 200.00 |
| Preschool (4 days per week) | 360.00 |

Day Care Fees (per week)
Full-time (M-F) 102.00
Part-time (MWF) 61.00

Part-time (TTH)
41.00
**A portion of the general access fee is allocated to the Parking and Transportation and Services Department; upon payment of all registration fees, students are eligible to receive a student parking permit.

No student will be allowed to preregister, register, or receive a grade report or transcript of credits until all accounts are settled. A student will not be officially enrolled until all fees are cleared through the Business Office.

## Late Registration

Students who complete registration (including the payment of fees) during the late registration period will be charged a $\$ 100$ late fee.

## Matriculation Fee for Incompletes

If a student receives a grade of Incomplete (I), he or she need not reregister or pay fees for the course every semester until the course is completed. Such students should work only with the course instructor to complete grade requirements.

## Returned Checks

Acknowledged bank errors excepted, a $\$ 30$ service charge will be assessed for each returned check, whether given in payment of fees, for purchase of books, cashed by the University for the personal convenience of the student, or for any other reason. The University will decline to accept checks from any student who has checks returned by the bank more than once or if any check returned is not paid within ten (10) working days. A $\$ 100$ late registration fee may be assessed for any returned check given in payment of registration fees.

## Automobiles

All privately owned or operated vehicles for use on the campus must be registered annually with Parking and Transportation Services and must display an official registration permit. (See above for charges.) For more information or clarification, please refer to Traffic and Parking Regulations, available in the Parking and Transportation Services Office.

## Auditing Charges

An auditor is one who enrolls and participates in a course without expectation of receiving academic credit. The same registration procedure is followed and the same fees charged as for courses taken for credit. An audited course is not applicable to any degree or certification program.
Regular class attendance is expected. Other course requirements, which may be obtained in writing from the instructor, will vary depending upon the nature of the course. Students interested in auditing a course should discuss course require-
ments prior to enrolling. Failure to meet course requirements may result in removal from the course at the request of the instructor. A successful audit will be recorded on the transcript with the designation NC .

A change from audit to credit or credit to audit must be processed by the last day to add a class.

Persons 60 years of age or older or disabled persons suffering from a permanent total disability which totally incapacitates such persons from working at an occupation which results in an income (T.C.A., Section 49-7-113) who are domiciled in Tennessee may audit courses at any state-supported college or university without paying tuition charges. Registration under this program is on a space-available basis; therefore, students cannot priority register. Class selection should be processed on the first day of classes for the term or session. Proof of age or disability must be provided.

## 65-Year-Old/Disabled Credit Student

Persons 65 years of age or older or disabled persons suffering from a permanent total disability which totally incapacitates such persons from working at an occupation which results in an income (T.C.A., Section 49-7-113) who are domiciled in Tennessee may register for classes for credit by paying a service fee not to exceed $\$ 70$ per semester. Registration under this program is on a space-available basis; therefore students cannot priority register. Class selection should be processed on the first day of classes for the term or session. No late fee is charged. An application fee is required. In addition, the applicant must be eligible for admission and submit proof of age or disability.

## Additional Charges

The University reserves the right to increase the charges listed herein or to add new ones whenever such increases or additions are found to be necessary.

## Board

Students may secure meals in the University cafeterias or grill either through optional meal plans available from the food service or a meal-to-meal cash basis.

## Debts

An important part of every student's educational experience is learning to manage money and to responsibly discharge financial obligations incurred. With this in mind, MTSU expects you to promptly pay all University bills and accounts when due.

Failure to meet financial obligations will result in your not being allowed to preregister, register, or receive transcripts, grade reports, or diplomas.

## Deferred Payment Plan

Students who want to use the Deferred Payment Plan must sign up for the payment plan and pay the down payment online via RaiderNet. If a student is eligible, there will be an option in the bill payment system to request a Deferred Payment Plan. Students who wish to pay by mail must view the down payment amount online by selecting the option to view the payment plan installments. Students may also sign up for the plan and pay the down payment at the Business Office cashier windows.

Although all charges are due and payable in full at the beginning of each term, students in good financial standing at MTSU may defer payment of up to 50 percent of their registration, housing, and freshman meal plan fees for the Fall and Spring semesters. The deferment of fees is not available for Summer terms.

To be eligible for the Deferred Payment Plan, each participant must make a minimum down payment of 50 percent of the registration fees, residence hall rent, and freshman meal plan costs. The balance due must be $\$ 400$ or more after all discounts, waivers, financial aid, and other credits are applied. A student who fails to make timely payments in a previous term will be denied the right to participate in the Deferred Payment Plan in future enrollment periods. Any student who makes payment with a check which is subsequently returned will be denied participation in the Deferred Payment Plan in all future terms.

The amount deferred will be payable in two monthly installments. For the Fall term, installment payments are due on or before September 30 and October 31. For the Spring term, installment payments are due on or before February 28 and March 31. The University is not obligated to send reminder notices before the payment is due. Participants in this plan must apply all discounts, waivers, credits, and financial aid (including student loans) toward payment of registration fees before a deferment will be considered. Financial aid and other credits received after the initial payment will be applied to the remaining balance, and future amounts due will be recomputed. No refunds can be made until all fees are paid in full. Students will not be withdrawn for failure to pay the second or third payments. However, the balance must be paid in full before the student can preregister for future terms, even if preregistration is prior to the due date.
Each participant will be charged a $\$ 50$ nonrefundable service fee each term to defray administrative costs. This fee is payable along with the 50 percent down payment on or before the registration fee payment deadline. An additional late payment charge of $\$ 25$ will be assessed for each installment not paid on or before the due date and each 30-day period past the second installment up to a maximum of $\$ 100$. Withdrawals from classes will not alter the remaining balance due except to the extent that any refund may be applied. Students who make payments with checks that are returned will be charged a $\$ 30$ return check service fee as well as any applicable late fees.

If a payment is not received in the Business Office by the scheduled payment due date, the University will withhold all
services from the student-including grades, transcripts, and future registration-until the fees have been paid in full including any assessed late fees.
All existing rules and policies pertaining to returned checks, refunds, withdrawals, dropped classes, and collection costs are applicable to the Deferred Payment Plan.
Payment of the minimum amount due on the Deferred Payment Plan finalizes registration. The class schedule will not be dropped. It is not necessary to also confirm on RaiderNet. The Deferred Payment Plan service fee, late fee, and minimum amount are effective for 2008-09 and are subject to change in future terms.

Additional fees for classes, dorms, or meal plans added after initial registration payment or confirmation must be paid by the late registration fee payment deadline. If students are eligible for the Deferred Payment Plan, any unpaid fees after this date will be processed as a deferred payment. The \$50 Deferred Payment Plan service charge and any applicable \$25 late payment fees will be charged.
Students who are not eligible for deferred payment will be subject to withdrawal from all classes or from the dorm for nonpayment or subject to service charges and late payment fees.
For more information and detailed instructions on how to sign up for deferred payment, check online at www.mtsu.edu/~ bursarmt. Questions regarding the Deferred Payment Plan should be directed to the Bursar's Office at (615) 8982761.

## Deferred Payment for Recipients of Veterans Affairs or Other Governmentally Funded Educational Assistance Benefits

Service members, veterans, and dependents of veterans who are eligible beneficiaries of U.S. Department of Veterans Affairs educational 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 educational 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.

## Registration Confirmation

If fees are paid in full by financial aid, Federal Stafford or PLUS loans, TELS (Lottery) scholarship, pre-paid tuition programs, Vocational or Veteran's rehabilitation or other credits, students must complete the registration process by confirming that they will attend MTSU for the term. If balance is a credit or zero, they must Confirm Registration on RaiderNet by the fee payment deadline.
To confirm registration, students should

- log in to PipelineMT at www.mtsu.edu;
- click on RaiderNet then on the Student tab;
- select Student Account;
- select Confirm Enrollment/Registration Payment/Account Detail for Term;
- select the term. The account balance summary and account detail for the term will be displayed.
- click "Yes, I will attend during ..." and wait for a confirmation number.

Students will be given a confirmation number and should write down the confirmation number and date as proof of confirmation. If in doubt, students should try the process again and the system will tell them if registration has been confirmed. The confirmation number will not be repeated. If the student does not receive a confirmation number and is instead taken to the bill payment system, aid is either not on the account or a balance is still due.

Please note: Reviewing the class schedule does not confirm registration; students MUST select the Confirm Registration option, then select the option "Yes, I attend during . . ." When this option is selected, the student will be given a confirmation number if the registration is confirmed. When a confirmation number is assigned, the system will hold classes. If registration is not confirmed before the fee payment deadline, the class schedule will be deleted from the computer. Financial aid refunds cannot be processed until confirmation is completed.

Check the online registration guide and www.mtsu.edu/ ~bursarmt for detailed instructions, dates, and deadlines for each term.

All students who preregister and decide not to attend MTSU should access RaiderNet prior to the final fee payment date for the term to drop all classes from their records. If they decide not to attend MTSU after confirming, they must withdraw from the University.

## Fee Adjustments

NOTE: No refund of housing, registration, or other fees will be made to students who are dismissed or suspended.

Tuition, program services fees, and out-of-state tuition will be adjusted as follows:

1. A full $(100 \%)$ refund or reduction of fees will be provided for courses cancelled by the University.
2. A full $(100 \%)$ refund or reduction of these fees will be provided to students who preregister and withdraw from all classes prior to the first day of class. Students who preregister and drop classes prior to the first day of class will be credited at $100 \%$. See the current
online registration guide for fee adjustments and schedule adjustment dates.
3. A full $(100 \%)$ refund of these fees will be provided in case of a student's death.
4. Tuition, registration fees, materials and course fees, and residence hall rent will be adjusted at the rates of 75 percent or 25 percent to students who officially withdraw from the University prior to the dates specified in the registration guide published each semester. The same fee adjustment schedule applies to students who drop below full-time to an hourly load. The calculation of tuition and fee adjustments for a complete withdrawal from the University is based on the percentage charge of all courses dropped for the term. There will only be an adjustment in fees if the new calculated charge is less than the original charge. Not all withdrawals will result in a refund or reduction in fees. The calculation of tuition and fee adjustments for dropped courses is based on the charge for currently enrolled hours plus a percentage charge of all courses dropped. There will only be a reduction in fees if the new calculated charge is less than the original charge. Not all dropped courses will result in a refund or reduction in fees.

The University fee adjustment policy is based entirely upon the official date of the withdrawal or drop. Fee adjustment exceptions will not be made for reasons such as employment conflicts, health or medical problems, moving out of town, or other reasons beyond the University's control or responsibility.
Refunds due to fee adjustments will be processed beginning approximately two weeks after the end of each fee adjustment period. It takes several weeks to process all the refunds. The University will offset against proposed refunds any amount owed by the student to the University.

Drop/Withdrawal from class. Students who drop or withdraw from classes will have a balance due under the Deferred Payment Plan. Fees are adjusted based on the drop or withdrawal date. The fee adjustment percentage is NOT applied to the amount of payment, but rather as a percentage adjustment of total fees. A refund would be issued to the student only if the newly adjusted amount of fees is less than the amount that has been paid by the student. Withdrawal from classes does not negate the student's responsibility to pay the balance of fees after the semester has begun.

## Refunds of Housing Expenses

## Residence Halls

Applications for residence halls and on-campus apartments must be accompanied by the required prepayment as outlined in the license agreement. Prepayment is a security of good faith that denotes the applicant's serious intent to reside in on-campus housing. Prepayment fees for 2008-2009 are $\$ 300, \$ 150$ of which is applied toward Fall semester charges, and $\$ 150$ of which is applied toward Spring semester charges. This prepayment is refundable prior to check-in according to the following schedule. All cancellations must be submitted in writing to the Housing and Residential Life Office. Prepayment amounts represent approximately 25 percent of the total semester fee and may vary from year to year. Students should contact Housing and Residential Life to verify specific changes.

## Academic Year (Fall and Spring) Applications

| Date of Cancellation | Refund Amount |
| :--- | :---: |
| By May 1 1 | $\$ 150.00$ |
| By June 1 | $\$ 100.00$ |
| By July 1 | $\$ 50.00$ |
| After July 1, but prior to the first check-in day <br> in August | $\$ 00.00$ |

## Spring Semester Only Applications

| Date of Cancellation | Refund Amount |
| :--- | :---: |
| By October 15 <br> After October 15, but prior to the first check-in <br> day in January | $\$ 50.00$ |

## Summer Housing

Details regarding application, fees, and refunds for summer assignment to residence halls and on-campus apartments may be obtained by contacting the Housing and Residential Life Office at (615) 898-2971.

## Housing Fees

The refunds of residence hall fees after registration will be prorated on a weekly calendar basis when the student is forced to withdraw from the residence hall because of approved medical reasons confirmed in writing by a licensed physician.
Full refund will be made in the case of death. No refund will be made other than under the above conditions, except as specified in the Student Housing Agreement.

## Direct Deposit of Financial Aid Credit Balance Refunds

Students receiving financial aid who expect to receive a refund must first be sure they have met all financial aid eligibility requirements, confirmed registration, have no holds, and completed all necessary paperwork. Students may choose to receive their refunds via direct deposit to personal bank accounts or use MTSU eCash PayCards.

## All students must sign up for direct deposit online through

 RaiderNet. Online sign-up via e-Refund must be completed at least five (5) days prior to the first day of classes to have the refunds available in accounts on the first day of classes.Detailed instructions are available online at www.mtsu .edu/~bursarmt. It is critical that all information be entered correctly to avoid delay of refunds.

Those who choose to receive MTSU eCash PayCards must come by the Business Office, Cope 103, to pick up cards and activate PINs (personal identification numbers). Instructions will be provided on how to enter eCash PayCards online through RaiderNet so that refunds will be ready to access on the first day of classes. The eCash PayCard can be used at designated ATMs, at merchants participating in point-of-sale debit networks, or by issuance of a Comdata check. These cards will remain active indefinitely and will be reloaded each time there is a financial aid credit balance refund. Students should not lose or destroy their cards.

## Financial Aid

## Office of Financial Aid Cope Administration Building 218

The Office of Financial Aid is a department within the Division of Student Affairs, Enrollment, and Academic Services. The Financial Aid Office provides financial assistance for qualified students. Unless otherwise indicated, application is made to the Office of Financial Aid. Results from the Free Application for Federal Student Aid (FAFSA) are required before eligibility can be determined for federal financial aid programs. Following is a summary of financial aid administered through MTSU.

## Sources of Aid and Eligibility

## Federal Programs

Subsidized Federal Stafford Loan Program
Graduate students enrolled at least half-time (five graduate hours) and in good standing or accepted for enrollment at MTSU; based on need which is determined from the results received from the FAFSA and cost of attendance; maximum loan limit for the award year is $\$ 8,500$ not to exceed a lifetime limit of $\$ 65,500$ (including the undergraduate loans); must be making Satisfactory Academic Progress (see Satisfactory Academic Progress Policy on next page). Students should accept loan offers on RaiderNet. For one-semester loans, students should submit a completed Loan Request Sheet (LRS) to the Financial Aid Office. Students may obtain a copy of the LRS in the Financial Aid Office or on MTSU's Web site at www.mtsu.edu/financialaid/forms.htm.

## Unsubsidized Federal Stafford Loan Program

Graduate students enrolled at least half-time (five graduate hours) and in good standing or accepted for enrollment at MTSU; based on eligibility and cost of attendance; maximum loan limit for the award year is \$12,000 not to exceed a lifetime limit of \$73,000 (including the undergraduate loans); must be making Satisfactory Academic Progress (see Satisfactory Academic Progress Policy on next page). Students should accept loan offers on RaiderNet. For one-semester loans, students should submit a completed Loan Request Sheet (LRS) to the Financial Aid Office. Students may obtain a copy of the LRS in the Financial Aid Office or on MTSU's Web site at www.mtsu.edu/financialaid/forms.htm.

## Federal Perkins Loan

Graduate students enrolled for at least half-time (five graduate hours) and in good standing or accepted for enrollment at MTSU; based on need which is determined from the results received from the FAFSA and cost of attendance; lifetime maximum of $\$ 40,000$; must be making Satisfactory Academic Progress (see Satisfactory Academic Progress Policy on next page). Applications are available in the Financial Aid Office.

## Federal Work-Study Program

Graduate students enrolled at least half-time (five graduate hours) and in good standing or accepted for enrollment at MTSU; based on eligibility and cost of attendance; maximum of 20 hours per week; must be making Satisfactory Academic Progress (see Satisfactory Academic Progress Policy on next page).

## Assistantships and Fellowships

A limited number of graduate teaching assistantships, graduate research assistantships, and doctoral fellowships are available. Applications may be obtained from the College of Graduate Studies or from the appropriate
academic department. Information on stipends is also available from these sources. An individual is expected to be in good standing, i.e., having met the requirements for admission to graduate school (including satisfactory test scores) and having a cumulative GPA of 3.00 or more.

## How to Apply

Step 1. Prospective students should complete the Free Application for Federal Student Aid (FAFSA) online at www.fafsa .ed.gov. To obtain a paper form, contact the Federal Student Aid Information Center at 1-800-433-3243.

Students should register for a personal identification number (PIN) before completing the application. The PIN can be used as an electronic signature. The Federal Processing Center will send a Student Aid Report (SAR) to the student and MTSU (if the student enters the MTSU School Code of 003510 in the school section of the FAFSA).
Step 2. If the MTSU Financial Aid Office receives a complete and valid SAR before the Fall semester of the upcoming academic year, students will be sent an electronic Fall/Spring award notice to their MTSU e-mail addresses stating the tentative financial they may be awarded. The award notice will direct students to RaiderNet, where they may review their estimated financial aid award offers. After the e-mail award notice is sent, the amount of an award offer may change due to changes in enrollment, EFC amounts, and other aid. The award notice will provide instructions for how to accept/reject award offers via RaiderNet.

Step 3. Students applying for a Federal Stafford Loan should accept their loan offers and choose a lender via RaiderNet by following the instructions in the award notice. For Federal Stafford Loans, graduate students must be enrolled in at least five graduate credit hours. Graduate students who are required to enroll in undergraduate prerequisites may contact the Financial Aid Office about their loan eligibility. First-time loan borrowers must complete an entrance interview and sign a master promissory note (MPN).

## General Financial Aid Information

1. During Fall and Spring semesters, students who officially withdraw during the first four (4) days of class will have all of their financial aid cancelled. Students who withdraw after the first four days but prior to completing 60 percent of the term will have their financial aid prorated. Students who drop courses before the census date may have their aid adjusted according to the number of hours enrolled as of that date. For dates, refer to www.mtsu.edu/~records. Students may owe a refund to the U.S. Department of Education and/or MTSU. Students are advised to contact the Financial Aid Office before withdrawing.
2. For each session of the Summer term, students who withdraw after the last day to add a class but prior to completing 60 percent of the session currently attending will have their financial aid prorated. Students who drop courses and receive a grade of W may have their financial aid adjusted. For dates, refer to www.mtsu.edu/~records. Students may owe a refund to the U.S. Department of

Education and/or MTSU. Students are advised to contact the Financial Aid Office before withdrawing.
3. Students who withdraw from the University before 60 percent of the term has been completed will have their aid adjusted according to the Financial Aid Return Policy. For information about the return policy, refer to the "Federal Financial Aid Return Policy" section on next page.
4. Class attendance will be verified for financial aid disbursements that occur during the Fall and Spring semesters and each session of the Summer term. For Stafford and Perkins loans, if a student is reported as not attending classes on at least a half-time basis ( 5 credit hours), funds may be cancelled or adjusted. If the University cancels a course, a student may be required to register for additional hours to remain eligible for federal financial aid. Students are advised to contact the Financial Aid Office if they have questions regarding their eligibility.
5. The official last date of attendance (for students who have not officially withdrawn) will be determined by the instructor. If a student is reported as not attending classes, aid may be adjusted or cancelled.
6. Class participation must be verified for students who are enrolled in correspondence courses, online courses, videoconferencing courses, the Regents Online Degree Program, or courses via the Internet. Because attendance is not required for these courses, instructors document class participation according to completed homework assignments. Students should complete their homework assignments in a timely manner so their participation can be documented. If students wish to withdraw or drop from these courses, they are encouraged to contact their instructors. Students' financial aid may be adjusted or cancelled if instructors are unable to verify participation.
7. The federal government randomly chooses students for verification, which is the process of verifying the accuracy of the data submitted on the FAFSA. If a student is selected, the Financial Aid Office will request signed copies of applicable federal income tax returns, W-2 forms, and other documents. Failure to submit completed documents to the Financial Aid Office in a timely manner may delay a student's financial aid and may result in the loss of certain funds.
8. Any scholarships received in excess of tuition, fees, and books are considered taxable income. Consult a tax preparer for tax filing information.
9. Students enrolled in only Regents Online Degree Program (RODP) courses may have their budgets adjusted.
10. Graduate students who are required to enroll in undergraduate courses to be accepted into a graduate program may qualify for Stafford loans at the undergraduate level provided they have not reached their aggregate undergraduate loan limits. If eligible, students may receive undergraduate Stafford loans for their prerequisites for up to a maximum of 12 consecutive months. A letter from the academic department or graduate analyst indicating which courses are required as prerequisites must be submitted to the Financial Aid Office before a loan can be processed.
11. All financial aid is subject to the Financial Aid Satisfactory Academic Progress Policy below.

## Satisfactory Academic Progress Policy

Federal regulations require that all federal financial aid recipients are enrolled in a degree-seeking program or an approved certification program or are seeking initial teacher licensure. To maintain eligibility, these recipients must maintain satisfactory academic progress. MTSU complies with this requirement by monitoring each aid recipient's cumulative grade point average (GPA), completion rate, and maximum time frame for completion of a degree. The following describes MTSU's method for monitoring each of these measures.

## Cumulative Grade Point Average

Graduate students. To be eligible for financial aid, a student's GPA must meet at least the minimum requirements listed in the graduate catalog or be approved by the College of Graduate Studies for enrollment.

## Completion Rate

Students must earn 66 percent of their cumulative attempted credit hours to remain eligible for financial aid. Grades of A, B, C, D, P, or S, including any " + " or " - " options, count as credits earned. All courses for credit will be counted as hours attempted including withdrawals, incompletes, courses repeated, and courses resulting in grades of N, U, and F.

1. Probation. Students whose completion rate is greater than 50 percent but less than the required 66 percent will be placed on probation. Students placed on probation must pass 75 percent of their attempted hours the next semester enrolled.
2. Suspension. Students whose completion rate is less than 50 percent of the credit hours attempted or those previously placed on probation who did not meet the requirements of their probation will be suspended from eligibility for federal loans and federal work-study employment. Students may still be eligible for emergency short-term loans, private educational loans, and other University funds.

## Time Limits

Graduates. The maximum time limit for graduate students may be limited to 125 percent of the standards established by the College of Graduate Studies and published in the graduate catalog.

## Review of Progress Standards

1. GPA. The Graduate Office reviews the GPA at the end of each semester. Graduate students may appeal academic suspension to graduate academic appeals committee. The decision of the committee is final.
2. Completion rate. The completion rate is reviewed annually at the end of each semester by the Financial Aid Office.
3. Time limits. The maximum time limit is reviewed at the end of each semester by the Financial Aid Office.

## Notification/Appeals

1. Probation. The Financial Aid Office will send e-mails to students' MTSU e-mail addresses notifying them of their financial aid probation and the expected requirements. Each student may be allowed at least one probationary period during the course of enrollment.
2. Suspension. The Financial Aid Office will send e-mails to students' MTSU e-mail addresses notifying them of their financial aid suspension and the expected requirements. Students are allowed to appeal their suspensions if they can document extenuating circumstances beyond their control which have since been resolved. Examples include death of an immediate family member and extended medical illness and/or disability. Provisions also may be made for students who have military credits that cannot be counted toward a degree. Any other circumstances not listed above must be well documented and have the approval of a financial aid administrator and/or the director of Financial Aid.
a. Financial Aid Suspension Appeals. Student appeals are reviewed by an internal committee composed of financial aid staff. Each student will be notified of the appeal decision and, if denied, what action must be taken to regain financial aid eligibility.
b. Loan and Scholarship Committee. Students who are suspended a second time or who have been denied by the internal financial aid committee may appeal to the Loan and Scholarship Committee or its designee. The Loan and Scholarship Committee comprises faculty members, students, and administrators. Because faculty and students do not report until the start of school, students appealing to this committee may be personally responsible for paying registration expenses. The decision of the committee is final.

## Reinstatement of Financial Aid if Appeal Denied

Students can attend MTSU and make up deficiencies in credit hours at their personal expense. If a student chooses to do this, a written appeal to the Financial Aid Office must be made when the deficiencies have been completed. This option is not available to students who have reached the maximum time limit.

## No Credit Hours Earned

A student who earns no credit hours for one semester will be automatically placed on financial aid probation. A student who earns no credit hours for the previous two semesters enrolled will be suspended from federal financial aid. However, the student may appeal the suspension. Please see the suspension guidelines in Notification/Appeals above.

## Teacher Licensure

Students who have completed an undergraduate degree and are enrolled for the sole purpose of attaining teacher licensure may be eligible for loans
at the undergraduate level. To receive aid, students must be accepted into the teacher education program. Students may be eligible for aid one year prior to being accepted provided they have taken or will be taking FOED 1110 and FOED 2110, have a minimum GPA of 2.5 , and provide the Financial Aid Office with a copy of their program of study. Exceptions may be made by the Financial Aid director or his/her designee.

## Exceptions

The University may suspend a student's financial assistance in the event of extraordinary circumstances that are not accounted for in this policy. In all instances, the student will be notified of the appeal process.

## Federal Financial Aid Return Policy

For the Fall and Spring semesters, a federal financial aid return will be calculated for all students who withdraw after the fourth day of class but prior to completing 60 percent of the term. For the Summer term, a federal financial aid return will be calculated for all students who withdraw after the last day to drop without receiving a grade, but prior to completing 60 percent of the session. The amount of the return will be prorated based on federal guidelines. Students who withdraw before the last day to drop without a grade may have all of their aid canceled. Students may owe a refund to the U.S. Department of Education and/or MTSU. For important dates about withdrawing, refer to www.mtsu.edu/~records. If there are questions regarding this policy, contact the Financial Aid Office.


## Academic Regulations

## Academic StandardsRetention, Probation, and Suspension

Degree-seeking students are expected to take appropriate courses and make satisfactory progress towards their degree objectives as determined by the graduate program. A graduate student at the master or specialist level must maintain a cumulative GPA of at least $\mathbf{3 . 0 0}$ for all graduate work completed at MTSU as well as in the major. A doctoral student must maintain a minimum GPA of at least $\mathbf{3 . 2 5}$ after the initial two (2) semesters of enrollment. Six semester hours of C grade (C+, C, or C-) coursework may be applied toward a master's or specialist's degree; seven hours of C grade may count toward a Ph.D.; no courses with a $C$ grade are acceptable toward the D.A. degree requirements. A graduate student failing to meet the applicable minimum cumulative graduate GPA retention standard or whose cumulative graduate GPA is less than 3.00 will be placed on academic probation for the subsequent term. Probation in itself has no serious consequences other than to alert the student of potential academic problems and the requirement to (re)establish satisfactory academic status. Once on probation, a student has three consecutive semesters in which to restore the cumulative GPA to the minimum required. If the student fails to attain the required GPA at the close of the third semester of probation, the student will be suspended automatically. A student placed on suspension will not be allowed to continue coursework during the subsequent semester. In order to reenroll, a suspended student must formally appeal the suspension to the Graduate Council Appeals Committee by writing the dean of the College of Graduate Studies within thirty (30) days of the end of the semester in which the suspension occurred. In the event that a student is suspended and subsequently upon appeal is granted permission to reenroll, should the student fail to maintain the minimum cumulative GPA, there will be no second probationary period. The student will be permanently suspended at the close of the semester and no longer eligible for matriculation in any program at MTSU.

## Access to Records

The MTSU policy concerning student access to educational records is printed on page 49.

## Appeal of Academic Suspension

A student may seek reversal of academic suspension, for cause, by petitioning in writing the Graduate Council Appeals Committee. Appeal forms are available on the College of Graduate Studies Web site (www.mtsu.edu/~graduate) and should be submitted to the dean of the College of Graduate Studies. Deadlines are listed in the University Calendar; however, appellants should contact the College of Graduate Studies to confirm the applicable deadline dates.

## T.C.A. Sec. 49-7-133, Misrepresentation of Academic Credentials

It is a Class A misdemeanor to misrepresent academic credentials. A person commits the offense of misrepresentation of academic credentials who, knowing that the statement is false and with the intent to secure employment at or admission to an institution of higher education in Tennessee, represent, orally or in writing that such person

1. has successfully completed the required coursework for and has been awarded one or more degrees or diplomas from an accredited institution of higher education;
2. has successfully completed the required coursework for and has been awarded one or more degrees or diplomas from a particular institution of higher education; or
3. has successfully completed the required coursework for and has been awarded one or more degrees or diplomas in a particular field or specialty from an accredited institution of higher education.

## Academic Integrity

Students at MTSU are expected to be intellectually honest and forthright in their academic activities. Proper credit should be given to sources of all work done. To attempt to use the ideas or words of others or to falsify data is to plagiarize (i.e., adopt, present, or reproduce ideas, statements, images, or works of others as one's own without proper acknowledgment) or fabricate (i.e., falsify any information or citation) respectively, neither of which is acceptable. Appropriate action will be taken as deemed necessary by the College of Graduate Studies, up to and including expulsion from MTSU and the rescinding of any graduate degree awarded as a result of a breach in academic integrity.

## Appeals, Other

Graduate students have the right to appeal for cause any decision affecting their academic standing as a graduate student. Cause excludes grade appeals, which are under the purview of the MTSU Grade Appeal Committee. The Appeal Advisory Committee of the Graduate Council is an ad hoc committee reporting to the dean of the College of Graduate Studies. The committee is convened at the discretion of the dean of the College of Graduate Studies.

The Graduate Council and the College of Graduate Studies have approved in principle the document Appeal Advisory Committee of the Graduate Council. Copies of this document are made available to all graduate students at the Web site (www.mtsu.edu/graduate) and in the College of Graduate Studies, Sam H. Ingram Building 121A.

## Classes-Cancellation of Scheduled Classes

The minimum enrollment requirement is ten students for up-per-division and 5000-level graduate classes; eight students for 6000-level classes; and four enrollees for 7000-level classes (excluding graduate research courses). Any class may be canceled if the number of enrollees is deemed insufficient; however, no scheduled class may be discontinued without the approval of the dean of the college in which the course is offered.

## Degree Plan-Changing a Form

Changes in degree programs are permitted upon proper filing and approval of a Change in Degree Plan Form, which is available at the College of Graduate Studies Web site (www.mtsu.edu/graduate). Changes in degree programs will take effect at the beginning of the semester after the change in degree plan is approved. When unforeseen circumstances arise during the semester of graduation, an exception to the implementation date may occur at the request of the director of graduate studies and with the approval of the dean of Graduate Studies.

## Degree Plan-Filing a Form

In consultation with the graduate advisor, each degree-seeking student must file a formal outline of the degree program on a degree plan available at the College of Graduate Studies or on the Web site (www.mtsu.edu/graduate). Degree plans should be completed within the first 21 hours of enrollment. Individual departments are responsible for monitoring the completion of prerequisites. In general, a doctoral student will not be permitted to register for more than 30 semester hours unless an approved degree plan is on file. The degree plan requires the approval of the major professor and/or the graduate coordinator. The degree form may not be filed in the same semester that the student expects to be graduated.

## Examinations-Comprehensive (for Specialist's and Master's Students; also see Glossary)

This examination is scheduled by each department during the time period designated by the College of Graduate Studies. Normally, the comprehensive examination may be taken no more than twice, and failure to pass the comprehensive on the second attempt terminates one's degree program. Any exception to this "twice-only" rule must be recommended by the graduate program and approved by the dean of the College of Graduate Studies.

## Examinations-Qualifying

Please see the section under Doctor of Philosophy Degree and/or the Glossary.

## Examinations-Other

Any graduate student may be required to take one or more additional tests designed to measure general educational achievement and/or achievement in selected major areas.

Graduate credit may not be earned by CLEP or Special Examination.

## Grades-Grading System

The following notations are used by faculty of the University to indicate the quality of the work performed by students taking graduate courses:

```
A,A-
B+,B,B-
C+, C,C-
D+,D,D-
F
```


## Grades That Do Not Influence Grade Point Average

```
W - Withdrawal
NC - No credit (audit)
I - Incomplete
S - Satisfactory
U - Unsatisfactory
P - Pass
```

The P/F grade is given only in those courses with prior approval to use pass/fail grading. Courses may be taught on a pass/fail basis only after approval of the Graduate Council. Course descriptions state if pass/fail grading applies.
Pass or Satisfactory/Unsatisfactory grades are not used in determining the grade point average. However, satisfactory grades do count toward graduation credit requirements and are treated in every other respect as being equivalent to traditionally graded courses. Any course in which an "unsatisfactory" is received does not count toward graduation credit requirements.
The grade I indicates that the student has not completed all course requirements due to illness or other uncontrollable circumstances, especially those which may occur toward the close of the term. Mere failure to make up work or turn in required work on time does not provide a basis for the grade of I unless the extenuating circumstances noted above are acceptable to the instructor. When a student fails to appear for a final examination without known cause, the grade to be reported should be determined as follows: If the student has done satisfactory work to that point, the grade I may be reported on the assumption that the student was ill or will otherwise present sufficient reason for official excuse; if the student has attended irregularly and has not done satisfactory work to that point, the grade F should be reported.
The "incomplete" must be removed during the succeeding semester, excluding summer. Otherwise, it converts to a grade of F. A student should not make up the "incomplete" by registering and paying again for the same course. The I grade carries no value until converted to a final grade.

## Grades—Appeal of Course Grades

## Level One

1. Student appeals concerning a course grade should be resolved by conference between the student and the faculty member who assigned the grade. The appeal must occur within forty (40) days of the graduation date for each term.
2. In the event of an impasse between the student and the faculty member, a student with an appeal of a grade shall discuss it with the department chair within ten (10) days of the conference with the involved faculty member. The department chair shall investigate the circumstances, record his/her findings, and send a copy to the student and the faculty member within ten (10) days of the notification of impasse. Although the department chair does not have the power to change the grade, he/she will make a recommendation concerning the appeal. These findings will become a part of the appeals record.

## Level Two

1. If the student is not satisfied, he/she may, within fifteen (15) days following receipt of the department chair's recommendation, refer the appeal plus all relevant data including stated reasons why he/she believes the appeal has thus far not been satisfied to the Provost's Office. The vice provost for Academic Affairs shall select a college committee to hear the appeal and transmit the appeal documents to the committee chair or to the office of the dean of the college which houses the selected appeals committee.
2. The committee hearing the appeal will receive documents and testimony regarding the circumstances, will record its findings, and shall render a decision. Notification of the committee's decision will be made to the student, faculty member, department chair, college dean, vice provost for Academic Affairs, and the director of Records.
3. The decision of the committee hearing the appeal will be final concerning the grade in question.
NOTE: In cases where the department chair is the person against whom the complaint is lodged, then the dean in whose college the department is located shall assume the duties of the chair in the investigation and decision making.

## Miscellaneous

1. The number of days indicated at each level above shall be considered the maximum, but every effort should be made to expedite the process.
2. The failure of the student to proceed from one level of the appeal procedure to the next level within the prescribed time limits shall be deemed to be an acceptance of the recommendations and/or decision previously rendered. All further considerations and proceedings regarding that particular appeal shall cease at that point.
3. A grade appeal may be withdrawn at any level without prejudice.
4. All appeal proceedings shall be kept as confidential as may be appropriate at each level.
5. A grade appeals committee shall have reasonable access to all official records for information necessary to the determination of a recommendation.

## Grades—Grade Point Average (Quality Credits)

Grade points are numerical values assigned to letter grades in order to provide a basis for quantitative determination of grade (quality) point averages. The four-point system with pluses and minuses is used.
The following system is used in determining grade point average:

| Grade |  | Grade Points |
| :---: | :--- | :---: |
| A | $=$ | 4.00 |
| A- | $=$ | 3.67 |
| B+ | $=$ | 3.33 |
| B | $=$ | 3.00 |
| B- | $=$ | 2.67 |
| C+ | $=$ | 2.33 |
| C | $=$ | 2.00 |
| C- | $=$ | 1.67 |
| D+ | $=$ | 1.33 |
| D | $=$ | 1.00 |
| D- | $=$ | 0.67 |
| F | $=$ | 0.00 |

The scholastic standing of a student is expressed in terms of grade point average (GPA). A GPA is the total number of grade points divided by the total number of credit hours (exclusive of P, S, and $U$ credit hours) at Middle Tennessee State University. Any transferred courses are included in the calculation. For a grade of $F$, the credit hours count, but zero grade points are earned.

## Grades by RaiderNet

Students may view their grades online each semester by selecting the appropriate option on RaiderNet. No student can view grades on RaiderNet until all debts or obligations owed to MTSU have been discharged.

## Intent to Graduate

An Intent to Graduate Form, available on the College of Graduate Studies Web site (www.mtsu.edu/graduate), must be filed by the student by end of the second week of the semester in which the student plans to graduate or no later than the end of the first week of Summer Session II (for August graduation).

## Prerequisites

The prerequisite for the graduate major is an undergraduate minor or its equivalent and/or the recommendation of the director of graduate studies. The prerequisite for the graduate minor is 12 semester hours of undergraduate coursework in that area or its equivalent and/or the recommendation of the director of graduate studies or delegate. If prerequisite coursework is marginally deficient, the student may be admitted to the College of Graduate Studies to make up the deficiencies concomitantly while taking graduate courses. Prerequisite
courses do not apply toward meeting graduate program requirements. Monitoring the completion of prerequisites is the responsibility of the individual departments.

## Repeated Courses

A graduate student may repeat graduate courses in which a grade of B- or lower was earned. However, there are certain restrictions and limitations. A maximum of two (2) courses, not to exceed eight (8) credits combined, may be repeated. The grade in the second attempt replaces the original assigned grade in the first attempt regardless of the earned grade. For all additional courses or subsequent repeated courses, there will be no grade replacement; i.e., all earned grades will be used in the grade point average calculation and are recorded on the transcript.

Graduate students may not repeat a course in which they have previously earned the grade of $\mathrm{A}, \mathrm{A}-, \mathrm{B}+$, or B without written approval from the director of graduate studies and dean of the College of Graduate Studies. If granted, there will be no grade replacement in the GPA calculation; i.e., all attempts will be used in the grade point average calculation and recorded on the transcript.

## Student Load

A student's enrollment status is determined by the number of credit hours taken per term according to the following:

Full-time - 9-12 graduate hours
Three-quarter time - $7-8$ graduate hours
One-half time - 5-6 graduate hours
Graduate students are limited to a maximum of 12 graduate hours per semester. If an exception is requested, overload forms must be signed by the director of graduate studies and the dean of the College of Graduate Studies. Full-time status for students holding graduate assistantships is six (6) graduate semester hours.

## Teacher Licensure

All applications for professional teaching licenses in Tennessee must be filed with the dean of the College of Education and Behavioral Science who is responsible for recommending each applicant from this University. All applicants for teacher licensing should furnish the Tennessee State Department of Education a report of scores attained on the Praxis. A copy of the scores should be sent to the Office of the Dean, College of Education and Behavioral Science. MTSU verification of the scores will be forwarded with the Application for Licensure.

## Post-baccalaureate Teacher Education Program

The postbaccalaureate teacher education program is designed for individuals who have completed baccalaureate degrees but who did not complete teacher preparation. The College of

Education and Behavioral Science requires candidates to address any course and program deficiencies in their undergraduate education to ensure the attainment of the knowledge and skills required in general education, professional education, and the major for the teaching field. Additional coursework and program requirements will be determined by the teacher licensure analyst. Transcript analysis forms for the post-baccalaureate program are available in the McWherter Learning Resources Center 173.

Postbaccalaureate students must also make formal application for admission to the teacher education program. Admission to teacher education is a prerequisite to enrollment in upper-division courses in Elementary Education (ELED), Reading (READ), Special Education (SPED) (except SPED 3010), Foundations of Education (FOED), or Youth Education (YOED).

## Time Limits

Students have six (6) years from the initial semester of matriculation to complete the requirements for a master's or specialist's degree. There is a ten-year time limit from initial matriculation, to complete all requirements for the doctoral degree. Exceptions to these time limitations, for good cause, will be considered by the dean of the College of Graduate Studies when submitted in writing with a proposed timeline for completion and the recommendation of the advisor and the director of graduate studies.

## Transcripts

Student and official copies of a student's record are furnished free of charge upon written request by the student. No transcript will be provided for a student who has any financial indebtedness to the University or who has not completed admission procedures. Official transcripts from other institutions must be obtained directly from those institutions.

## Transfer Credit

In general, only coursework taken while in graduate status, prior to attending MTSU, will be transferred and only if those courses were not used in partial satisfaction of degree requirements at the previous university. Coursework transferred or accepted for credit toward a graduate degree must represent graduate coursework relevant to the degree, with course content and level of instruction resulting in student competencies at least equivalent to those of students enrolled in the institution's own graduate degree programs. Transfer credit requires the recommendation of the director of graduate studies and approval of the dean of the College of Graduate Studies. Transfer courses with grades below B will not be accepted for credit in any graduate degree programs.
No graduate credit may be obtained by correspondence or work experience. A maximum of 12 semester hours of residence credit (6 in the major area) may be transferred and applied on a master's or specialist's degree.

Doctoral students should check with their director of graduate studies for the policy on transfer of credits into their doctoral degree program.


## Withdrawals from the University

Students finding it necessary to withdraw (completely separate) from the University after having selected classes for a future term should access RaiderNet, www.mtsu.edu, to drop all classes. A student may also initiate the official withdrawal process at the University Withdrawal Office, Cope Administration Building 205. Consult online for each term to determine whether withdrawal should be accomplished by RaiderNet or through the University Withdrawal Office. Once classes have begun for the Summer term, withdrawal for that Summer term cannot be accomplished via RaiderNet.
The Records Office will be notified of the withdrawal and will enter the withdrawal and its effective date in the computer system. Faculty can access class rolls for up-to-date information via RaiderNet.

The grade for a student who officially withdraws from the University will be determined by the student's academic performance prior to withdrawal. Withdrawal early in a term may result in no grades being assigned to the student. The Records Office Web page (www.mtsu.edu/~records) carries dates governing withdrawal and appropriate grades.

A student may not officially withdraw from the University after a date in the semester or term which is one week or less prior to the beginning of final examinations, except for reasons of mitigation or extenuation as shall be determined by the University Withdrawal Office.

Any student who leaves the University without officially withdrawing will receive a grade of F for all work attempted.
Requests to withdraw from a term within one year of the end of that term will be considered only if the student presents acceptable documentation of extenuating circumstances to the withdrawal coordinator. In such cases, faculty members will receive a written request for approval to assign a W grade. No requests will be considered beyond one year of the end of the term.

A student under certain conditions may receive an administrative withdrawal from a single course or courses. Similar procedures are provided for a total severance from the University if conditions warrant. The following policy will determine the eligibility for an administrative withdrawal: The entry of W indicates that the student has been withdrawn from a course without reflection of grades. The entry of W results from a situation involving extreme extenuating circumstances as identified and originated with the University physician or counselors at Counseling Services and/or the associate dean of students. The entry of W will be accomplished only with the full knowledge and written concurrence of the faculty member concerned.

Any student who is absent from a state college or university during any school term or portion thereof in excess of thirty (30) days due to active military service shall be entitled to withdraw and receive a tuition credit in the form of credit hours for each credit hour paid by, or on behalf of, such student, or a refund for any payments made. Credit shall be given only if the reserve or National Guard student did not receive a final grade in the course for which tuition credit is sought.

## Student Access to Educational Records

## Definitions

Educational Records are those records, files, documents, and other materials which (1) contain information directly related to a student, and (2) are maintained by Middle Tennessee State University or by a person acting for the University. "Records" means information recorded in any medium, including, but not limited to, the following: handwriting, print, tapes, film, CDs, cartridges, diskettes, and disk storage devices. Educational records do not include (1) personal notes, (2) records available only to law enforcement personnel, (3) employment records, (4) medical and psychiatric records (these are accessible by the student's physician).

For all nondisciplinary purposes, a student is any person who is or has been enrolled (registered for at least one class) at Middle Tennessee State University. An applicant who does not enroll or who is declared ineligible has no inherent right to inspect his or her file. Wherever "student" is used in reference to personal rights, an eligible parent of a dependent student has similar rights. This "eligible" parent is one who has satisfied Section 152 of the Internal Revenue Code of 1954 and who presents such proof to the custodian of the educational records. Normally this proof will be a certified copy of the parent's most recent federal income tax form.
Directory information includes the student's name, address (including e-mail), telephone listing, year and place of birth, major field of study, enrolled hours, student level (freshman, sophomore, etc.) participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. A student may request that such directory information not be released to anyone other than those persons defined as school officials. To do so, a Request for Nonrelease of Directory Information must be filed in the Records Office, Cope Administration 106. A student may request the nonrelease be honored until the end of the semester, until graduation or ceased enrollment, or indefinitely. A student must notify the Records Office in writing to resume the release of directory information.
A school official is a person employed by the University as an administrator, instructor, supervisor, or support staff member.

A legitimate educational interest exists if the official needs to review an educational record to fulfill his or her professional responsibility.
Having access to an educational record means being allowed to see the original record.

## Release of Personally Identifiable Student Educational Records

Middle Tennessee State University shall not permit access to or the release of any information in the educational records of
any student that is personally identifiable (other than directory information) without the written consent of the student to any party other than the following:

1. MTSU officials and staff who have legitimate educational interests;
2. officials of other schools in which the student seeks admission;
3. appropriate persons in connection with a student's application for, or receipt of, financial aid;
4. federal or state officials as defined in paragraph 99.37 of the Family Educational Rights and Privacy Act of 1974;
5. state and local officials authorized by state statute;
6. organizations conducting studies for or on the behalf of MTSU for the purpose of assisting in accomplishing the University's stated goals, when such information will be used only by such organizations and subsequently destroyed when no longer needed for the intended purpose;
7. accrediting organizations, to carry out their functions;
8. parents of a dependent student as defined in section 152 of the Internal Revenue Code of 1954 (Written consent may be allowed from either of these separated or divorced parents subject to any agreement between the parents or court order. In the case of a student whose legal guardian is an institution, a party independent of the institution, appointed under state and local law to give parental consent, may be allowed to do so.);
9. in compliance with judicial order or subpoena, provided that the student is notified in advance of the compliance unless the issuing court or agency has ordered that the existence or the contents of the subpoena or the information furnished not be disclosed; or
10. appropriate persons in connection with an emergency if such knowledge is necessary to protect the health or safety of a student or other persons.
NOTE: With the exception of MTSU officials and staff who have been determined by the University to have legitimate educational interests, all individuals and agencies who have requested or obtained access to a student's record (other than directory information) will be noted in a record which is kept with each student's Educational Record. A request must be in writing stating the purpose of the request. This record will also indicate specifically the legitimate interest that the persons or agency had in obtaining the information.

## Procedures for Accessing Educational Records

Eligible students have a right to inspect and review their Educational Records. To do so the student must request the custodian make the records available. The student may ask for an explanation and/or a copy of the record. (The price of the copies shall not exceed the cost of duplicating the record.) The records shall be made available within 45 days after the request. After consultation with the custodian the student may seek amendment of the records the student believes to be inaccurate, misleading, or otherwise in violation of the student's privacy rights. If there is a disagreement between the student and the custodian as to the correctness of the data contained in the record, the student may submit a request for a formal hearing. The request and the formal challenge to the content of the records must be presented in writing to the chair of the Student Appeals Committee. The chair shall call a meeting no later than 45 days after receipt of the written appeal and challenge. The committee will allow the student to present evidence to substantiate appeal and shall render a written decision to the student within 45 days after the meeting.

Complaints of alleged failure of the institution to comply with the Family Educational Rights and Privacy Act may be filed with the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, D.C. 20202-4605.

NOTE: This procedure does not provide for a hearing to contest an academic grade.

## Exclusions

Right of access does not include

1. financial records of parents or any information therein;
2. confidential letters and statements of recommendation placed in the educational record of a student prior to January 1, 1975;
3. records to which access has been waived by a student. (This applies only if a student, upon request, is notified of the names of all
persons making confidential recommendations and if such recommendations are used solely for the purpose for which they were intended.)

## Destruction of Educational Records

Educational records may be destroyed except that a student shall be granted access prior to destruction if such is requested.

## Informing Students

MTSU informs its students of the policy governing privacy rights of students' Educational Records by publishing the policy in the University Catalogs. A listing of the types of records and related information may be found in the undergraduate catalog.


## DEPARTMENTS AND DEGREE PROGRAMS

S
Students of the Graduate College are expected to demonstrate superior talent, high motivation, and dedication to advancing the goals of the University. These goals include an emphasis on academic excellence, teaching distinction, public service, research, expanding economic opportunity, cultural preservation, and quality of life. To achieve those ends the University seeks outstanding, highly motivated students.

The following section describes the academic departments and/or divisions which offer majors and minors for graduate degrees. Included are specific degree program requirements and information and course descriptions.

## Doctor of Philosophy Degree

Middle Tennessee State University offers the Doctor of Philosophy (Ph.D.) degree in Economics, English, Human Performance, Literacy Studies, and Public History. The Ph.D. degree is offered for the purpose of developing doctoral-level expertise combining pedagogy with scholarly achievement and research excellence (applied or theoretical) in the fields of economics, English, human performance, literacy studies, or public history. Above all, the Ph.D. recipient from MTSU is a scholar who has acquired advanced academic skills and is well prepared to teach at the collegiate level, conduct independent scholarly investigation, and provide service to the private and public sectors associated with her/his academic discipline.

## Admission

General admission requirements for the Ph.D. degree may be found in the admission section of this catalog. Applicants for admission to this degree objective must hold a baccalaureate degree. Although a master's degree is not a general University requirement, each graduate program has the option of establishing such a requisite.

## University Requirements Leading to the Ph.D. Degree

Following are the minimum University requirements that must be met to be eligible for the granting of the Ph.D. degree. In addition, please note that each individual Ph.D. program has established distinct curricular requirements that are specific to that program. Please refer to the applicable graduate program section in this catalog.

## General Course and Credit Requirements

The required minimum is 60 semester hours of coursework with at least two-thirds of the program at the 7000 level. No more than 12 semester hours of dissertation research (course 7640) may be applied toward this 60 -hour requirement. If recommended by the student's graduate advisor and approved by the graduate dean, up to 12 semester hours of coursework taken at the master's level may be applied toward this 60-hour requirement. In the case of a non-degreed D.A. student from MTSU or in the case of a D.A. recipient from MTSU wishing to pursue a Ph.D., additional hours (not to exceed twenty-five percent $(25 \%)$ or twenty (20) hours whichever is greater of the D.A. requirements may be applied toward the 60 -hour requirement if recommended by the director of graduate studies and approved by the graduate dean.

The $\mathbf{6 0}$-credit requirement must include the following:
a. At least 42 hours in discipline-specific coursework. Undergraduate or dual-listed 4000/5000 courses (or their equivalents) cannot be used toward this requirement.
b. At least 12 semester hours for the dissertation research (course 7640).
NOTE: Once a Ph.D. student has begun taking dissertation research, he/she is expected to enroll in at least 1 semester hour of dissertation research (exclusive of Summer semester) until the dissertation is completed. Thus, Ph.D. students normally enroll for more than 12 total semester hours of dissertation research. Failure to maintain continuous enrollment while in the dissertation phase will require the student to apply for readmission to the program. Readmission is not guaranteed.
c. At least six (6) semester hours (two courses) in an educational pedagogy core. MTSU recognizes that competency and understanding of current teaching strategies and technologies is an important component of a contemporary, well-rounded Ph.D. curriculum. Thus an educational core consisting of at least two 3 -credit pedagogy courses is required. Please refer to the applicable graduate program section in this catalog for your specific pedagogy requirement.

## Additional Program Requirements

Each doctoral program establishes degree requirements which are specific to that discipline and may be in excess of the minimum University requirements. Students should consult the appropriate graduate program section in this catalog. The graduate advisor/director of graduate studies each graduate program, in consultation with the advisory committee when relevant, may also specify additional requirements above the required sixty (60) hours for the Ph.D., such as prerequisites, a reading knowledge of foreign language(s), a working knowledge of statistics, computer literacy, or specific courses related to graduate teaching assistantships or research assistantships.

## Pre-dissertation Advisory Committee

As soon as practicable, each Ph.D. student will be assigned an advisor or advisory committee. The advisor/committee is appointed by the director of graduate studies, in consultation with the student and the potential major professor. If warranted, the advisor/committee membership may be reconstituted upon a recommendation from the director of graduate studies and approval by the dean of the College of Graduate Studies.
The advisor/committee provides academic guidance to formulate a curricular plan best suited for the academic needs and interests of the student.

## Degree Plan

As early as possible during the student's program of study he/she should complete a degree plan in consultation with
his/her advisor/advisory committee. The degree plan must be approved by the student's advisor and submitted to the College of Graduate Studies before the completion of 30 graduate hours. The degree plan may be amended as necessary by submission of a Change to Degree Plan Form.

## Examinations

Each Ph.D. student may be required to take a set of examinations administered by a graduate program. A less than satisfactory outcome including a fail decision on any component of the examinations may result in additional academic requirements and/or a re-examination. A re-examination may be given only once. A second fail decision on any component of the examinations results in a recommendation to the dean of the College of Graduate Studies for academic dismissal. The student may appeal the dismissal recommendation, for cause, to the Appeals Subcommittee of the Graduate Council via the chair of the Graduate Council or the dean of the College of Graduate Studies.

Qualifying Examinations: Each Ph.D. student may be required to take a qualifying examination. The qualifying examination is administered by a graduate program early in the student's doctoral program; often after the first year of the doctoral program. Students should consult with their advisors as to the individual program policy on the timing and content of the administration. It may assess overall knowledge upon entry into the program or prior to entering the dissertation phase. The results of this examination should be used, in part, to plan the student's academic program. To be eligible to take this examination, the student must be fully admitted to the College of Graduate Studies and to the graduate program. Programs may have additional requirements or assess students by different means. The student should contact the individual program to determine qualifying examination requirements.
Preliminary Examination: The Ph.D student must also pass an additional or subsequent written and/or oral examination. This examination is referred to as the Preliminary Examination. The student must be in good academic standing and must have at least a 3.25 grade point average in all graduate work at the time the Intent to Schedule the Preliminary Examination form is filed. The preliminary examination is intended to assess whether a candidate is qualified to continue in a doctoral program, advance to candidacy, and pursue dissertation work.

All written examinations are given at least one month before the close of the Fall, Spring, and/or Summer semesters. Permission for the Ph.D. student to schedule the preliminary examination requires the approval of the student's advisory committee. Applications may be obtained from the department. The student should contact the individual program to determine the deadlines for submitting these applications.
A satisfactory or passing performance on the written and/or oral examinations means that the candidate is qualified to continue the program as planned.

## Written Preliminary Examination

1. The purpose of the written examination is to evaluate the candidate's overall knowledge of the field, integrative skills, ability to organize material, and competency in written expression. The maximum time limit for the written examination is eight hours.
2. The written examination is administered by the major department (i.e., the graduate program).
3. The graded written examinations are maintained in the department and are available to the student upon request.

## Oral Preliminary Examination

The oral examination is administered by the student's advisory committee and covers the candidate's area of specialization and general knowledge. The committee evaluates the candidate's breadth of knowledge of the field(s), integration and problem-solving skills, competency in oral expression, and potential for conducting independent research.

## Advancement to Candidacy

After having successfully completed the preliminary examination, the student must file an Advancement to Candidacy application with the dean of the College of Graduate Studies. At this time the dissertation committee is formally constituted and usually has the same membership as the pre-dissertation advisory committee, although this is not mandatory. For example, should the student's research area change, it may be relevant to replace one or more of the original advisory committee members with faculty better qualified to provide research mentoring in the new area of inquiry. The Advancement to Candidacy Form certifies that the student has successfully completed the preliminary examination and lists the proposed chair and members of the dissertation committee. Upon approval, the College of Graduate Studies will notify the applicant of advancement to candidacy.
Before an applicant is officially admitted to candidacy for the Ph.D. degree, the student must have satisfied the following requirements:

1. Advancement to Candidacy and Intent to Graduate forms must be filed by the deadlines published in the Graduate Catalog, the registration guide, and posted on department bulletin boards on campus. Normally, there are few extension exceptions granted if these forms are not submitted by the listed deadlines. The Advancement to Candidacy Form may not be filed in the same semester in which the student is to be graduated.
2. The student must have at least a 3.25 grade point average on all coursework listed on the candidacy forms as well as any other graduate work undertaken at Middle Tennessee State University within the specified time limit (ten years). Grades of D or F are not accepted for any graduate degree credit and no more than seven (7) hours of C grade may count toward Ph.D. degree requirements. However, all C, D, and F grades will be included in the student's GPA computation.
3. The student's entire program, including the dissertation, must be acceptable to the dissertation committee, department chair and/or director of graduate studies, and the dean of the College of Graduate Studies.

## Defense of Dissertation

Upon submission of the completed dissertation, the doctoral candidate who has successfully completed all requirements for the degree will be scheduled by the chair of her/his dissertation committee, in consultation with the other committee members, to defend the dissertation. The College of Graduate Studies will publish the dissertation title, date, time, and location of the defense at least two weeks prior to the defense. The defense is open to all members of the University community who wish to attend. The dissertation defense is administered by the dissertation committee according to program guidelines. Successful defense of the dissertation must be attested to in writing by all members of the dissertation committee.

## Time Limit

There is a ten-year limit for completing all Ph.D. degree requirements. Thus, all coursework offered toward the doctoral degree as well as the dissertation must be completed within ten years after matriculation (i.e., the first semester of enrollment). All graduate level coursework considered for transfer credit into the Ph.D. program must be degree-applicable and have been completed within seven (7) years prior to the first enrollment in the Ph.D. program.

## Transfer Credits

Only coursework completed at an accredited institution that would count toward the doctorate there will be considered for approval as transfer credit toward the Doctor of Philosophy coursework requirement at MTSU. Additional information on transfer credit may be found in the section on academic regulations.

## Residency

Residency requirements will be established by each program, pending Graduate Council approval.


# General Information for Specialist and Master's Students 

In addition to the materials found below, the reader should refer to the Glossary section in this catalog for additional important information relative to graduate education at MTSU.

## Admission Requirements

Applicants must meet the admission requirements for degreeseeking students and submit any additional materials required by the major program of study. (See relevant department for specific requirements.)
Admission is granted to a specific program of study and a student may not change the major, the concentration, or the minor without a recommendation by the relevant graduate advisor(s) and the written approval of the dean of the College of Graduate Studies.
All applicants must hold a bachelor's degree from an accredited university. In addition, applicants for the Ed.S. degree must also hold a master's degree from an accredited university.

## Comprehensive Examinations

The comprehensive examinations are scheduled by each department during the last part of the semester in which the student expects to graduate. These may be oral, written, or both. This test is not merely a reexamination of coursework, but it is an assessment of the candidate's ability to integrate scholarly information linking the major and related fields. The comprehensive examinations may be taken no more than twice.

## Degree Plan

The degree plan is established in consultation with the graduate advisor and sets out the curricular plan to follow for the purpose of graduation. The degree plan must be filed and approved prior to the completion of 21 credit hours (or earlier if required by the graduate program). The form is approved by the pertinent graduate program personnel (e.g., major professor, graduate advisor, etc.) and the dean of the College of Graduate Studies (or designee). It may not be filed in the semester in which the student anticipates to be graduated.
M.A.T. and M.S.T. degree plans must also be signed by the dean of the College of Education and Behavioral Science or an appropriate representative if licensure is being sought. The degree plan for the M.Ed. requires that the student have a professional license to teach and thus must also be signed by
the dean of the College of Education and Behavioral Science or an appropriate representative.
For students pursuing either a second master's or specialist's degree at MTSU, the degree plan should be filed prior to the completion of 18 credit hours of coursework.

## Degree Plan Change

If for any reason the courses listed on the degree plan cannot be followed, a revision to the degree plan must be filed with the dean of the College of Graduate Studies. This must be approved by the major professor, reader(s), and/or faculty advisors.

## Faculty Advisors

After admission, a degree-seeking student is assigned faculty advisors in the major and minor areas. The student should consult these advisors for program planning and optimal course scheduling.

## Intent to Graduate

By the end of the first full week of the term in which the student intends to graduate, or by the end of the first week of the Summer June Term (for August graduation), the candidate must file an Intent to Graduate Form with the College of Graduate Studies, pay relevant fees at the Business Office, and complete the College of Graduate Studies exit survey. All degree requirements must be completed prior to the date of graduation.

## Thesis

The thesis in final form must be submitted to the dean of the College of Graduate Studies no later than the date specified in the University Academic Calendar, which is approximately six weeks before graduation. It must be approved by the major professor, the reader(s), and the department chair prior to submission to the College of Graduate Studies. Guidelines for the thesis vary from department to department. While the responsibility for the technical quality and content of the thesis or dissertation lies in the graduate committee, the College of Graduate Studies imposes format requirements to ensure an appropriate appearance for your thesis or dissertation and recognizes the quality of the product you have produced by accepting it. Final responsibility for the thesis or dissertation lies with the author. The University reserves the right to refuse any manuscript that is not in agreement with the MTSU Thesis and Dissertation Manual formatting guidelines, is not in suitable condition for archiving in Walker Library, or is in any form plagiarized or fabricated. Thus a thesis not meeting standards may be rejected by the dean of the College of Graduate Studies and graduation delayed. The original and three copies of the thesis must be submitted for binding. One copy is forwarded to the library, one to the major professor, one to the department, and one is returned to the student. Additional fees must be paid if extra copies are bound.
NOTE: Once the student has begun taking thesis research, he/she is expected to enroll in at least 1 semester hour of thesis research (course 6640) until the thesis is completed.

## Specialist in Education Degree

Middle Tennessee State University offers the Specialist in Education (Ed.S.) degree in Administration and Supervision and in Curriculum and Instruction. The Ed.S. degree is provided specifically for teachers, counselors, and administrators wishing to pursue graduate study beyond the master's level. The Ed.S. in Administration and Supervision is available through the Department of Educational Leadership. The Ed.S. in Curriculum and Instruction is offered by both the Department of Educational Leadership and the Department of Elementary and Special Education. The Ed.S. in Curriculum and Instruction with a concentration in School Psychology is offered by the Department of Psychology.

## Common Requirements for All Specialist Degree Programs

All specialist candidates must

1. complete all applicable coursework after receipt of the master's degree.
2. file a degree plan with the College of Graduate Studies prior to the completion of 21 credit hours. No courses at the 5000 level or lower may apply toward the specialist degree.
3. successfully complete a written (and/or oral) comprehensive examination. The examination may be taken no more than twice.
4. complete all specific graduate program requirements. These additional specific degree requirements are found under the applicable department.

## Second Specialist Degree from MTSU

An individual who has received one specialist degree from MTSU may obtain a second specialist degree with a minimum of 24 additional semester hours of graduate coursework earned at MTSU if approved in advance by the graduate program and the graduate dean. No transfer coursework is accepted towards the second specialist degree. All specific course requirements must be met for the second degree (except FOED 7060, Seminar in Educational Foundations, and SPSE 7130, The Curriculum: Structures and Functions), including the written comprehensive examinations and thesis (if relevant). All semester hours must be earned after the first specialist degree has been conferred.

## The Master's Program

Middle Tennessee State University offers a total of 55 graduate degrees and certificate programs encompassing over 70 areas of study. These include the Master of Arts (M.A.), the Master of Arts in Teaching (M.A.T.), the Master of Business Administration (M.B.A.), the Master of Business Education (M.B.E.), the Master of Criminal Justice (M.C.J.), the Master of Education (M.Ed.), the Master of Fine Arts (M.F.A.), the Master of Science (M.S.), the Master of Science in Nursing (M.S.N.), the Master of Science in Teaching (M.S.T.), the Master of Professional Studies (M.P.S.), and the Master of Social Work (M.S.W.).

## Common Requirements for all Master's Degree Programs

All master's candidates must

1. satisfactorily complete the undergraduate prerequisites.
2. complete a minimum of 30 (or more) semester hours of graduate coursework. No more than 30 percent of the total degree hours may be dually listed as undergraduate/graduate hours. No undergraduate courses may apply toward the graduate program requirements. If a thesis is required, normally no more than three hours will apply toward the 30 (or more) semester hour program requirement. However, additional semester hours of thesis research (6640) may be taken and will appear on the student's transcript.
3. file a degree plan with the College of Graduate Studies prior to the completion of 21 credit hours.
4. successfully complete a written (and/or oral) comprehensive examination; the examination may be taken no more than twice.
5. complete all specific graduate program requirements.

## Programs Leading to the M.A. Degree

There are six departments offering programs leading to the Master of Arts degree. They are Economics and Finance, English, History, Music, Psychology, and Sociology and Anthropology.
Normally, the Master of Arts degree requires a thesis; however, graduate programs in English, Economics and Finance, and Music include a non-thesis option requiring more than 30 semester hours. (Specific program requirements may be found under the appropriate department.)

## Program Leading to the M.A.T. Degree

The Master of Arts in Teaching degree is offered in Foreign Languages. The degree should be pursued by those individuals interested in teaching. Admission is open to licensed teach-
ers as well as those seeking initial licensure. Specific degree requirements are found under the Department of Foreign Languages and Literatures.

## Program Leading to the M.B.A. Degree

The Master of Business Administration program includes courses in the following six areas of business: accounting, economics, finance, management, marketing, and information systems. Specific degree requirements are found under Business Administration.

## Program Leading to the M.B.E. Degree

A Master of Business Education (M.B.E.) degree program is offered by the Department of Business Communication and Entrepreneurship in the Jennings A. Jones College of Business. Specific degree requirements are found under the Department of Business Communication and Entrepreneurship.

## Program Leading to the M.C.J. Degree

The Master of Criminal Justice degree program is a joint program with Tennessee State University. Students may seek professional employment in the operational agencies in the field of criminal justice or pursue relevant research or teaching positions. Eighteen semester hours credit from each university is required. Applicants must complete a special application specifically for this degree program. Specific degree requirements are found under the Department of Criminal Justice Administration.

## Programs Leading to the M.Ed. Degree

There are four departments offering programs leading to the Master of Education degree. The M.Ed. degree provides programs of study in Administration and Supervision, Aerospace Education, Curriculum and Instruction, Professional Counseling, Reading, and Special Education. Specific degree requirements are found under the Department of Aerospace, Department of Educational Leadership, Department of Elementary and Special Education, and Department of Psychology.

## Program Leading to the M.F.A. Degree

The Master of Fine Arts (M.F.A.) with a major in Recording Arts and Technologies is offered by the Department of Recording Industry to prepare practitioners in the field of audio and music recording and production for advanced work in an integrated electronic media environment. Specific degree requirements are found under the Department of Recording Industry.

## Program Leading to the M.P.S. Degree

MTSU offers in collaboration with other Tennessee Board of Regents institutions the Master of Professional Studies for individuals seeking interdisciplinary training within the social sciences and their current profession. Information regarding this degree is available through the College of Continuing Education and Distance Learning.

## Programs Leading to the M.S. Degree

The University offers the Master of Science degree in the areas of Accounting/Information Systems; Aviation Administration; Biology; Chemistry; Computer Science; Exercise Science; Health, Physical Education, Recreation; Human Sciences, Engineering Technology and Industrial Studies; Mass Communication; Mathematics; and Professional Science. Specific degree requirements are found under the applicable department.
Normally, the Master of Science degree requires a thesis; however, graduate programs in Computer Science; Exercise Science; Health, Physical Education, Recreation; Industrial Studies; Mass Communication; and Mathematics include a non-thesis option requiring more than 30 semester hours. (Specific program requirements may be found under the appropriate department.)

## Program Leading to the M.S.N. Degree

The Master of Science in Nursing Degree (M.S.N.) is offered through the Regent's Online Degree Program (RODP), and is delivered following the standard protocol established for the delivery of RODP courses and programs. Information regarding this degree is available through the School of Nursing.

## Program Leading to the M.S.T. Degree

The Master of Science in Teaching degree is offered by the Department of Mathematical Sciences. The degree should be pursued by those individuals interested in teaching. Admission is open to licensed teachers as well as those seeking initial licensure. Specific degree requirements are found under the Department of Mathematical Sciences.

## Program Leading to the M.S.W. Degree

The Master of Social Work degree program is a collaborative program with Middle Tennessee State University, Tennessee State University, and Austin Peay State University. Specific degree requirements are found under the Department of Social Work.

## Second Master's Degree from MTSU

An individual who has received one master's degree from MTSU may obtain a second master's degree with a minimum of 24 additional semester hours of coursework earned at MTSU if approved in advance by the director of graduate studies and the graduate dean. No transfer coursework is accepted towards the second master's degree. All specific course requirements must be met for the second degree, including the written comprehensive examinations and thesis (if relevant). All semester hours to be applied toward the second degree must be earned after the first master's degree has been conferred.

## Graduate Certificate Programs

Graduate certificate programs provide advanced study beyond the baccalaureate degree and are intended as both professional development and as an intermediate step towards a desired graduate degree. Middle Tennessee State University offers graduate certificates in Dyslexic Studies, Geoscience, Gerontology, and Health Care Management. The Gerontology, Health Care Management, and Dyslexic Studies certificates are interdisciplinary programs involving courses and faculty in multiple MTSU departments.

## Requirements

Prospective students should apply to the Graduate School. Once a student is admitted to the graduate school, his or her application is transmitted to the director of the individual certificate program for admission consideration. For admission to the interdisciplinary graduate certificate programs in Gerontology and Health Care Management, students must possess a bachelor's degree with an undergraduate grade point average of 2.75 ( 4.0 scale) and are required to submit a letter demonstrating their interest, detailing prior field experience, and outlining career goals and aspirations.
Students enrolled in the certificate program must comply with existing policies applicable to all graduate programs at MTSU. The time limit for use of credit toward the certificate is six years from the date of enrollment in the earliest course applied toward the certificate, including transferred courses. Students must maintain a cumulative graduate grade point average of 3.00 in courses leading to the certificate. Students may transfer up to six (6) credit hours of approved coursework into the certificate program.

## Geoscience

The Department of Geosciences offers a graduate certificate in Geoscience that consists of 12-16 hours taken from a variety of geography and geology courses. The certificate in Geoscience should be of particular interest to those in the private sector, $\mathrm{K}-12$ and community college education, and government agencies. The department also offers a minor at the graduate level and hours taken in the certificate program normally can be applied toward the minor requirements. Specific requirements for the certificate in Geoscience are found on page 121.

## Interdisciplinary Certificate Programs

## Dyslexic Studies

The graduate certificate program in Dyslexic Studies is rooted in the research base that defines dyslexia and guides identification. It examines content and strategies for intervention. Prerequisites for admission are a certificate in some field integral to P-12 education, documentation of three or more years of successful experience in the career field, and permission of the program advisor. Candidates must be admitted to the College of Graduate Studies; present a letter of recommendation from a principal or supervisor; and submit a letter detailing professional experience, positions held, and motivation for studying dyslexia. See course descriptions on page 109.

## Total required minimum hours: 18

| Requirements |  |  |
| :---: | :---: | :---: |
| DYST | 6000 | Introduction to Dyslexia |
| PSY | 6530 | The Psychology of Reading and Reading Development |
| BIOL | 6740 | Brain Development and Learning Disabilities |
| CDIS | 5000 | Language Development, Speech, and Literacy |
| DYST | 6010 | Identifying Students with Dyslexia |
| DYST | 6011 | Interventions for Dyslexia |
| DYST | 6012 | Multisensory Teaching Strategies |
| DYST | 6013 | Practicum in Multisensory Teaching |
| DYST | 6020 | Adolescents with Dyslexia and Other Literary Difficulties |

For more information, contact Diane J. Sawyer, director of the Tennessee Center for the Study and Treatment of Dyslexia, at (615) 898-5642 or dsawyer@mtsu.edu.

## Gerontology

The certificate program in Gerontology provides supplementary education in gerontology for students preparing for careers in a broad range of positions. This program is also designed to give those already working in the field an opportunity to enrich existing skills and knowledge and to provide further opportunities for career advancement.

## Total required minimum hours: 18

## Core Requirements: 6 hours

| SOC | 6550 | Seminar on Aging |
| :--- | :--- | :--- |
| SOC | 6900 | Practicum: Applied Analysis* |

*NOTE: All students are required to complete this capstone experience during their last semester of coursework.
Remaining hours are to be selected from the following courses in conjunction with career goals and aspirations.

| CDFS | 5390 | Families in Later Life |
| :--- | :---: | :--- |
| CDIS | 5800 | Speech and Language Disorders in the Adult <br> Population |
| REC | 5380 | Introduction to Recreation for Persons <br> with Disability |
| REC | 5470 | Leisure and Aging <br> NFS |
| 5210 | Nutrition in Aging |  |


| PSY | 5610 | Adult Psychology and Aging |
| :--- | :--- | :--- |
| PSY | 5630 | Death and Dying |
| SOC | 5020 | Sociology of Aging |
| SOC | 5030 | Topics in Gerontology |
| SOC | 5040 | Health Care Delivery Issues |
| SOC | 6660 | Program Management and Evaluation |
| SOC | 6670 | Mental Health and Aging |
| SOC | 6680 | Counseling Elders |

For more information, contact Brandon Wallace in the Aging Studies Program at (615) 898-5976.

## Health Care Management

The curriculum is designed to

1. offer support for individuals interested in the health care field who may or may not want to pursue a graduate degree to obtain recognition for a coherent body of graduate level study in the field of health care management.
2. provide for interdisciplinary collaboration in teaching, learning, and practice.
3. encourage qualified students to pursue graduate degrees related to their specific field of interest or practice.

Total required minimum hours: 18
Core Requirements: 9 hours

| MGMT | 6000 | Management and Operations Concepts |
| :--- | :--- | :--- |
| MGMT | 6780 | Health Care Management |
| SOC | 5040 | Health Care Delivery Issues |

Remaining hours are to be selected from the following courses in conjunction with career goals and aspirations.

| BLAW | 6430 | Legal Environment of Management |
| :--- | :--- | :--- |
| ECON | 6400 | Economics of Health Care |
| HLTH | 6510 | The Nation's Health |
| HLTH | 6850 | Methods in Epidemiology |
| HLTH | 6860 | Program Planning for Health Promotion |
| MGMT | 6750 | Business Ethics |
| MKT | 6900 | Health Care Marketing |
| NURS | 5035 | Special Topics |
| NURS | 5055 | Informatics for the Health Care Professional |
| SOC | 5020 | Sociology of Aging |
| SOC | 5030 | Topics in Gerontology |
| SOC | 5040 | Health Care Delivery Issues |

For more information, contact the Center for Health and Human Services at (615) 898-5950.

## Graduate Minors

Minors are offered in the following areas:
Accounting
Aerospace
Agriculture
Art
Biology
Chemistry
Computer Science
Criminal Justice Administration
Curriculum and Instruction
Earth Science/Geology
Economics
Education
English
Foreign Languages
Geography
Gerontology
Health
History
Human Sciences
Industrial Studies
Information Systems
Library Science
Mass Communication
Mathematics
Music
Physical Education
Physics
Political Science
Psychology
Reading
Recreation
Safety
Sociology
Special Education
Speech and Theatre
There are three patterns of minors from which a candidate must choose:

1. A single minor consisting of at least 12 semester hours; 12 undergraduate hours in an area are prerequisite to a single minor in that area at the master's level.
2. A minor consisting of a minimum of 6 semester hours in each of two subjects.
3. The distributive minor consisting of a minimum of 12 semester hours in at least three subjects.
The candidate is expected to complete the total program in the major, minor, and/or cognate fields. A cognate is defined as 6 semester hours.

## Academic Abbreviations-Courses

| AAS | African American Studies |
| :---: | :---: |
| ABAS | Agribusiness and Agriscience |
| ACA | Academic Success Program |
| ACSI | Actuarial Science |
| ACTG | Accounting |
| ADV | Advertising |
| AERO | Aerospace |
| ANTH | Anthropology |
| ARAB | Arabic |
| ART | Art |
| AS | Aging Studies |
| ASTL | Advanced Studies in Teaching and Learning |
| ASTR | Astronomy |
| ATHC | Athletic Coaching |
| ATHT | Athletic Training |
| BCEN | Business Communication and Entrepreneurship |
| BIOL | Biology |
| BLAW | Business Law |
| BUAD | Business Administration |
| CDFS | Child Development and Family Studies |
| CDIS | Communication Disorders |
| CHEM | Chemistry |
| CHIN | Chinese |
| CIM | Concrete Industry Management |
| CJA | Criminal Justice Administration |
| CMT | Construction Management Technology |
| COED | Cooperative Education |
| COMM | Communication (Speech) |
| CSCI | Computer Science |
| DANC | Dance |
| DYST | Dyslexic Studies |
| ECON | Economics |
| ELED | Elementary Education |
| EMC | Electronic Media Communication |
| ENGL | English |
| EST | Environmental Science and Technology |
| ET | Engineering Technology |
| ETIS | Engineering Technology and Industrial Studies |
| EXL | Experiential and Service Learning |
| EXSC | Exercise Science |
| FCSE | Family and Consumer Sciences Education |
| FIN | Finance |
| FL | Foreign Languages |
| FOED | Foundations of Education |
| FREN | French |
| GEOG | Geography |
| GEOL | Geology |
| GERM | German |
| GERO | Gerontology |
| GRAF | Media Design/Graphics |
| GS | Global Studies |
| HEBR | Hebrew |
| HHP | Health and Human Performance |
| HIST | History |
| HLTH | Health |
| HSC | Human Sciences |
| HUM | Humanities |
| IDES | Interior Design |
| IED | Industrial Education |
| IMIC | Interdisciplinary Microanalysis and Imaging Center |


| INFS | Computer Information Systems |
| :---: | :---: |
| ITAL | Italian |
| JAPN | Japanese |
| JOUR | Journalism |
| LATN | Latin |
| LEST | Leadership Studies |
| LIBS | Library Science |
| LITS | Literacy Studies |
| LSM | Leisure and Sports Management |
| MATH | Mathematics |
| MC | Mass Communication |
| MES | Middle East Studies |
| MGMT | Management |
| MKT | Marketing |
| MRAT | Recording Arts and Technologies |
| MS | Military Science |
| MUAP | Applied Music |
| MUED | Music Education |
| MUEN | Music Ensembles |
| MUHL | Music History and Literature |
| MUPD | Music Pedagogy |
| MUS | Music |
| MUTH | Music Theory |
| NFS | Nutrition and Food Science |
| NURS | Nursing |
| ORCO | Organizational Communication |
| PHED | Physical Education |
| PHIL | Philosophy |
| PHOT | Photography |
| PHYS | Physics |
| PLEG | Paralegal Studies |
| PORT | Portuguese |
| PR | Public Relations |
| PRSE | Professional Seminar |
| PRST | Professional Studies |
| PS | Political Science |
| PSCI | Physical Science |
| PSY | Psychology |
| QM | Quantitative Methods |
| READ | Reading |
| REC | Recreation |
| RIM | Recording Industry |
| RS | Religious Studies |
| RUSS | Russian |
| SAFE | Safety |
| SOC | Sociology |
| SPAN | Spanish |
| SPED | Special Education |
| SPSE | School Personnel Service Education |
| STAT | Statistics |
| SW | Social Work |
| TELC | Education |
| THEA | Theatre |
| TRNS | Transportation |
| TXMD | Textiles, Merchandising, and Design |
| UH | University Honors |
| UNIV | University Seminar |
| WMST | Women's Studies |
| YOED | Youth Education |

## DEPARTMENTS AND DEGREE PROGRAMS

S
Students of the Graduate College are expected to demonstrate superior talent, high motivation, and dedication to advancing the goals of the University. These goals include an emphasis on academic excellence, teaching distinction, public service, research, expanding economic opportunity, cultural preservation, and quality of life. To achieve those ends the University seeks outstanding, highly motivated students.

The following section describes the academic departments and/or divisions which offer majors and minors for graduate degrees. Included are specific degree program requirements and information and course descriptions.

# Department of Accounting 

Jeffrey L. Hamm, Chair<br>Business and Aerospace Building N425C<br>Kevin James, M.S. Program Coordinator<br>Business and Aerospace Building N407

The mission of the Master of Science degree program in Accounting and Information Systems is to provide a flexible and focused program that prepares students for professional jobs in accounting and other related fields. The program is designed to offer students opportunities to obtain knowledge in nonaccounting areas to support their career development. Fulfilling this mission requires that faculty members enhance and broaden their skills through academic and professional research, service to the profession, and educational development.
The Department of Accounting offers the Master of Science in Accounting and Information Systems with accounting as the primary field and courses for the Master of Business Administration degree. A minor in Accounting is offered for students seeking a master's degree other than the M.B.A. A specialization in taxation is also offered within the primary field of accounting. The accounting graduate coordinator serves as advisor for students choosing accounting as their primary field.
Students are encouraged to take advantage of the opportunity to take a balance of accounting and information systems courses; however, there is significant flexibility in the requirements to allow a student's program to be specialized to the extent desired for particular career goals.
The prerequisites for a student seeking an M.S. degree in the department are the same as those required for the M.B.A. degree (see page 74). A recent graduate of an AACSB-accredited program would normally possess an adequate background in these prerequisites. A student electing accounting as a primary field must have completed an additional 18 hours of prerequisites including Intermediate Accounting I and II, ACTG 3110 and 3120; Cost Accounting, ACTG 3310; Accounting Systems, ACTG 4510; Introduction to Federal Income Tax, ACTG 4550; and External Auditing I or Internal Auditing, ACTG 4620 or ACTG 4640.
To be admitted to the M.S. program (see page 30), a student must meet one of the following:
a. GPA $\times 200+$ GMAT $=950$
or Upper Division GPA $\times 200+$ GMAT $=1,000$
b. International students must comply with the following provision: For undergraduate degrees from foreign institutions where a grade point average cannot be clearly established but where that work is thought to be equivalent to domestic grades of $\mathbf{B}$ or higher, admission eligibility may be determined by the GMAT score. A score of at least 450 is required for unconditional admission under such circumstances. Preparatory work taken in institutions with grading systems paralleling that of most United States institutions must conform to a B average.

The M.S. with Accounting concentration fulfills the requirement to sit for the CPA exam in Tennessee.

## Requirements for the Master of Science Degree

## Accounting as Primary Field; Information Systems as Secondary Field

## Required

ACTG 6650 Advanced Accounting Theory
INFS 6610 Information Systems Management and Applications
At least one of the following as a capstone course in the last semester:
ACTG 6670 Advanced Financial Accounting and Reporting Problems
ACTG 6720 Advanced Auditing and Public Accounting Practices

## Electives

Three hours in INFS at the 5000 or 6000 level
Three hours in ACTG at the 5000 or 6000 level Six hours in ACTG at the 6000 level
Six hours of approved electives at the 6000 level
Three hours in international/global at the 6000 level

## Specialization in Tax Accounting

Students electing to specialize in tax accounting must complete the following courses among their electives: ACTG 6510, 6530, 6540, and 6550.

## Additional Requirements

The chosen capstone course must be passed with a grade of B- or higher with a maximum enrollment of two times.
The degree is to be completed within six years from the time of admission to the degree program.
No foreign language or thesis is required in the program.
NOTE: Students who have credit for the undergraduate equivalent of the 5000-level course are not permitted to enroll in the 5000-level course for credit.

## Courses in Accounting [ACTG]

5510 Accounting Systems. Three credits. Prerequisites: ACTG 3020 or 3310 and INFS 2200 or consent of department chair. Current developments in establishment of complete accounting systems and the application of principles to typical business organizations. Special emphasis on accounting cycles, controls, and database design.

5530 Federal Taxes I. Three credits. Prerequisites: Graduate standing and permission of department chair. Addresses determination of taxable income for individuals; federal income tax returns and research methods.

5610 Governmental Accounting and Reporting. Three credits. Prerequisite: ACTG 3120 with a minimum grade of C. State and local government accounting principles and procedures; classifications of accounts for budgetary and financial reporting; accounting for revenues and expenditures or expenses; reporting for funds and the governmental entity; and auditing the governmental entity.

5680 Forensic Accountancy and Fraud Auditing. Three credits. Prerequisite: ACTG 4620 or 4640 or approval of department chair. Practice of forensic accounting, i.e., nontraditional investigative aspects of accountancy (e.g., litigation support, business interruptions, etc.); emphasis on fraud prevention and the detection of fraudulent intent to obtain improper individual or group gains.

5840 Study Abroad. Three credits. Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

6000 Survey of Accounting Principles. Three credits. The accounting cycle, financial statements, accounting systems, use of accounting information for managerial decision-making purposes and problem solving. Not open to students with undergraduate accounting backgrounds. May not be used for elective credit in graduate business degree programs.

6100 Accounting and Legal Issues for Managers. Three credits. Surveys accounting skills and legal perspectives necessary for managers without undergraduate business degrees to enter the business world. Will not meet the requirements for the M.S. in Accounting/Information Systems nor the M.B.A. degree programs.

6110 Advanced Financial Accounting. Three credits. Prerequisite: ACTG 3120 with a minimum grade of C. Extensive coverage of consolidated financial statement preparation. Financial accounting topics including advanced partnerships, interim financial reporting, segment reporting, foreign currency issues, and accounting for fiduciaries also covered. Readings from professional journals and research related to current accounting issues.

6310 Advanced Cost Accounting, Budgeting, and Controllership. Three credits. Prerequisite: ACTG 3020 or 3310 or 6910 . Recent conceptual and analytic development in cost accounting, budgeting, and controllership. Includes principles and procedures in preparation of business budgets and methods of accounting for managerial control of cost of production, distribution, and administration through the use of standards.

6510 Federal Income Tax Research and Planning. Three credits. Prerequisite: ACTG 4550 or consent of instructor. Skillful application of tax research methodology in the use of primary tax authority, secondary tax reference materials, and research aids. Research through practice in the use of materials available in the tax library.

6530 Taxation of Pass-Through Entities. Three credits. Prerequisite: ACTG 4550 with a minimum grade of $C$ or consent of instructor. Principles of partnership and S corporation taxation. Addresses the tax consequences of formation, operations, distributions, and liquidations of partnerships. Also covers tax rules unique to $S$ corporations.

6540 Taxation of Business Entities. Three credits. Prerequisite: ACTG 4550 with minimum grade of C or consent of instructor. The federal income taxation of business entities, including $C$ corpo-
rations, S corporations, partnerships, limited liability companies, and estates and trusts. Also covers estate and gift taxation.

6550 U.S. International Taxation. Three credits. Prerequisite: ACTG 4550 with a minimum grade of C or consent of instructor. Basic concepts of U.S. taxation of international transactions. Topics include sourcing of income from foreign activities, Subpart F income, selecting the proper vehicle for foreign investments, and computing foreign tax credits.

6570 International Financial Reporting and Controls. Three credits. Prerequisite: Nine hours of accounting with a C or better. Advanced study of international financial reporting issues, international financial statement analysis, international accounting standards, foreign currency translation, foreign currency transaction reporting, international management accounting issues, and international taxation practices.

6610 Advanced Governmental and Nonprofit Accounting and Reporting. Three credits. Prerequisites: ACTG 3120 and 4610 (5610) with a minimum grade of C . State and local government accounting principles and procedures; accounting and reporting for state and local governments, colleges and universities, hospitals, and nonprofit organizations. Auditing practices for all these organizations.

6650 Advanced Accounting Theory. Three credits. Prerequisite: Consent of department chair. History and development of accountancy, tax structures, and industrial development of past, present, and projected societies including relevant research into current controversial issues. Extensive research required. Required for M.S. in Accounting/Information Systems with accounting as the primary field.

6670 Advanced Financial Accounting and Reporting Problems. Three credits. Prerequisite: Accounting major or consent of instructor. Application of theoretical concepts and promulgations of authoritative bodies to financial accounting and financial reporting situations encountered in practice.

6720 Advanced Auditing and Public Accounting Practices. Three credits. Prerequisite: ACTG 4620 or consent of department chair. Critical analysis of techniques used in auditing, method of data collection, and nature of audit evidence. Includes modern and relevant statistical and social research techniques and computer use as applied to the various steps in audit practices and procedures.

6730 External Auditing II. Three credits. Prerequisite: ACTG 4620 or equivalent with a minimum grade of C . Responsibilities and functions of external auditors in providing attestation services. Auditing concepts, standards, and techniques including application of audit techniques to various transaction cycles will be covered.

6810 Empirical Methods in Accounting. Three credits. Prerequisites: Foundation requirements and consent of instructor. Independent study and research on topics in or related to accounting under supervision of graduate faculty.

6910 Accounting and Business Decisions. Three credits. Prerequisite: ACTG 2120 or equivalent. Accounting concepts and their application to the decision-making process. Research reports on a variety of financial and managerial accounting topics prepared and presented orally by the student. Not open to M.S. accounting students.

6920 Financial Statement Analysis. Three credits. Prerequisite: ACTG 2120 or equivalent. Concepts and techniques of financial statement analysis, income determination, and related institutional background. Not open to M.S. accounting students.

## Courses in Business Law [BLAW]

6430 Legal Environment of Management. Three credits. Legal rights and potential liabilities of business managers. Presentation of the legal, ethical, and political environment of business. Includes basic principles of the legal system, torts and product liability, antitrust, labor and employment laws, securities, contracts, sales, secured transactions, bankruptcy, agency, partnerships, corporations, and commercial paper. May not be used for elective credit in graduate business degree programs.

6500 Legal Aspects of Health Care. Three credits. Prerequisite: BLAW 3400 or ACTG 6100 or approval of department chair. The U.S. health care system; its major stakeholders; and the laws and regulations that apply to health care institutions, professionals, and suppliers including Medicare, electronic health records, health care fraud and abuse, compliance planning, certificates of need, health care business associations, federal tax exemption, liability and licensing issues, and ethics in decision making.


# Department of Aerospace 

Wayne Dornan, Chair Business and Aerospace Building S211C

The Department of Aerospace offers the Master of Science (M.S.) in Aviation Administration, with a concentration in Airline/Airport Management or Aviation Asset Management, and a Master of Education (M.Ed.) in Aerospace Education.

## Requirements for the Master of ScienceAviation Administration Major

Normally the required minimum test score for admission to this program is 800 on the Graduate Record Examination or 393 on the Miller Analogies Test (38 on the old scale).
Candidate must

1. have graduated from an accredited four-year college or university to be considered for unconditional admission. Transcripts must reflect 6 hours of research-related coursework (e.g., statistics, computer science, etc.) and 18 semester hours from the following disciplines: aviation, business, or information systems. Demonstrated knowledge equivalent to that obtainable through the undergraduate core curriculum in Aerospace may be substituted for up to 15 of the 18 required semester hours. The aviation coursework must include 6 semester hours in at least two of the following areas: airline or airport management, aviation asset management, fixed-base operations or theory of flight. Applicants with undergraduate majors in fields other than aviation who have not completed a college-level flight theory course, or who do not possess Federal Aviation Administration or military-issued pilot credentials, will be required to enroll in AERO 1020 (Theory of Flight) during their first semester after admission to the M.S. degree program.
2. complete 36 semester hours consisting of an 18 -hour core, 12 hours in the chosen concentration, and 6 hours of electives with a cumulative GPA of 3.0 or greater. If necessary, an additional 3 hours may be taken to complete the thesis; however, these hours may not be applied toward elective requirements.
3. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
4. successfully complete a written comprehensive examination (may be taken no more than twice).
5. successfully complete a thesis defense.

NOTE: Applicants meeting the above criteria whose cumulative GPA is less than 3.00 but at least 2.75 and who present other qualities deemed valuable by the aviation industry, as determined by the Graduate Program Committee, may be conditionally accepted with academic probationary status. Students with probationary status who fail to achieve and maintain a 3.0 GPA will be suspended from the M.S. degree program.

| Airline/Airport Management Concentration |  |
| :--- | :--- |
| Required Courses |  |
| AERO | 6120 | Aviation History

## Guided Electives

Students will select 6 hours of approved electives suited to their career goals from another department within the University. Selection will be made with appropriate guidance from faculty of both departments.

## Aviation Asset Management Concentration

## Required Courses

AERO 6120 Aviation History
AERO 6150 Aviation Industries
STAT 6160 Advanced Mathematical Statistics I OR
QM 6000 Quantitative Methods Survey
AERO 6300 Air Transportation Systems
AERO 6610 Introduction to Aerospace Research
AERO 6640 Thesis Research
Electives $\mathbf{- 1 2}$ hours from the following:
AERO 5075 Selected Readings in Aerospace
AERO 6170 Scheduled Air Carrier Operations
AERO 6250 Aviation Policy and Planning
AERO 6350 General Aviation
AERO 6370 Aviation Contracts and Leases
AERO 6450 Airport Funding Policy
INFS 6610 Information Systems Management and Applications OR
INFS 5200 Data Enhanced Internet Applications
ACTG 6000 Survey of Accounting Principles
ECON 6030 Survey of Economic Theory

## Guided Electives

Students will select 6 hours of approved electives suited to their career goals from another department within the University. Selection will be made with appropriate guidance from faculty of both departments.

## Requirements for the Master of EducationAerospace Education Major

Advisement for the degree is provided by graduate faculty members in the Aerospace Department and one graduate faculty member from the College of Education and Behavioral Science. Students in the M.Ed. degree program may elect either an aerospace or an education option. Both options consist of a 13-hour core and are designed to serve applicants interested in education or professional development programs and administration.

Normally, the required test score for admission to the M.Ed. program is 380 ( 30 on the old scale) on the Miller Analogies Test or a satisfactory score on the Graduate Record Examination.

Candidate must

1. hold a bachelor's degree from an accredited institution;
2. complete 34 semester hours with no more than 30 percent of the total degree hours dually listed as undergraduate/ graduate hours (refer to the appropriate option for specific requirements);
3. be admitted by Aerospace Department's Graduate Program Committee;
4. file a degree plan with the Graduate Office prior to the completion of 21 credit hours; and
5. successfully complete a written comprehensive examination (may be taken no more than twice).

## Option 1 (Aerospace)

## Required - 13 hours

AERO 6100 Aviation Workshop (same as YOED 6100)
SPSE 6430 Introduction to Curriculum Development
AERO 6610 Introduction to Aerospace Research OR
FOED 6610 Analysis and Application of Educational Research
AERO 6120 Aviation History

## Aerospace Electives - 12 hours

Any 5000-level aerospace course not previously taken at the 4000-level or any 6000-level aerospace course with the approval of the student's Aerospace Department advisor.

Education - the following three (3) courses or courses approved by the College of Education and Behavioral Science advisor:
FOED 6020 Educational Foundations
SPSE 6040 Supervision of Instruction
SPSE 6050 Instructional Leadership

## Option 2 (Education)

Students choosing this option must have a designated College of Education and Behavioral Science advisor and should have the appropriate teaching license. The licensure requirement may be waived under special circumstances. A student seeking a licensure waiver must initiate a written request with the advisor, seek approval from the chair and dean of the College of Education and Behavioral Science, and forward the request to the Office of Teacher Licensure, McWherter Learning Resources Center 170.

| Required $\mathbf{- 1 3}$ hours |  |
| :--- | :--- |
| YOEED | 6100 |
| Aviation Workshop |  |
| SPSE | 6430 | Introduction to Curriculum Development

## Aerospace Electives - 9 hours

Any 5000-level aerospace course not previously taken at the 4000 level or any 6000-level aerospace course except for AERO 6100 and 6610.

## Courses in Aerospace [AERO]

5050 Aerospace Internship I. Three credits. Prerequisite: Consent of department chair. Student employed by an acceptable airline, airport director, or aerospace industry for field work. Minimum 300 hours work required. Pass/Fail grading.

5071- Problems in Aerospace. One to three credits. Individual directed 5073 study in the field of aerospace.

5075 Selected Readings in Aerospace. Three credits. Prerequisite: Graduate standing. Guided readings in aviation or space. Topics alternate each semester and range from historical events to possible future developments. Discussion, presentations, and critical analysis of material.

5100 Airline Management. Three credits. Airline operation and implementation of sound management practices.

5110 Airport Management. Three credits. Airport operations. Development of an airport master plan.

5130 Aerospace Physiology. Three credits. Instruction, readings, and structured experiences to ensure familiarity with the various physiological and health-related factors affecting a flyer's safety and performance.

5150 Fixed Base Operations Management. Three credits. The FBO operator and the essential role played in general aviation.

5160 Aviation Law. Three credits. Legal responsibility in the aviation industry.

5170 Airport Planning and Design. Three credits. Methods utilized in airport planning and design; relationship of the airport and the community.

5200 Flight Instruction for Teachers. Three credits. Flight instruction and discussion provide an opportunity to understand the airplane and its operation. Fee required.

5230 Advanced Air Navigation. Three credits. Advanced navigation equipment and operation procedures, GPS, and LORAN.

5240 Aircraft Systems Management. Three credits. Instruction and the requirements pertaining to activities of a flight engineer.

5310 Aerospace Vehicle Systems. Three credits. Design, use, and function of typical hydraulic, mechanical, and electrical systems used on aircraft. For potential pilots, flight engineers, and mechanics.

5400 Space. Three credits. Extensive study of the history of space exploration, the successes and failures of manned and unmanned efforts, and what the future may be for human beings in space.

5490 Aerospace Science for Teachers. Three credits. For teachers who desire an introduction to the total aviation and space effort.

5530 Air Traffic Control. Three credits. The FAA Air Traffic Control system used to regulate air vehicle traffic during enroute and terminal phases of flight, with emphasis on communication, navigation, and control equipment and procedures.

5580 Flight Instruction IV. Three credits. Academics for the ATP and dispatchers written. If flight is desired, student will meet FAR 61 and fee required.

6100 Aviation Workshop. Four credits. (Same as YOED 6100.) A first course in aerospace education; provides an overview of aerospace historically and in the future.

6120 Aviation History. Three credits. Detailed examination of the development and role of aviation and its economic, social, and political impact on the modern world. Particular emphasis on the global aspects of civilian aviation and the consequences of the transportation revolution it engendered. Specific topics analyzed in detail each semester.

6130 Safety Administration and Security. Three credits. An examination of the various programs which airport operators employ in operating and maintaining airport safety and security services. Special emphasis on federal guidelines and their applications at commercial service airports.

6150 Aviation Industries. Three credits. An overview of domestic and international air transportation businesses. Includes an analysis of extant and forecast labor requirements.

6170 Scheduled Air Carrier Operations. Three credits. An examination of contemporary problems and issues confronting airline industry policy makers, government regulators, managers, and the traveling public.

6190 Airport Organizational Structures and Operational Activities. Three credits. Prerequisite: AERO 5110 or 5170 or consent of instructor. A critical analysis of airport organizational structures, functions, and constraints affecting the airport. A detailed view of operational activities and methods to improve airport efficiency.

6220 Environmental Policy. Three credits. Airport planning and land use programs and procedures as they are currently used within the industry.

6250 Aviation Policy and Planning. Three credits. The regulatory agencies of the aviation industry and their functions. Special emphasis on current problems and issues affecting the industry.

6270 Airport Design. Three credits. Introduces the concepts of airport planning, design, and layout with particular emphasis on community characteristics and resource allocation. Students will become familiar with the Federal Aviation Administration's role in the airport design process.

6300 Air Transportation Systems. Three credits. Explores the evolution of the National Airspace and Airway System from its chaotic
start to a reasonably sophisticated system. Covers importance of technological developments to improve the system.

6330 International Aviation Systems. Three credits. An in-depth analysis of international aviation with particular attention to U.S. aviation interface. Areas covered include the air traffic control systems, bilateral agreements, nationalized vs. privately owned carriers, ETOPS restrictions, marketing and operational difficulties, etc.

6350 General Aviation. Three credits. Operations, supervision, and the role of administration.

6370 Aviation Contracts and Leases. Three credits. An examination of the various agreements utilized by airports to define the terms and conditions for airlines, FBOs, concessionaires, air cargo operators, and other airport tenants. Analysis of the general provisions and requirements contained within airport leases and those specific to each tenant. A review of airport lease administration and compliance procedures.

6380 Aerostructures. Three credits. Prerequisites: MATH 1730 or 1720 and PHYS 2010/2011. Concepts of mechanics applied to analysis of structural elements used in aerospace vehicles. Loading, deflection safety factors, and modes of possible failure.

6390 Advanced Aerodynamics. Three credits. Prerequisite: AERO 3440 or equivalent. Examines the aerodynamics of aircraft flight from subsonic to hypersonic speeds, with flight through the four sonic regions discussed and solutions to problems presented.

6400 Aerospace Seminar. One credit. Prerequisite: Last semester of resident enrollment. A capstone course involving the analysis, synthesis, and integration of relevant academic experiences.

6450 Airport Funding Policy. Three credits. Airport subsidy funding by the local, state, and federal governments and their essential components as applied to local airports. Procedures necessary to obtain government funding and grants available for building new facilities and repairing existing buildings.

6540 Problems in Aerospace Education. One, two, or three credits. (Same as YOED 6540.) Content varies with needs of individual students who are interested in making a specialized study of current problems in the field of aerospace education.

6610 Introduction to Aerospace Research. Three credits. Emphasis on research as a significant component of graduate study to include methods, procedures, style, and form.

6640 Thesis Research. One to six credits. Prerequisite: AERO 6610. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6700 Advanced Aviation Workshop. Four credits. (Same as YOED 6700.) Builds on prior experiences in aviation/aerospace. Essential for the prospective teacher or aerospace education courses at any level.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

## School of <br> Agribusiness and Agriscience

Warren Gill, Director<br>Stark Agribusiness and Agriscience Center 100

The School of Agribusiness and Agriscience offers a minor at the graduate level.

## Courses in Agribusiness and Agriscience [ABAS]

5100 Microcomputer Applications in Agriculture. Three credits. Prerequisite: CSCI 1150 or INFS 2200. Includes use of agricultural software, agricultural communications network, computer daily feeding machines, and farm records.

5130 Agricultural Marketing and Price Analysis. Three credits. Prerequisite: ABAS 3130 or approval of instructor. Agricultural prices and their relationship to production and marketing. Agricultural marketing systems, functions, institutions, and structural changes.

5140 Economics of Agribusiness Management. Three credits. Prerequisite: ABAS 3130 or approval of instructor. The application of economic concepts to agribusiness firms.

5150 Agricultural Policy. Three credits. Prerequisite: ABAS 3130 or approval of instructor. Agricultural policy in a democratic society; relationship of farm groups to public policy; types of agricultural programs and appraisal of their results.

5200 Fruit and Vegetable Marketing. Three credits. Prerequisites: PSCI 1030/1031 and BIOL 1030/1031 or approval of instructor. Basic biochemistry of respiration, handling techniques and practices, quality assessment, and marketing of fruit and vegetable crops. Both domestic and international marketing of fruit and vegetable products discussed. Examines economic impact of improper handling on both the local producer and the end user.

5210 Farm Power and Equipment. Three credits. Gasoline engines with actual work experience in overhaul. Work also with transmissions, hydraulics, braking systems, and other farm equipment including use of shop manuals, operation manuals, and parts books.

5220 Methods of Teaching Agriscience and Agricultural Mechanics. Three credits. Emphasis on performing shop skills such as welding, brazing, electrical wiring, etc.

5230 Adult Education in Vocational-Education and Program Development. Three credits. How to teach adults and administer adult programs. Emphasis on planning, organizing, and arranging courses for adults in agriculture.

5260 Behavior of Domestic Animals. Three credits. Behavior aspects of raising and managing domestic animals to include equine, swine, goats, cattle, sheep, dogs, and cats. Communicative, ingestive, sexual, social, aggressive, and abnormal behaviors emphasized.

5310 Forage Crops. Three credits. Adaptation, distribution, establishment, management, cultivation, and utilization of forage legumes and grasses.

5330 Turf Management. Three credits. Prerequisite: ABAS 1610 or BIOL 1120/1121. Establishment and management of turf grasses for lawns, golf courses, and parks.

5340 Soil Formation and Remediation. Three credits. Prerequisite: ABAS 3340. Environmental factors affecting soil formation and utilization.

5350 Soil Survey and Land Use. Three credits. Prerequisite: ABAS 3340 or approval of instructor. Soil properties used to determine suitability for land use. Lecture/lab.

5400 Horsemanship-Equitation. Three credits. Prerequisite: ABAS 2400 or approval of instructor. Proper horseback riding, handling, mounting, and dismounting. Various gaits and proper equitation stressed. One lecture and two two-hour laboratory periods.

5410 Animal Nutrition and Feeding. Three credits. Gastrointestinal tract, process of digestion, and nutrient utilization. Application of principles of animal nutrition to formulation of supplements and complete rations for livestock.

5420 Genetics of Domestic Livestock. Three credits. Basic principles of genetics, inbreeding, quantitative traits in livestock, prediction of breeding value and genetic progress, method of selection, mating systems, methods of genetic evaluation, computer software for animal breeding and genetics, and genetic engineering.

5430 Horse Production. Three credits. Prerequisite: ABAS 2400, 3400 , and one of the following: ABAS 3300, 4090, or 4440 or consent of instructor. Scientific principles relevant to production requirements of horses as related to exercise physiology and performance, growth, reproductive physiology and state, age, and clinical support. Facilities management, marketing, legal aspects of horse ownership and career opportunities covered.

5460 Care and Training of Horses. Three credits. Prerequisites: ABAS 2400,3400 , and 4400 or approval of instructor. Theory, fundamentals, and practices of breaking, training, fitting, showing, and the use of light horses for riding and driving, with special emphasis on the Tennessee Walking Horse and the needs of the local area.

5470 Advanced Beef Production. Three credits. Prerequisite: ABAS 3470 or approval of instructor. In-depth look at various systems of beef production from standpoint of function, economics, and suitability to locale. Extensive field trips to commercial cow-calf, feedlot, performance testing, stocker, and purebred operations.

5510 Domestic Animal Reproductive Physiology. Three credits. Advanced topics in the anatomy, physiology, and endocrinology of reproduction in domestic livestock species. Topics include male and female physiology and an overview of comparative anatomy and physiology between species. Current technologies and methods in controlling reproduction in livestock species also discussed.

5620 Greenhouse Management. Three credits. Prerequisite: ABAS 1610 or BIOL 1120/1121. Analysis of soils, fertilizers, irrigation techniques, container preparation, ventilation, growth regulation, and carbon dioxide enrichment for greenhouse operation. Two hours lecture and one two-hour lab.

5630 Floriculture. Three credits. Prerequisite: ABAS 1610 or BIOL 1120/1121. Propagation and other cultural practices for the production and maintenance of plants and flowers in the home. Two hours lecture and one two-hour lab.

5640 Landscaping. Three credits. Application of the principles of design, the use of proportionate-sized woody landscape plants, and other practices to produce low-maintenance-cost landscapes. One hour lecture and one four-hour lab.

5670 Plant Propagation. Three credits. Prerequisite: ABAS 1610 or BIOL 1120/1121. Anatomical features and physiological principles involved in propagating plants from seed and by division, cutting, budding, and grafting. Use of growth regulators and environmental factors. Two hours lecture and one two-hour lab.

5700 Agriculture in Our Lives. Three credits. The national and international importance of U.S. agriculture. Emphasis on food production and marketing, land conservation, and agriculture related recreation. Accepted as a natural science elective for education majors. NO CREDIT GIVEN TOWARD A MAJOR IN THE SCHOOL OF AGRIBUSINESS AND AGRISCIENCE.

5830 Food Quality Control. Three credits. Prerequisites: PSCI 1030/1031 and BIOL 1030/1031 or approval of instructor. Quality control and sensory evaluation techniques utilized in food processing. Instrumental and physical methods of quality determination of raw and processed food products, hazard analysis and critical control point (HACCP), and quality philosophies employed in the industry. Sensory evaluation techniques and statistical analysis of evaluation results covered.

5910 Problems in Agriculture. One to six credits. Problem or problems selected from one of the major disciplines. May involve conferences with instructor, library work, field study and/or laboratory activity. Students can take from one to three credits with a maximum of three per semester.

5980 Seminar in Horse Science. One credit. Familiarizes horse science majors with important current scientific investigation in horse science.

5990 Seminar. One credit. Students required to research and make an oral report on a current agricultural topic.

6450- Problems in Agriscience Technologies. Three credits each. Pre-
6455 requisite: Teaching experience or approval of instructor. Provides agricultural education teachers with intensive training in advanced technologies. A MAXIMUM OF SIX CREDIT HOURS IN EACH DIVISION.
6451 Animal Science
6452 Plant Science
6453 Agricultural Mechanics
6454 Agribusiness
6455 Forestry and Agricultural Products

# Department of Art 

## Jean Nagy, Chair

Andrew L. Todd Hall 227C
The Art Department offers a graduate-level Art minor.

## Courses in Art [ART]

5000 Workshop. One to three credits. Prerequisite: Permission of instructor. Subject matter as well as credit to be determined by the instructor. May be conducted in the area of art, art education, or any art discipline. (A maximum of nine credits may be applied toward a degree.)

5310 Portfolio II. Three credits. Prerequisite: Permission of instructor. Production of portfolio-based problems with emphasis on advanced design skills related to the specific needs of the workplace. Includes basic collateral problems, ad campaigns, corporate identity, signage, plus a self-promotional package.

5320 Senior Project. Three credits. Prerequisite: Permission of instructor. Following a portfolio review, each member of the class will devise a project that conceptually and visually addresses his or her design/illustration goals.

5330 Internship. Three credits. Prerequisite: Permission of internship coordinator. Advanced students gain practical experience in a professional setting. Approximately 150 work hours required for the semester.

5510 Sculpture IV. Three credits. Prerequisite: ART 3530 or permission of instructor. Development of concepts and techniques with primary emphasis on metal sculpture. Experiences include gas and electric welding, fabricating, grinding, finishing, and subordinate use of other sculpture materials.

5520 Sculpture V. Three credits. Prerequisite: ART 5510 or permission of instructor. Development of concepts and techniques with primary emphasis on casting activities in the foundry covering various metal casting techniques and subordinate use of other sculpture materials.

5530 Sculpture VI. Three credits. Prerequisite: ART 5520 or permission of instructor. Problems in sculpture acceptable to both student and instructor, selected by the student after consultation with instructor.

5640 Advanced Art Problems. One to three credits. Prerequisite: Permission of instructor. Structure and content determined by the Art faculty on the basis of individual need. Student should be prepared to do independent research and experimentation in the area selected. Arrangements must be made prior to registration for acceptance to proper assignment of course credit. (A maximum of nine credits may be applied toward a degree.)

5680 Individual Problems in Drawing. Three credits. Prerequisite: 12 semester hours of previous drawing credit or permission of instructor. Advanced-level course with the content determined in advance through consultation with the instructor.

5710 Painting IV. Three credits. Prerequisite: Permission of instructor. Projects in painting; content of the course planned by student under supervision of instructor. Final paper required.

5720 Painting V. Three credits. Prerequisite: ART 5710 or permission of instructor. Independent studies course in painting which continues concerns of Painting IV.

5730 Painting VI. Three credits. Prerequisite: ART 5720 or permission of instructor. Independent studies course in painting which continues concerns of Painting IV. Final paper required.

5810 Intermediate Clay II. Three credits. Prerequisite: ART 3820 or permission of instructor. Laboratory research and testing of ceramic materials, formulation of glazes and clay bodies, development of a glaze and a clay body.

5820 Advanced Clay. Three credits. Prerequisite: ART 3830 or permission of instructor. Studio experiences in design and construction of sculptural clay forms. Forming methods and decorative techniques explored.

5830 Advanced Study in Clay. Three credits. Prerequisite: ART 4820/5820 or permission of instructor. Directed individual study of a problem mutually agreed upon by the student and course instructor. Written paper and exhibit required.

5900 Nineteenth- and Twentieth-Century Art. Three credits. Western visual art movements and trends ca. 1750-ca. 1950, focusing on European painting and sculpture with periodic explorations of non-European and non-Western traditions for perspective.

5920 Contemporary Art. Three credits. Contemporary Western visual art movements and issues ca. 1945 to present, focusing on American painting and sculpture with periodic explorations of other traditions for perspective.

5940 Studies in Art History. Three credits. Content varies. When offered, particular topics addressed are indicated by the course title in the class schedule book. Depending on the nature of the material to be covered, prerequisites may be imposed by the instructor. Can be repeated for up to 9 hours.

5960 Independent Studies in Art History. Three credits. Investigations into art history under the direction of a member of the art history faculty. Topic(s) of investigation must be agreed upon by both student and instructor based on discussions prior to registering for this course. Can be repeated for up to 9 hours.

6200 Foundations of Art Education. Three credits. Prerequisites: Permission of department. Historical development, philosophy, purposes, and value of art education that shaped the structures of public and private schooling in art.

6210 Theories in Art and Art Education. Three credits. Prerequisite: Permission of department. Contemporary theories in art and art education with emphasis on implications for visual art curriculum and instruction.

6220 Problems, Issues, and Trends in Art Education. Three credits. Prerequisite: Permission of department. Problems, trends, and issues, including diversity, within contemporary art education. Overview of instructional technologies. Examines the teacher/ educator as a professional.

6230 Research Methods in Art Education. Three credits. Prerequisites: Permission of department and completion of ART 6200, 6210, and 6220. Contemporary research methods in art education with emphasis on teacher as researcher. Successful completion of this course is dependent on successful completion of ART 6240.

6240 Independent Project in Art Education. Three credits. Prerequisites: Permission of department and completion of ART 6200, 6210, and 6220. Should be taken simultaneously with ART 6230. Independent research-based course in which the student, with professorial approval, will complete a research project exploring a specific area of interest within art education.

# Department of Biology 

## George Murphy, Chair <br> Davis Science Building 128

The Department of Biology offers the Master of Science as well as a minor at the graduate level. Normally, the required test score for admission is a satisfactory Graduate Record Examination score (minimum expected score of 800 verbal and quantitative). The department also offers courses in the Master of Science in Professional Science degree. Complete information on the Professional Science program and its concentrations in Biotechnology, Biostatistics, and Health Care Informatics can be found on page 163.

## Requirements for the Master of Science

## Candidate must

1. have an undergraduate minor in biology or its equivalent at time of admission.
2. complete a minimum of 30 semester hours including a thesis of 3 semester hours with no more than 30 percent of the total degree hours dually listed as undergraduate/ graduate hours.
3. complete 6 semester hours of a foreign language or pass a language examination or complete one year of approved research tools in addition to the 30 hours.
4. pursue a major of at least 16 semester hours which includes
BIOL 6620 Biological Research
BIOL 6640 Thesis Research
BIOL 6650 Seminar
BIOL 6660 Seminar
Remaining courses will include approved courses in biology, chemistry, mathematics, physics, or certain other related disciplines. A minor is optional but if elected must include a minimum of 12 semester hours.
5. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
6 . succesffully complete a written comprehensive examination (may be taken no more than twice).

## Courses in Biology [BIOL]

5010 Embryology. Four credits. Prerequisites: BIOL 1110/1111 and 1120/1121. Corequisite: BIOL 5011. Early development of the frog, chick, pig, and human. Living material, whole mounts, and serial sections used for the study of cleavage, germ layer formation, histogenesis, and organogenesis. Three lectures and one three-hour laboratory.

5011 Embryology Lab. Zero credits. Corequisite: BIOL 5010.
5020 Comparative Anatomy of the Vertebrates. Four credits. Prerequisites: BIOL 1110/1111 and 1120/1121. Corequisite: BIOL 5021. Vertebrate morphology and the development and function of systems and organs. Three lectures and one three-hour laboratory.

5021 Comparative Anatomy of the Vertebrates Lab. Zero credits. Corequisite: BIOL 5020.

5030 Nonflowering Plants. Four credits. Prerequisites: BIOL 1110/1111 and 1120/1121. Structure, physiology, methods of reproduction, and classification of the algae, fungi, liverworts, mosses, and ferns. Six hours lecture/laboratory.

5040 General Entomology. Three credits. Prerequisites: BIOL 1110/1111 and 1120/1121. Structure, classification, evolution, importance, and life history of insects. Five hours lecture/laboratory.

5050 Parasitology. Three credits. Prerequisites: BIOL 1110/1111 and 1120/1121. Corequisite: BIOL 5051. Life histories, host-parasite relationships, and control measures of the more common parasites of humans and domesticated animals. Two lectures and one three-hour laboratory.

5051 Parasitology Lab. Zero credits. Corequisite: BIOL 5050.
5100 History and Philosophy of Biology. Three credits. Prerequisites: BIOL 1110/1111 and 1120/1121. Development of biology; the philosophy, ideas, and contributions of outstanding biologists. Three lectures.

5120 Flowering Plants. Four credits. Prerequisites: BIOL 1110/1111 and 1120/1121. Structure and classification of seed plants and a survey of local flora. Six hours lecture/laboratory.

5130 Histology. Four credits. Prerequisites: BIOL 3250/3251; CHEM 1110/1111 and 1120/1121. Corequisite: BIOL 5131. Microscopic anatomy of vertebrate cells, tissues, and organs. Three lectures and one three-hour laboratory.

5131 Histology Lab. Zero credits. Corequisite: BIOL 5130.
5140 Invertebrate Zoology. Four credits. Prerequisites: BIOL 1110/1111 and 1120/1121. Corequisite: BIOL 5141. Structure, functions, life histories, and economic importance of the invertebrate phyla. Laboratory work comprises detailed studies of representative specimens. Three lectures and one three-hour laboratory.

5141 Invertebrate Zoology Lab. Zero credits. Corequisite: BIOL 5140.

5170 Endocrinology. Three credits. Prerequisites: BIOL 3250/3251, 4110/4111, or 2020/2021; CHEM 2030/2031 or 3010/3011. Structure, function, and integrative mechanisms of vertebrate endocrine organs, with additional attention to invertebrate hormones. Three lectures.

5180 Vertebrate Zoology. Four credits. Prerequisites: BIOL 1110/1111 and 1120/1121. Corequisite: BIOL 5181. Structure, life history, and classification of fish, amphibians, reptiles, birds, and mammals. Local representatives emphasized. Three lectures and one three-hour laboratory.

5181 Vertebrate Zoology Lab. Zero credits. Corequisite: BIOL 5180.
5220 Ichthyology. Four credits. Prerequisites: BIOL 1110/1111 and 1120/1121. Corequisite: BIOL 5221. The morphology, physiology, taxonomy, and ecology of fishes. Three lectures and one threehour laboratory.

5221 Ichthyology Lab. Zero credits. Corequisite: BIOL 5220.
5240 General Ecology. Four credits. Prerequisites: BIOL 1110/1111 and 1120/1121; CHEM 1110/1111 or consent of instructor. Corequisite: BIOL 5241. Basic concepts of the ecosystem and community, aquatic and terrestrial habitats, and population ecology; complemented by field and laboratory activities. Three lectures and one three-hour laboratory per week.

5241 General Ecology Lab. Zero credits. Corequisite: BIOL 5240.
5250 Limnology. Four credits. Prerequisites: BIOL 1110/1111, 1120/1121; CHEM 1110/1111. Corequisite: BIOL 5251. Biological, chemical, and physical aspects of lakes and streams. Not open to students who have had Aquatic Ecology. Three lectures and one three-hour laboratory.

5251 Limnology Lab. Zero credits. Corequisite: BIOL 5250.
5260 Nature Study. Three credits. Prerequisites: BIOL 1110/1111 and 1120/1121. Identification of local plants and animals and a consideration of the ecological principles governing them. Four hours lecture/laboratory.

5320 Seminar: Advancements in Biology. Two credits. A broad overview of biological principles and recent research developments. Two lectures.

5330- Biome Analysis. One to four credits. Prerequisite: Permission
5333 of department. An intensive classroom and on-site study of a specific biome with special emphasis on data collection and analysis. Consult department head for specific credits and costs.
5331 Biome Analysis - Cedar Glade
5332 Biome Analysis - Marine
5333 Biome Analysis - Desert
5390 Ethology. Four credits. Prerequisite: BIOL 1110/1111. Corequisite: BIOL 5391. Innate and learned animal behavior in primitive and advanced animals including behavior associated with space, reproduction, and food getting. Three lectures and one three-hour laboratory.

5391 Ethology Lab. Zero credits. Corequisite: BIOL 5390.
5460 Human Genetics. Three credits. Prerequisite: BIOL 3250/3251. Corequisite: BIOL 5461. Application of the fundamental laws of inheritance to humans. Two lectures and one two-hour laboratory.

5461 Human Genetics Lab. Zero credits. Corequisite: BIOL 5460.
5500 Plant Physiology. Four credits. Prerequisites: BIOL 3250/3251; CHEM 2030/2031 or 3010/3011. Plant growth; development and metabolism at the cellular and whole plant levels. Six hours lecture/laboratory.

5510 Food/Industrial Microbiology. Four credits. Prerequisite: BIOL 2230/2231. The interaction between microorganisms and food and industrial processes of importance to humans. Six hours lecture/laboratory.

5520 Plant Anatomy. Four credits. Prerequisite: BIOL 1120/1121. Plant cells, tissues, and organs. Emphasis on the survival value of the plant's various structural features. Six hours lecture/laboratory.

5540 Topics in Environmental Education. One to four credits. Prerequisite: Junior standing or above. An intensive classroom and field study of natural science and resources in Tennessee. Special emphasis on data collection, analysis, and problem solving. Target groups are graduate students and upper-division undergraduates in the areas of biology and education. Consult the department chair for specific credits and costs. This course will not apply to the biology major or minor.

5550 Biotechnology. Three credits. Prerequisites: BIOL 2230/2231 and senior/graduate level. Instruction in both theory and application of current research methodologies in biology and molecular biology. Topics included immunochemistry, polymerase chain reaction, restriction enzyme analysis, and electrophoresis. Five hours lecture/laboratory.

5560 Neurobiology. Four credits. Prerequisites: BIOL 1110/1111 and 1120/1121. Corequisite: BIOL 5561. Introduces comparative neurobiology. Topics include the basic structure and function of the nerve cell and organization of nervous systems of representative species of invertebrate and vertebrate animals. Three hours lecture and one three-hour laboratory.

5561 Neurobiology Lab. Zero credits. Corequisite: BIOL 5560.
5570 Principles of Toxicology. Three credits. Prerequisites: BIOL 1110/1111, 1120/1121; CHEM 1110/1111, 1120/1121, 3010/3011. Corequisite: BIOL 5571. Adverse effects of chemical agents on living organisms; current toxicological techniques in laboratory portion of course. Two hours lecture and one threehour laboratory.

5571 Principles of Toxicology Lab. Zero credits. Corequisite: BIOL 5570.

5580 Marine Biology. Four credits. Prerequisites: BIOL 1110/1111, 1120/1121; CHEM 1110/1111, 1120/1121. Corequisite: BIOL 5581. Biological, chemical, and physical characteristics of major marine environments and their associated flora and fauna. Three lectures and one three-hour laboratory.

5581 Marine Biology Lab. Zero credits. Corequisite: BIOL 5580.
6060 Advanced Dendrology. Three credits. Prerequisite: BIOL 1120/1121. Woody plants with special emphasis on classification, identification, and literature of important timber trees of North America. Five hours lecture/laboratory.

6070 Plants and Man. Three credits. Prerequisite: BIOL 1120/1121. Human dependence on plants emphasized. Topics include origin of agriculture, fruits and nuts, grains and legumes, vegetables, spices and herbs, oils and waxes, medicinal plants, psychoactive plants, beverages, fibers and dyes, tannins, wood and ornamental plants. Three lectures.

6080 Advanced Mycology. Four credits. Prerequisites: Graduate standing plus BIOL 1120/1121. Corequisite: BIOL 6081. Fungi, with emphasis on taxonomy, morphology, culture, and importance to humans. Three lectures and one three-hour laboratory.

6081 Advanced Mycology Lab. Zero credits. Corequisite: BIOL 6080.
6120 Aquatic Ecology. Three credits. Physical, chemical, and biotic conditions of freshwater lakes and streams and of population structure and dynamics in these environments. Not open to students who have had Limnology. Five hours lecture/laboratory.

6130 Ornithology. Three credits. Corequisite: BIOL 6131. Structure, taxonomy, natural history, and identification of birds. Emphasizes field work. Two lectures and one three-hour laboratory.

6131 Orinthology Lab. Zero credits. Corequisite: BIOL 6130.
6180 Mammalogy. Three credits. Corequisite: BIOL 6181. Morphology, physiology, systematics, and the development of mammals. Two lectures and one three-hour laboratory.

6181 Mammalogy Lab. Zero credits. Corequisite: BIOL 6180.
6200 Speciation. Three credits. Prerequisite: BIOL 3250/3251. Mutation, natural selection, adaptation, isolating mechanisms, genetic drift, hybridization, ploidy in the process of species formation, and a history of the development and ideas of evolution. Two lectures.

6210 Protozoology. Three credits. Corequisite: BIOL 6211. Morphology, physiology, reproduction, ecology, taxonomy, and life cycles of the protozoa. Two lectures and one three-hour laboratory.

6211 Protozoology Lab. Zero credits. Corequisite: BIOL 6210.
6220 Herpetology. Three credits. Prerequisites: BIOL 4240/4241 or 5240/5241. Corequisite: BIOL 6221. Morphology, natural history, and identification of amphibians and reptiles. Local representatives emphasized. Two lectures and one three-hour laboratory.

6221 Herpetology Lab. Zero credits. Corequisite: BIOL 6220.


6270 Cell Metabolism and Human Disease. Three credits. Prerequisites: BIOL 4110/4111 or 6330/6331; CHEM 3010/3011, $3530 / 3531$. Metabolic pathways of mammalian cells and the diseases that result from genetic defects that disrupt their normal function.

6290 Advanced Scanning Electron Microscopy. Four credits. Prerequisite: Permission of instructor. Application of scanning electron microscopy to study materials with emphasis on theory of scanning electron microscopy and preparation of biological specimens for microscopy. Seven hours lecture/laboratory.

6330 Principles of Physiology. Four credits. Prerequisites: BIOL 3250/3251; CHEM 2030/2031 or 3010/3011. Corequisite: BIOL 6331. Physical and chemical properties of protoplasm, cells, and organisms and their relationships to life processes. Three lectures and one three-hour laboratory.

6331 Principles of Physiology Lab. Zero credits. Corequisite: BIOL 6330.

6350 Biostatistical Analysis. Four credits. Prerequisite: BIOL 3250/3251. Corequisite: BIOL 6351. Intermediate-level introduction to biostatistical procedures used in research. Three lectures and one three-hour laboratory.

6351 Biostatistical Analysis Lab. Zero credits. Corequisite: BIOL 6350.
6360 Energy Dispersive X-Ray Theory and Analysis. One credit. Prerequisite: BIOL 4290 or 6290. Theory of X-ray analysis and elemental analysis of materials using an energy dispersive X-ray system with scanning electron microscopy. One three-hour laboratory.

6380 Experimental Immunology. Four credits. Prerequisite: BIOL 2230/2231. Corequisite: BIOL 6381. Mechanisms of immunity including the more recent developments in immunology. Three lectures and one two-hour laboratory.

6381 Experimental Immunology Lab. Zero credits. Corequisite: BIOL 6380.

6390 Advanced Cell and Molecular Biology. Four credits. Prerequisites: BIOL 2230/2231, 3250/3251; CHEM 2030/2031 or 3010/3011. Corequisite: BIOL 6391. Molecular biology of the cell with emphasis on current experimental techniques. Three lectures and one three-hour laboratory.

6391 Advanced Cell and Molecular Biology Lab. Zero credits. Corequisite: BIOL 6390.

6400 Medicinal Plants. Three credits. Prerequisite: BIOL 1120/1121. Plants affecting human health, including poisonous, psychoactive, and remedial plants. Ethnobotanical and modern medicinal uses considered. Three lectures.

6410 Advanced Transmitting Electron Microscopy. Four credits. Prerequisite: Permission of instructor. Ultrastructure of the cell using basic and specialized techniques. Seven hours lecture/laboratory.

6430 Clinical and Pathogenic Microbiology. Four credits. Prerequisite: BIOL 2230/2231. Comprehensive coverage of the most recent discoveries and techniques used for the identification of pathogenic organisms and their relationships to disease processes. Six hours lecture/laboratory.

6440 Advanced Virology. Four credits. Prerequisites: BIOL 2230/2231; CHEM 1110/1111 and 1120/1121. Emphasizes the main virus families and their biochemical composition. Experimental ap-
proaches and techniques will be developed in order to identify and manipulate viruses. Six hours lecture/laboratory.

6450 Advancements in Molecular Genetics. Four credits. Prerequisites: BIOL 2230/2231; CHEM 1110/1111 and 1120/1121. Recent advancements in microbial genetics and gene manipulation with emphasis on applications of molecular genetics, including gene regulation and recombinant DNA technology. Six hours lecture/ laboratory.

6460 Conservation Biology. Four credits. Prerequisite: BIOL 4240/4241 or 5240/5241. Measuring biodiversity: species, ecosystem, and genetic diversity. Topics include conservation ethics, extinctions, habitat degradation, exotic species, and management of populations and ecosystems. Six hours lecture/laboratory.

6500 Special Problems in Biology. Four credits. Prerequisite: Permission of department. Plan, implement, and interpret a research problem in some area of biology. Available topics limited to areas of graduate faculty interest and expertise.

6590 Environmental Toxicology. Four credits. Prerequisites: BIOL 1110/1111, 1120/1121; CHEM 1110/1111, 1120/1121, and $3010 / 3011$. Ecological effects of chemicals in the environment and techniques currently utilized to assess these effects. Current environmental assessment techniques, including biomonitoring, will be covered in the laboratory. Six hours lecture/laboratory.

6620 Biological Research. Three credits. Prerequisite: Permission of department. Selection of a research problem, review of pertinent literature, and execution of the research.
6640 Thesis Research. One to six credits. Prerequisites or corequisites: BIOL 6620 and permission of department. Completion of the research problem begun in BIOL 6620; preparation of the thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. Minimum of three credits required for M.S. degree. S/U grading.

6650 Seminar. One credit. Discussion and critical evaluation of the primary scientific literature. Responsible conduct of research topics including data management, publication practices, peer review, and collaborative science emphasized. One two-hour session.

6660 Seminar. Two credits. Development of written and oral communication skills relevant to obtaining research funding and presenting research results. Responsible conduct of research topics including mentor/trainee relationships, human subjects, animal research, research misconduct, and conflicts of interest emphasized. Two one-hour sessions.

6700 Plant-Animal Interactions. Three credits. Prerequisite: BIOL 1110/1111, 1120/1121. Corequisite: BIOL 6701. Evolutionary and ecological perspectives on how plants attract and repel symbionts and how those symbionts influence plant fitness. Topics include angiosperm evolution, the coevolution of plants with pollinators, herbivores, mycorrhizae, and N -fixing bacteria, and how plant secondary metabolites facilitate or mitigate these interactions. Two hours lecture and three hours lab.

6701 Plant-Animal Interactions Lab. Zero credits. Corequisite: BIOL 6700.

6710 Biostatistical Analysis II. Three credits. Prerequisite: BIOL 4350 or 6350. Advanced-level applied, multivariate biological statistics. Three lectures per week.

6720 Advanced Animal Development. Four credits. Prerequisites: BIOL 3250/3251; BIOL 4210/4211 or 6390/6391 recommended. Corequisite: BIOL 6721. Processes and underlying molecular
mechanisms by which a single fertilized egg develops into an adult organism. Focuses on vertebrate development, including insights gained from other model organisms. Three hours lecture and two hours lab.

6721 Advanced Animal Development Lab. Zero credits. Corequisite: BIOL 6720.

6730 Advanced Microbial Physiology and Biochemistry. Four credits. Prerequisites: BIOL 2230/2231; CHEM 1110/1111, 1120/1121, and 2030/2031 or 3010/3011 or consent of instructor. Survey of the physiology and biochemistry of prokaryotic and eukaryotic microorganisms. Six hours lecture/laboratory.

6740 Brain Development and Learning Disabilities. One credit. Prerequisite: Permission of department. Biology and psychology underlying dyslexia and other common learning disabilities encountered in the school setting. Addresses practical classroom applications utilizing this background information. Five three-hour class meetings.

6750 Advanced Plant Biotechnology. Four credits. Prerequisites: BIOL 1110/1111, 1120/1121, 3250/3251. Processes and reasoning behind the human manipulation of plant species for agricultural and technological purposes. Topics include traditional breeding techniques, tissue culture, plant cell transformation, and general plant molecular biology techniques as well as current debate over genetically modified organisms. Six hours lecture/laboratory.

6760 Bioinformatics. Four credits. Prerequisites: BIOL 1110/1111 and 1120/1121 and CSCI 1170 or consent of instructor. Explores the emerging field of bioinformatics which involves the application of computer science to biological questions. Bioinformatics specifically applies to the computational aspects of data gathering, processing, storage, analysis, and visualization methods for use in revising and testing biological hypotheses. Student should have a strong background in either computer science or biology, be willing to learn about the other field in an accelerated fashion, and be willing to work cooperatively as part of an interdisciplinary team. Four hours of lecture/problem solving per week.

6770 Issues in Biotechnology. Two credits. Prerequisite: BIOL 4550/4551, 5550/5551, or 4750/6750. Explores current and emerging issues in biotechnology. Students will be asked to solve problems drawn from biotechnology industry. Seminars, field trips, and case study work.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

## Field Station Affiliation

MTSU is an affiliate of the Gulf Coast (Miss.) Research Laboratory. Certain courses in marine biology may be taken for graduate credit and transferred to MTSU. See department head for list of courses.

# Business Administration 

Troy Festervand, Associate Dean for Graduate and Executive Education<br>Business and Aerospace Building N222A/B

The University offers a Master of Business Administration degree which requires courses in the departments of Accounting, Economics and Finance, Computer Information Systems, and Management and Marketing. See departmental listings in this catalog for complete course descriptions.

## Application Process

A complete application package consists of the graduate application, application fee, official transcripts from all collegiate institutions attended, and official GMAT score report.
Deadlines for Completed Applications: Fall - July 1; Spring - December 1; Summer - April 1. Completed application packages received after the deadline will be evaluated based on the date received.

## Requirements for the <br> Master of Business Administration

Candidate must

1. be admitted to the program (see page 30). For admission, a student must meet one of the following:
a. GPA $\times 200+$ GMAT $=950$
or Upper Division GPA $\times 200+$ GMAT $=1,000$
b. International students must comply with the following provision: For undergraduate degrees from foreign institutions where a grade point average cannot be clearly established but where that work is thought to be equivalent to domestic grades of $\mathbf{B}$ or higher, admission eligibility may be determined by the GMAT score. A score of at least 450 is required for unconditional admission under such circumstances. Preparatory work taken in institutions with grading systems paralleling that of most United States institutions must conform to a $\mathbf{B}$ average.
2. complete the following foundation courses (or equivalents) before enrolling in core courses listed in 3.a. below:* ACTG 3000 Survey of Accounting for General Business, 3 hours
BLAW 3400 Legal Environment of Business, 3 hours
ECON 6030 Survey of Economic Theory, 3 hours
FIN 3010 Business Finance, 3 hours
INFS 3100 Principles of Management Information Systems, 3 hours
MGMT 6000 Management and Operations Concepts, 3 hours
MKT 3820 Principles of Marketing, 3 hours
QM 6000 Quantitative Methods Survey, 3 hours

In addition to the above, it is desirable that all students in the Jennings A . Jones College of Business be proficient in keyboarding and basic computer skills. Students should develop these proficiencies prior to taking Jennings A . Jones College of Business courses in which these skills are typically used. Basic computer skill may be developed by taking INFS 2200, Introduction to Microcomputing.
*Some or all of these courses may be waived by the associate dean for Graduate and Executive Education based upon an analysis of previous courses completed.
3. follow a program which stresses interrelationships of functional business areas and which requires a total of 36 semester hours, at least 30 of which must be at the 6000 level. NOTE: Core courses may not be satisfied by independent study.
a. Core courses: all candidates will take the following 24 semester hours:
ACTG 6910 Accounting and Business Decisions OR
ACTG 6920 Financial Statement Analysis
(Undergraduate Accounting majors should take another 6000-level accounting course.)
ECON 6000 Managerial Economics
FIN 6710 Financial Analysis
MGMT 6600 Study of Organizations
MGMT 6650 Operations Management
MKT 6800 Marketing Management
INFS 6610 Information Systems Management and Applications
BUAD 6980 Business Policy (The student will take 6980 in the last semester only.)
b. Global/international elective: 3 semester hours
(Student should see the associate dean for Graduate and Executive Education for a current list of courses that meet the global/international requirement.) NOTE: Independent study may not be used to satisfy this 3-hour elective.
c. Elective Cognate: 6 semester hours (choose 6 hours from approved electives in same field)
d. Approved elective: 3 semester hours
(Course taken to satisfy this elective requires prior approval of the associate dean for Graduate and Executive Education.)
NOTE: Independent study course requested to satisfy this elective must be accompanied by a research proposal which has been approved by the supervising faculty member, appropriate department chair, and associate dean for Graduate and Executive Education.
e. A student who has had substantial undergraduate instruction in accounting, economics, finance, information systems, management, or marketing may be required, as determined by the director, to take an alternate 6000 -level course in the same area of instruction in lieu of the required graduate course.
4. A degree plan will be prepared when an applicant is approved for admission to a graduate business program.
5. BUAD 6980, Business Policy, includes the required comprehensive written examination for the M.B.A. This course should be taken during the student's last semester and after completing the following courses: ACTG 6910 or 6920, INFS 6610, ECON 6000, FIN 6710, MGMT 6600 and 6650, and MKT 6800, or the equivalent.

# Department of Business 

## Communication and Entrepreneurship

Stephen D. Lewis, Chair<br>Business and Aerospace Building N429C

A Master of Business Education is offered by the Department of Business Communication and Entrepreneurship. Advisement for the degree is provided by graduate faculty members in this department.

## Requirements for the <br> Master of Business Education (M.B.E.)

The required test score for admission to the program is a satisfactory score on the Miller Analogies Test or a satisfactory Graduate Record Examination score.

Candidate must

1. have at least 24 semester hours of undergraduate business subjects.
2. complete 33 semester hours with no more than 30 percent of the total dually listed as undergraduate/graduate hours.
3. file a degree plan with the Graduate Studies Office prior to the completion of 21 credit hours.
4. successfully complete a written comprehensive examination (may be taken no more than twice).
5. meet licensure requirements to teach business subjects upon completion of the degree or select the nonteaching option.
Required Courses ( 6 semester hours)
BCEN 5710 History and Foundations of Business Education and Marketing Education*
BCEN 6620 Research in Business and Marketing Education 27 hours of guided electives

## Research Option

Required Courses
BCEN 5710 History and Foundations of Business Education and Marketing Education*
BCEN 6620 Research in Business and Marketing Education
BCEN 6780 Problems in BE/ME/VOE
24 hours of guided electives
*Students who complete this course at the undergraduate level may substitute another three-hour graduate level course in business or marketing education.

BCEN, FOED, and SPSE electives will be chosen in consultation with BCEN advisor or department chair.
A nonlicensure training and development specialization includes BCEN 5410 and 5450. Electives for this specialization will be chosen in consultation with BCEN advisor or department chair.

## Courses in Business Communication and Entrepreneurship [BCEN]

5200 Problems in BE/ME/OM. One, two, or three credits. Prerequisites: Graduate standing and consent of department chair. Individual research, reading analysis, or projects in contemporary problems and issues in concentrated area of study under direction of a faculty member. May be taken twice.

5240 Materials and Methods in Basic Business. Three credits. Analysis of objectives, materials, research, and appropriate instructional strategies for developing teaching strategies and delivery systems in basic business courses such as introduction to business, economics, international business, business communication systems, American business/legal systems, business management, marketing, and introduction to finance.

5250 Innovations and Problems in Administrative Business Services and Technology. Three credits. Prerequisite: BCEN 2330 or equivalent. Instructional strategies in office technology including objectives, testing, audio-visuals, course content, basic programming, and standards.

5340 Integrated Administrative Technology. Three credits. Prerequisites: BCEN 2330 and 2340 or equivalent. Development of necessary skills for administrators of word processing centers. Word processing feasibility, development, and implementation for business using a total information processing concept. Students develop a thorough knowledge and refine skills using various application software.

5350 Records Management. Three credits. Equipment and systems used for information storage, transmission, and retrieval. Filing, microfilming, tape processing, storage system design, form usage, and other information management functions in the office.

5410 Managerial Media Presentations. Three credits. Prerequisite: BCEN 2330 or equivalent knowledge of computers. Presentations in business and classroom environments. Emphasis on the communication process; audience analysis; presentation design and planning; media integration; innovative delivery techniques; equipment, software, and material selection; and evaluation criteria.

5450 Training Strategies for Business Systems and Technology. Three credits. Prerequisite: BCEN 4410 or equivalent. Corporate learning specialist activities such as design, development, delivery, and evaluation of learning programs for a business environment. Focuses on adult learning theories with emphasis on professional learning activities related to innovative corporate educational programs.

5510 Business Report Writing. Three credits. Prerequisite: BCEN 3510 or equivalent. Nature, general functions, and present need of reports in industry. Recognizing, organizing, and investigating problems preparatory to writing reports and construction and writing of distinctive business and technical reports.

5520 Instructional Strategies in Marketing Education. Three credits. Develops competence in techniques of teaching with emphasis on problem-solving and demonstration procedures. Emphasizes teaching-learning evaluation.

5600 Organization and Administration of Marketing Education Programs. Three credits. Organizing marketing education programs at the secondary and postsecondary levels; emphasizes youth organizations, techniques of coordination, and administrative procedures.

5640 Problems in Office Management. Three credits. Evaluation of significant research in office management. Observations in local business offices and visits to managers and identifying and solving office problems.

5660 Organizational Communications. Three credits. Prerequisite: BCEN 3510 or equivalent. Research and analysis of case studies of significant research; case studies in business communication; communication policies, principles, and procedures from the executive's viewpoint.

5670 International Business Communication. Three credits. Provides a theoretical and practical framework for understanding and conducting effective international business communication. Emphasis on the analysis and development of international business communication processes.


5680 Diversity in the Workplace. Three credits. Emphasis on developing skills essential for working effectively with a diverse work force in global and domestic settings, incorporating the value of diversity into organizations, and building multicultural work teams.

5710 History and Foundations of BE and ME. Three credits. Developments, aims, principles, and present status of business education; organization and evaluation of the business education curriculum; administration and supervision of business education.

5730 Consumer Education. Three credits. Opportunity to develop understanding of relationship of consumer education to instructional program in business. Emphasis on sources of information and formulation of a conceptual framework essential to the deci-sion-making process.

5810 Internship Program. Three credits. A supervised program of related work experience. Provides experiential opportunities for the application of the theoretical concepts learned.

5840 Study Abroad. Three credits. Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

6010 Training and Development. Three credits. (Same as PRST 6460.) Prerequisite: Graduate status. A broad introduction to training and development as a field of study and practice. Designed for training and development specialists as well as organizational leaders focused on continually improving human and organizational performance.

6310 History and Philosophy of BE/ME/VOE. Three credits. Historical development, philosophy, and objectives of business and marketing education. Contributions to general education, vocational education, and adult education. Curriculum in relation to future needs, objectives, and social change.

6460 Issues and Trends in Business Education/Vocational-Technical Education. Three credits. Exploration and analysis of researchbased studies on current issues and trends in vocational-technical education and business education, marketing education, and office management.

6600 Organization and Coordination of Marketing Education Curriculum. Three credits. Offers preparation for developing, implementing, and coordinating the marketing education curriculum. Emphasis on organizing and administering marketing education programs at the secondary level, on coordinating the work-based learning activities of vocational students, and on integrating and managing youth organizations.

6620 Research in Business and Marketing Education. Three credits. Introduction to research methods, tools, and interpretation of research data.

6640 Thesis Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

6650 Workshop in BE and/or ME. Three credits. Innovations in marketing education and/or business education. Special programs and organizations featured.

6670 Organization, Administration, and Supervision of Business Education. Three credits. Administrative problems of a school system. Emphasis on those of the supervisor of business education, the department head, and the teacher as to reorganization, budgets, curriculum, equipment, personnel, adult education, and public relations.

6700 Coordination of Cooperative Programs. Three credits. Organization of such programs and their characteristics in combining classroom instruction with regularly scheduled supervised experience and on-the-job training.

6720 Measurement and Evaluation in BE and ME. Three credits. Teacher-made, standardized, and industry-developed tests and other standards used in teaching, used to evaluate student achievement, and used by industry for employment and promotion.

6770 Vocational Guidance in BE and ME. Three credits. Developing teacher competence through utilization of occupational information, surveys, and job analysis to determine community opportunities and requirements for employment, placement, and promotion in preparing students for careers in business.

6780 Problems in BE/ME/VOE. Three credits. Individualized research projects in special areas of concern to teachers of business education, marketing education, and vocational education and to trainers in business and industry.

6810 Recent Developments in Basic Business. Three credits. Present status and trends affecting content of basic business courses, aims, objectives, learning aids, motivation devices, resource materials, and current research.

6820 Managerial Communication. Three credits. Analysis of communication theory and communication processes with emphasis on development of executive communication skills essential for understanding organizational processes from a holistic perspective. Covers organizational theory, behavior, and interpersonal communication from both a domestic and global perspective.

6830 Recent Developments in Integrated Business Technology. Three credits. Trends in teaching office technology; selecting classroom equipment and applications software, setting standards of achievement for job competencies, developing proficiency in applications of current software, analyzing supportive instructional technologies and materials, and assessing instructional issues in current research and writings.

6910 Internship Program. Three credits. A supervised program of related work experience. Provides experiential opportunities for the application of the theoretical concepts learned.

6950 Computer-Based Technologies for E-Training. Three credits. (Same as PRST 6450.) Prerequisite: Graduate status. Concepts for developing computer-based e-training using numerous technologies.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

# Department of Chemistry 

Earl Pearson, Chair<br>Davis Science Building 239

The Department of Chemistry offers a Master of Science degree with a major in Chemistry and the Doctor of Arts in Chemistry (admission closed). Also offered is a minor in Chemistry at the graduate level.
The required test score for admission to the M.S. program is a satisfactory Graduate Record Examination score.

## Requirements for the Master of Science ( 5000 and 6000 level)

## Chemistry

Candidate must

1. have an undergraduate minor in chemistry or its equivalent at time of admission.
2. complete a minimum of 30 semester hours with no more than 30 percent of the total degree hours dually listed as undergraduate/graduate hours.
3. complete the following core curriculum:

CHEM 6100 Intermediate Organic Chemistry, 3 hours
CHEM 6230 Intermediate Analytical Chemistry, 4 hours
(Quantitative Analysis is a prerequisite for this course; can be taken for undergraduate credit after admission.)
CHEM 6300 Intermediate Physical Chemistry, 3 hours CHEM 6400 Intermediate Inorganic Chemistry, 3 hours (Exceptionally well-prepared students may substitute another approved graduate chemistry course in the same area for the core course by successful performance on a proficiency examination in that core curriculum area.)
4. complete and present an original thesis approved by the student's advisory committee:

| CHEM 6640 | Thesis Research (3-8 credit hours count toward <br> 30 degree hours) |
| :--- | :--- |
| CHEM 6800 | Chemistry Seminar, 1 hour |
| CHEM 6870 | Chemistry Research, 3 hours |

5. complete a minimum of 5 credit hours of additional approved chemistry graduate courses, or approved cognate courses in biology, mathematics, computer science, or physics.
6. file a degree plan with the Graduate Office prior to the completion of 21 credit hours, and annually work out a plan of study for the following twelve months with the academic advisor.
7. successfully complete a comprehensive examination. The exam may be taken no more than twice.

## Requirements for the Doctor of Arts ( 6000 and 7000 level)

## (Admission closed Fall 2006.)

1. Full admission requires a master's degree and at least 20 undergraduate and/or graduate hours of coursework in chemistry including a course in quantitative chemical analysis, demonstrated English proficiency, and familiarity with basic computer applications. Students not meeting requirements for full admission may seek conditional admission.
2. The D.A. in Chemistry specifies 64 semester hours with at least two-thirds of the program on the 7000 level; however, this can be reduced to 52 semester hours for students entering with a master's in chemistry or education. With the approval of the D.A. Program Committee, students may transfer up to 12 credits for work done in a master's or a doctoral program in chemistry or education. The D.A. coordinator should be consulted for details on transfer credits.
3. The core requirement in chemistry constitutes 19 hours: CHEM 6100, 6230/6231, 6300, 6400, 6500, and 7900. With departmental approval, well-prepared students with recent coursework in any of these areas may fulfill this requirement by passing a proficiency exam in that area; if the exam is passed, the student must substitute an advanced chemistry course in the same area.
4. The advanced chemistry requirement constitutes 15 hours, including at least three of the following courses: CHEM 7110, 7200, 7420, 7510, and 7720. The remaining 6 hours may be chosen, with approval of the advisor and the D.A. Program Committee, from the following: CHEM 7210, 7220, 7700, 7710, 7820, 7910; SPSE 7010; PSY 6280, 6290.
5. The education requirement constitutes 18 hours: CHEM 7800, 7810; FOED 7520, 7560; SPSE 7540, 7550. Consult the D.A. coordinator for details regarding the two chemistry teaching internships (CHEM 7800, 7810).
6. The research requirement constitutes 12 hours of CHEM 7640.
7. A plan of study for the following twelve months and a provisional candidacy form (see no. 10 below) must be worked out annually with the D.A. coordinator.
8. Students should interview prospective research advisors early, and select an advisor by the end of the second semester in residence. A doctoral committee will then be appointed; consult the D.A. coordinator for details.
9. A dissertation proposal (prospectus) will be prepared and submitted to the doctoral committee, then (at least one week later) the proposal will be defended orally before the committee. Consult the D.A. coordinator..
10. A degree plan must be filed with the Graduate Office after completion of the core requirement in chemistry and after approval of the dissertation proposal but prior to the completion of 30 credit hours.
11. Preliminary exams must be completed during the last semester of prescribed coursework other than dissertation research but after advancement to candidacy is approved.
12. Guidelines and relevant deadlines for the preparation of the dissertation are available from the D.A. coordinator and should be carefully followed. The dissertation must include both chemistry and chemical education components.
13. At least two weeks after the dissertation has been written and submitted to the doctoral committee, the student must present an oral defense of the dissertation to the committee in a seminar open to members of the public. After the examination, the committee will discuss the defense and vote on whether or not the student has successfully defended the dissertation; approval of the committee is required. Upon successful completion of the defense, the candidate submits the corrected dissertation to the Graduate Office.

## Courses in Chemistry [CHEM]

Graduate standing and permission of department are prerequisites for graduate courses in chemistry. The 5000-level courses also have the same prerequisites as listed for the corresponding 4000-level courses in the undergraduate catalog.

5100 Organic Spectroscopy. Three credits. Prerequisite: CHEM 3020 or equivalent. Theory of and practice in the interpretation of mass, infrared, Raman, ultraviolet-visible, and nuclear magnetic resonance spectra. Offered every other spring.

5330/5340 Physical Chemistry Fundamentals. Four credits each. Modern physical chemistry including current theories of atomic and molecular structures, chemical thermodynamics, electrochemistry, chemical kinetics, and related theoretical topics. Three lectures and one three-hour laboratory period. Offered every year.

5331/ 5341 Physical Chemistry Fundamentals Lab. Zero credits. Offered every year.

5350/5360 Physical Chemistry. Four credits each. Quantitative principles of chemistry involving extensive use of calculus. Major topics include thermodynamics, phase changes, chemical equilibria, electrochemistry, reaction kinetics, quantum chemistry, molecular structure, and statistical mechanics. Three lectures and one three-hour laboratory period. Offered every year.

5351/ 5361 Physical Chemistry Lab. Zero credits. Offered every year.
5400 Inorganic Chemistry. Three credits. Basic concepts and theories of inorganic chemistry and how these are used to predict and understand the physical and chemical properties of compounds of the elements other than carbon. Inorganic compounds in the air, water, earth, and in the laboratory, and in biochemistry, geochemistry, and industrial materials and processes. Offered on sufficient demand.

5500 Biochemistry I. Three credits. Prerequisite: CHEM 3020 or consent of instructor. The chemical properties of biological molecules such as amino acids, proteins, enzymes, and carbohydrates. Chemical basis of enzyme catalysis and reactions of carbohydrate metabolism. Offered every fall.

5600 Introduction to Environmental Chemistry. Three credits. Quality of the environment and of chemical changes in the environment through contamination or modification of the air, water, and soils as affected by human, agricultural, industrial, and social activities. Offered every fall.

5630 Detection of Chemical Pollutants. Four credits. Theory and practice of analytical chemistry methods used in pollution measurement. Three lectures and one three-hour laboratory period. Offered every other spring.

5631 Detection of Chemical Pollutants Lab. Zero credits. Offered every other spring.

5700 Polymers, an Introduction. Three credits. Structure, properties, and applications of polymers. Offered every other spring.

5730 Advanced Physical Chemistry. Four credits. Modern chemical concepts and computations applied to quantum chemistry, molecular spectroscopy, and statistical thermodynamics. Three lectures and one three-hour calculation laboratory period. Offered on sufficient demand.

5731 Advanced Physical Chemistry Lab. Zero credits. Offered on sufficient demand.

6100 Intermediate Organic Chemistry. Three credits. Prerequisite: CHEM 3020/3021 or 2030/2031 or equivalent. Concepts and modern theories of organic chemistry: stereochemistry of reactions, mechanistic interpretation of organic reactions, and multistep synthesis. Offered every fall.

6110 Topics in Organic Chemistry. Three to six credits. Prerequisite: CHEM 6100. A selection of modern topics. Offered every other spring.

6200 Topics in Analytical Chemistry. Three to six credits. Prerequisite: CHEM 4230/4231 or 6230/6231. Selected topics of major interest in chemical analysis. Offered every other fall.

6230 Intermediate Analytical Chemistry. Four credits. Prerequisite: CHEM 2230/2231 or equivalent. Selected instrumental methods of analysis including but not limited to gas and liquid chromatography methods; ultraviolet, visible, and infrared spectroscopic methods; and flame emission and atomic absorption spectrometry. Three lectures and one three-hour laboratory period. Offered every spring.

6231 Intermediate Analytical Chemistry Lab. Zero credits. Offered every spring.

6300 Intermediate Physical Chemistry. Three credits. Key concepts from classical thermodynamics, quantum theory, and chemically relevant spectroscopies. Statistical thermodynamics introduced. Offered every spring.

6400 Intermediate Inorganic Chemistry. Three credits. Concepts of inorganic chemistry needed for effective teaching of general chemistry and for safe and effective use of inorganic chemicals and materials in industrial and academic laboratories; atomic theory, principles of inorganic reactivity in acid-base; precipitation, complexation, and oxidation-reduction reactions; crystal and ligand field theory; symmetry; molecular orbital theory; organometallic chemistry. Offered every fall.

6410 Transition Metal and Theoretical Inorganic Chemistry. Three credits. Prerequisite: CHEM 5400 or consent of instructor. The chemistry of transition metal complexes, organometallic compounds, and of related compounds, their practical applications, and modern theoretical treatments of this chemistry. Offered on sufficient demand.

6420 Topics in Inorganic Chemistry. Three to six credits. Prerequisite: CHEM 6400. Selected topics of current interest in inorganic
chemistry such as organo-metallic chemistry, inorganic materials science, and kinetics and mechanisms of inorganic reactions. Offered every other spring.

6480/ 6490 Laboratory in Inorganic Chemistry. One credit each. Prerequisite or corequisite: CHEM 6400 (for 6480), CHEM 6420 or CHEM 5700 (for 6490), or consent of instructor.
6480 Inorganic Synthetic Methods. Offered every other fall. 6490 Physical Methods in Inorganic Chemistry Offered every other fall.

6500 Intermediate Biochemistry. Three credits. The chemistry and metabolism of biological compounds such as proteins, carbohydrates, lipids, and nucleic acids. Offered every other spring.

6510 Biochemistry II. Three credits. Prerequisite: CHEM 5500. The structure of lipids, amino acids, nucleotides, and nucleic acids and their metabolism at a molecular level. Emphasis on understanding the chemical basis of biological phenomena. Offered every spring.

6520 Topics in Biochemistry. Three to six credits. Prerequisite: CHEM 6500 or 6510 or consent of instructor. Selected topics of particular interest in biochemistry. Offered every other fall.

6530 Biochemical Techniques. Two credits. Prerequisite/corequisite: CHEM 6500 or 6510 or consent of instructor. Laboratory in biochemical techniques with emphasis on protein purification, enzyme kinetics, carbohydrate and lipid analysis, and manipulation of DNA. Offered every spring.

6610 Environmental Soil Chemistry. Three credits. Prerequisite: Working knowledge of physical and organic chemistry. Fundamental chemical principles applied to the fate and behavior of organic and inorganic contaminants in the soil-water environment. Topics include sorption and redox reactions of contaminants. Offered every other spring.

6640 Thesis Research. One to six credits per semester. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading. Offered every term.

6720 Topics in Physical Chemistry. Three to six credits. Prerequisite: CHEM 6300. Advanced theories of, latest literature in, and unsolved problems of a particular research area in physical chemistry selected by the professor. Offered every other fall.

6800 Chemistry Seminar. One credit. Required of graduate students specializing in chemistry. Scientific articles reviewed and reports on individual research projects presented. Offered every term.

6870 Chemistry Research. Three credits. Original laboratory problem that will furnish material for a thesis. Offered every fall.

7110 Advanced Topics in Organic Chemistry. Three credits. Prerequisite: CHEM 6100. Applications and advanced concepts in physical organic chemistry, including those used in teaching organic chemistry. Topics include classical and modern approaches in physical organic chemistry including MO theory, conformational analysis, stereochemistry, reaction mechanisms, structure and solvent effects, pericyclic reactions, and theories of acidity/basicity. Offered every other spring.

7200 Advanced Chemical Separations and Chemical Equilibrium. Three credits. Prerequisite: CHEM 6230 or equivalent including a course in quantitative chemical analysis. Advances in theories
and applications of analytical chemistry for students familiar with laboratory techniques and chemical instrumentation. Special attention given to chemical equilibrium as it applies to the practice and teaching of chemical separations. Offered every other fall.

7210 Problems in Modern Chemical Laboratory Procedures. Three credits. Newly developed laboratory techniques and procedures which the student had not previously had the opportunity to learn. Offered on sufficient demand.

7220 Independent Study of Instrumental Analysis. Three credits. Developing skill in using selected sophisticated instruments. Offered on sufficient demand.

7420 Advanced Topics in Inorganic Chemistry. Three credits. Prerequisite: CHEM 6400. Applications and advanced concepts of inorganic chemistry; methods of teaching these concepts. Inorganic materials such as metals, superconductors, zeolites, and fullerenes; organometallic compounds, halides, hydrides, and oxides of elements; inorganic reaction mechanisms; bioinorganic chemistry; electronic states and term symbols. Modern methods of teaching inorganic content in general chemistry courses. Offered every other spring.

7510 Advanced Biochemistry. Three credits. Prerequisite: CHEM 6500 or consent of instructor. Advanced subjects in biochemistry including current techniques in structure/activity relationships of biomolecules, regulation and control of metabolic pathways, bioenergetics, enzymology, control of transcription and translation, regulation of gene expression, and biochemistry of inherited disease. Offered every other fall.

7640 Dissertation Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled, student should register for at least one credit hour of doctoral research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading. Offered every term.

7700 Topics in Theoretical Chemistry. Three to six credits. Bonding, stereochemistry, empirical and semi-empirical parameters, state

functions, spectroscopic interpretation, and reaction mechanisms. Offered on sufficient demand.

7710 Topics in Applied Chemistry. Three to six credits. Some important and current practical applications. Offered every other spring.

7720 Advanced Topics in Physical Chemistry. Three credits. Prerequisite: CHEM 6300. Theoretical basis and application of the principal methods used for experimental molecular structure determination. Computational methods of structure prediction and interpretation of data. Searching and retrieving structural information from structural databases. Offered every other fall.

7800/ $\mathbf{7 8 1 0}$ Chemistry Internship. Three credits each. Prerequisite: Permission of department. Admission based on recommendations and performance in teaching. Offered every term.

7820 Seminar in Chemical Education. One credit. Areas and ideas associated with chemical education. Readings from current literature or seminal texts on given topics which may include the role of laboratory in chemical education, current research in science education, trends in chemical education, research techniques in chemical education, and the historical development of chemistry. Offered online. May be taken up to three times for credit. Offered every fall.

7900 Teaching and Learning in Chemistry. Three credits. Areas and ideas associated with chemical education. Readings from the current literature or seminal texts on misconceptions in chemistry, theories of learning, and theories of teaching. Offered summer only.

7910 Instructional Technology in the Science Classroom. Three credits. Explores concepts and applications associated with the use of computer- and other technology-based instructional materials in the science classroom. Readings from current literature or seminal texts on theoretical issues; practical applications associated with the use of technology in teaching scientific concepts. Offered summer only.

## Courses in Physical Science [PSCI]

Graduate standing and consent of instructor are prerequisites for graduate courses in physical science.

5030 Experimental Physical Science. Four credits. Basic concepts, laws, and principles of astronomy, chemistry, geology, and physics with particular emphasis on the utilization of equipment available or easily improvised in actual school situations to illustrate these concepts, laws, and principles. Offered every term.

5080 Problems in Physical Science. Four credits. A problem from chemistry, physics, or other physical science appropriate to the student's background and interest. Offered on sufficient demand. May be repeated for a total of eight credits with departmental approval.

6020 Investigations in Physical Science. One, two, or three credits. Prerequisite: Graduate standing or consent of instructor. Topics from astronomy to chemistry and physics, with special emphasis on the development of hands-on activities, determination of content cognitive demand, development of appropriate assessment instruments/implementation plans, and implementation of these across the pre-college curriculum. For practicing pre-college science teachers and school administrators. Consult the listed instructor for costs and specific credits. Does not apply toward chemistry graduate degrees. Offered on sufficient demand. May be repeated for a total of six credits with departmental approval.

## Department of Computer Information Systems

Stan Gambill, Chair<br>Business and Aerospace Building N333C

The Department of Computer Information Systems (CIS) offers the Master of Science in Accounting and Information Systems with a concentration in Information Systems. The department also offers courses for the Master of Business Administration degree. A minor in Information Systems is offered for students seeking a master's degree other than the M.B.A.
The CIS graduate coordinator serves as advisor for students choosing Information Systems as their concentration. Students are also encouraged to contact the CIS Department to discuss its program.
The business prerequisites for a student seeking an M.S. in Information Systems are the same as those required for the M.B.A. A recent graduate of an AACSB-accredited program would normally possess an adequate background in the business prerequisites.
Students electing Information Systems as the concentration without an undergraduate degree in information systems or demonstrable professional experience in the discipline are required to complete the additional prerequisites of INFS 3800 (or 3700) and 4790 (or 5790). INFS 5790 may be taken for credit toward the graduate degree. Students without formal training or experience in computer programming may be encouraged to take some additional INFS courses. A portion of these requirements may be satisfied in conjunction with the student's graduate studies.
To be admitted to the M.S. program (see page 30), a student must meet one of the following:
a. GPA $\times 200+\mathrm{GMAT}=950$
or Upper Division GPA $\times 200+$ GMAT $=1,000$
b. International students must comply with the following provision: For undergraduate degrees from foreign institutions where a grade point average cannot be clearly established but where that work is thought to be equivalent to domestic grades of $\mathbf{B}$ or higher, admission eligibility may be determined by the GMAT score. A score of at least 450 is required for unconditional admission under such circumstances. Preparatory work taken in institutions with grading systems paralleling that of most United States institutions must conform to a B average.

## Requirements for the Master of Science

Information Systems Concentratoin
(three available options)

## General

INFS 6710 IT Systems Development Project Management
INFS 6790 Seminar in Database Management
QM 6770 Computer-Based Decision Modeling
6000-level international/global (INFS 6750 strongly recommended)
INFS 6980 Information Systems Practicum
Six hours INFS at the 6000 level
Six hours INFS or ACTG at the 5000 or 6000 level
Three hours of approved electives at the 5000 or 6000 level

## Specialization in IT Project Management

INFS 6710 IT Systems Development Project Management
INFS 6790 Seminar in Database Management
QM 6770 Computer-Based Decision Modeling
6000-level international/global (INFS 6750 strongly recommended)
INFS 6980 Information Systems Practicum
INFS 6500 IT Project Management Planning and Implementation
INFS 6510 IT Project Risk Assessment and Control
INFS 6520 IT Project Management Case Studies
Six hours INFS electives

## Specialization in IS Security and Assurance

INFS 6710 IT Systems Development Project Management
INFS 6790 Seminar in Database Management
QM 6770 Computer-Based Decision Modeling
6000-level international/global (INFS 6750 strongly recommended)
INFS 6980 Information Systems Practicum
INFS 6300 Information Systems Security Management
INFS 6310 Information Systems Assurance Planning and Practices
INFS 6320 Advanced Integrated Security and Assurance
Six hours INFS electives

## Additional Requirements

INFS 6980 must be passed with a grade of B- or higher with a maximum enrollment of two times.

The degree is to be completed within six years from the time of admission to the degree program.

No foreign language or thesis is required in the program.
No more than two (2) 5000-level classes may be taken as part of the degree program.

Information systems majors may meet the international/global requirement with any approved Jennings A. Jones College of Business course; however, the selection of INFS 6750, Global Strategic Information Systems, is strongly encouraged.

Students planning to graduate in the minimum amount of time, including summer attendance, should plan their programs carefully in order to meet course sequencing and scheduling constraints. The Computer Information Systems Department can provide scheduling assistance.

A limited number of graduate assistantships are available on a competitive basis to qualified students.

Students with undergraduate degrees in information systems may not take INFS 6610 to satisfy either a required or elective course in the program.

## Courses in Information Systems [INFS]

5200 Data Enhanced Internet Applications. Three credits. Prerequisites: 6 hours of information systems. Focus on designing, deploying, maintaining, and querying an Internet database using appropriate hardware and software. In-depth study of e-commerce applications in a microcomputer environment.

5760 Advanced Programming. Three credits. Prerequisite: INFS 2720. Functional programming experience in structured programming techniques; top-down design; advanced file handling and maintenance techniques to include sequential, indexed sequential, direct, and relative file organization; interactive, menu-driven applications; and uploading/downloading programs to a central site. Requires extensive laboratory work.

5790 Database Design and Development. Three credits. Prerequisite: 6 hours of information systems. Fundamental concepts: conventional data systems, integrated management information systems, database structure systems, data integration, complex file structure, online access systems. Emphasis on total integrated information systems database and database management languages.

5830 Database Programming. Three credits. Prerequisite: INFS 4790 or 5790 or consent of instructor. Operational database design and implementation. Includes the development of interfaces that enable end users to query the database contents and transform data into information. Requires each student to participate fully in a group project.

5840 Study Abroad. Three credits. Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

5900 Business Data Communications. Three credits. Prerequisite: 6 hours of information systems. Current topics in the field of data communications.

6010 Survey of Information Systems Issues. Three credits. Topics include Systems Development Life Cycle (SDLC), Data Resource Management, and Information Resource Management. Incorporates various microcomputer applications software packages. May not be used for elective credit in graduate business degree programs.

6300 Information Systems Security Management. Three credits. A comprehensive view of the managerial concepts for security. Includes strategic alignment of security initiatives with business objectives; identification and assessment of information security risks; design, development, and management of an information security program; and the development and management of the response and recovery from disruptive and destructive information security events.

6310 Information Systems Assurance Planning and Practices. Three credits. Planning and application of information systems assurance. Focuses on risk assessment, compliance of standards and regulatory requirements, and effective use of system development and use of new IT technologies and processes.

6320 Advanced Integrated Security and Assurance. Three credits. Prerequisite: INFS 6300, 6310, or permission of instruction. An integrated approach to the development, implementation, and assurance of an information system security program. Students
will combine and apply the principles from security and assurance into proactive planning that attains compliance, efficiency, and effectiveness.

6500 IT Project Management Planning and Implementation. Three credits. Planning and implementation issues such as project planning and selection, portfolio management, problem solving, communication, conflict resolution, change management, and leadership. Includes a substantial emphasis on organizational and people issues in project management.

6510 IT Project Risk Assessment and Control. Three credits. Elements involved in identifying and mitigating IT project risks. Offers preparation to monitor project progress, identify and quantify the impact of risks, evaluate the degree to which a program is troubled, and apply appropriate decision strategies to problematic situations.

6520 IT Project Management Case Studies. Three credits. Integrates all areas of IT project management into a coherent analysis. Covers topics, situations, and problems using case study techniques. Includes the development of project management software skills.

6610 Information Systems Management and Applications. Three credits. Focuses on the use of computing resources in managerial context. Students will develop an understanding of issues and implications of information resources and end-user computing as well as develop skills in application of these concepts in a prob-lem-solving oriented microcomputer system environment. NOT open to students with an undergraduate degree in Information Systems.

6620 Advanced Computer Applications for Business. Three credits. Advanced application development in an end-user computing environment. Opportunity to develop skills in building applications to support management activities in the information age. Includes database systems, electronic spreadsheets, and other appropriate application environments.

6710 IT Systems Development Project Management. Three credits. Prerequisite: Previous coursework or experience in systems analysis. Practical explanation of the total systems concept and a knowledge of systems development. Addresses the entire development cycle including analysis, design, and implementation. Includes an emphasis on project management.

6720 Knowledge Management. Three credits. Strategic value of knowledge as a critical organizational asset, design of effective knowledge management systems, and implementation of knowledge management programs for organizations operating in the highly competitive knowledge economy.

6740 Strategic Information Systems. Three credits. Focuses on the use of information system (IS) and information technology (IT) in the strategic management process in business organizations. Emphasis on the strategic view of IS and IT and their impact on organizational strategy. Use of IS and IT to support prominent generic strategy models and how IS and IT aid applying the principles of those generic strategic models.

6750 Global Strategic Information Systems. Three credits. Examines the managerial, operational, and strategic implications of information and communication technology in the global context. Particular emphasis on the strategic dimension.

6760 Programming Applications. Three credits. Beginning to advanced topics in computer programming. Structured programming approach emphasized as students write application programs for an increasingly difficult series of exercises.

6790 Seminar in Database Management. Three credits. Prerequisite: Previous database coursework or experience. Advanced topics in computer-related information systems as found in current literature and practical application. Advanced information structures and data management concepts applied in the design of computerbased information systems. Additional topics include data structures as applied to distributed processing systems, computer system component resource allocation, and data communication systems design. Significant computer application projects required.

6880 Electronic Commerce. Three credits. The business and technical implications of electronic commerce from the perspective of the manager of information technology. Introduces the technical, business, managerial, and social issues associated with electronic commerce systems. Addresses the role of information technology in the development of electronic commerce applications and considers the ethical and legal implications of electronic commerce.

6900 Business Data Communication Management. Three credits. Management and use of data communications technologies to support the operations of businesses. Practical experiences in the use of data communications technologies, such as local area networks, the Internet, distributed computing, and distributed databases.

6980 Information Systems Practicum. Three credits. Prerequisites: 6 hours of information systems or permission of instructor. Emphasizes communication skills, creative thinking, problem solving, and professional responsibility from a leadership perspective. Includes the discussion of information systems assessment in organizations. Capstone course for Information Systems majors and must be taken the last semester prior to graduation.

6990, 6991 Independent Research in Information Systems. Three credits. Prerequisites: Consent of graduate program coordinator or department chair. Provides individual research, readings analysis, or projects in contemporary problems and issues in a concentrated area of study under the direction of an appropriate faculty member. Maximum credit applicable toward degree may not exceed six credits.

## Courses in Quantitative Methods [QM]

6000 Quantitative Methods Survey. Three credits. Quantitative methodologies to assist in the decision-making process. Emphasis on applied statistics and decision sciences topics that are practical, useful, and of wide application for business analysis. May not be used for elective credit in graduate business degree program.

6770 Computer-Based Decision Modeling. Three credits. Advanced techniques in quantitative methods. Modeling and optimization techniques. Computer applications emphasized.

6960 Statistical Methodology and Analysis. Three credits. Prerequisite: QM 3620 or 6000 . Descriptive and inferential statistical concepts with the use of expert systems to assist in the selection of appropriate design and methodology. Usage of common packages for problem solution and analysis.

# Department of Computer Science 

## Richard Detmer, Chair <br> Kirksey Old Main 306

The Department of Computer Science offers the Master of Science with a major in Computer Science and a minor at the graduate level.

Admission to the master's program requires a satisfactory Graduate Record Examination score.

## Requirements for the Master of Science

Candidate must

1. meet the following requirements:
a. have completed CSCl 1170, 2170, 3080, 3110, 3130, 3160, and 3250 or equivalent of each course;
b. complete CSCI 5700 if he or she did not complete CSCI 4700 or an equivalent course as an undergraduate; and
c. complete CSCI 5560 if he or she did not complete CSCI 4560 or an equivalent course as an undergraduate.
2. have completed MATH 1910 and 2050 or equivalent of each course.
3. complete at least 24 semester hours of graduate computer science courses at MTSU.
4. complete one of the following two options:
a. Thesis option: A thesis and at least 30 hours of graduate coursework. Up to 3 hours in CSCI 6640 may be included in the 30 hours. Students must present an oral defense of the thesis. A minimum of 21 hours must be at the 6000 level.
b. Nonthesis option: At least 36 hours of graduate coursework. Successfully complete a comprehensive examination. Credit for CSCI 6640 may not be included in the 36 hours. A minimum of 24 hours must be at the 6000 level.
NOTE: A student already holding a master's degree from MTSU may complete a second master's degree in Computer Science by satisfying either of the above options with a minimum of 27 semester hours. A minimum of 18 hours must be at the 6000 level.
5. take all courses in the Computer Science Department with the following possible exceptions:
a. with the prior approval of the Computer Science graduate faculty, a maximum of 6 hours of cognate courses may come from departments other than Computer Science.
b. with the approval of the candidate's graduate advisor, a single minor up to 12 semester hours may be included. Such a minor must also be approved by the department offering the minor.
NOTE: With the approval of the Computer Science graduate faculty, a maximum of 12 semester hours of residence credit (maximum of 6 in Computer Science) may be transferred from another institution and applied to the master's degree.

## Courses in Computer Science [CSCI]

5130 Microprocessor Operation and Control. Three credits. Prerequisite: $\operatorname{CSCI} 3160$. Digital systems based around microcomputers, microcomputer architecture, logic replacement, memory design, timing considerations, input/output design, interfacing, robotics, and total system design.

5160 Compiler Design and Software Development. Three credits. Prerequisites: CSCI 3080, 3110, and 3160. The various phases of a compiler along with grammars, finite automata, regular expressions, LR parsing, error recovery, backward and forward flow analysis, and code optimization. A term project consisting of the design and construction of a functional compiler required.

5250 Computer Graphics. Three credits. Prerequisites: CSCI 2170 and 3080 or consent of instructor. Topics include vector drawing displays, raster scan displays, input devices and techniques, graphics software, transformations, projections, interpolation, and approximation.

5300 Data Communication and Networks. Three credits. Prerequisite: CSCI 3250. Computer network architectures, protocol hierarchies, and the open systems interconnection model. Modeling, analysis, design, and management of hardware and software on a computer network.

5330 Parallel Processing Concepts. Three credits. Prerequisites: CSCI 3130, 3250, and a working knowledge of either C or C++. Parallel processing and programming in a parallel environment. Topics include classification of parallel architectures, actual parallel architectures, design and implementation of parallel programs, and parallel software engineering.

5350 Introduction to Artificial Intelligence. Three credits. Prerequisites: CSCI 2170 and 3080 or equivalent. Principles and applications of artificial intelligence. Principles include search strategies, knowledge representation, reasoning, and machine learning. Applications include expert systems and natural language understanding.

5360 Intelligent Robot Systems. Three credits. Prerequisites: CSCI 2170 and 3080. Principles and applications of intelligent mobile robotics. Various architectures used in the basic AI robotics development paradigms and basic techniques used for robot navigation. Strong emphasis on hands-on mobile robot design, construction, programming, and experimentation using a variety of robot building platforms.

5410 Web Technologies. Three credits. Prerequisites: CSCI 3080 and 3110. An intensive introduction into current Web technologies including basic HTML, tools for Web page design, XML, client-side methods, and server-side methods. Students will be required to implement several Web-based projects.

5560 Database Management Systems. Three credits. Prerequisites: CSCI 3080 and 3110. The relational and object models of database design along with relational algebras, data independence, functional dependencies, inference rules, normal forms, schema design, modeling languages, query languages, and current literature.

5600 Independent Study in Computer Science. One to six credits. Prerequisite: Consent of instructor. Students wishing to enroll must submit a written course/topic proposal to the department prior to the semester in which CSCI 5600 is taken. Proposal must be approved prior to taking the course. At the conclusion of the course, each enrollee will submit a written summary of the project.

5700 Software Engineering. Three credits. Prerequisites: CSCI 3080 and 3110. Consists of a theoretical component and a practical component. Topics include the history of software engineering, software development paradigms and life cycles, and computeraided software engineering (CASE). A team project will be developed in parallel with the theory.

5800 Software Testing. Three credits. Prerequisites: CSCI 2170 and 3080. Integrates theory and applications of software testing techniques. Provides actual hands-on testing experience. Considers multiple testing paradigms.

5850 Neural Nets. Three credits. Prerequisite: CSCI 3080. Various neural net architectures, theory, and applications, including models such as Perceptron, back propagation, Kohonen, ART, and associative memory. Learning and conditioning methods also studied.

5900 Selected Topics in Computer Science. Three credits. Prerequisite: CSCI 2170. Advanced topics in computer science to be selected and announced at time of class scheduling. May be repeated for up to six credits total.

6100 Analysis of Algorithms. Three credits. Prerequisites: CSCI 3080 and 3110 or consent of instructor. Topics include the analysis and design of algorithms; efficiency of algorithms; design approaches including divide and conquer, dynamic programming, the greedy approach, and backtracking; P and NP; and algorithms in many areas of computing.

6130 Selected Topics in Parallel Processing. Three credits. Prerequisite: CSCI 4330/5330. An in-depth investigation of one or more topics in parallel processing. Topic(s) to be selected by the professor. Possible topics include parallel algorithms, parallel programming languages, parallel programming tools, parallel software engineering, parallel architectures, parallel applications, and parallel VLSI. Repeatable up to 6 hours.

6180 Software Design and Development. Three credits. Prerequisite: CSCI 3110. State-of-the-art techniques in software design and development; provides a means for students to apply the techniques.

6190 Theory of Compilers. Three credits. Prerequisite: CSCI 4160/5160. Theory of parsing methods as well as symbol table construction, code optimization, run time storage management, and implementation of recursion.

6250 Advanced Operating Systems. Three credits. Prerequisite: CSCI 3250. Topics include concurrent processes, name management, resource allocation, protection, advanced computer architecture, and operating systems implementation.

6260 Advanced Computer Graphics. Three credits. Prerequisite: CSCI $4250 / 5250$. Topics include three-dimensional curves and surfaces, projections, hidden line and surface elimination, raster graphics systems, and shading techniques.

6300 Networks. Three credits. Prerequisite: CSCl 4300/5300. Computer communications, network architectures, protocol hierarchies, and the open systems interconnection model. Modeling, analysis, and specification of hardware and software on a computer network. Wide area networks and local area networks including rings, buses, and contention networks.

6350 Selected Topics in Artificial Intelligence. Three credits. Prerequisites: CSCI 3110 and 4350/5350. In-depth study of the principal areas of the field: artificial intelligence programming, problemsolving methods, knowledge representation methods, deduction and reasoning, and applications such as natural language processing and expert systems. Repeatable up to 6 hours.

6450 Operating System Design. Three credits. Prerequisite: CSCI 6250. Definition, design, and implementation of a significant operating system examining such areas as file systems, process management, memory management, input/output device management, and user interface.

6550 Introduction to Symbolic and Algebraic Manipulation. Three credits. Prerequisites: CSCI 3110 and 4350/5350. Techniques for algebraic manipulation on the computer. Includes symbolic differentiation and integration, extended precision arithmetic, polynomial manipulation; introduces one or more symbolic manipulation systems. Automatic theorem provers considered.

6560 Selected Topics in Database. Three credits. Prerequisite: CSCI $4560 / 5560$. An in-depth investigation of one or more topics in database. Topic(s) to be selected by the professor. Possible topics include object-oriented database systems, distributed database systems, client-server database systems, deductive databases, multimedia databases, and database theory (concurrency, query optimization, recovery, security). Repeatable up to 6 hours.

6600 Selected Topics in Computer Science. Three credits. May be repeated for up to six credits total. Prerequisites: A solid foundation in undergraduate computer science and any prerequisites determined by the instructor. An in-depth investigation of one or more topics in computer science. Topic(s) to be selected by the professor. Possible topics include search techniques, for example genetic algorithms, soft computing, object-oriented software engineering, expert systems, program verification, software quality, knowledge discovery in databases, and design of embedded software systems.

6620 Research Methods in Computer Science. Three credits. Prerequisite: Twelve hours of graduate work in computer science. Emphasizes communication skills, creative thinking, problem solving, and integration of knowledge from prior computer science courses. Includes a study of computer science research tools. Students will select a research problem with approval of the instructor, review pertinent literature, and produce a report using the manual of thesis writing currently approved by the College of Graduate Studies.

6640 Thesis Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

# Department of Criminal Justice Administration 

Deborah Newman, Chair<br>Vaughn House 6

The Department of Criminal Justice Administration offers a Master of Criminal Justice (M.C.J.) degree in cooperation with Tennessee State University. A minor in Criminal Justice at the graduate level is also offered at MTSU. Normally, the required test score for admission to the Master of Criminal Justice program is 370 on the Miller Analogies Test (25 on the old scale) or a satisfactory score on the Graduate Record Examination. To be considered for Fall admission, an applicant's materials must be received by June 15; for Spring admission, November 1; and for Summer admission, April 15.
A graduate student may not enroll in more than 12 total hours in any given semester. This limitation applies to Criminal Justice graduate students who may be simultaneously enrolled at both TSU and MTSU. Any student exceeding the hours-per-semester limit will be dropped from a course or courses to the twelve-hour level. A student may, on rare occasions, be given permission for an overload, but the proper overload form must be executed before courses begin and under no circumstances will the overload exceed three hours or a total of 15 hours.

## General Requirements for the Master of Criminal Justice

## Candidate must

1. have completed a minimum of 18 hours of work at the undergraduate level in criminal justice or an approved equivalent.
2. complete a total of 36 hours ( 18 hours at MTSU and 18 hours at TSU) with no more than 30 percent of the total degree hours dually listed as undergraduate/graduate hours including the following core courses:
Middle Tennessee State University - Fall Semester Only
CJA 6000 Criminal Justice Administration, 3 hours
CJA 6010 Seminar in Law Enforcement, 3 hours
Tennessee State University - Spring Semester Only
CJA 6020 Judicial Seminar, 3 hours
CJA 6030 Contemporary Corrections, 3 hours
3. file a degree plan after having completed 10 semester hours credit and before having completed 16 semester hours credit. Candidate must have maintained an average grade of 3.00 or above on all work attempted. No fewer than 10 and no more than 16 semester hours may
be counted toward the degree before the individual is advanced to candidacy. Indicate research/thesis institution at this time.
4. complete the following 6 hours at one institution (MTSU or TSU):
CJA 6900 Research in the Criminal Justice Process, 3 hours
CJA 6640 Thesis Research, 3 hours
5. complete the remaining 18 hours of approved electives as follows:
12 hours at the non-thesis/research institution 6 hours at the thesis/research institution
6. successfully complete an oral comprehensive examination in conjunction with the thesis defense.

## Courses in Criminal <br> Justice Administration [CJA]

5220 Community Relations and Minority Problems. Three credits. Analysis of public hostility toward police and current community relations projects; training and education of law enforcement officers; responsibilities of police administrators; causes of tension and conflict, positive and negative factors in the control of minority group hostilities; minority recruitment in law enforcement.

5260 Special Issues in Law Enforcement. Three credits. Variety of subtopics related to law enforcement. Problems in private and public morality with regard to drug use, alcoholism, and sex offenses; analysis of current police training programs; relationship between legislation and political process which affects law enforcement.

5330 Criminal Investigation. Three credits. (For CJA majors or with permission of instructor.) General investigative responsibilities and techniques, including administration preparation, investigative jurisdiction and responsibility, and the importance of substantive report writing. Includes special techniques required for specific investigative categories.

5500 The Juvenile Justice System. Three credits. Juvenile delinquency and youth crime with emphasis on the history of the juvenile justice system, the court and police role within the system, rehabilitation and correction of the delinquent, and juvenile probation services. Alternatives to traditional procedures: community-based programs versus correctional institutions, nonjudicial adjustment, etc., examined.

5530 Criminal Evidence and Procedures. Three credits. Types of individuals and problems of admissibility in court proceedings, proper treatment and disposition of evidence, legal procedure to be followed, and actual trial procedure.

5750 Seminar in Corrections. Three credits. Each student selects a problem area of interest for an intensive research effort. The group will be presented with a contemporary corrections issue or problem and will be required to create practical and workable strategies for coping with the issue. Where feasible, arrangements will be made to implement the program in an actual correctional setting.

5800 Crime in America: An Assessment. Three credits. An in-depth survey of the impact of crime on American society: amount and trends of crime, economic impact of crime, professional and white collar crime, characteristics of offenders and victims of crime.

5900 Readings in Criminal Justice. Three credits. Advanced students capable of independent study will be allowed to do in-depth readings in a particular area of criminal justice relevant to individual interests. Annotated bibliography and report required. Arrangements should be made with the instructor prior to registration.

6000 Criminal Justice Administration. Three credits. Criminal justice, juvenile justice, correctional and mental health processes, and other issues including those arising out of other processes of social control and community-based treatment of offenders. Development of a critical analysis of current literature, compilation of a bibliography, and completion of an intensive research paper required.

6010 Seminar in Law Enforcement. Three credits. The function of police within the community and its relationship to the criminal justice system, the effects of police actions on the community and other segments of the system, social expectations and limitations, assessment and special problems. Analysis of relevant studies, formation of annotated bibliography, and organization of research into a formal composition.

6020 Judicial Seminar. Three credits. Examination of the judicial system, including flow of the criminal case, personnel, court community relations, computers and the courts, and special problem areas. A research project consisting of a literature review, bibliography, and a thorough analysis required.

6030 Contemporary Corrections. Three credits. Corrections programs in contemporary custodial and juvenile institutions and commu-nity-based corrections programs; problems and prospects associated with them. Each student required to make class presentations on assigned topics, participate in class discussions and analysis of reports, develop a bibliography, and submit a research paper in a specific area of corrections.

6040 The Concept of Justice. Three credits. Historical development and philosophy of law. The notion of justice in a criminal context, with emphasis on equity and ethics in law and justice. Examines the sociology of law and societal constraints on proscribed behavior.

6230 Police Management Systems. Three credits. The need for awareness of police management problems, reaction of criminal justice system within P.M.S., administrative behavior toward the organizational environment, and the nature of change within P.M.S. Preparation of a research paper which consists of complete analysis of a topic within P.M.S., a review of recent literature, and an annotated bibliography required.

6250 Criminal Justice Internship. Three credits. Prerequisite: Permission of instructor. Student placed for an intensive field experience in a functional criminal justice agency. The selection of the placement agency determined by student's background, academic status, and interest.

6300 Innovations in Law Enforcement. Three credits. The changing role of the police function and its relationship to the criminal justice system, including evaluation of the operational line function of the 80s, technological changes in society and their effects on law enforcement, and the etiology of innovation. Evaluation of recent literature, compilation of a list of selected readings, and unification of research into a methodological exposition.

6410 Advanced Constitutional Law. Three credits. Examination of constitutional rights of the accused including pretrial, trial, and prisoner rights. Reading and critique of current literature and Supreme Court decisions, learning to function in a law library, and composing a research paper with a bibliography on a chosen constitutional topic.

6430 Criminal Law: The Defense Side. Three credits. Procedure of the criminal courts from the defense viewpoint. ABA standards for defense attorneys, the handling of a case by the defense from arrest to appeal, and ethical problems posed for defense attorneys. Attention given to defense by appointment and plea bargaining.

6500 Interviewing and Counseling Juveniles. Three credits. Causal theories of delinquency, application of theory to treatment, caseworker attitudes, and counseling styles. Discussion of individualized models for classification and treatment as well as group and process models.

6640 Thesis Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6700 Community-Based Corrections. Three credits. Intensive survey of probation and parole at both the adult and juvenile levels. Halfway houses, work-release programs, and other community correctional settings. Impact of the "justice model" upon community corrections featured.

6830 Violence and Victimology. Three credits. Impact of violence on victims at both the adult and juvenile levels examined. Other major topics include the right to treatment, victims as witnesses, victims in the correctional system, and societal reaction to violence.

6900 Research in the Criminal Justice Process. Three credits. Introduces research methods, including the experiment and experimental methods and models, survey research, participant observation, case studies, unobtrusive measures, the use of official and unofficial statistics, validity, reliability, and data analysis. Special emphasis on ethics in criminal justice research and on proposal writing and evaluation research.

6920 Seminar in Criminal Justice Planning and Management. Three credits. Intensive introduction to principles of planning and management in the system. Students required to actively participate in planning exercises and to utilize data from actual situations for the development of appropriate management strategies.

6930 Comparative Systems of Criminal Justice. Three credits. Systems in the U.S. and Great Britain, New York, and London. Crime and justice in northern and southern Europe, Russia, and Canada. Discussion of progressive criminal policy and the U.N. and the uses of comparative analysis of current literature and formal exposition on a related topic.

6940 Crimes, Criminals, and Their Treatment. Three credits. Intensive exploration of the various systems of criminal typology, including a survey of the various theories of criminal behavior and a survey of institutional treatment methods currently in use. Extra-institutional treatment methods also examined.

6950 Business and Industrial Security. Three credits. Examination of the scope of the problem, the economic impact, major problems (security, employee theft, shoplifting, industrial espionage). Discussion of the responsibility and effectiveness of the criminal justice system, programs for prevention and training of employees, managers, and security personnel. Preparation of an extensive research paper which analyzes an assigned topic and summarizes current trends in the literature required.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

# Department of Economics and Finance 

Charles L. Baum II, Chair Business and Aerospace Building N329C

The mission of the graduate program in economics is to provide students with advanced studies in economic theory and research methodology. To accomplish its mission, the Department of Economics and Finance offers two degree programs: the Master of Arts (M.A.) with a major in Economics and the Doctor of Philosophy (Ph.D.) with a major in Economics. The department's approach to these degree programs is global, interactive, and innovative. In the M.A. program, students are offered three curricular paths: general economics, Industrial Relations, and Financial Economics. M.A. students in economics are offered preparation for careers in private business and public service. The focus of the M.A. program is on decision analysis and applied research. Ph.D. students in economics are trained for careers in teaching and applied research. The Ph.D. provides students with the opportunity to combine advanced training in economics with educational pedagogy and research methodology.
The required test score for admission to the master's program is 380 on the Miller Analogies Test (30 on the old scale) or a satisfactory score on the Graduate Records Examination (GRE). Admission to the doctoral program requires a satisfactory score on the GRE.

## Requirements for the Master of Arts ( 5000 and 6000 level)

1. Once admitted, candidates must complete a minimum of 30 semester hours ( 10 courses) if a thesis is written or a minimum of 33 semester hours ( 11 courses) if a thesis is not written. At least 24 hours ( 8 courses) must be in courses numbered exclusively as 6000 -level graduate courses (other courses can be taken at the 5000 level). A minimum of 18 of these semester hours must be in economics and include ECON 6110, ECON 6120, and ECON 6620.
2. Students may include a minor in their degree programs. A minor consists of a minimum of 12 semester hours of approved courses. Students not electing a minor may include a cognate area of up to 6 semester hours in their programs. Cognate areas can be formed from courses in accounting, agriculture, finance, geography, geology, history, insurance, management, political science, psychology, real estate, and sociology.

## Major in Economics (General)

Candidates choosing a major in Economics (general) must complete a minimum of 18 semester hours of economics including ECON 6110, 6120, and 6620. A minor (12 hours of approved courses) can also be included. A list of graduate minors can be found on page 59 .
Students not electing a minor can include a cognate area of up to 6 semester hours in their programs. Cognate areas can be formed from courses in such fields as accounting, agriculture, finance, geography, geology, history, insurance, management, marketing, mathematics, political science, psychology, real estate, and sociology.

The student, with the assistance of the M.A. advisor, must file a degree plan prior to the completion of 21 credit hours.

## Major in Economics with a Concentration in Financial Economics

Students in the Financial Economics concentration may choose to take the theoretical track (involves more mathemat-ics)-ECON 6110, ECON 6120, and 6620-or the applied track-ECON 5620, ECON 6000, and ECON/FIN 6450.

In addition, candidates choosing the concentration in Financial Economics are required to complete the following three-hour courses:
ECON/FIN 6460 Seminar on Financial Markets
FIN 6710 Financial Analysis
ECON/FIN 6730 Seminar on Financial Institutions
FIN 6740 Security Analysis
An additional six hours of guided electives must be chosen from the following:
ECON/FIN 6430 Seminar on Public Finance
ECON/FIN 6450 Seminar on Monetary Policy
ECON 6530 International Trade Theory and Policy
FIN 6720 Cases in Financial Management
FIN 6860 International Financial Management
The remaining three hours are general electives.

## Major in Economics with a <br> Concentration in Industrial Relations

Students in the Industrial Relations concentration may choose to take the theoretical track (involves more mathematics)ECON 6110, ECON 6120, and ECON 6620-or the applied track-ECON 5620, ECON 6000, and ECON/FIN 6450.
In addition, candidates choosing the concentration in Industrial Relations are required to complete ECON 6500, ECON 6510, and ECON 5390.
Students without substantial experience in the field of industrial relations may be required to complete the following as initial courses in the concentration:
ECON 5420 Labor and Human Resource Economics
ECON 5490 Industrial Relations Legislation
ECON 5510 Unions and Collective Bargaining
ECON 6040 Survey of Employment Relations

## Comprehensive Examinations

1. Candidates must successfully complete a written comprehensive examination that may be taken no more than twice. For the major in Economics, the comprehensive examination covers the three core areas: macroeconomics, microeconomics, and Econometrics I. For the major in Economics with a concentration in Financial Economics, the comprehensive examination includes macroeconomics, microeconomics, and a financial economics field examination. For the major in Economics with a concentration in Industrial Relations, the comprehensive examination includes macroeconomics, microeconomics, and an employment relations field examination.
2. Before taking the comprehensive examination, the student is expected to attend and actively participate in regularly scheduled departmental student/faculty workshops where research papers are presented and discussed by the participants.

## Requirements for the Doctor of Philosophy ( 6000 and 7000 level)

The Ph.D. in Economics provides students with the opportunity to combine advanced training in economics with educational pedagogy and applied research. Students completing the Ph.D. in Economics will have the academic and pedagogical skills necessary to teach economics at the collegiate level and to conduct applied research in economics.

## General Admissions Requirements

For admission to the doctoral program, candidates are expected to attain a GRE score of 1100 or better. On matriculation, students will complete a degree plan. The Ph.D. advisor must approve the degree plan. In some cases, it may be possible to complete the program on a part-time basis, but the program is designed for full-time students.

## Requirements for the Ph.D. in Economics

1. Students entering the Ph.D. program in economics must hold a baccalaureate degree and meet the entrance requirements listed under the General Admissions Requirements.
2. Students entering with a baccalaureate degree are required to complete a minimum of 64 semester hours, including a minimum of 51 hours of formal coursework, a one-credit hour economics workshop (two presentations), and 12 hours of dissertation research. Of the total 64 hours, 43 hours must be at the 7000 level. Up to 12 semester hours of formal coursework may be applied toward the minimum of 51 hours of formal coursework for students entering with an M.A. in economics.
3. In consultation with graduate advisor, the student must file a degree plan prior to the completion of 21 credit hours.
4. Students must complete the Qualifying Examination as described on page 53 of the Graduate Catalog. Competency in economic theory is tested by qualifying examinations in microeconomics and macroeconomics at the end of
the student's first year of study. A major field examination and either a minor field exam or an econometrics exam will test a candidate's competency in two applied fields. These field examinations will be taken after completion of all the course requirements for the specific field. A field consists of a minimum of two doctoral-level (7000-level) courses plus electives as advised by the field coordinators. The field requirements are listed below.
5. Candidates must successfully defend a dissertation prospectus (page 54 of the Graduate Catalog) and, upon approval by the candidate's dissertation committee, prepare a dissertation. The student is responsible for contacting a Ph.D. faculty member about becoming the chair of the student's dissertation committee. The chair will suggest other potential committee members.
6. After completion of the dissertation, the candidate is given an oral examination dealing with the structure and content of the dissertation. The dissertation defense is discussed on page 54 of the Graduate Catalog. The candidate will be notified in writing of the committee's approval of the dissertation.

## Sample Course and Examination Schedule

The following sample schedule outlines the sequence of Ph.D. course requirements.

| Fall Semester - Year $\mathbf{1}$ |  |  |
| :--- | :--- | :--- | :--- |
| ECON | 6100 | Mathematical Methods for Economics |
| ECON | 6110 | Macroeconomics I |
| ECON | 6120 | Microeconomics I |
| ECON | 6620 | Econometrics I |


| Spring Semester - Year 1 |  |  |
| :--- | :--- | :--- |
| ECON | 6630 | Econometrics II |
| ECON | 7110 | Macroeconomics II |
| ECON | 7120 | Microeconomics II |
| ECON | 7660 | History of Economic Thought |

Summer - Year 1
ECON $7130 \quad$ Microeconomics III
Qualifying Exam-Macroeconomics
Qualifying Exam-Microeconomics
Fall Semester - Year 2
ECON 7630
Econometrics III
ECON 7600
ECON/FIN Instructional Development and Practice in Economics

Spring Semester - Year 2
ECON 7900 Research Seminar
ECON/FIN Major Field Course II
ECON/FIN Minor Field Course II
ECON/FIN Elective Course
Summer - Year 2
Field Exam Major Field Exam
Field Exam Econometrics or Minor Field Exam
Fall Semester - Year 3
ECON 7500 Economics Workshop
ECON 7640 Dissertation Research
Spring Semester - Year 3
ECON 7640 Dissertation Research
Summer - Year 3
Proposal Dissertation Proposal

| Fall Semester - Year 4 |  |  |
| :---: | :---: | :---: |
| ECON | 7640 | Dissertation Research |
| Spring Semester - Year 4 |  |  |
| ECON | 7640 | Dissertation Research |
| Summer - Year 4 |  |  |
| Defense |  | Dissertation Defense |
| Required Core Courses |  |  |
| ECON | 6100 | Mathematical Methods for Economics |
| ECON | 6110 | Macroeconomics I |
| ECON | 7110 | Macroeconomics II |
| ECON | 6120 | Microeconomics I |
| ECON | 7120 | Microeconomics II |
| ECON | 7130 | Microeconomics III |
| ECON | 6620 | Econometrics I |
| ECON | 6630 | Econometrics II |
| ECON | 7630 | Econometrics III |
| ECON | 7600 | Instructional Development and Practice in Economics |
| ECON | 7660 | History of Economic Thought |
| ECON | 7900 | Research Seminar |
| ECON | 7500 | Economics Workshop |

## Fields of Study

Every student has to choose two fields and four 7000-level field courses.

Financial Economics
Required Courses:
FIN 7710 Advanced Financial Economics I
ECON/FIN 7720 Advanced Financial Economics II
Labor Economics and Employment Relations Required Courses:
ECON 7510 Advanced Labor Economics I
ECON 7520 Advanced Labor Economics II

## Courses in Economics [ECON]

5310 Public Finance II. Three credits. (Same as FIN 5310.) Prerequisites: ECON 2410 and 2420. Current issues in taxation, theory of income taxation, consumption taxes, property and wealth taxes. Advanced treatment of tax incidence, tax efficiency, income distribution, fiscal federalism, and state and local budget issues. Students are required to complete a term project resulting in a paper available for peer review and a class presentation.

5390 Employee Benefits. Three credits. (Same as FIN 5390.) Includes descriptive review and taxation, legislative, and administrative dimensions of the major components of employee benefit plans such as retirement systems, deferred compensation plans, health insurance, death benefits, disability benefits, paid and unpaid time off. Technical analysis and problem solving emphasized to develop applied skills. Social insurance and international benefits integrated.

5400 Business and Government. Three credits. Structure, conduct, and performance of American industries; public policies toward business; economic analysis of these policies.

5420 Labor and Human Resource Economics. Three credits. Current issues and theories, returns to training and education (human capital), earnings differences; theoretical interpretation and empirical economic impacts of unions, government regulation, and
international forces upon labor relations and labor markets; human resource information systems (spreadsheet applications) and integration of Internet information sources and forensic analysis.

5440 International Economics. Three credits. Differences between domestic trade and international trade and foundations of international trade; economic effects of free trade and restricted trade; mechanisms of international payments and structure of balance of payments; history and contemporary issues of trade policies and world monetary systems.

5470 Economic Development of the Third World. Three credits. Conditions and problems of the less developed countries; causes, processes, and consequences of economic development; introduction to basic growth models, development theories, and strategies for development. Economic as well as noneconomic factors studied.

5490 Industrial Relations Legislation Three credits. Effects of domestic and international legislation and regulation of governments on the practical functions of labor markets and employment relations in the public and private sectors. Specific dimensions include unions and other collective and collaborative institutions, workforce diversity, and the impacts of technology. Domestic and international electronic resources heavily integrated into learning experiences based on research and analysis.

5510 Unions and Collective Bargaining. Three credits. Collective bargaining contract administration and alternative dispute resolution mechanisms. Information technology tools. Analytical focus on the impacts of total compensation agreements, strike strategies, and the interdependent influences of the union and non-union sectors of the economy. Practical cases emphasized. A brief international comparative survey of unions and other collective relationships included.

5620 Econometrics and Forecasting. Three credits. Prerequisites: QM 2610 and MATH 1810 or equivalent. Application of mathematical and statistical techniques to economic problems. Introduces econometric model construction and estimation and related problems. Requires use of econometric computer package.

5840 Study Abroad. Three credits. Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

5890 Internship in Economics. One to three credits. Prerequisite: Graduate status and recommendation of advisor. Supervised work experience in cooperating business firms or government agencies together with specialized academic study relating to the work experience.

5990 Problems in Economics. One to three credits. Problems for intensive study are chosen in joint consultation between student and instructor.

6000 Managerial Economics. Three credits. Prerequisites: ECON 2410 and 2420 or 4570 or equivalent. Primarily for M.B.A. students with particular attention given to business administration and finance topics including demand analysis, production and cost decisions, quantitative market analysis, capital budgeting, and alternative theories of the firm. Special emphasis on case studies, software applications, and interpretation of economic meanings of related analyses.

6030 Survey of Economic Theory. Three credits. Overview of microand macroeconomic principles with an emphasis on applications to decision making in a competitive market environment. May not be used for elective credit in graduate business degree programs.

6040 Survey of Employment Relations. Three credits. Survey of employment relations with emphasis on developing a general context, computational skills, and ability to conduct informed discourse on the content. Computational skills include simple time value and statistical analysis limited to calculator or spreadsheet applications. Students expected to demonstrate presentation skills utilizing different media. For current or aspiring professionals in employment relations who need to retool and/or need a course which, upon successful completion, will facilitate entry into the M.A. in Economics Industrial Relations concentration. Also a suitable elective for students in related fields of study.

6100 Mathematical Methods for Economics. Three credits. Preparation for core courses in economics. Covers all essential mathematical methods including basic matrix algebra, exponential and logarithmic functions, the basics of differential calculus, unconstrained optimization, constrained optimization subject to equality and inequality constraints, comparative statics, and the Envelope theorem.

6105 Advanced Mathematical Methods for Economics. Three credits. Prerequisite: ECON 6100 or equivalent as determined by instructor. Covers methods of dynamic optimization including calculus of variations, optimal control, and dynamic programming and the mathematical prerequisites of these methods such as integration, difference and differential equations, and advanced matrix algebra. Covers basics of mathematical statistics. Computer applications emphasized.

6110 Macroeconomics I. Three credits. Prerequisite: ECON 6100 taken concurrently or approval by instructor. Serves as the first semester core course in macroeconomic theory for students pursuing a Ph.D. in economics. First part focuses on long-run economic growth. Topics include exogenous and endogenous growth theory, overlapping generations models, and the neoclassical growth model. Second part focuses on short-run economic fluctuations. Topics include real business cycle theory, traditional Keynesian theories, and New Keynesian models featuring rational expectations. Mathematical models used to address competing theories; comfort with multivariate calculus and linear algebra essential.

6120 Microeconomics I. Three credits. Prerequisite: ECON 6100 taken concurrently or approval by instructor. Serves as the first semester core course in microeconomic theory for students pursuing a Ph.D. in economics. First part develops the theory of consumer choice, with extensions including the labor supply model, intertemporal choice, and choice under uncertainty. Second part models theory of the firm in both perfectly competitive and monopoly industry settings. Mathematical models used to derive theories; comfort with multivariate calculus and linear algebra essential.

6200/ 7200 Economics of Education. Three credits. Prerequisite: ECON 6120 or permission. The role of education in creating human capital, the existence of externalities, the returns to education, the education "industry," and the issues surrounding education reform.

6390/ 7390 Social Insurance, Pensions, and Benefits. Three credits. Prerequisites: ECON 4390/5390 (or equivalent). An intensive survey of policy and practice in employee benefits, with an indepth examination of pension plans. Covers an interdisciplinary mix of economics, accounting/finance, law, and regulation.

6400 Economics of Health Care. Three credits. Applications of microeconomics to analysis of the health care delivery system in the United States. Major issues include the private and public demand for health care, supply of health care, cost of health care, the pricing of health care, and the analysis of the various health care reform policies of the industry. Examines how economics can provide valuable insights into the above problems of social choice.

6430 Seminar on Public Finance. Three credits. (Same as FIN 6430.) Examines the role of government in the allocation and distribution of society's resources. Topics include theories of government sector growth, public and quasi-public goods, externalities and agency theory, transitivity and completeness of voting preferences, income redistribution and economic justice, social insurance, health care programs, tax shifting and incidence analysis, efficiency and equity in taxation, and efficiency and redistributive aspects of deficit financing. Topics may involve case studies such as budget formulation, environmental policies, payroll taxes, and alternative tax structures.

6440 Special Topics in Economics. One to three credits. Independent study of a particular topic selected by the student and approved by the instructor. Provides an opportunity to study special areas of interest for which regular courses are not offered.

6450 Seminar on Monetary Policy. Three credits. (Same as FIN 6450.) Prerequisite: ECON 3210 or equivalent recommended. Objectives and limitations of monetary policy, alternative monetary theories underlying policy decisions and the controversy among theories, transmission channels of monetary policy, alternative strategies used to achieve the objectives of monetary policy, practical considerations in the execution of monetary policy, global linkages and monetary policy, and the effects and consequences of policy decisions on economic activity and business decisions.

6460/ 7460 Seminar on Financial Markets. Three credits. (Same as FIN 6460/7460.) Prerequisite: FIN 3000 or 3010 or 6000 or equivalent. Credit flows within the U.S. and the global economies, the economic and financial forces influencing the general level of interest rates and the relationship among interest rates, the characteristics of key short- and long-term financial assets, new financial instruments, derivative instruments, global financing linkages, global linkages among financial instruments and among national economies, and interest rate risk, including the measurement and means of protection.

6470/ 7470 Seminar in Economic Growth and Development. Three credits. Prerequisites: ECON 2410 and 2420 and permission of instructor. Satisfies the M.B.A. international course requirement. Critical analysis of causes, processes, and consequences of economic development; evaluation of various policies and strategies for economic development; introduction to advanced growth models and theories. Special emphasis on the less developed countries

6500 Modern Issues in Labor and Industrial Relations. Three credits. A survey of labor market and employment relations issues evolving in our changing economic environment. Coverage includes the concepts of efficiency, equity, and ethics of market and institutional behavior and economic issues related to work force demographics and work place organization. Distinction drawn between cooperative and competitive models of economic organization and outcomes in the employer-employee relations environment. Internet labor market information sources and international comparisons incorporated.

6510 Theory and Analysis in Labor Economics and Industrial Relations. Three credits. Prerequisite: ECON 4570 or 6000 or 4420/5420 (or equivalent of either). Recommended prerequisites: Courses or equivalent experience involving financial computations, spreadsheet applications, and statistical software. Micro and macro theory of labor demand and supply and government policy implications, economic theory and measurement of human capital, returns to education, discrimination, income distribution, and impacts of international trade.

6520 Special Media Projects. Three credits. Nontraditional learning experiences. Approval includes faculty and student written mutual agreement and conformance to departmental standards for independent study. Examples of special projects include production of CDs, DVDs, cable TV programming, Internet projects, internships that clearly add nonredundant learning experiences, or highly applied projects that demonstrate the integration of information technologies into mainstream business or other organization decision making.

6530/7530 International Trade Theory and Policy. Three credits. Prerequisite: ECON 5440 or equivalent background recommended. Advanced study of the key topics covered and introduction to other topics not covered in ECON 5440. Critical examination of major issues and evaluation of latest theories in international trade and monetary relations.

6540 Japanese Society and Business. Three credits. (Same as SOC 6710.) Japanese economy, business practices, and social and physical environment in comparison with those in other countries, particularly the United States.

6550 Studies in Economic Development: Pacific Asia. Three credits. Prerequisite: ECON 5470 or equivalent recommended. Analysis and evaluation of processes of economic development with focus on a specific area of the United States or of the world. Area covered varies.

6560 Mergers, Acquisitions, and Corporate Restructuring. Three credits. (Same as FIN 6560.) Issues covered include the reasons firms merge, buyer and seller motivations, the assessment of merger prospect value, merger waves and their consequences, the concentration of economic power resulting from mergers, policies toward mergers, the effects of takeover defenses, and the effects of mergers on the economy.

6570/ 7570 Industrial Organization and Strategy. Three credits. Prerequisites: ECON 6120 and 6620 (or equivalent) or permission of the instructor. Historical overview of the development of industrial organization as a field, followed by intensive review of the recent theoretical and empirical literature on industry behavior and strategy. Behavior of firms in oligopoly markets emphasized. Topics include basic theory of non-cooperative games, welfare effects of non-competitive behavior, and antitrust and regulatory policy toward such behaviors.

6620 Econometrics I. Three credits. (Same as FIN 6620.) Prerequisite: ECON 4620 or equivalent. Focuses on ordinary least squares regression analysis, covering the problems of specification, multicollinearity, heteroskedasticity, autocorrelation, and endogeneity. SAS statistical software used as a tool for manipulating data, conducting forecasts, carrying out Monte Carlo simulations, and performing statistical inference.

6630 Econometrics II. Three credits. Prerequisite: ECON 6620 or permission of instructor. Emphasizes methods of time series analysis, including Box-Jenkins methods, general-to-specific modeling, volatility models, vector autoregressions, unit roots and cointegration, unobserved component and state space models, and neural
networks. Integrates practical applications in various computing environments including SAS, RATS, and Matlab.

6640 Thesis Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6660/ 7660 History of Economic Thought. Three credits. Prerequisites: Graduate status and proficiency in reading and writing English. Examines the history of Western economics beginning with the ancient Greeks, including the medieval scholastics, the early modern mercantilists, and selected thinkers from classical liberal economics, socialism, the historical and institutionalist schools of economics, neoclassical economics, and contemporary economics.

6730 Seminar on Financial Institutions. Three credits. (Same as FIN 6730.) Focus on the common and distinctive aspects of the provision of financial services and the management of risk associated with those services. Roles, characteristics, and operation of financial institutions, constraints that these institutions face in meeting that objective, regulatory environment within which they operate, risks that they face and the management of those risks, evolution experienced during the 1980s and 1990s, and the probable course of change in the years ahead.

6999/ 7999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

7110 Macroeconomics II. Three credits. Prerequisites: ECON 6100 and 6110. Second semester core course in macroeconomic theory for students pursuing a Ph.D. in economics. Focuses on modern intertemporal macroeconomics. Develops discrete-time dynamic optimization techniques and examines the role of fiscal and monetary policies in centralized and decentralized economics and their welfare implications. Reviews recent developments in economic growth theory and international macroeconomics. Focus of course is quantitative but developing intuition about macroeconomic dynamics stressed.

7120 Microeconomics II. Three credits. Prerequisites: ECON 6100 and 6120. Second semester core course in microeconomic theory for students pursuing a Ph.D. in economics. Examines oligopolies and pricing strategies with game theory, general equilibrium including the incorporation of public goods and externalities, and information economics with asymmetric information in principle-agent models. Mathematical models used to derive the theories; comfort with multivariate calculus and linear algebra essential.

7130 Microeconomic III. Three credits. Prerequisite: ECON 7120. Third semester course in microeconomic theory for students pursuing a Ph.D. in economics. Advanced methods used in practical applications in microeconomics. Topics include set theory approach to cost and production with an emphasis on measurement methods for productivity and efficiency, multifactor productivity and index numbers, and applications of game theory to issues in law and economics, political economy, and finance. Familiarity with calculus, linear algebra, and game theoretic analysis of basic strategies in oligopoly expected.

7250 Methods of Outcome Assessment. Three credits. Prerequisites: ECON 7120 and 7630. Deals with outcomes assessment of the educational process. Covers techniques to rank educational
institutions, methods to assess the effectiveness of educational programs, ways to evaluate individual courses or instructors, and methods to assess student learning. Key quantitative tools that are used in outcomes assessment, including data envelope analysis, stochastic frontier models, and hierarchical linear models. Also considers the political and incentive problems that typically arise in implementing assessment methods in practice.

7500 Economics Workshop. One credit. Students present material related to their dissertation proposals or ongoing dissertation research to peers and the graduate faculty in a formal workshop setting. Credit is awarded after a student completes two separate workshop presentations that are judged satisfactory by the attending graduate faculty.

7510 Advanced Labor Economics I. Three credits. Prerequisites: Student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. First half of an introduction of leading theories in labor economics including labor supply, education and human capital, job search, labor demand, compensating wage differentials and discrimination, contracts, risk-sharing, incentives, and collective bargaining. Frequent use of multivariate regression analysis and other modern econometric techniques allows students to enhance skills necessary to conduct independent research in the field.

7520 Advanced Labor Economics II. Three credits. Prerequisite: Student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Second half of an introduction of the leading theories in labor economics including unemployment and inflation, employment allocation and job loss, technological progress, globalization, inequalities, labor market policies, and institutions and labor market performance. Frequent use of multivariate regression analysis and other modern econometric techniques allows students to enhance skills necessary to conduct independent research in the field.

7550 Quantitative Policy Analysis in International Economics. Three credits. Prerequisites: ECON 6530, 7120, and 7630. Applica-tions-oriented course emphasizing quantitative tools to analyze policy issues related to international trade, exchange rates, sectoral resource allocation, and growth. Topics include an extended introduction to trade policy analysis using a general equilibrium modeling framework. Practical aspects of general equilibrium modeling emphasized and applied to a particular issue of interest, such as the impact of trade liberalization on labor markets and growth or the impact of trade and exchange rate distortions on resource allocation and growth.

7600 Instructional Development and Practice in Economics. Three credits. Prerequisite: Student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Workshop environment where students present key economic concepts, use new technology, organize and structure courses and individual classes, use assessment tools, and deal with conflict in the classroom. Offers preparation to teach undergraduate classes in economics.

7610 Economic Internship. Three credits. Prerequisites: FOED 7520 and SPSE 7550. Supervised teaching of undergraduate economics courses.

7630 Econometrics III. Three credits. Prerequisites: ECON 6620 and 6630; student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Third course in the econometrics sequence with an emphasis on nonlinear estimation methodology for cross section and panel data. Includes discussion of various qualitative and limited dependent variable models, including those for discrete responses, censored and truncated data, sample selection problems, treatment effects, and duration
analysis. Incorporates practical applications in SAS, STATA, and other computing environments.

7640 Dissertation Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled, student should register for at least one credit hour of doctoral research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

7710 Advanced Financial Economics I. Three credits. (Same as FIN 7710.) Prerequisite: Student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Provides an integrated treatment of a variety of dynamic optimization and dynamic equilibrium models and examines their empirical implications for individual choices and, in particular, savings and asset prices. Three frameworks studied: infinitely lived representative agent models, heterogenous agent models, and representative and heterogenous agent models with financial frictions. Advanced numerical solution methods and panel data estimation techniques also incorporated.

7720 Advanced Financial Economics II. Three credits. (Same as FIN 7720.) Prerequisite: Student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Introduction to leading theories in monetary economics including measurement of the empirical impact of monetary shocks on real activity, money in the utility function and cash-in-advance models, and New Keynesian models featuring sluggish price and wage adjustment. Emphasis on the analysis of interest rate rules and the conduct of optimal monetary policy under commitment and discretion. Frequent use of numerical dynamic programming and empirical estimation of monetary models allows students to enhance skills necessary to conduct independent research in the field.

7900 Research Seminar. Three credits. Prerequisites: ECON 7630; student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Students practice writing academic papers, critiques, and monographs in economics and finance with some emphasis on developing a viable dissertation proposal. Incorporates a detailed discussion of essential steps in the publication process such as identifying a topic, fitting it into the literature, developing a theoretical background, preparing the data, choosing an appropriate methodology, and presenting the results, as well as pitfalls to avoid in working on dissertations and academic papers.

## Courses in Finance [FIN]

5310 Public Finance II. Three credits. (Same as ECON 5310.) Prerequisites: ECON 2410 and 2420. Current issues in taxation, theory of income taxation, consumption taxes, property and wealth taxes. Advanced treatment of tax incidence, tax efficiency, income distribution, fiscal federalism, and state and local budget issues. Students are required to complete a term project resulting in a paper available for peer review and a class presentation.

5360 Management of Financial Institutions. Three credits. Prerequisite: FIN 3210 or equivalent or consent of instructor. Application of principles of institution management with a focus on operations, policy making, asset, liability, and capital management of commercial banks and nonbank financial institutions.

5390 Employee Benefits. Three credits. (Same as ECON 5390.) Includes descriptive review and taxation, legislative, and administrative dimensions of the major components of employee benefit plans such as retirement systems, deferred compensation plans, health insurance, death benefits, disability benefits, paid and unpaid time off. Technical analysis and problem solving emphasized to
develop applied skills. Social insurance and international benefits integrated.

5430 Real Property Valuation. Three credits. Prerequisite: FIN 2450 or consent of instructor; FIN 3010 strongly recommended. Theory and methods of real property valuation. Qualitative and quantitative analysis incorporated to appraise residential and incomeproducing properties. Comparable sales, cost-depreciation, and income capitalization analysis emphasized.

5590 Problems in Real Estate. Three credits. Current controversial conditions in the field of real estate with concentration on major problems and policies in managing real estate and other related resources.

5710 Insurance in Estate Planning. Three credits. Prerequisite: FIN 3610 or permission of instructor. Insurance as it may relate to estate planning examined in detail. Focus on estate planning principles including the problems of estate liquidity, taxation, governmental regulation, and costs involved in handling estates. Also included are ownership provisions and beneficiary designations, settlement options, and trusts.

5730 Insurance Company Operations. Three credits. Prerequisite: FIN 3610 or permission of instructor. Insurance marketing, underwriting, reinsurance, rate making, claims adjusting, loss control activities, and other functions and activities.

5750 Risk Management. Three credits. Prerequisite: FIN 3610 or permission of instructor. Analysis of major sources of liability loss exposures and the insurance coverages designed to meet those exposures. Noninsurance techniques such as loss control and risk transfer are also discussed.

5790 Problems in Insurance. Three credits. Prerequisite: FIN 3610 or permission of instructor. Application of various insurance coverages to fulfillment of personal, business, and social needs. Special problems are chosen or assigned in areas of the student's interest in joint consultation between student and instructor.

5840 Study Abroad. Three credits. Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

5890 Internship in Finance. Three credits. Prerequisite: Graduate status and recommendation of advisor. Supervised work experience in cooperating business firms or government agencies together with specialized academic study relating to the work experience.

5990 Problems in Finance. One to three credits. Chosen in joint consultation between student and instructor.

6000 Survey of Financial Management. Three credits. Principles and tools of financial management including time value of money, security valuation, funds acquisition and capital budgeting, and cost of capital. May not be used for elective credit in graduate business degree programs.

6430 Seminar on Public Finance. Three credits. (Same as ECON 6430.) Examines the role of government in the allocation and distribution of society's resources. Topics include theories of government sector growth, public and quasi-public goods, externalities and agency theory, transitivity and completeness of voting preferences, income redistribution and economic justice, social insurance,
health care programs, tax shifting and incidence analysis, efficiency and equity in taxation, and efficiency and redistributive aspects of deficit financing. Topics may involve case studies such as budget formulation, environmental policies, payroll taxes, and alternative tax structures.

6440 Readings in Finance. One to three credits. Independent read-ings-based study of a particular topic in finance selected by the student and approved by the instructor. Provides an opportunity to study special areas of interest for which regular courses are not offered.

6450 Seminar on Monetary Policy. Three credits. (Same as ECON 6450.) Prerequisite: ECON 3210 or equivalent recommended. Objectives and limitations of monetary policy, alternative monetary theories underlying policy decisions and the controversy among theories, transmission channels of monetary policy, alternative strategies used to achieve the objectives of monetary policy, practical considerations in the execution of monetary policy, global linkages and monetary policy, and the effects and consequences of policy decision on economic activity and business decisions.

6460/ 7460 Seminar on Financial Markets. Three credits. (Same as ECON 6460/7460.) Prerequisite: ECON 3210 or equivalent. Credit flows within the U.S. and the global economies, the economic and financial forces influencing the general level of interest rates and the relationship among interest rates, the characteristics of key short- and long-term financial assets, new financial instruments, derivative instruments, global financing linkages, global linkages among financial instruments and among national economies, and interest rate risk, including the measurement and means of protection.

6550 Real Estate Investment. Three credits. Prerequisites: FIN 2450 and 3010. Development of a framework for making real estate investment decisions and for analyzing real estate investment alternatives.

6560 Mergers, Acquisitions, and Corporate Restructuring. Three credits. (Same as FIN 6560.) Issues covered include the reasons firms merge, buyer and seller motivations, the assessment of merger prospect value, merger waves and their consequences, the concentration of economic power resulting from mergers, policies toward mergers, the effects of takeover defenses, and the effects of mergers on the economy.

6620 Econometrics I. Three credits. (Same as ECON 6620.) Prerequisite: ECON 4620 or equivalent. Focuses on ordinary least squares regression analysis, covering the problems of specification, multicollinearity, heteroskedasticity, autocorrelation, and endogeneity. SAS statistical software used as a tool for manipulating data, for conducting forecasts, for carrying out Monte-Carlo simulations, and for performing statistical inference.

6710 Financial Analysis. Three credits. Prerequisite: FIN 3010 or 6000. Theory of corporate finance with applications. Techniques and problems for maximizing wealth through the application of discounted cash flow analysis. Emphasis on risk, capital budgeting, and capital structure.

6720 Cases in Financial Management. Three credits. Prerequisite: FIN 6710. Applications-oriented approach to managerial problemsolving. Topics may include working capital management, capital budgeting, cost of capital estimation, lease/purchase decisions, bond refunding, and international issues.

6730 Seminar on Financial Institutions. Three credits. (Same as ECON 6730.) Focus on the common and the distinctive aspects of the provision of financial services and the management of risk associated with those services. Roles, characteristics, and operation of financial institutions, constraints that these institutions face in meeting that objective, regulatory environment within which they operate, risks they face and the management of those risks, evolution experienced during the 1980s and 1990s, and the probable course of change in the years ahead.

6740 Security Analysis. Three credits. Prerequisite: FIN 3810 or consent of instructor. Interpretation of financial statements, valuation and selection of securities, security risk, legal and regulatory issues, and agency problems.

6860 International Financial Management. Three credits. Prerequisite: FIN 3010 or 6000 . International capital markets, exchange rate exposure, risk management, and other multinational finance issues. Essential not only for United States exporters, but also for those facing competition from abroad.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

7710 Advanced Financial Economics I. Three credits. (Same as ECON 7710.) Prerequisite: Student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Provides an integrated treatment of a variety of dynamic optimization and dynamic equilibrium models and examines their empirical implications for individual choices and, in particular, savings and asset prices. Three frameworks studied: infinitely lived representative agent models, heterogenous agent models, and representative and heterogenous agent models with financial frictions. Advanced numerical solution methods and panel data estimation techniques also incorporated.

7720 Advanced Financial Economics II. Three credits. (Same as ECON 7720.) Prerequisite: Student must have passed Ph.D. qualifying exams in microeconomics and macroeconomics. Introduction to the leading theories in monetary economics including measurement of the empirical impact of monetary shocks on real activity, money in the utility function and cash-in-advance models, and New Keynesian models featuring sluggish price and wage adjustment. Emphasis on the analysis of interest rate rules and the conduct of optimal monetary policy under commitment and discretion. Frequent use of numerical dynamic programming and empirical estimation of monetary models allows students to enhance skills necessary to conduct independent research in the field.

# Department of Educational Leadership 

James O. Huffman, Chair<br>Jones Hall 323

The Department of Educational Leadership offers the Specialist in Education degree (Ed.S.) and the Master of Education degree (M.Ed.) with majors in Administration and Supervision and Curriculum and Instruction. The Ed.S. in Administration and Supervision offers specializations in K-12 public schools and higher education. The Ed.S. Curriculum and Instruction major offers a specialization in technology and curriculum design and a specialization in English as a second language.
The M.Ed. in Administration and Supervision offers a concentration in Library Science and specializations in K-12 public schools and higher education. The M.Ed. in Curriculum and Instruction offers a concentration in English as a Second Language and a specialization for the professional education coursework for teacher licensure (Secondary Education Licensure Path). A graduate minor in Library Science is available.
Normally, for admission to the specialist's or master's programs, a satisfactory score on the Miller Analogies Test, the Graduate Record Exam, the Praxis II (Principles of Learning and Teaching), or a valid Tennessee teacher license is required.
Applicants for the Ed.S. and M.Ed. degrees should submit a completed application, transcripts, three reference forms, and verification of test scores or copy of teaching license to the Graduate Office. Once the completed file is received in the department, an advisor is assigned and the file is reviewed by the Educational Leadership Graduate Admission Board. Students should consult an advisor to determine what courses to schedule each semester.

Students pursuing an M.Ed. or Ed.S. degree must be fully admitted to the program prior to the completion of their initial semester of coursework.

## Requirements for the Specialist in Education

Candidate must

1. hold a master's degree.
2. complete a minimum of 30 semester hours with a minimum of 15 at the 7000 level.
3. have teacher licensure. The licensure requirements will be waived for the higher education specialization and other special circumstances. In the event licensure is waived, some prerequisite courses may be required prior to full admission into the program. A student seeking a licensure waiver must initiate a written request with the advisor, seek approval from the chair and dean of the College of Education and Behavioral Science, and forward the request to the departmental office, Jones Hall 321.
4. be admitted by the Educational Leadership Graduate Admissions Board prior to their initial semester of coursework.
5. file a degree plan with the Graduate Office prior to the completion of 21 hours.
6. successfully complete a written comprehensive examination or oral presentation of research project during the semester of graduation (exam may be retaken once during a subsequent semester).

## Administration and Supervision Major (Ed.S.) Specialization: K-12 Public Schools

Those seeking licensure should consult the department chair.

## Required Courses ( $9-12$ semester hours)

SPSE 7200 Administrative Behavior: Theory into Practice
FOED 7060 Seminar in Educational Foundations
and
Each student will select either the research path (SPSE 7010 and FOED 7610) or the practicum path (SPSE 7190)

Specialized Core ( 12 semester hours) with at least 3 hours at the 7000 level; selected with an advisor
Electives ( 6 semester hours) selected with advisor

## Administration and Supervision Major (Ed.S.) Specialization: Higher Education

## Required Courses ( 12 semester hours)

SPSE 7200 Administrative Behavior: Theory into Practice
FOED 7060 Seminar in Educational Foundations

## and

Each student will select either the research path (SPSE 7010 and FOED 7610) or the practicum path (SPSE 7190)

Specialized Core ( 12 semester hours) with at least 3 hours at the 7000 level; selected with an advisor
Electives ( 6 semester hours) selected with advisor

## Curriculum and Instruction Major (Ed.S.)

## Required Courses ( 12 semester hours)

SPSE 7130 The Curriculum: Structures and Functions
FOED 7060 Seminar in Educational Foundations
and
Each student will select either the research path (SPSE 7010 and FOED 7610) or the practicum path (SPSE 7190)

Specialized Core ( 12 semester hours) with at least 3 hours at the 7000 level; selected with an advisor
Electives (6 semester hours) selected with an advisor

## Curriculum and Instruction Major (Ed.S.) Specialization: Technology and Curriculum Design

Teacher licensure is not required for the specialization in Technology and Curriculum Design. Instead, candidates must meet testing requirements as outlined by Graduate Studies for admission to the specialization (a GRE or MAT test score).

## Required Courses ( $\mathbf{1 5}$ semester hours)

SPSE 6140 Teacher Leadership for School Improvement
SPSE 7010 Educational Research Methodology
SPSE 7130 The Curriculum: Structures and Functions
FOED 7060 Seminar in Educational Foundations
FOED 7610 Directed Individual Educational Research
Specialized Core (12 semester hours)
SPSE 6900 Learning Systems and Instructional Design
SPSE 6960 Preparation and Utilization of Instructional Materials
SPSE 7500 Studies in Education: Administration
YOED 6680 Issues and Trends in Teaching and Learning
Elective (3 semester hours)
SPSE 6600 Microcomputers in Educational Administration
SPSE 7090 Seminar: Conducting Program for School Improvement
SPSE 7520 Studies in Education: Curriculum
FOED 6030 School and Community Relations
Curriculum and Instruction Major (Ed.S.)
Specialization: English as a Second Language
(Not a licensure add-on ESL program)
Required Courses ( 12 semester hours)
SPSE 7010 Educational Research Methodology
SPSE 7130 The Curriculum: Structures and Functions
FOED 7060 Seminar in Educational Foundations
FOED 7610 Directed Individual Educational Research
Specialized Core (15 semester hours)
SPSE 7520 Studies in Education: Curriculum
SPSE 6900 Learning Systems and Instructional Design
SPSE 7090 Seminar: Conducting Program for School Improvement
FOED 7080 Contributions of Psychology to Education
YOED 6680 Issues and Trends in Teaching and Learning
Electives (choose one - 3 semester hours)
SPSE 6390 School Law
SPSE 6520 Studies in Education: Curriculum

## Requirements for the Master of Education

Candidate must

1. hold a bachelor's degree.
2. complete 33 semester hours with no more than 30 percent of the total degree hours dually listed as undergraduate/ graduate hours. (Students should refer to the appropriate major for specific requirements.)
3. have teacher licensure. The licensure requirements will be waived for the higher education specialization and other special circumstances. In the event licensure is waived, some prerequisite courses may be required prior to full admission into the program. A student seeking a licensure waiver must initiate a written request with the advisor, seek approval from the chair and dean of the College of Education and Behavioral Science, and forward the request to the departmental office, Jones Hall 321.
4. be admitted by Educational Leadership Graduate Admissions Board prior to completion of their initial semester of coursework.
5. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
6. successfully complete a written comprehensive examination during the semester of graduation (may be retaken once during a subsequent semester).

## Administration and Supervision Major (M.Ed.) Specialization: K-12 Public School

Students must be admitted to the program prior to the completion of 12 semester hours.
Completion of this program will meet course requirements for Tennessee administration licensure. Additional state requirements must be met. Requirements for licensure should be checked in the Teacher Licensing Office, McWherter Learning Resources Center 170.

NOTE: Due to State Board of Education requirements, the Administration and Supervision licensure program will be under revision. Please contact the Educational Leadership Department office for advising (615-898-2855) prior to applying for or beginning coursework in the program.
Required Courses (33 semester hours)
FOED 6020 Educational Foundations
FOED 6030 School and Community Relations
FOED 6610 Analysis and Application of Educational Research
SPSE 6010 Organization and Administration of Public Schools
SPSE 6040 Supervision of Instruction
SPSE 6050 Instructional Leadership
SPSE 6120 Professional Internship, 9 credits; (may substitute for SPSE 6040, 6400, 6600)
SPSE 6340 School Finance
SPSE 6390 School Law
SPSE 6400 The Principalship
SPSE 6430 Introduction to Curriculum Development
SPSE 6600 Microcomputers in Educational Administration

## Administration and Supervision Major (M.Ed.) Specialization: Higher Education

Required Courses ( 9 semester hours)
FOED 6020 Educational Foundations
FOED 6610 Analysis and Application of Educational Research
SPSE 6080 Studies in Leadership
Specialized Core (12 semester hours)
FOED 6580 The College Student
SPSE 6530 Administration of Higher Education
SPSE 6600 Microcomputers in Educational Administration
SPSE 6210 Legal Issues in Higher Education
Electives (12 semester hours)
To be selected with approval of advisor

## Administration and Supervision Major (M.Ed.) Concentration: Library Science

Students must be admitted to the program prior to the completion of their initial semester. Completion of this program will meet course requirements for Tennessee endorsement as a library information specialist. Additional state requirements must be met for initial teacher licensure. Requirements for licensure should be checked in the Teacher Licensing Office, McWherter Learning Resources Center 170. For students seeking initial licensure (library only), a student teaching experience (9 credits) is required in place of LIBS 6180 and 6190.
Please see the libraryscience Web site athttp://mtsu32.mtsu.edu: 11485.

Required Courses (33-39 semester hours)
LIBS 5150 Books, Media, and Literacy for Children
LIBS 5160 Books, Media, and Literacy for Young People and Adults
LIBS 6110 School Library Administration
LIBS 6120 Classification and Cataloging Media and Materials
LIBS 6130 Principles of Librarianship
LIBS 6170 Basic Reference Materials
LIBS 6180 Library Science Practicum PreK-6
LIBS 6190 Library Science Practicum 7-12
LIBS 6200 School Library Media Center Skills and Issues
SPSE 6430 Introduction to Curriculum Development
FOED 6610 Analysis and Application of Educational Research
For students seeking initial teacher licensure, a student teaching experience ( 12 semester hours) is required.

## Curriculum and Instruction Major (M.Ed.)

Students must be admitted to the program prior to the completion of 12 hours of coursework.
The Curriculum and Instruction program is designed to foster the development of teaching skills that result in increased pupil performance. By analyzing curriculum choices and strategies, along with best teaching practices, those who complete this program will be better equipped to provide an environment in which students engage in relevant and meaningful learning activities.

## Required Courses (9 semester hours)

FOED 6020 Educational Foundations
FOED 6610 Analysis and Application of Educational Research
SPSE 6430 Introduction to Curriculum Development

> Specialized Core (18 semester hours) YOED 6680 Issues and Trends in Teaching and Learning SPSE 6140 Teacher Leadership for School Improvement

Electives ( 6 semester hours)
To be selected with approval of advisor

## Curriculum and Instruction Major (M.Ed.)

Concentration: English as a Second Language
Core Courses ( 9 semester hours)
SPSE 6430 Introduction to Curriculum Development
FOED 6020 Educational Foundations
FOED 6610 Analysis and Application of Educational Research

## Required Courses (15 semester hours)

YOED 6020 Reading, Writing, and Learning Methods for ESL
FOED 6850 Cultural Issues in Education
FL 6700 Introduction to Linguistics
FL 6900 Issues in Foreign Language Acquisition
ENGL 5540 Approaches to Teaching ESL Grammar and Writing

## Electives (6 hours)

SPSE 6480 Instructional Excellence in Secondary Schools
ENGL 5510 Modern English Grammar and Usage*
*Prerequisite to ENGL 5540
The following courses may also be approved as electives if students have taken either SPSE 6480 or ENGL 5510 to satisfy degree requirements for a previous degree earned at MTSU:
SPED 6800 Exceptional Children and Youth
PSY 6530 The Psychology of Reading and Reading Development READ 6710 Adolescent Literacy

Practicum (3 semester hours):*
SPSE 6710 Practicum in English as Second Language for PreK-3, 1 hour credit
SPSE 6720 Practicum in English as Second Language (4-8), 1 hour credit
SPSE 6700 Practicum in English as Second Language for Grades 9-12, 1 hour credit
*Ten hours of field experience must be completed at each level

## Curriculum and Instruction Major (M.Ed.) Specialization: Secondary Education Licensure Path

Required Courses (9 semester hours)
FOED 6020 Educational Foundations
FOED 6610 Analysis and Application of Educational Research
SPSE 6430 Introduction to Curriculum Development
Specialized Core (24-30 semester hours)
SPSE 6480 Instructional Excellence in Secondary Schools
SPSE 6640 Microcomputers in the K-12 Educational Setting
YOED 6680 Issues and Trends in Teaching and Learning
SPSE 6140 Teacher Leadership for School Improvement
FOED 6630 Educational Tests and Measurement
SPED 6800 Exceptional Children and Youth
READ 5460 Teaching Reading in the Content Area
YOED 5510 The Teaching Internship, Grades 7-12

## Minors

A minor in Library Science consists of 18 semester hours. A minor in Education consists of 12 semester hours selected with the consent of the advisor. The Master of Arts in Teaching and the Master of Science in Teaching degrees require a minor in Education to be approved by the minor advisor.

## Non-degree, "Plus 30," and Add-on Endorsements

Students taking courses for licensure renewal, add-on endorsements, or "plus 30" upgrade on teacher licensure should register as non-degree students. Students enrolling in 6000level courses must hold a bachelor's degree, and students enrolling in 7000-level courses must hold a master's degree. Non-degree-seeking students cannot register for 7000-level courses without departmental permission.

## Courses in Foundations of Education [FOED]

6020 Educational Foundations. Three credits. Assists educational personnel in developing contexts and concepts in which educational problems and issues may be understood through awareness of findings in humanistic and behavioral studies.

6030 School and Community Relations. Three credits. The reciprocal relationship of the two and the skills necessary for analyzing problems and utilizing data and technical skills in planning effective school-community relations programs.

6520/ 7520 Problems of Evaluation in Higher Education. Three credits. Introduction to testing theory, design, and construction. Use of the evaluation process and instruments; instructions, advising, and research situations.

6570/7570 Issues in Higher Education. Three credits. Higher education in America and its historical, philosophical, political, and sociological background, development, and relationships. Current trends and problems, particularly those relating to the financial and legal aspects.

6580/ 7580 The College Student. Three credits. The changing nature of the college student with emphasis on institutional efforts to provide for the development of the student.

6610 Analysis and Application of Educational Research. Three credits. Qualitative and quantitative research applicable to the field of education. Both producers and consumers of educational research with a literature review presented to support possible solutions to significant hypotheses or problems.

6630 Educational Tests and Measurements. Three credits. Basic concepts in educational measurement and evaluation; evaluation as a part of the teaching-learning process; utilization of evaluation for instructional improvement.

6850 Cultural Issues in Education. Three credits. Ways the school and community can give greater understanding of and improve the life chances of minority group members.

6999/ 7999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

7060 Seminar in Educational Foundations. Three credits. Opportunities to think reflectively and critically on the historical, philosophical, and psychological foundations of education and attendant implications.

7080 Contributions of Psychology to Education. Three credits. Concepts and generalizations of the various theories of psychology and their relationships to education in such areas as motivation, retention, evaluation, discipline, capacity, practice, understanding, transfer-creative thinking, problem solving, and methods of instruction.

7560 Seminar in College Teaching. Three credits. Development of the student with focus on teaching and learning.

7610 Directed Individual Educational Research. Three credits. Prerequisite: SPSE 7010. It is recommended that this class be taken the following semester after enrollment in SPSE 7010. Culmination of research sequence (FOED 6610 and SPSE 7010) which requires studying a professional educational problem through completing and presenting a research project.

7611 Directed Individual Educational Research. One credit. Prerequisite: FOED 7610. Must be taken each semester (not including summer) until research is completed. Completion of the research problem begun in FOED 7610. Students should continue to register for FOED 7611 each semester until completion. S/U grading.

## Courses in Youth Education [YOED]

5110 Directed Teaching, Grades 7-12. Nine to twelve credits. Prerequisites: All required professional education courses; appropriate special methods course(s); admission to teacher education. A full-day, full-semester supervised teaching experience in a public school classroom. Pass/Fail. NOTE: YOED 5110 will be offered for nine credits effective Fall 2005.

5510 The Teaching Internship, Grades 7-12. Three to nine credits. Directed field experience which will meet specific needs related to individual needed competencies. Applicant must meet all prerequisites for directed teaching.

6020 Reading, Writing, and Learning Methods for ESL. Three credits. (Same as FL 6020.) Provides teaching ideas for promoting oral, reading, and writing development in English for K-12 English learners. Language acquisition theory, classroom organization, teaching strategies, and assessment procedures for effective English learner instruction.

6100 Aviation Workshop. Four credits. (Same as AERO 6100.) A first course in aerospace education; provides an overview of aerospace historically and in the future.

6110- International Aerospace Education Seminar. Three credits each.
6112 Acquaints teachers with aerospace implications on an international scale. Outstanding international points of interest in six or more countries visited. Offered in July Term of the summer.
6110 Europe/Mideast
6111 The Americas
6112 The Far East
6540 Problems in Aerospace Education. One, two, or three credits. (Same as AERO 6540.) Content varies with needs of individual students who are interested in making a specialized study of current problems in the field of aerospace education.

6680 Issues and Trends in Teaching and Learning. Three credits. Emphasis on examining current issues and trends in teaching and learning.

6700 Advanced Aviation Workshop. Four credits. (Same as AERO 6700.) Builds on prior experiences in aviation/aerospace. Essential for the prospective teacher of aerospace education courses at any level.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

## Courses in School Personnel Services Education [SPSE]

5210 General Methods Including A/V. Three credits. A general course.
5220 Technology in Teaching. Three credits. Prerequisites: Admission to Teacher Education Program. Use of selected hardware and software in the teaching/learning process. Design and creation of inexpensive teaching and learning materials.

5260 Problems in Education. One, two, or three credits. Opportunity for individuals or groups to work on problems related to their individual topics. Credit to be determined at the time of scheduling.

6000/ 7000 Professional Negotiations. Three credits. Concepts and principles of operating a school district under the master contract. Special emphasis on the laws of various states relative to the professional negotiations process.

6010 Organization and Administration of Public Schools. Three credits. Basic concepts, principles, and practices in local, state, and federal organization and administration of education.

6040 Supervision of Instruction. Three credits. Development and purposes of supervision involving principles and techniques for organization and facilitation of programs at the school and system level.

6050 Instructional Leadership. Three credits. Research on student learning, effective teaching, and effective schools. Attention given to processes for promoting school improvement.

6080/ 7080 Studies in Leadership. Three credits. Roles, responsibilities understandings, and behavior patterns in effective administrative and supervisory personnel. Developing sensitivity to individuals, the nature and structures of groups, and the problems of communication within and among groups and individuals.

6090/ 7090 Seminar: Conducting Program for School Improvement. Three credits. Emphasizes motivation, identification of needs and goals, planning and organization, and utilization of various resources as components of successful school improvement programs.

6120/ 7120 Professional Internship. Nine credits. Requires approval of departmental chair and agreement of superintendent of the school district. May be substituted for SPSE 6040, 6600, and 6400. Educational administration and supervision experiences learned in the school setting under the supervision of a sponsoring mentor. Internship in cooperating school systems.

6140 Teacher Leadership for School Improvement. Three credits. Assessing standard teaching practices, analyzing the relationship between effective teaching and effective schools, and developing strategies for instructional and school improvement. Includes experiences to help students become more reflective in their daily teaching.

6210/ 7210 Legal Issues in Higher Education. Three credits. The legal framework as it pertains to higher education and its operations. Special attention given to rights of students as well as professors. Law cases, constitutional provisions, attorney general's opinions, rules and regulations of the Tennessee Board of Regents, Tennessee Board of Trustees, and the Tennessee Higher Education Commission studied and discussed.

6250/ 7250 Seminar in Curriculum Improvement. Three credits. For the advanced major in curriculum development utilizing small group or seminar approach. Issues and research in curriculum improvement analyzed critically.

6310 Supervising Student Teachers. Three credits. Administration and supervision of student teaching.

6330 Elementary and Middle School Principalship. Three credits. The organization and administration of elementary and middle schools with emphasis on current practices, trends, and problems.

6340 School Finance. Three credits. State, local, and federal financing of education; includes taxation trends, school funds, and apportionment; evaluation of equalization plans; state bond loan programs; development and administration of school budgets; education and economy.

6380 Secondary School Administration. Three credits. Organization and administration of the modern high school with emphasis on current practices and problems.

6390 School Law. Three credits. Legal framework within which public schools operate. Special attention given to the legal rights and liabilities of school personnel and school board members. School laws, case laws, constitutional provisions, attorneys' general rulings, and regulations of the State Board of Education emphasized.

6400 The Principalship. Three credits. Organization and administration of the modern K-12 school with emphasis on current practices and problems.

6430 Introduction to Curriculum Development. Three credits. Opportunity to study, discuss, and evaluate modern practices and procedures in curriculum development and reorganization in schools and school systems.

6450 Elementary and Middle School Curriculum. Three credits. Concepts, processes, and skills related to curriculum development and evaluation.

6480 Instructional Excellence in Secondary Schools. Three credits. Development of creative approaches for secondary classroom teaching in order to stimulate creative and critical thinking abilities of students.

6500/ 7500 Studies in Education: Administration. One, two, or three credits. Individual or small group study and/or research in educational administration which provides an opportunity for in-depth study and specialization for majors. To be structured for student needs by teacher. Repeatable up to six hours.

6520/ 7520 Studies in Education: Curriculum. One, two, or three credits. Individual or small group study and/or research in the area of curriculum development. To be structured for student needs by teacher. Repeatable up to six hours.

6530/ 7530 Administration of Higher Education. Three credits. Complexity of the structure of higher education (national, regional, state, and local) and how it is organized. Attention given to the interrelationships of the institution and its internal and external constituencies.

6540/ 7540 Overview of Higher Education. Three credits. Higher education in America. Attention given to its historical, philosophical, political, and sociological background, development, and relationships. Includes current trends and problems, particularly those which relate to the financial and legal aspects of higher education.

6550 Supervised Field Experience. Three credits. Direct field experience in appropriate areas of school operation which will meet specific needs related to such individual matters as career plan, position changes (principals, supervisors, superintendents, curriculum directors, etc.), or needed competencies.

6560/ 7560 Studies in Education: Supervision. One, two, or three credits. Individual or small group study and/or research in the area of supervision of instruction. To be based on individual needs and structured by teacher. Repeatable up to six hours.

6590/ 7590 Independent Study in Higher Education. One, two, or three credits. A practicum in higher education. Course will vary to meet the needs of individual students who are interested in making a specialized study of current problems in the field of higher education.

6600 Microcomputers in Educational Administration. Three credits. Offers preparation for incorporating microcomputer technology into the school work-place. Student designs a model school administrative unit by applying the microcomputer skills and understanding acquired.

6640 Microcomputers in the K-12 Educational Setting. Three credits. Offers preparation for incorporating microcomputer technology into the K-12 school environment. Student designs a computerassisted instruction project by applying the microcomputer skills and understanding acquired.

6700 Practicum in English as Second Language for Grades 9-12. One credit. A practicum course for the ESL teacher. Includes ten hours
field experience in the ESL classroom with grades 9-12 students from different cultures.

6710 Practicum in English as Second Language for PreK-3. One credit. A practicum course for the ESL teacher. Includes ten hours field experience in the ESL classroom with preK-3 students from different cultures.

6720 Practicum in English as a Second Language (4-8). One credit. A practicum course for the ESL teacher. Includes ten hours field experience in the ESL classroom with grades 4-8 students from different cultures.

6900 Learning Systems and Instructional Design. Three credits. Assessment of effectiveness and efficiency of various learning systems and learning modules. Stresses need for systematic approaches to instruction. Practice in stating behavioral objectives, motivation, adaptation, evaluation, and systems assessment in which media are utilized as integral parts of learning modules.

6910 Problems in Learning Resources. Three credits. Consideration of recent developments in curriculum, teaching, physical facilities, and innovations in library service and media utilization. Includes participation in projects such as media and materials for handicapped, educational TV, library skills, graphic communication, library activities for specific subjects or groups, and individualization of instruction.

6920 Automation of Library Processes. Three credits. Application of data processing and computerization techniques to acquisitions, cataloging, circulation, and business operations of libraries and media centers. Includes an examination of newer developments such as MARC, facsimile transmission, and automated retrieval of data. Basic technical courses recommended prior to taking this course.

6960 Preparation and Utilization of Instructional Materials. Three credits. (Same as LIBS 6960.) Discussion and examination of technology- based learning materials and adaptation to classroom instruction and individual learning styles/needs. Design, creation, and production of technology-based learning materials that reflect professional standards, good design principles, understanding of curriculum design, and audience needs.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

7010 Educational Research Methodology. Three credits. It is recommended that this class be taken within the first 9 hours of the program. FOED 6610 or appropriate research course is recommended prior to this course. Designing research studies, including development of understandings, as well as skills and techniques, needed in gathering, structuring, interpreting, and presenting data required for educational research. SPSE 7010 is a prerequisite for enrollment in FOED 7610, which is recommended to be taken the following semester.

7020 Administration of School Personnel. Three credits. School district personnel problems. Consideration by school administrators of relationship between the school and the community with special reference to the administrative role.

7040 Seminar in Supervision. Three credits. Identification and investigation of the problems of supervision and research; experimentation in the use of supervisory techniques.

7050 School Business Management. Three credits. Reading, discussion, and problem solving in the field of business administration.

7100 The Junior Community College. Three credits. History, philosophy, organization, administration, current developments, and problems in two-year colleges.

7110 Readings in Educational Administration. Three credits. Review of the research literature on the social and political processes involved in the development and implementation of public policy and legislation relating to education at the national, state, and local levels.

7130 The Curriculum: Structures and Functions. Three credits. Scope, sequence, organization, and priorities involved in the development of "continuity of educational experience" from kindergarten through grades 13-14.

7150 Curriculum Study and Instructional Design. Three credits. Readings in current research relative to basic and emerging ideas of curriculum development and instructional design.

7160 Practicum in Curriculum Development. Three credits. Principles and practices of curriculum construction applied through simulated and field experiences.

7190 Professional Field Experience. Six credits. Provides direct field experience in appropriate areas of education in collaboration with the University, the school mentor, and the student.

7200 Administrative Behavior: Theory into Practice. Three credits. An exploration of the relevant new developments in the field of educational administration, including recent concepts and research.

7320 Educational Facilities and Transportation Services. Three credits. Development of competencies in the areas of school plant planning, maintenance and utilization, financing, analysis of transportation, survey of school plant, site selection, and educational specifications.

7550 Instructional Development in Higher Education. Three credits. Addresses effective college teaching, instructional strategies, and use of technology in teaching at the higher education level.

## Courses in Library Science [LIBS]

5150 Books, Media, and Literacy for Children. Three credits. Materials suitable for elementary school children including a study of leisure time interests and curricular needs, criteria for evaluating materials, and related aids used in their selection.

5160 Books, Media, and Literacy for Young People and Adults. Three credits. Basically the same approach as LIBS 5150 but adapted to the secondary school and adult level.

6110 School Library Administration. Three credits. Purpose, structure, and function of the school library media center and the library program.

6120 Classification and Cataloging Media and Materials. Three credits. Simplified procedures for classifying books and audio/visual materials, cataloging routines, and filing.

6130 Principles of Librarianship. Three credits. Presents the broad field of library service and librarianship as a profession. Emphasis on the place of the library in the instructional program of the school and on administrative details.

6170 Basic Reference Materials. Three credits. Evaluation and use of basic reference materials for the PreK-12 school library. Discussion of the elements of reference work.

6180 Library Science Practicum PreK-6. Three credits. Prerequisite: 12 hours of library science courses. Opportunity to observe successful materials specialists/librarians at work and to participate in actual operations followed by seminar opportunities for exchange of ideas. 100 contact hours required. Application for placement required.

6190 Library Science Practicum 7-12. Three credits. Prerequisite: 12 hours of library science courses. Opportunity to observe successful materials specialists/librarians at work and to participate in actual operations followed by seminar opportunities for exchange of ideas. 100 contact hours required. Application for placement required.

6200 School Library Media Center Skills and Issues. Three credits. Prerequisites: LIBS 5150, 6110, and 6120. Aspects of the school library media centers, including oral presentations, use of library collection maintenance software, instruction and teaching in the library, and research into a current issue in librarianship.

6511 Directed Student Teaching (Library Science). Nine credits. Prerequisites: 18 hours of library science courses including FOED 6610 and SPSE 6430; FOED 1110 and 2110; SPED 3010; admission to teacher education. Taken in conjunction with YOED 4000. A full-day, full-semester supervised teaching experience in a public school library.

6960 Preparation and Utilization of Instructional Materials. Three credits. (Same as SPSE 6960.) Discussion and examination of technology- based learning materials and adaptation to classroom instruction and individual learning styles/needs. Design, creation, and production of technology-based learning materials that reflect professional standards, good design principles, understanding of curriculum design, and audience needs.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

## Course in Education [TELC]

6006 Teachers as Agents for Change. Three credits. Prerequisites: Program admission. Current issues, trends, and problems commonplace to teaching in public school settings. Offers analytic experiences designed to assist those teaching on Alternative C, Vocational, and Occupational licenses to meet requirements for professional licensure.

# Department of Elementary and Special Education 

## Connie Jones, Chair Jones Hall 225

The Department of Elementary and Special Education offers the Master of Education degree with majors in Curriculum and Instruction, Reading, and Special Education as well as graduate minors in Curriculum and Instruction, Reading, and Special Education. The major in Curriculum and Instruction offers concentrations in Early Childhood Education, Elementary School Education, and Middle School Education. A specialization in Initial Licensure K-6 is also available. Concentrations in Mildly/Moderately Disabled Students, Preschool Disabled Students, Severely/Profoundly Disabled Students, and Vision Disabilities are available through the Special Education major. The Specialist in Education degree is offered with a major in Curriculum and Instruction and concentration in Elementary Education.
The department also offers the Master of Education in Advanced Studies in Teaching and Learning-Regents Online Degree Program (RODP).
Students seeking admission to the Master of Education program are expected to score at least 30 on the Miller Analogies Test or 700 on the Graduate Record Examination or the minimum on a National Teachers Examination that meets Tennessee licensure standards. For admission to the specialist's program, a score of 800 on the Graduate Record Examination or a score of 40 on the MAT is expected.

Applicants for the Ed.S. and M.Ed. degrees in Curriculum and Instruction must have elementary teaching licensure, the attainment of which may require additional undergraduate courses prior to the completion of the degree. Applicants for the M.Ed. degree in Special Education must have a teaching license in special education and a 3.00 undergraduate GPA.

## Requirements for the Specialist in Education

In order to be admitted the candidate must

1. hold a master's degree.
2. have a minimum of three years teaching experience in an elementary setting.
3. have an initial conference with a graduate advisor in the department.

In order to complete the degree, the candidate must

1. complete a minimum of 30 semester hours.
2. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
3. successfully complete a thesis pertaining to an area of emphasis within the scope of elementary education.
4. successfully complete an oral defense.

## Curriculum and Instruction Major (Ed.S.) Concentration: Elementary Education

## Required Core (9 semester hours)

SPSE 7010 Educational Research Methodology
FOED 7060 Seminar in Educational Foundations
SPSE 7130 The Curriculum: Structures and Functions
Specialized Courses ( 15 semester hours)
FOED 7080 Contributions of Psychology to Education
ELED 6290/ 7290 Inquiry in the Classroom
ELED 7220 Seminar in Elementary Education
ELED 7250 From Policy to Practice in American Public Schools
ELED 7640 Ed.S. Thesis Research
Elective Courses ( 6 semester hours)
To be selected with the consent of the advisor
Applicants having previously met any of the course requirements above may, with the consent of the advisor, choose options. Requirements for licensure should be checked in the Teacher Licensing Office, McWherter Learning Resources Center 170.

## Requirements for the Master of Education

In order to be admitted, the candidate must

1. have completed undergraduate prerequisites.
2. hold a current teaching license.
3. have an initial conference with an appropriate graduate advisor in the department.
4. have at least 2.75 undergraduate GPA for full admission and a 2.50 undergraduate GPA for conditional admission.

Any course requiring admission to Teacher Education may require observations, case studies, or other time in K-6 classes.

In order to complete the degree, the candidate must

1. complete a minimum of 33 semester hours with no more than 30 percent of the total degree hours dually listed as undergraduate/graduate hours.
2. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
3. successfully complete a written comprehensive examination to be taken in the last semester of coursework (may be taken no more than twice).

## Curriculum and Instruction Major (M.Ed.) Concentration: Early Childhood Education

| Required Core (9 semester hours) |  |  |
| :---: | :---: | :---: |
| FOED | 6020 | Educational Foundations |
| FOED | 6610 | Analysis and Application of Educational Research |
| SPSE | 6430 | Introduction to Curriculum Development |
| Specialized Core (12 semester hours) |  |  |
| ELED | 6010 | The Teacher as Reflective Practitioner (prerequisite for all ELED courses) |
| ELED | 6011 | The Teacher as Reflective Practitioner (must be taken in last semester of coursework) |
| ELED | 6090 | Creating Learning Environments for Young Children |
| ELED | 6200 | The Classroom as Community |
| ELED | 6620 | Assessment of Teaching and Learning |
| Specialized Courses (6 semester hours) |  |  |
| READ | 6000 | Foundations of Reading |
| READ | 6720 | Diagnostic and Remedial Practices in the Improvement of Reading |
| READ | 6760 | Early Literacy |
| READ | 6120 | Current Issues in Reading Instruction |
| ELED | 6000 | Teaching Writing |
| ELED | 6030 | The Early Childhood Practitioner, K-4 |
| ELED | 6130 | Current Issues in Elementary Language Arts |
| ELED | 6140 | Current Issues in Elementary Social Studies |
| ELED | 6170 | The Multi-Age Classroom |
| ELED | 6180 | Research and Advanced Methods in Elementary School Mathematics |
| ELED | 6190 | Current Issues in Elementary Science |
| ELED | 6230 | Integrating Curriculum and Teaching, K-8 |
| ELED | 6250 | Technological Tools for Thinking and Learning |
| ELED | 6330 |  |
| ELED | 6400 | Teaching the Special Needs Learner in the Heterogenous Classroom |

## Electives ( 6 hours)

To be selected within the range of specialized courses or with the consent of the advisor.

## Concentration: Elementary School Education

Required Core (9 semester hours)
FOED 6020 Educational Foundations
FOED 6610 Analysis and Application of Educational Research
SPSE 6430 Introduction to Curriculum Development
Specialized Core ( $\mathbf{1 2}$ semester hours)

| ELED | 6010 | The Teacher as Reflective Practitioner <br> (prerequisite for all ELED courses) |
| :---: | ---: | :--- |
| ELED | 6011The Teacher as Reflective Practitioner <br> (must be taken in last semester of coursework) |  |
|  | 6090 | Creating Learning Environments for Young Children OR |
| ELED | 6100 | The Early Adolescent Learner |
| ELED | 610 | The Classroom as Community |
| ELED | 6200 | The |
| ELED | 6620 | Assessment of Teaching and Learning |

Specialized Courses ( 6 semester hours)
READ 6000 Foundations of Reading
READ 6120 Current Issues in Reading Instruction
READ 6710 Adolescent Literacy
READ 6720 Diagnostic and Remedial Practices in the Improvement of Reading
READ 6760 Early Literacy
ELED 6000 Teaching Writing
ELED 6030 The Early Childhood Practitioner, K-4
ELED 6130 Current Issues in Elementary Language Arts
ELED 6140 Current Issues in Elementary Social Studies
ELED 6170 The Multi-Age Classroom

| ELED | 6180 | Research and Advanced Methods in Elementary School |
| :--- | :--- | :--- |
|  | Mathematics |  |
| ELED | 6190 | Current Issues in Elementary Science |
| ELED | 6230 | Integrating Curriculum and Teaching, K-8 |
| ELED | 6250 | Technological Tools for Thinking and Learning |
| ELED | 6330 | Play |
| ELED | 6400 | Teaching the Special Needs Learner in the |
|  | Heterogeneous Classroom |  |

Electives ( 6 semester hours)
To be selected within the range of specialized courses or with the consent of the advisor.

## Concentration: Middle School Education

Required Core (9 semester hours)
FOED 6020 Educational Foundations
FOED 6610 Analysis and Application of Educational Research
SPSE 6430 Introduction to Curriculum Development
Specialized Core ( $\mathbf{1 2}$ semester hours)
ELED 6010 The Teacher as Reflective Practitioner (prerequisite for all ELED courses)
ELED 6011 The Teacher as Reflective Practitioner (must be taken in last semester of coursework)
ELED 6100 The Early Adolescent Learner
ELED 6200 The Classroom as Community
ELED 6620 Assessment of Teaching and Learning

## Specialized Courses ( 6 semester hours)

READ 6000 Foundations of Reading
READ 6120 Current Issues in Reading Instruction
READ 6710 Adolescent Literacy
READ 6720 Diagnostic and Remedial Practices in the Improvement of Reading
ELED 6000 Teaching Writing
ELED 6130 Current Issues in Elementary Language Arts
ELED 6140 Current Issues in Elementary Social Studies
ELED 6170 The Multi-Age Classroom
ELED 6180 Research and Advanced Methods in Elementary School Mathematics
ELED 6190 Current Issues in Elementary Science
ELED 6230 Integrating Curriculum and Teaching, K-8
ELED 6250 Technological Tools for Thinking and Learning
ELED 6330 Play
ELED 6400 Teaching the Special Needs Learner in the Heterogenous Classroom

## Electives

To be selected within the range of specialized courses or with the consent of the advisor.

## Specialization: Initial Licensure K-6

The Master of Education major in Curriculum and Instruction with a specialization in Initial Licensure K-6 is a 46 -hour program which includes a nine-hour internship. These candidates must meet requirements for admission to teacher education and internship in addition to the traditional graduate admission requirements.

## Required Core ( 9 semester hours)

FOED 6020 Educational Foundations
FOED 6610 Analysis and Application of Educational Research
SPSE 6430 Introduction to Curriculum Development
Specialized Required Core ( 9 semester hours)
ELED 6500 Learning and Teaching
ELED 6250 Technological Tools for Thinking and Learning

| SPED | 6800 |
| :--- | :--- | :--- |
| ELED | Exceptional Children and Youth |
| OR | 6400 | | Teaching the Special Needs Learner in the |
| :--- |
|  |

Specialized Courses ( 18 semester hours)
All courses require admission to Teacher Education.
READ 5130 Corrective Reading in the Elementary School
READ 6520 Teaching Reading
ELED 6510 Language Arts
ELED 6530 Teaching Social Studies
ELED 6540 Teaching Science
ELED 6550 Teaching Mathematics
ELED 6560 Assessment
Specialized Required Internship (9 semester hours)
Requires admission to Teacher Education
ELED 5510 The Teaching Internship, Grades 1-8

## Minor in Curriculum and Instruction

Students desiring a graduate minor in Curriculum and Instruction in one of the three concentrations described above-Early Childhood, Elementary School Education, or Middle School Education-should complete 18 semester hours in elementary education to include ELED 6090 or 6100,6200 , and 6620.
This does not meet licensure requirements in elementary education.

## Reading Major (M.Ed.)

The Master of Education in Reading degree requires 36 semester hours and leads to the Reading endorsement, Reading Specialist, PreK-12. Three years successful classroom experience as a licensed teacher and the PRAXIS 10300 are required to add the Reading Specialist endorsement.

```
Required Core ( 30 semester hours - *required for licensure)
READ 6000 Foundations of Reading*
READ 6710 Adolescent Literacy*
READ 6720 Diagnostic and Remedial Practices in the Improvement
            of Reading*
READ 6730 Curriculum and Supervision of Reading*
READ 6750 Research Seminar in Reading*
READ 6760 Early Literacy*
READ 6790 The Reading Practicum*
ELED 6500 Learning and Teaching*
ELED 6510 Language Arts*
ELED 6620 Assessment of Teaching and Learning*
Elective Courses ( 6 semester hours selected from the following):
READ 5130 Corrective Reading in the Elementary School
READ 5460 Teaching Reading in the Content Area
READ 6120 Current Issues in Reading Instruction
READ 6260 Individualizing Reading
DYST 6000 Introduction to Dyslexia
DYST 6010 Identifying Students with Dyslexia
DYST 6011 Interventions for Dyslexia
DYST 6020 Adolescents with Dyslexia and other Literacy
                                    Difficulties
ELED 6000 Teaching Writing
ELED 6130 Current Issues in Elementary Language Arts
ELED 6330 Play
ELED 6400 Teaching the Special Needs Learner in the
                Heterogeneous Classroom
LIBS 5150 Books, Media, and Literacy for Children
```

LIBS
5160 Books, Media, and Literacy for Young People and Adults

Special Education Options (3 semester hours)
To be selected with consent of advisor

## Electives ( 9 semester hours)

To be selected with consent of advisor

## Minor in Reading

A minor is available in Reading, the content of which is determined through collaborative consultation with the student's major advisor and the advisor for Reading.

## Special Education Major (M.Ed.)

In order to be admitted candidate must

1. have an undergraduate GPA of 2.75 or higher OR a minimum of twelve hours in special education at the graduate level with a GPA of 3.0 or higher. Those with a GPA of 2.75 or higher but lower than 3.0 must take the Miller Analogies Test (and obtain a minimum score of 30) or the Graduate Record Exam (and obtain a minimum score of 700). An individual with a GPA of 3.0 or higher (in undergraduate or twelve hours of graduate courses) will not need to take either test.
2. have a teaching license in special education for admission to the programs in mild/moderate or severe/profound; a teaching license in special education, early childhood education, or elementary education for admission to the program in preschool; or a teaching license in special education, elementary education, or secondary education for admission to the program in vision.

Candidates without the appropriate license must be admitted to the graduate program as non-degree-seeking students. Once licensure requirements are met, candidate may reapply for admission to the program in special education.

A candidate not licensed in special education may apply for a waiver to the license requirement by signing a waiver form stating that he/she wishes to receive a master's degree in special education without a license to teach.

Students may apply for admission to the master's program in special education without having a formal appointment and prior approval of special education faculty and the coordinator of graduate admissions.

## Concentration: Mildly/Moderately Disabled Students

## Required Core (9 semester hours)

SPED 6780 Issues in Special Education
FOED 6610 Analysis and Application of Educational Research
SPED 6710 Action Research in Special Education
Concentration Courses ( $\mathbf{1 5}$ semester hours)
SPED 6300 Theoretical Perspectives on Mild/Moderate Disabilities
SPED 6310 Issues in Assessment of Mild/Moderate Disabilities
SPED 6330 Theories of Instruction for Mild/Moderate Disabilities
SPED 6360 Transition Education and Services for Exceptional Learners
SPED 6380 Collaborative/Consulting Skills in Special Education
Restricted Electives ( 9 semester hours)
To be selected with consent of advisor

Concentration: Preschool Disabled Students Required Core (3 semester hours)<br>FOED 6610 Analysis and Application of Educational Research<br>Concentration Courses ( $\mathbf{1 5}$ semester hours)<br>SPED 6900 Characteristics of Preschool Children with Disabilities<br>SPED 6910 Developmental Assessment<br>SPED 6920 Laboratory Experience I<br>SPED 6930 Methods of Working with Children Who Are Developmentally Delayed<br>SPED 6950 Laboratory Experience II

Restricted Electives ( $\mathbf{1 5}$ semester hours)
To be selected with consent of advisor

## Concentration: Severely/Profoundly Disabled Students

## Required Core (9 semester hours)

SPED 6780 Issues in Special Education
FOED 6610 Analysis and Application of Educational Research
SPED 6710 Action Research in Special Education
Concentration Courses ( $\mathbf{1 5}$ semester hours)
SPED 6380 Collaborative/Consulting Skills in Special Education
SPED 6400 Characteristics and Needs of Severely/Profoundly Disabled
SPED 6430 Theories of Instruction for Severely/Profoundly Disabled Students
SPED 6910 Developmental Assessment
CDFS 6300 Application of Child Development Principles I
Restricted Electives ( 9 semester hours)
To be selected with consent of advisor

## Concentration: Vision Disabilities

## Required Core (9 semester hours)

SPED 6380 Collaborative/Consulting Skills in Special Education
SPED 6780 Issues in Special Education
FOED 6610 Analysis and Application of Educational Research
Concentration Courses ( 24 semester hours)
SPED 6500 Anatomy and Physiology of the Eye
SPED 6510 Introduction to Braille and Communication Skills for the Visually Impaired
SPED 6520 Advanced Braille and Communication Skills for the Visually Impaired
SPED 6530 Educational Procedures for the Visually Impaired
SPED 6540 Advanced Educational Procedures for the Visually Impaired
SPED 6550 Orientation and Mobility for the Classroom Teacher
SPED 6560 Nature and Needs of the Visually Impaired
SPED 6570 Practicum in Special Education (Vision) OR
SPED 5510 Teaching Internship: Special Education

## Special Education Master's—Non-Licensed

Persons who do not hold a license in special education but wish to work toward a master's degree in mild/moderate or severe/profound special education may ask for an exception to the license prerequisite. This would allow the individual to complete a master's degree but the degree would not lead to licensure. Persons who complete this degree will not be licensed to teach special education upon completion of the degree.

## Minor in Special Education

Students desiring a minor at the graduate level in Special Education must complete 18 semester hours in Special Education to include SPED 6020, 6800, and 12 additional semester hours of 6000 courses in Special Education. This does not meet licensure requirements in Special Education.

## Master of Education in Advanced Studies in Teaching and LearningRegents Online Degree Program (RODP)

The Master of Education in Advanced Studies in Teaching and Learning (M.Ed.) with a concentration in Childhood Literacy Reading is offered through the Regent's Online Degree Program (RODP), and is delivered following the standard protocol established for the delivery of RODP courses and programs. The mission of this program is to provide advanced professional preparation in the area of reading and language arts for practicing teachers.
Program of Study (33 hours)
Required
ASTL $6700 \quad$ Portfolio Development
ASTL $6701 \quad$ Teacher as Learner
ASTL 6721 Theory and Foundation of Developmental Literacy (Literacy I)
ASTL 6703 Knowledge of the Learner
ASTL $6723 \quad$ Understanding and Implementing Best Practices
in Teaching Beginning Literacy (Literacy II)
Specialized Core
ASTL 6705 Assessment of Learning
ASTL 6706 Learning Strategies/Instructional Strategies
ASTL $6725 \quad$ Understanding and Implementing Best Practices for Continued Literacy Growth in the Middle Grades (Literacy III)
ASTL 6726 Diagnosing Literacy Problems K-8 (Literacy IV)
ASTL $6709 \quad$ Action Research
ASTL 6729 Remediation of Literacy Problems K-8 (Literacy V)
Specialized Courses
ASTL 6721, 6723, 6725, 6726, 6729
For more information, refer to the RODP Web site at www .tn.regentsdegrees.org.

## Courses in Elementary Education [ELED]

5110 Directed Teaching Grades K-8. Twelve credits. Prerequisites: READ 4015 and 4035; minimum grade point average of 2.50 overall and in the major; admission to teacher education program; passing scores on the NTE Tests of Communication Skills and General Knowledge. Fulltime, 15 -week semester of supervised teaching experience in the public schools. Pass/Fail.

5200- Observation and Participation. Three credits. Directed labora-
5201 tory experiences for teachers desiring to add an endorsement to their certificates. Includes language arts, math, science, social studies, art, and music.
5200 Kindergarten
5201 Grades 1-6
5260 Problems in Elementary Education. One to three credits. A prob-lem-oriented course, on or off campus, planned and designed for individuals, school faculty, school systems, or other professional groups that will provide opportunities for in-service education
related to assessed needs. Credit toward a degree limited to six semester hours.

5510 The Teaching Internship, Grades 1-8. Nine credits. A supervised internship available only to those with at least one year of paid teaching experience in the major in which endorsement is sought. Applicants must meet all prerequisites for student teaching.

6000 Teaching Writing. Three credits. An in-depth exploration of students' efforts to become writers. Presents theoretical and practical strategies for establishing an effective writing environment based on current research.

6010 The Teacher as Reflective Practitioner. Two credits. Articulates the role of and explores the varied dimensions of the process of reflective teaching as it may be utilized by the elementary, special education, reading, or secondary teacher. Prerequisite for all Curriculum and Instruction (Early Childhood Education, Elementary School Education, and Middle School Education) candidates.

6011 The Teacher as Reflective Practitioner. One credit. A culminating course summarizing and synthesizing the knowledge acquired throughout the graduate program. Must be taken in last semester of graduate work.

6030 The Early Childhood Practitioner, K-4. Three credits. Emphasis on the emerging theories which have influenced current programs.

6090 Creating Learning Environments for Young Children. Three credits. Prerequisite: ELED 6010. In-depth analysis of social, emotional, language, and cognitive variables that impact young children's learning and allow teachers to plan and maintain proactive environments. Required for those students wishing to concentrate in Early Childhood Education.

6100 The Early Adolescent Learner. Three credits. Prerequisite: ELED 6010. Reflects on the early adolescent while focusing on the student-centered school environment and the appropriately well-balanced curriculum. Required for those students wishing to concentrate in Middle School Education.

6130 Current Issues in Elementary Language Arts. One credit. Prerequisite: ELED 6010. Overview of current issues surrounding the teaching of language arts.

6140 Current Issues in Elementary Social Studies. One credit. Prerequisite: ELED 6010. Overview of current issues and trends surrounding the teaching of social studies. Topics will vary from semester to semester.

6170 The Multi-Age Classroom. One credit. Prerequisite: ELED 6010. Examines the basic alternatives and tools that have been shown to be effective in multi-age classrooms in both primary and middle grades.

6180 Research and Advanced Methods in Elementary School Mathematics. Three credits. Explores knowledge and methods needed to effectively teach elementary school mathematics in relation to current research on mathematical pedagogy. Reflects upon teaching in comparison to the current literature on best practices in order to effectively implement these strategies.

6190 Current Issues in Elementary Science. One credit. Prerequisite: ELED 6010. Prerequisite: ELED 6010. Investigates current issues relating to the study and teaching of elementary school science. Topics will vary from semester to semester.

6200 The Classroom as Community. Three credits. Prerequisite: ELED 6010. Explores the classroom community with respect to definitions and practice. Teachers will reflect on how their beliefs and attitudes influence practice. Required for all students.

6210 Seminar on Current Innovations and Trends in Elementary Education. Three credits. Prerequisite: ELED 6010. Recent research in child development, school organization, curriculum, and evaluation.

6220 Seminar in Early Childhood Education. Three credits. Review of issues, programs, and research in early childhood education.

6230 Integrating Curriculum and Teaching, K-8. Three credits. Prerequisite: ELED 6010. Assists elementary and middle school teachers in organizing, assessing, and planning instruction in an integrated program.

6250 Technological Tools for Thinking and Learning. Three credits. Prerequisite: ELED 6010. Learning environments supported by computer technology that promote knowledge construction. Special emphasis on use of the Internet and the design and development of a hypermedia learning environment.

6290/ 7290 Inquiry in the Classroom. Three credits. An in-depth study of the inquiry process as it relates to teachers in the classroom. Theory and practice combine as teachers engage in their own research to improve classroom instruction.

6330 Play. Three credits. Content provides educators with the social, emotional, and cognitive benefits of play for children's learning and development.

6370 Education and Ethno-cultural Diversity. Three credits. Explores the ethno-cultural issues, concepts, and theories that impact teaching practice. Course content linked to students' (anticipated) professional needs and interests. Prior professional, cross-cultural, or international experience welcomed. Exposes participants to social dimensions of ethno-cultural diversity that increasingly impact pedagogy.

6400 Teaching the Special Needs Learner in the Heterogeneous Classroom. Three credits. Prerequisite: ELED 6010 (prerequisite requirement for elementary education majors only). Helps develop skills, beliefs, and attitudes necessary for effectively incorporating and teaching special needs learners in a heterogeneous classroom.

6500 Learning and Teaching. Three credits. Promotes understanding of human learning and development necessary to engender competent, caring professionals by providing opportunities to describe, compare, and contrast various theories in order to create appropriate learning environments.

6510 Language Arts. Three credits. Explores language learning and teaching. Introduces various theories about cognition, language, and language learning, including second language acquisition and various strategies for teaching language arts. Public school practicum required.

6530 Teaching Social Studies. Three credits. Prerequisite: Valid teaching licence or acceptance into the teacher education program. Introduces students to philosophy and need for teaching social studies in the K-6 classroom and to a variety of instructional strategies for teaching social studies.

6540 Teaching Science. Two credits. Prerequisites: Admission to the teacher education program; ELED 6500. Introduces students to various philosophies for teaching science in the K-6 classroom and to a variety of instructional strategies for teaching science.

6550 Teaching Mathematics. Three credits. Prerequisites: Admission to teacher education program or a valid teaching license; ELED 6500. Orientation to the teaching strategies and materials appropriate for teaching mathematics in grades K-6. Emphasis on using a constructivist approach.

6560 Assessment. Two credits. Prerequisite: Admission to teacher education program. Explores evaluation and assessment of children in grades K-6.
6620 Assessment of Teaching and Learning. Three credits. Prerequisite: ELED 6010 (or taken concurrently with 6010 by Elementary Education major only). Familiarizes teachers with assessment techniques that focus on the complex relationship between learning and instruction. Required for all students.

6870 Home-School Interaction. Three credits. Includes approaches, activities, and materials related to parent education.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

7220 Seminar in Elementary Education. Three credits. Explores contemporary issues in education as they relate to the individual teacher, the school as an institution, the school clientele, and the community. Allows the student to adjust individual educational philosophy to a changing society and schools; gives contiguity to other educational experiences.

7250 From Policy to Practice in American Public Schools. Three credits. The effect of public policy on educational practices. Emphasis on exploring policy variations within the educational practices in the U.S. and around the world with a particular emphasis on elementary education.

7260 Problems in Elementary Education. One to six credits. Prerequisite: Nine semester hours of graduate-level courses in elementary education.

7640 Ed.S. Thesis Research. One to six credits. Prerequisite: Six semester hours of 7000 -level courses in elementary education. Supervised, in-depth study on an individual or group basis of an area of elementary education. Student may register two semesters for three hours credit each semester or for six hours credit one semester. Open only to post-master's degree students.

## Courses in Reading [READ]

5130 Corrective Reading in the Elementary School. Three credits. Prerequisite: A reading methods or literacy course. The modification of assessment and instruction for the resolution of reading problems in the elementary classroom.

5460 Teaching Reading in the Content Area. Three credits. Emphasis on teaching reading in content subjects such as mathematics, science, and social studies in upper elementary, middle school, and secondary schools. Specific suggestions for activities and lesson strategies included. (Available on permission-of-department basis only.)

6000 Foundations of Reading. Three credits. Prerequisite: A reading methods or literacy course. Planning and developing a reading program through extensive reading in the field and seminar participation. Special emphasis on the reading process.

6120 Current Issues in Reading Instruction. One to three credits. Specific issues and trends affecting reading instruction in today's classrooms. Repeatable up to three hours of various topics.

6260 Individualizing Reading. Three credits. Theoretical background, organization, and implementation of individualizing reading through the self-selection of reading materials. Content applicable to elementary, middle school, secondary, adult, and special education teachers.
6520 Teaching Reading. Three credits. Prerequisites: Admission to the teacher education program; ELED 6500 and ELED 6510 may be taken concurrently. Introduces students to the various philosophies for teaching reading in the K-6 classroom and to a variety of instructional strategies for teaching reading.

6710 Adolescent Literacy. Three credits. Approaches to effective literacy enhancement in middle and secondary school programs. Suggestions for meeting the literacy needs of typical and atypical adolescent literacy learners.

6720 Diagnostic and Remedial Practices in the Improvement of Reading. Three credits. Prerequisite: READ 6000 or permission of instructor. Formal and informal tools to document and define a reading difficulty as well as approaches/strategies to overcome such difficulties.

6730 Curriculum and Supervision of Reading. Three credits. The role of the reading specialist. Focuses on preparing reading specialists to work with students and adults in school settings. Planning in-service presentations, grant writing, critiquing materials, and effective reading programs explored.

6750 Research Seminar in Reading. Three credits. Prerequisite: READ 6000, its equivalent, or permission of the instructor. An investigation of significant research related to reading with emphasis on classroom practices, group analysis, and individual study. (Available on permission-of-department basis only.)

6760 Early Literacy. Three credits. A methods course that concentrates on beginning reading and emergent literacy issues in developing reading and writing.

6790 The Reading Practicum. Three to six credits. Prerequisite: READ 6720 or equivalent. A supervised practice in teaching children with various types of reading and learning problems. Student may enroll for 3 hours credit or 6 hours credit in a single semester. May be repeated for up to 6 credits; however, only 3 credits may apply toward the degree.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

## Courses in Special Education [SPED]

5240 Methods and Techniques of Behavior Management. Three credits. Overview of various approaches to behavior management. Application of various approaches in different special education settings. Basis of evaluation of various behavior change techniques.

5260 Problems in Special Education A-Z. One to three credits. A problem-oriented course, on or off campus, planned and designed for individuals, a school faculty, school system, or other profes-
sional groups that will provide opportunities for pre- or in-service education related to assessed needs. Not more than 6 semester hours credit in independent study (SPED 6840) and/or problems (SPED 5260) can be applied toward a degree or licensure.

5280 Assistive Technology in Special Education. Three credits. Prerequisite: Permission of instructor. Introduces students to adaptive/assistive technologies. The technologies will range from low-tech to high-tech and apply to the needs of school-aged students with disabilities. Includes assessing and supporting needs through the delivery of adaptive/assistive technologies.

5320 Directed Teaching in Special Education (Self-contained). Nine credits. Prerequisites: ELED 3150; SPED 6200, 6800; full admission to Directed Teaching. A full-day, ten-week supervised teaching experience in a public classroom. Pass/Fail.

5350 Directed Teaching in Special Education (Resource room). Nine to twelve credits. Prerequisites: ELED 3150; READ 4015 or 4035; SPED 6200 and 6800; full admission to directed teaching. A full-day, ten-week supervised teaching experience in a public classroom. Pass/Fail.

5510 Teaching Internship: Special Education. Nine credits. A supervised teaching experience. Available only to those with at least one year of paid teaching experience in the major in which endorsement is sought. Applicants must meet all prerequisites for student teaching. Pass/Fail.

6020 Overview of Special Education. Three credits. Theories and techniques of providing instruction to exceptional individuals. Designed for individuals without prior specialized experience and/or course work in special education. Not for degree credit.

6200 Educational Diagnostics. Three credits. The role of the special educator in the assessment process; formal and informal assessment devices and procedures; involvement of parents in the evaluation; precision teaching; diagnostic and prescriptive teaching; writing IEPs.

6270 Characteristics and Needs of the Mentally Retarded Child. Three credits. Cognitive, affective, motor, social, and language development of the mentally retarded.

6280 Characteristics and Needs of the Emotionally Disabled Child. Three credits. A survey of theories and research relative to emotional/behavioral problems of children; discussion of classroom models for remediation and specific techniques appropriate for teacher use.

6300 Theoretical Perspectives on Mild/Moderate Disabilities. Three credits. Reviews the various perspectives on mild/moderate disabling conditions from a historical perspective. Viability of each perspective examined. Implications of each for assessment and intervention considered.

6310 Issues in Assessment of Mild/Moderate Disabilities. Three credits. Prerequisite: SPED 6300. A variety of tests and assessment tools within the various theoretical frameworks they represent. Considers the development of diagnostic batteries based on such tests. Particular attention given to the significance of the theoretical perspectives in selecting and interpreting data collected.

6330 Theories of Instruction for Mild/Moderate Disabilities. Three credits. Prerequisite: SPED 6310. A variety of instructional approaches within the various theoretical frameworks from which each evolved. Considers the development and evaluation of IEPs through an integration of learner characteristics, instructional approaches, and educational needs.

6360 Transition Education and Services for Exceptional Learners. Three credits. Prerequisite: Admission to Special Education: Modified program or permission of department. Addresses the knowledge and skills needed to develop and implement effective transition planning from school to adult life. Offers preparation for successful transition from elementary grades, career preparation education, and eventual transition to adult life. Explores a variety of tools, supports, and classroom strategies for creating successful transitions in preparation for adult life.

6370 Mildly/Moderately Disabled Adolescents and Adults. Three credits. The unique status of public school students, ages 16-21 years with mild/moderate disabilities. Focus on career, vocational, and transitional services. Highlights specific concerns and problems in adulthood.

6380 Collaborative/Consulting Skills in Special Education. Three credits. Assistance in developing skills needed for consulting with parents, students, teachers, administrators, and others in the development and implementation of individualized education programs for disabled students.

6400 Characteristics and Needs of Severely/Profoundly Disabled. Three credits. In-depth survey of severely/profoundly disabled students and their needs. Emphasis on cognitive, motor, social, communicative, behavioral, and physical characteristics of this population.

6430 Theories of Instruction for Severely/Profoundly Disabled Students. Three credits. Advanced methods and techniques for teaching severely/profoundly disabled students.

6500 Anatomy and Physiology of the Eye. Three credits. Examines structures of the eye and visual system and diseases/conditions that affect vision. Considers various screening instruments to use for making referrals to eye specialists. Attention given to administration and interpretation of screening instruments.

6510 Introduction to Braille and Communication Skills for the Visually Impaired. Three credits. Offers teachers and professionals who work with visually impaired and blind students skills and competencies in reading and writing braille.

6520 Advanced Braille and Communication Skills for the Visually Impaired. Three credits. Prerequisite: SPED 6510. Reinforces and extends skills learned in SPED 6510. Formatting textbooks and trade books required by visually impaired students in schools. Emphasis placed on learning to use abacus, slate and stylus, and correction slate. Transcription according to Library of Congress standards.

6530 Educational Procedures for the Visually Impaired. Three credits. Presents students with roles and responsibilities of the teacher of the visually impaired, including adaptations of curriculum, environment, equipment, and methods. Available resources at local, state, and national levels. Particular attention given to the deci-sion-making processes required, such as type of reading medium required for specific tasks, use of low-vision aids, appropriateness of various types of modifications, and adaptations of regular curriculum.

6540 Advanced Educational Procedures for the Visually Impaired. Three credits. Necessary skills to conduct functional vision assessments of students of normal intelligence as well as those with multiple disabilities. Assessing communication skills for the visually impaired.

6550 Orientation and Mobility for the Classroom Teacher. Three hours. Basic orientation and mobility techniques to teach visually impaired students to enable them to move around the school environment safely. Included are concept development, protective techniques, basic and advanced sighted guide techniques, and the use of tactual maps.

6560 Nature and Needs of the Visually Impaired. Three credits. Insights into problems associated with visual loss and its impact on individuals, family relations, and seeing populations. Also addresses advantages and limitations of adaptations and specialized instruction, equipment, devices, and aids. Examines the role and effect of various organizations and professionals on services for visually impaired persons.

6570 Practicum in Special Education (Vision). Three credits. Understanding of eye conditions that result in visual disabilities and their implications; training in determining most appropriate modifications. Experiences in assessment of functional vision of students with visual disabilities and multiple disabilities; designed to facilitate application of these skills in real-life experiences with visually impaired and blind learners.

6710 Action Research in Special Education. Three credits. Prerequisite: FOED 6610 or equivalent. Presents skills necessary to conduct classroom research for the purpose of improving learning opportunities for diverse learners.

6720 Working with Parents. Three credits. Understanding the concerns and needs of parents of children who have special needs. Also presents strategies and techniques for working effectively with parents.

6740 Affective Education in the Classroom. Three credits. Theoretical basis for the role of the school in providing instruction in the affective domain. Emphasis on the translation of theories of emotional/social development into educational strategies.

6780 Issues in Special Education. Three credits. Analysis of current issues in the field. Emphasis on the analysis of relevant research.

6800 Exceptional Children and Youth. Three credits. Introduction to problems in identification, etiology, and educational treatment of mentally retarded, gifted, physically and emotionally challenged, learning disabled, and culturally disadvantaged children and youth.

6810 Characteristics and Needs of the Learning Disabled Child. Three credits. An understanding of the causes and characteristics. Formal and informal evaluation instruments. An investigation of various educational approaches to learning disabilities, their theoretical bases, and practical implications.

6840 Independent Study: Special Education. One to three credits. Prerequisite: Consent of the advisor. Enables students to develop and conduct a study based on individual professional interests. No more than 6 semester hours credit in Independent Study (SPED 6840) and/or Problems (SPED 5260) can be applied toward a degree or licensure.
6850 Characteristics and Needs of the Severely Handicapped Child. Three credits. An in-depth survey covering the characteristics and needs for serving the severely disabled. Includes how to develop a program and the IEP.

6860 Characteristics and Needs of the Gifted Child. Three credits. Characteristics, needs, psychological and educational considerations, and identification procedure for gifted children.

6870 Habilitation of Mentally Retarded and Multiple Handicapped Young Adults. Three credits. An in-depth look. Various habilitation models, how they are designed, and how they function.

6880 Educational Procedures in the Education of the Gifted. Three credits. Prerequisite: SPED 6860. Reviews various theoretical models of learning and teaching that are most often used in developing curriculum for the gifted learner. Application of the models is stressed.

6900 Characteristics of Preschool Children with Disabilities. Three credits. Includes an in-depth study of young children delayed in their development. Focus on developmental needs.

6910 Developmental Assessment. Three credits. Evaluative and diagnostic instruments and procedures used with very young and/or multiple disabled individuals.

6920 Laboratory Experience I. Three credits. Practicum experience in settings serving preschool children who have developmental delays. Students will spend 60 hours in each of two practicum settings.

6930 Methods of Working with Children Who Are Developmentally Delayed. Three credits. Current theories, practices, and procedures used to develop programs for preschool children who are developmentally delayed (ages birth to 5 years).

6950 Laboratory Experience II. Three credits. Practicum experience in settings serving preschool children who have developmental delays. Students will spend 60 hours in each of two practicum settings.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

## Courses in Dyslexic Studies [DYST]

6000 Introduction to Dyslexia. Three credits. Prerequisite: Permission of the instructor and bachelor's degree or advanced degree in education or a related field. Overview of the history and science of dyslexia. Examines the value of integrating insights from the cognitive neurosciences into diagnostic, therapeutic, and instructional models in literacy.

6010 Identifying Students with Dyslexia. Three credits. Prerequisites: Permission of the instructor and bachelor's degree or advanced degree in education or related fields; three years of successful professional employment. Details the profile of dyslexia and develops competency in interpreting appropriate testing instruments within a battery designed to differentiate dyslexia from other reading/spelling problems. Develops competency in using assessment data to plan instruction.

6011 Interventions for Dyslexia. Three credits. Prerequisites: Permission of instructor and bachelor's degree or advanced degree in education or related fields; DYST 6000 and 6010; three years of successful professional employment. Details the crucial elements of intervention for children with dyslexia and aims to increase competency in choosing appropriate programs based on student characteristics.

6012 Multisensory Teaching Strategies. Three credits. Prerequisite: Permission of the department and bachelor's degree or advanced degree in the education field. Multisensory teaching of reading, spelling, and handwriting. Participants learn theory and teaching strategies in class and apply their knowledge while tutoring a student during the course. Critiques of tutoring lessons will be provided daily.

6013 Practicum in Multisensory Teaching. One credit. Prerequisites: Permission of instructor; DYST 6012. Focuses on multisensory strategies for teaching advanced skills such as syllabication and structural analysis. Participants apply their knowledge while tutoring a student twice a week for ten weeks. Students submit two videotapes of lessons and supporting materials to the professor for critique.

6020 Adolescents with Dyslexia and Other Literacy Difficulties. Three credits. Prerequisite: Permission of instructor and bachelor's degree or advanced degree in the education field. Overview of literacy difficulties faced by adolescents with particular emphasis on dyslexia. Develops competency in assessing and planning for literacy instruction, within and beyond the general education classroom setting in middle and high school.

6040 Neurobiology of Reading and Dyslexia. Three credits. Overview of the neurobiological and cognitive bases of written language ability and disorders. Topics include neuroanatomy, neurophysiology, neural development, genetics, acquired and developmental disorders of reading and writing. Basic principles of anatomic and functional neuroimaging presented. Importance of distinguishing among biological, cognitive, and behavioral phenomena in research and practice stressed.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

## Courses in Advanced Studies in Teaching and Learning [ASTL]

6701 Teacher as Learner. Three credits. Introduces hardware and software used to create effective literacy learning experiences. Opportunity to further professional development of educators through effective use of technology and to promote and develop reflective learners-learners who are able to use technology to enhance and expand their learning environments.

6706 Strategies of Learning and Instruction. Three credits. Prerequisites: ASTL 6700 and 6701. Examines learning theories and studies their influence on current instructional practices. Students will be asked to reflect on metacognitive processes involved in the decision-making phase of classroom instruction. Alignment of National Board for Professional Teaching Standards with personal instructional practices questioned and studied.

# Department of Engineering Technology 

Walter Boles, Chair<br>Voorhies Industrial Studies Complex 143

The Department of Engineering Technology offers the Master of Science degree in Engineering Technology and Industrial Studies with thesis and nonthesis options and concentrations in Engineering Technology and Occupational Health and Safety. Under the Engineering Technology concentration, the degree requires the student to select courses, as approved by the graduate advisor, that provide the student with a technical area of specialty. Currently, typical technical areas include manufacturing, environmental safety, computer integrated manufacturing, electronics, drafting and design, and quality control. Other technical areas can be designed to meet the student's individual needs, if approved by the graduate advisor. A minor in Industrial Studies is also available at the graduate level.
Normally, a minimum combined score of 800 from the verbal and quantitative sections of the Graduate Record Examination with a minimum score of 300 from the verbal section is required for admission to the master's program.

## Requirements for the Master of Science Degree

## Thesis Option

## Candidate must

1. have completed undergraduate prerequisites of at least 18 semester hours in engineering technology or equivalent coursework approved by the advisor.
2. complete at least 30 semester hours, with 21 semester hours at the 6000 level, to include ETIS 6620 and 6640 and 6 semester hours from the following courses: ETIS 6110, 6180, 6370; 6010 or 6040 .
3. complete 3 semester hours of an approved research tool with a grade of C or better on the undergraduate or graduate level to include mathematical statistics or a course containing statistics (or any other suitable course) as approved by the student's graduate advisor and the graduate coordinator of the ET Department.
4. file a degree plan with the Graduate Office after the completion of 12 graduate credits and prior to the completion of 21 credit hours to include ETIS 6620, 6 hours from ETIS 6020, 6110, 6180, 6370, and 3 hours from
any industrial studies independent study or advanced technical problems course.
5. successfully complete a written comprehensive examination (may be taken no more than twice).
6. complete a major of at least 18 hours.
7. elect whether or not to have a minor. A minor, if elected, must include a minimum of 12 semester hours.
The program may include a cognate of 6 hours in management and marketing, computer science, economics, psychology, or vocational-technical education.

## Nonthesis Option

Candidate must

1. have completed undergraduate prerequisites of at least 18 semester hours in industrial studies or equivalent coursework approved by the advisor.
2. complete at least 36 semester hours with at least 26 semester hours of 6000-level courses to include ETIS 6620 and 6510 or 6910 and 6 semester hours from the following courses: ETIS 6110, 6180, 6370; 6010, or 6040.
3. complete 3 semester hours of an approved research tool with a grade of C or better on the undergraduate or graduate level to include mathematical statistics or a course containing statistics (or any other suitable course) as approved by the student's graduate advisor and the graduate coordinator of the ET Department.
4. file a degree plan with the Graduate Office after completion of 12 graduate credits.
5. successfully complete a written comprehensive examination (may be taken no more than twice).
6. complete a major of at least 18 hours.
7. elect whether or not to have a minor. A minor, if elected, must include a minimum of 12 semester hours.

The program may include a cognate of 6 hours in management and marketing, computer science, economics, or psychology.

## Concentration: Engineering Technology

Candidate must complete

1. requirements for the thesis or nonthesis option.
2. core, approved by the advisor, consisting of emphasizing in one of the following typical areas: environmental safety, computer integrated manufacturing, drafting and design, quality control.
3. minor/cognate and/or additional electives as approved by the advisor.

## Concentration: Occupational Health and Safety

## Candidate must complete

1. requirements for the thesis or nonthesis option.
2. core consisting of ETIS 6020, 6040, 6070, 6620, and 6640 (thesis option) or 6910 (nonthesis).
3. electives to be selected from SAFE 5320, 5350, 6410, 6450, 6470, 6920; EXSC 6650; ET 5420, 5440, 5450, 5970; ETIS 6010, 6110, 6510, 6920; PSY 5350.

## Courses in Engineering Technology and Industrial Studies [ETIS]

6010 Safety Planning. Three credits. Advanced study of planning in occupational safety and health management, including program planning and development methods and techniques as well as various systems approaches to hazard control.

6020 Safety Technology and Engineering. Three credits. Advanced study of the technical components of occupational workplace hazards, hazards analysis, workplace design, current regulatory requirements, engineering techniques for hazard control, personal protective systems, equipment and techniques. Includes a practical application problem of hazard analysis and control.

6040 Occupational and Environmental Hygiene. Three credits. An advanced quantitative study of occupational and environmental health principles, practices, and sampling techniques as required by either consensus or regulatory standards and their specific protocols to protect both workers and the public.

6070 Anthropometric Factors in Accident Prevention. Three credits. The necessity and desirability of a thorough consideration of anthropometric factors when designing facilities and equipment and recognition of those factors most prevalent in accidents.

6110 Designing for Economical Production. Three credits. Factors determining the acceptability of a product from a producibility point of view. Includes an analysis of function and cost, relative machining cost, material cost, manufacturing method, cost of tolerances, and surface finishes for the selected manufacturing methods.

6180 Seminar in Industrial Quality Developments. Three credits. Review of current quality control practices. Investigation of new concepts and literature in the discipline. Examinations of vendor/ customer relationships in quality.

6190 Six Sigma. Three credits. Prerequisite: MATH 1530 or equivalent or consent of instructor. The Six Sigma methodology is defined as a comprehensive and flexible system for achieving, sustaining, and maximizing business success. Through class instruction, simulations, and hands-on projects, students will be able to identify and focus on customers' critical-to-quality (CTQ) characteristics and solve problems using the define, measure, analyze, improve, and control (DMAIC) process and its associated tools. A Green Belt certification will be awarded upon successful completion of an industry/business Green Belt project.

6230 Advanced Technical Drafting. Three credits. Current trends and techniques such as using computers to solve design problems and the use of group suggestions (brainstorming) in solving design problems.

6240 Advanced Technical Problems in Metal. Three credits. In-depth insight into the use of metal in industry. Emphasis on industrial research and development techniques and their application in industry.

6260 Advanced Technical Problems in Electricity/Electronics. Three credits. In-depth insight into the practical applications of electronic theory. Students required to design and develop electrical/electronic applications of an advanced nature.

6370 Computer-Integrated Design and Manufacturing. Three credits. Prerequisite: ET 4590/5590 or consent of instructor. Applications of computer-integrated manufacturing. Current techniques of
design for manufacturing and the integration into information flow, organization, product design, and software applications.

6510/ 6520 Advanced Topics in Technology. Three credits each. Independent investigation and report of current problems of particular interest to individual students directed by department faculty members.

6620 Methods of Research. Three credits. Introduces Master of Science students to scholarly research principles and to thesis formats for research reporting. A problem is researched and written up in thesis proposal format.

6640 Thesis Research. One to six credits. Prerequisite: ETIS 6620. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6650 Embedded Microprocessor Design. Three credits. Prerequisite ET 4660 or consent of instructor. Topics include basics of embedded microprocessor systems, introduction to field programmable gate arrays (FPGA), integrated software environment (ISE), embedded development kit (EDK) CAD software, and the architecture and features of the MicroBlaze soft-core. Two hours lecture and three hours laboratory.

6710 Current and Future Trends in Engineering and Technology. Three credits. Prerequisite: Graduate standing. The latest advancements and practices in various engineering and technology fields. Selected topics may include computers and electronics, networking and telecommunication, instrumentation, lasers,

automation and robotics, manufacturing and rapid prototyping, bioengineering and biotechnology, and renewable energy sources. Takes a student-centered, hands-on learning approach and focuses on understanding new technologies and how technology is used in the industry. Research projects will provide appropriate experience and accommodate individual's interest.

6910/ 6920 Problems in Engineering Technology. Three credits each. Independent investigation and report of a problem in engineering technology. Designed to meet the particular needs of the students; pursued under the direction of a department faculty member.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. Student must contact graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

## Courses in Engineering Technology [ET]

5220 Advanced Metalwork. Three credits. Techniques, equipment and procedures, advantages and disadvantages of current metal-casting processes used in industry. Laboratory exercises in sand molding and casting, the full mold process, investment casting, and permanent mold casting including pattern design and construction, mold making, metal melting and handling. Guest lecturer(s). Plant tour(s). Two hours lecture and three hours laboratory.

5230 Advanced Machine Tool Technology. Three credits. Taper turning, boring and thread chasing, and calculations of screw threads and other operations. Gear terminology and calculations, practice gear cutting on the milling machine, use of index head. Two hours lecture and three hours laboratory.

5280 Computer-Aided Manufacturing: Numerical Control (NC). Three credits. Role of NC in today's manufacturing environment; machines and machine control systems of a typical installation; justification. Emphasis on writing and debugging programs for a three-axis milling machine and a two-axis turning machine utilizing CNC and computer-aided part programming. For those with little or no experience with NC or those seeking to broaden their knowledge of NC. Two hours lecture and three hours laboratory.

5330 Advanced Computer-Aided Drafting. Two credits. Prerequisite: ET 3360 or CMT 3320. Interactive computer drafting and design using advanced AutoCAD software and add-ons. Primarily for students who want to increase their capabilities using CAD software and hardware. One hour lecture and three hours laboratory.

5340 Design of Machine Elements. Three credits. Analytical design methods of machine elements. Stress analysis, working stress, combined stresses, failure theories, fatigue failure. Design techniques for shafts, fasteners, gears, bearings, and belt and chain drives. Includes a design project. Lecture.

5360 Computer-Assisted Drafting/Design II. Three credits. Prerequisites: ET 2310 or CMT 3320. Utilizes AutoCAD software to develop skills in the creation and analysis of mechanical and architectural solid models for design and production purposes. Includes the use of shading and rendering to enhance three-dimensional model display and the extraction of two-dimensional engineering drawings. Two hours lecture and three hours laboratory.

5370 Tool Design. Three credits. Design of tools, fixtures, gauges, and dies. Translates product drawing specifications to tooling concepts. Utilizes computer drafting. Two hours lecture and three hours laboratory.

5420 Industrial Safety. Three credits. Safety and health problems in the manufacturing, construction, and utilities industries, including pertinent laws, codes, regulations, standards, and liability considerations. Organizational and administrative principles and practices for safety engineering, accident investigation and recording, safety education, and safety enforcement.

5440 Fire Safety. Three credits. Possible prevention activities, fire hazards and their causes, and fire inspection techniques.

5450 Industrial Hygiene. Three credits. Safety and health education training and investigation activities and how they are related to overall environmental safety.

5590 Manufacturing Automation Systems. Three credits. Provides technical, human, and business aspects of modern automation systems. Includes automation controls, levels of control and major components/subsystems, object-based software components, intelligent actuators and sensors, emerging trends, flexible manufacturing systems (FMS), computer integrated manufacturing (CIM), industrial systems and supply chain applications, organizational approaches, and automation justification.

5600 Programmable Logic Controllers. Two credits. Introduces programmable logic controllers (PLCs). Selection, operation, and troubleshooting. Ladder diagrams and programming of PLCs emphasized. One hour lecture and three hours laboratory.

5610 Instrumentation and Controls. Three credits. Devices and techniques used in the measurement of physical parameters. Consideration of accurates and sources of error, identification of typical measurements, sensors and transducers, control stability, and response. Two hours lecture and three hours laboratory.

5630 Local Area Networks. Three credits. Foundation and experience to understand the design, implementation, and management strategies of local area networks (LAN). Data communications standards and protocol fundamentals included. Lecture, laboratory activities, and a LAN design requirement. Two hours lecture and three hours laboratory.

5640 Industrial Electricity. Three credits. AC power theory and circuits for industrial applications, polyphase systems, power factor correction, and transformers. Theory, applications, and selection of motors and generators. Control subsystems with emphasis on power electronics. Two hours lecture and three hours laboratory.

5650 Introduction to Microprocessors. Three credits. Prerequisite: ET 3620. Introductory course in microprocessor-based systems and their related components. Machine language programming extensively used to solve problems and to demonstrate the relationship of the microprocessor to its supporting peripherals. Basic microcomputer architecture also emphasized. Two hours lecture and three hours laboratory.

5660 Microprocessor Interfacing. Three credits. Analog and digital conversion devices and their related systems. Introduction to individual subsystems; A/D and D/A data conversion. Organization and design of individual digital systems emphasized. Includes data transfer, conversion, storage, input and output with principal focus on systems external to computer systems. Two hours lecture and three hours laboratory.

5670 Microprocessor Design. Three credits. Advanced course in design and application of microprocessor-based microcomputers for measurement and control systems. In-depth analysis of software and hardware in the design process. Design, develop, and test an operating system for a microprocessor-based computer. Two hours lecture and three hours laboratory.

5680 Electronic Fabrication. Three credits. Prerequisite: ET 3610 or equivalent. Planning and designing electronic packaging, including printed circuit board design, component selection criteria, and construction techniques. Conventional and computer-aided printed circuit board design techniques used. Two hours lecture and three hours laboratory.

5690 Electronic System Analysis. Four credits. Theory of electronic troubleshooting and proper repair techniques of electronic devices.

5700 Transform Circuit Analysis. Three credits. Prerequisites: ET 3601 and MATH 1910 or permission of instructor. An advanced course in network analysis that stresses network theorems and solutions of time and frequency-domain problems with the use of Laplace Transforms.

5710 Industrial Seminar. One credit. Orientation to industrial job opportunities, placement practices, interview techniques, and preparation of application materials (resume, cover letter). Guest lectures, films, and student and faculty presentations.

5850 Fluid Power. Three credits. Systems and the basic components that make up these systems, including hydraulic, pneumatic, and fluidic. Emphasis on understanding the language and graphic symbols associated with fluid power and the performance characteristics of system components. Two hours lecture and three hours laboratory.

5860 Robotics. Three credits. Introduces the fundamentals of robots. Types of robots and controls, the prime movers, and the application of robots in the industrial environment. Two hours lecture and three hours laboratory.

5915 Technical Project Management and Soft Skills. Three credits. Prerequisite: Graduate standing. Project management as sanctioned by the International Project Management Institute and how to assess and boost emotional intelligence or soft skills. Student successfully completing course will earn 20 Professional Development Units (PDUs) issued by the International Project Management Institute.

5920 Plant Layout and Materials Handling. Three credits. An overview of facility planning including equipment selection, work flow analysis, activity relationship analysis, and plant layout for product, process, and JIT requirements. Teams assigned actual projects in industry. CAD layout presentations to industry management required.

5970 Engineering Economy. Three credits. Development of capital budgets; justification of capital projects using time value of money concepts; replacement analysis. Review of justification of actual capital projects and computer applications.

5980 Federal and State Safety Legislation. Three credits. The federal Occupational Safety and Health Act (OSHA) and the Tennessee Occupational Safety and Health Act (TOSHA); Environmental Protection Agency; rules and regulations and how they apply to industry.

5990 Industrial Engineering Systems. Three credits. Prerequisite: ET 3910 or equivalent. System design of work tasks including establishing time standards by time and motion study and work sampling; ergonomic design for integration of the human into the work task environment. Scientific methods supplemented by quality considerations with emphasis on statistical quality control (SQC). Computer software used for design and analyses. Graduate students will lead an industry design project team of students.

6390 Productivity Strategies/Lean Systems. Three credits. Prerequisites: Graduate standing and ET 3910 or consent of instructor. Topics include the human element (supervisory and teamwork skills), the theoretical aspect (laws and science covering service and production systems), and the practical aspect (tools for lean operational systems implementation). Theoretical and practical methods needed to complete a required industry/business project and obtain a certification in Lean Manufacturing.

## Course in Concrete Industry Management [CIM]

5800 Special Problems in Concrete Industry Management. One to three credits. Prerequisite: Permission of department. Opportunity to pursue projects of individual interest in concrete industry management. Projects may be technical and/or managerial in nature and may require any combination of literature reviews, lab work, field studies, and other research methods. A faculty member will approve a formally submitted proposal for the study, supervise progress, and grade a report and a presentation which are required upon completion of the project. May be repeated. No more than 6 hours may count toward degree.

## Course in Construction Management Technology [CMT]

5320 Architectural Computer-Aided Drafting and Design. Three credits. Using computers to draw and design residential architectural plans. Specifically geared toward the construction area of concentration. Three hours lecture and three hours laboratory.

## Courses in Environmental Science and Technology [EST]

5770 Pollution Control Technology. Four credits. Introduces air, noise, solid waste, and water pollution control technology. Legislative regulations and equality standards, pollution types and sources, detection and analysis instruments, and treatment principles and practices.

5780 Air, Solids, and Noise Pollution Technology. Three credits. Prerequisites: 8 hours each chemistry, biology, and physics or permission of instructor. Introduces air, noise, solid, and hazardous waste pollution technology, including legislative regulations and quality standards: sources, detection, and analysis instrumentation and practices, and treatment and abatement principles, equipment, and practices.

5810 Energy and the Environment. Three credits. Introduces sources and methods of energy production and classifications of energy usages with emphasis on usage trends, energy conservation strategies, and alternate energy utilization.

5820 Solar Building Design. Three credits. Introduces environmental and economic impact of solar energy for residential and light industrial construction including topics such as day lighting, passive solar design, and hot water heating.

5840 Energy Auditing. Three credits. Introduces types of energy consumption and classifications of energy usages. Emphasis on conservation strategies and total management for residential and industrial plants.

5870 Passive Solar Design. Three credits. Introduces passive solar techniques in the construction of residential and light industrial structures. Includes day lighting, passive solar design, methods, and system integration.

# Department of English 

Tom Strawman, Chair<br>Peck Hall 302

The Department of English offers the Master of Arts, the Doctor of Philosophy, and a minor at the graduate level.

Materials required for application include official transcripts certifying coursework from each college or university attended, three letters of recommendation, GRE scores (English subject test optional), and a 500 -word statement of purpose outlining academic interests and professional goals. Admissions decisions will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for graduate study. Students are selected from a pool of qualified applicants. Admission to graduate study is not automatic by meeting minimum admission requirements.

## Admissions Process

Application for Summer/Fall admission must be complete by March 1. Application for Spring admission must be complete by October 1. Those seeking teaching assistantships must apply by February 1 for the following Fall semester. All application materials should be sent directly to the Graduate College, other than the assistantship application, which should be sent directly to the director of graduate studies in the English Department.

## Requirements for the Master of Arts (5000 and 6000 level)

## Thesis Option

## Candidate must

1. have earned at least 30 semester hours of undergraduate English.
2. fulfill a foreign language requirement in one of the following ways:
a. complete 18 undergraduate semester hours of a foreign language or complete 6 semester hours of 3000 -level work in a foreign language,
b. earn a final grade of $A$ or $B$ in a foreign language course numbered 5990,
c. pass a reading examination administered by the Foreign Languages and Literatures Department;
d. earn a final grade of B or better in both ENGL 6010 (Old English Language and Literature) and 6020 (Beowulf), which must be taken sequentially.
3. either
a. complete 30 semester hours in English, including ENGL 6640 and 6660 , with no more than 30 percent of the total degree hours dually listed as undergraduate/graduate courses, or
b. elect a minor, in which the student takes a minimum of 12 semester hours, plus a minimum of 18 hours in English including ENGL 6640 and 6660.
4. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
5. successfully complete and defend a thesis.

## Nonthesis Option

## Candidate must

1. have earned at least 30 semester hours of undergraduate English.
2. fulfill a foreign language requirement in one of the following ways:
a. complete 18 undergraduate semester hours of a foreign language or complete 6 semester hours of 3000 -level work in a foreign language,
b. earn a final grade of $A$ or $B$ in a foreign language course numbered 5990,
c. pass a reading examination administered by the Foreign Languages and Literatures Department;
d. earn a final grade of B or better in both ENGL 6010 (Old English Language and Literature) and 6020 (Beowulf), which must be taken sequentially.
3. either
a. complete 36 semester hours in English, including ENGL 6660, with no more than 30 percent of the total degree hours dually listed as undergraduate/graduate courses; or
b. elect a minor, in which the student takes a minimum of 12 semester hours, plus a minimum of 24 hours in English, including ENGL 6660.
4. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
5. successfully complete a written comprehensive examination (examination may be taken no more than twice).

## Requirements for the Doctor of Philosophy (6000 and 7000 level)

Candidates will be expected to have completed at least 30 semester hours of English at the undergraduate level. Applicants with an M.A. will be expected to have completed at least 20 hours of graduate coursework in English.
All Ph.D. candidates must have completed the following course of study:

1. ENGL 6660/7660 Introduction to Graduate Study: Bibliography and Research at either the M.A. or Ph.D. level.
2. Any ONE of the following: ENGL $\mathbf{7 3 5 0}$ Critics and Criticism; $\mathbf{7 3 8 0}$ Modern Critical Theory; $\mathbf{7 4 7 0}$ Studies in Narratology; or 7520 Essentials of Linguistics.
3. Two courses from each of these groups (in each group one must be at the 7000 level).
a. British Literature through the Renaissance. ENGL 7010 Old English Language and Literature; 7020 Beowulf; 7030 Chaucer Seminar; 7040 Medieval English Literature; 7050 Studies in Early English Drama, Excluding Shakespeare: 900-1642; 7110 Spenser Seminar; 7120 Studies in Sixteenth-Century Prose and Poetry; 7130 Studies in Seventeenth-Century Prose and Poetry;

7140 Studies in Milton; 7150 Studies in Shakespeare. Other courses (7230 Major British Writers, 7500 Selected Topics in Literature and Language, 7620 Directed Reading and Research) when appropriate.
b. British Literature since the Renaissance. ENGL 7200 Studies in Restoration and Eighteenth-Century Literature; 7210 Studies in English Romanticism: Wordsworth and Coleridge; 7220 Studies in English Romanticism: Shelley, Byron, and Keats; 7270 Studies in Victorian Literature; 7290 Modern British Literature. Other courses (ENGL 7230 Major British Writers, 7490 Studies in the Novel, 7500 Selected Topics in Literature and Language, 7620 Directed Reading and Research) when appropriate.
c. American Literature: ENGL 7340 African American Literature; 7360 Studies in Southern Literature; 7400 American Literature to 1800; 7410 Studies in American Literature: 1800-1860; 7420 Studies in American Literature: 1860-1910; 7430 Studies in American Literature: 1910-1950; 7480 Studies in Contemporary Literature. Other courses (ENGL 7330 Major American Writers; 7490 Studies in the Novel; 7500 Selected Topics in Literature and Language; 7620 Directed Reading and Research) when appropriate.
4. A sufficient number of electives chosen from the above courses or any other English graduate courses to complete the required number of hours.
5. Language requirement: Reading knowledge of one foreign language. (Committees may require more than one language.) The language requirement must be fulfilled in one of the following ways:
a. completing 18 undergraduate semester hours of a foreign language or 6 semester hours of 3000 -level work in a foreign language;
b. earning a final grade of A or B in a foreign language course numbered 5990;
c. passing a reading examination administered by the Foreign Languages and Literatures Department;
d. meeting this requirement at the M.A. level.
e. earn a final grade of B or better in both ENGL 6010 (Old English Language and Literature) and 6020 (Beowulf), which must be taken sequentially.
6. Before the completion of two semesters of coursework above the M.A. level ( 12 hours of 7000 -level work), a student in the Ph.D. program will take a qualifying exam, comprehensive in scope. Ph.D. students must pass this exam in order to proceed in their program (the examination may be taken no more than twice).
7. An approved degree plan must be filed with the Graduate Office prior to the completion of $\mathbf{3 0}$ credit hours.
8. Upon the completion of coursework, students must successfully complete two written Ph.D. exams in chosen concentrations from among the following areas: Old and Middle English; Renaissance: 1500-1660, including Milton; Restoration and Eighteenth-Century British Literature; Nineteenth-Century British Literature (a. Romantic, b. Victorian); Twentieth-Century British Literature; American Literature to 1830; American Literature: 1830-1910; American Literature: 1910-present; Criticism and Critical Theory; Composition, Language, and Rhetoric; Children's and Young Adult Literature; Popular Culture, Film, and Folklore (a. Popular Culture, b. Film, c. Folklore); Linguistics; and Anglophone Literature. An oral exam will be given upon the successful completion of each written exam.
9. An approved Advancement to Candidacy form listing the members of the candidate's doctoral committee must be filed with the Graduate Office upon successful completion of the written and oral preliminary examination.
10. Completion of dissertation (12 hours minimum) and oral dissertation defense.

## Courses in English [ENGL]

5510 Modern English Grammar and Usage. Three credits. Historical development of the theory and practice of modern English grammar and usage.

5530 History of the English Language. Three credits. Traces the development of the English language from cuneiform writing systems and Semitic and Phoenician syllabaries through Greek and Latin contributions, Old and Middle English, and Modern English.

5540 Approaches to Teaching ESL Grammar and Writing. Three credits. Prerequisite: ENGL 4510/5510. A survey of the background and basic methods needed to teach English grammar and composition to students for whom English is a second language. Emphasizes understanding the problems nonnative speakers face and developing techniques for helping nonnative speakers express themselves in written English.

6000/ 7000 Poetry Workshop. Three credits. A rigorous writing course to develop the advanced writer's use of point-of-view, tone, rhythm, meter, line, and stanza. Practice in both the spontaneity of composition and the deliberate, disciplined work of revision. Examination, through poems and essays by relevant authors, of the movements, forms, and possibilities of contemporary poetry.

6010/ $\mathbf{7 0 1 0}$ Old English Language and Literature. Three credits. Prerequisite for ENGL 6020/7020, Beowulf. Introduction to Old English language (grammar, phonology, syntax, and vocabulary) and literature (poetry and prose) and to the historical and cultural background of the Anglo-Saxon period.

6020/ 7020 Beowulf. Three credits. Prerequisite: ENGL 6010/7010. Intensive line-by-line study of Beowulf in Old English, with special emphasis on its sources and analogues, twentieth-century criticism, and current dating studies of the poem.

6030/ 7030 Chaucer Seminar. Three credits.
6040/ 7040 Medieval English Literature. Three credits. A study of Middle English literary types (in poetry, prose, and drama) and of the major authors and texts of the Middle English period. Includes study of Middle English dialects.

6050/ 7050 Studies in Early English Drama, Excluding Shakespeare: 900-1642. Three credits. The origin and development of English drama, emphasizing Elizabethan and Jacobean drama and the contributions of Shakespeare's contemporaries and successors.

6110/ 7110 Spenser Seminar. Three credits.
6120/ 7120 Studies in Sixteenth-Century English Prose and Poetry. Three credits.

6130/ 7130 Studies in Seventeenth-Century English Prose and Poetry. Three credits. Selected nondramatic literature of the century, with primary emphasis on the seventeenth century before the Restoration. Included are Donne, Herbert, and the metaphysical poets and Jonson and the Cavalier poets.

6140/ 7140 Studies in Milton. Three credits. The major poetry of John Milton, including Lycidas, Paradise Lost, Samson Agonistes, and Paradise Regained.

6150/ 7150 Studies in Shakespeare. Three credits. Shakespeare's poems and plays, emphasizing poetic and dramatic techniques in Shakespeare's works and critical reaction to those works.

6200/ 7200 Studies in Restoration and Eighteenth-Century Literature. Three credits. Designed to give students a definite critical knowledge of the major literary works of Restoration and eighteenthcentury England, 1660-1800. Course may focus on either drama, poetry, or prose or a combination.

6210/ 7210 Studies in English Romanticism: Wordsworth and Coleridge. Three credits.

6220/ 7220 Studies in English Romanticism: Shelley, Byron, and Keats. Three credits.

6230/ 7230 Major British Writers. Three credits. An in-depth study of one, two, or three British writers. Course varies according to interests of instructor and students.

6270/ 7270 Studies in Victorian Literature. Three credits. Intellectual backgrounds of the Victorian period; major prose writers: Macaulay, Carlyle, Newman, Mill, Ruskin, Arnold, Pater; major poets: Tennyson, Browning, Arnold.

6290/ 7290 Modern British Literature. Three credits. Intellectual backgrounds of modern British literature; major novelists: Forster, Woolf, Joyce, Lawrence; major poets: Yeats, Eliot, Auden, Thomas; selected minor writers.

6300/ 7300 History of Children's Literature. Three credits. History of British and American literature for children and analysis of issues in the field.

6305/ 7305 Special Topics in Children's/Adolescent Literature. Three credits. Selected genre, period, ethnicity, tradition, or literary focus on children's and/or young adult literature. Subject will vary with instructor.


6310/ 7310 Popular Culture Studies. Three credits. Major trends and significant debates in the development of popular culture theory and criticism.

6320/ 7320 Postcolonial Literature and Theory. Three credits. Introduces postcolonial studies through an exploration of seminal literary and critical writings in the field. Primary focus on the critical thought and discursive practices that define postcolonial discourse and their application to literature that engages issues of colonialism, its aftermath, and other forms of imperialism.

6330/ 7330 Major American Writers. Three credits. An in-depth study of two or three American writers. Course varies according to interests of instructor and students.

6340/ 7340 African American Literature. Three credits. An in-depth study of the African American literary tradition with emphasis on significant authors, genres, texts, and contexts.

6350/ 7350 Critics and Criticism. Three credits. Examines significant critical movements in Western literature from classical times into the twentieth century. Focusing on major critics such as Aristotle, Johnson, Coleridge, and Eliot, the course also treats less influential figures and considers practical applications of theory to specific texts.

6360/ 7360 Studies in Southern Literature. Three credits. Themes, theories, movements, and types of literature produced in the American South with particular emphasis on selected authors and texts.

6370/ 7370 Satire. Three credits. Satire as a distinct genre, emphasizing its continuity in Western literature from its roots among the Greeks to its resurgence in the twentieth century; representative works from four periods: ancient, medieval and Renaissance, eighteenth century, and modern; prose, poetry, and drama.

6380/ 7380 Modern Critical Theory. Three credits. Covers major critical trends in literary theory since 1965, including feminist, Marxist, structuralist, and deconstructive approaches to literature. Students explore background and implications of these theories and analyze selected works of literature in light of these approaches.

6390/ 7390 Reading Postmodernism. Three credits. Theoretical discourse which works to define the cultural mindset known as "postmodernism." Theories examined will be applied to examples of postmodern literature, film, and/or television. Topics emphasized include the instability of social and cultural categories, the dissolving boundaries between "high" and "low" culture and art, and the subversion of realist narrative strategies.

6400/ 7400 American Literature to $\mathbf{1 8 0 0}$. Three credits.
6410/ 7410 Studies in American Literature: 1800-1860. Three credits.
6420/ 7420 Studies in American Literature: 1860-1910. Three credits.
6430/ 7430 Studies in American Literature: 1910-1950. Three credits.
6440/ 7440 Popular Literature of the Twentieth Century. Three credits. The forms of literature reflecting the mass culture of America from 1900 to the present, including such genres as the mystery, the western, science fiction and fantasy, popular humor, comic strips, popular poetry, song lyrics, and the aesthetics of nonprint media.

6450/ 7450 Contemporary Women's Literature. Three credits. Study of recent women writers with emphasis on the relationship between
literature and the social and political status of women. Addresses diverse writers and issues of difference among women, including race, class, ethnicity, nationality, sexuality, and other determinants of individual and group identity.

6460/ 7460 Studies in Contemporary Drama. Three credits. The development of world drama from 1950 to the present with attention to related criticism and theory.

6470/ 7470 Studies in Narratology. Three credits. Examines modern and contemporary theories of narrative (modernist, rhetorical structuralist, dialogical) with particular application to selected authors and texts.

6480/ $\mathbf{7 4 8 0}$ Studies in Contemporary Literature. Three credits. Intellectual backgrounds of contemporary literature; significant developments in fiction, nonfictional prose, poetry, and drama.

6490/ 7490 Studies in the Novel. Three credits. The novel as a literary genre may be approached from a variety of perspectives, including generic, historical, theoretical, or single-author approaches. Course varies according to interests of instructor and students.

6500/ 7500 Selected Topics in Literature and Language. Three credits. A specialized field of literary or linguistic inquiry, its bibliography, critical problems, and probable solutions. Topics vary with the professor assigned to the course.

6505/ 7505 History of Rhetoric: Classical to Renaissance. Three credits. An examination of the major theorists and themes, including literary and pedagogical implications, from the ancient period to the Renaissance.

6510/ 7510 Modern Rhetoric and Prose Style. Three credits. An examination of major theorists and themes, including literary and pedagogical implications, from early modern period to the present.

6520/ 7520 Essentials of Linguistics. Three credits. Major linguistic approaches to the study of language-dominant trends and current issues in linguistics; the phonological, morphological, and syntactic structure of the English language.

6530/ 7530 Studies in Composition and Rhetoric. Three credits. An introduction to the intellectual foundations of composition studies focusing on influential theories as well as the field's intellectual and disciplinary history.

6535/ 7535 Special Topics in Composition and Rhetoric. Three credits. Intensive examination of themes, periods, figures, and texts in composition and/or rhetoric. Subject will vary with instructor.

6540/ 7540 Middle Tennessee Writing Project (MTWP) Summer Institute. Three credits. Reserved for invited participants in the Middle Tennessee Writing Project. Acquaints students with composition and pedagogical theories, practices for the teaching of writing, methods of research and presentation, development of writing resources including grant writing, various genres of writing and writing response, and publishing.

6550/ 7550 Writing Center Theory. Three credits. Examines the theoretical and practical components of writing center work, including collaborative, composition, learning, writing center, and postmodern theories. Open to all graduate students; required for all University Writing Center assistants.

6560/ 7560 Seminar in Teaching Composition. Three credits. Open only to first-year teaching assistants or with consent of instructor.

6570/ 7570 Practicum in Composition Methodology. Three credits. In-depth study of how composition theory and research inform methodology. Topics covered vary according to interests of instructor and students.

6580/ 7580 Computers and Writing. Three credits. Practical and theoretical implications of computer technology and of the Internet and World Wide Web for the teaching of writing.

6590/ 7590 Seminar in Teaching of Literature. Three credits. Recommended for second-year teaching assistants and others interested in teaching literature.

6620/7620 Directed Reading and Research. Three credits. Prerequisite: Permission of the director of graduate studies. Individually supervised reading and research either in a historical period of English or American literature or in a major literary genre.

6630 Directed Creative Writing. Three credits. Prerequisite: Permission of the director of graduate studies in English. Individually supervised writing project in fiction, poetry writing, playwriting, or creative nonfiction.

6640 Thesis Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6650/ 7650 Special Topics in Popular Culture Studies. Three credits. A theme, genre, period, text, or artist in one or more popular cultural media. Subject will vary each time the course is taught.

6660/ $\mathbf{7 6 6 0}$ Introduction to Graduate Study: Bibliography and Research. Three credits. Literary scholarship: its nature and scope; traditional and modern methods; the definition and solution of research problems; the production of literary scholarship. Required of all master's students enrolling in English.

6700/ 7700 Studies in Folklore. Three credits. Study of folklore with focus on the history of the discipline.

6710/ 7710 Special Topics in Folklore. Three credits. Selected area of folklore: folk narrative, folklore and literature, folk song, folk religion, proverb, or folklore of a particular group.

6750/ 7750 Film Studies. Three credits. Covers such topics as the film text, adaptation, narratology, genres, ideology, authorship, theory, history, schools, movements, national cinemas, and film audiences.

6760/ 7760 Special Topics in Film Studies. Three credits. Examines a theme, genre, director, period, school or movement, national cinema, etc. Subject will vary each time course is taught.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

7600/ 7610 Internship. Three credits each.
7640 Dissertation Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled, student should register for at least one credit hour of doctoral research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

# Department of Foreign Languages and Literatures 

Thomas Heine, Interim Chair Boutwell Dramatic Arts Building 301

The Department of Foreign Languages and Literatures offers the Master of Arts in Teaching with concentrations in French, German, or Spanish. Also offered is a minor at the graduate level. Students who would like to minor in foreign languages should determine the requirements based on their major curriculum in consultation with their advisors.

The Graduate Record Examination (GRE) is required. A combined score of 900 on the verbal and quantitative (or analytical of the old version) portions of the Graduate Record Examination is considered indicative of potential for an acceptable level of academic performance.

## Requirements for the Master of Arts in Teaching-Foreign Languages Major ( 5000 and 6000 level)

This degree is intended to prepare native and nonnative speakers of the foreign language for a career in foreign language teaching at the elementary or secondary level. Students planning to teach in elementary school must be licensed prior to admission to the M.A.T. program. Those planning to teach on the secondary level may be already licensed or may pursue licensure while enrolled in the M.A.T. program; however, requirements for admission to teacher education must be met. Students select a concentration from French, German, or Spanish.

Candidate must

1. have earned at least 24 semester hours of the language selected for admission to the program. Students may complete up to 6 hours of these undergraduate hours while concurrently enrolled in the graduate program. Native speakers must consult with the graduate director regarding this requirement.
2. complete a minimum of 33 semester hours including 21 hours in foreign language courses as listed below OR 18 hours in foreign languages and ENGL 6520, Essentials of Linguistics; no more than 30 percent of the total degree hours dual-listed as undergraduate/graduate hours can be counted toward the degree.
3. complete a professional education component approved by the chair of the Educational Leadership Department.
4. achieve an oral proficiency level in the target language of at least "Advanced" and a written proficiency level of
"Advanced Plus" on the ACTFL scale; students should consult the foreign languages graduate director for additional information on this requirement.
5. demonstrate a basic reading knowledge in a language other than the target language; this requirement may be met by passing a foreign language reading examination or by earning a final grade of A or B (83\%) in FREN 5990, GERM 5990, or SPAN 5920 or by passing a reading examination.
6. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
7. successfully complete a written comprehensive examination that covers language teaching methods and the language, literature, and culture of the target language (may be taken no more than twice).

## Choices Under the M.A.T. in Foreign Languages

Candidates for the M.A.T. with a major in Foreign Languages and a concentration in either French, German, or Spanish may choose whether or not to seek licensure to teach. The curriculum selected is based on the individual's preference and need:

1. for those already licensed to teach in the state of Tennessee;
2. for those who seek licensure in conjunction with the M.A.T. degree;
3. for those who wish to pursue the degree without teacher licensure in Tennessee.
The foreign language requirement under each option is the same; candidates should consult an advisor in the Educational Leadership Department regarding the courses pertinent to their degree and career goals.

## Required courses in foreign languages:

FL 5500 Introduction to Teaching Foreign Language
FL 6990 Internship
French, German, or Spanish 6000 seminar, 3 hours
9 hours of electives in 5000- or 6000-level courses in the concentration selected
6 hours selected from the following:
FL 6010 Foreign Language Acquisition: Theory and Practice three hours (taught in English)
FL 6700 Introduction to Linguistics
FL 6900 Issues in Foreign Language Acquisition

## Courses in Foreign Languages [FL]

5550 Introduction to Teaching Foreign Language. Three credits. Introduces students to a variety of approaches and methods for foreign language instruction in elementary or secondary schools.

6010 Foreign Language Acquisition: Theory and Practice. Three credits. Acquaints students with major theories of foreign language acquisition and various approaches to language learning.

6020 Reading, Writing, and Learning Methods for ESL. Three credits. (Same as YOED 6020.) Provides teaching ideas for promoting oral, reading, and writing development in English for K-12 English learners. Language acquisition theory, classroom organization, teaching strategies, and assessment procedures for effective English learner instruction.

6640 Thesis Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled for thesis research, students should register for at least one credit hour of research each semester until the thesis is completed. S/U grading.

6700 Introduction to Linguistics. Three credits. Basic concepts of linguistic analysis, which are applied to linguistic phenomena in French, German, Spanish, and English.

6750 Romance Linguistics. Three credits. Prerequisite: FL 6700, ENGL 6520, or permission of instructor. Introduces linguistic heritage of Latin as manifested in modern Spanish, French, Italian, Portuguese, Catalan, Sardinian, and Rumanian. Earlier language stages as well as mechanisms of language evolution also examined. Knowledge of one Romance language helpful but not required.

6800 Instructional Technology in Foreign Language Education. Three credits. An introductory course with an emphasis on telecommunication and computer applications. Critical examination and evaluation of existing technologies and programs.

6900 Issues in Foreign Language Acquisition. One, two, or three credits. (May be repeated for a maximum of 9 credits.) Prerequisite: Approval of graduate coordinator. Independent study to address a problem or investigate an issue agreed upon by both student and instructor.

6990 Internship. Three or six credits. Prerequisite: FL 6010. Three credits are given for a supervised teaching internship at MTSU; six credits are given for a teaching internship abroad. Under certain circumstances a self-designed, nonteaching internship may be undertaken locally or in a foreign country where the target language is spoken. Students should consult the graduate director in Foreign Languages and Literatures for details.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

## Courses in French [FREN]

5010 Topics in Twentieth-Century French Literature. Three credits. Prerequisite: 6 hours of French beyond the intermediate level or permission of the instructor. Repeatable up to six hours.

5020 Topics in French Film. Three credits.
5030 Topics in Nineteenth-Century French Literature. Three credits. Prerequisite: 6 hours of French beyond the intermediate level or permission of the instructor. Repeatable up to six hours.

5040 Topics in Eighteenth-Century French Literature and Culture. Three credits. Prerequisite: 6 hours of French beyond the intermediate level or permission of the instructor.

5050 Topics in Medieval and Renaissance French Literature. Three credits. Prerequisite: 6 hours of French beyond the intermediate level or permission of the instructor. Repeatable up to six hours.

5060 Topics in Neoclassical French Literature. Three credits. Prerequisite: 6 hours of French beyond the intermediate level or permission of the instructor. Repeatable up to six hours.

5080 Topics in Medieval French Literature. Three credits. Prerequisite: 6 hours of French beyond the intermediate level or permission of instructor.

5900 Directed Study in French Literature and Culture. One to six credits. Prerequisite: 6 hours of French beyond the intermediate level or permission of the instructor. Individualized intensive reading in primary and secondary sources relating to a specific topic in French literature or culture. Arrangements must be made with instructor prior to registration.

5990 Techniques in Translation. Three credits. Prerequisites: Admission to the College of Graduate Studies or permission of the instructor. For graduate students seeking proficiency in reading French for research purposes. Open to undergraduates seeking to prepare for graduate study. Will not count toward a major or minor in French.

6000 Seminar in French Studies. Three credits. Prerequisite: Permission of instructor. Comprehensive study of history and structure of French language; advanced stylistics leading to research project of cultural, literary, or linguistic topic.

6970 Seminar in French Literature. Three credits. Prerequisites: 9 hours of French on the 4000/5000 level; must be of graduate status in the M.A. program or have permission of professor. An in-depth look at specific topics, themes, and/or authors in French literature from the medieval period to the present. May be taken twice.

## Courses in German [GERM]

5010 Topics in German Literature and Culture. Three credits. Prerequisite: 6 hours of German beyond intermediate level or permission of instructor. Topics will vary. Course may be repeated with different topic.


5020 German Literature: 1725-1880. Three credits. Prerequisite: 6 hours of German beyond intermediate level or permission of instructor.

5030 German Literature: $\mathbf{1 8 8 0}$ to present. Three credits. Prerequisite: 6 hours of German beyond intermediate level or permission of instructor.

5900 Directed Study in German Literature and Culture. One to six credits. Prerequisite: 15 hours of German or permission of instructor. Individualized intensive reading in primary and secondary sources relating to a specific topic in German literature or culture. Arrangements must be made with instructor prior to registration.

5990 German for Reading Knowledge. Three credits. Prerequisites: Admission to the College of Graduate Studies or permission of the instructor. For graduate students seeking proficiency in reading German for research purposes. Open to undergraduates seeking to prepare for graduate study. Will not count toward a major or minor in German.

6000 Seminar in German Studies. Three credits. Prerequisite: Permission of instructor. Comprehensive study of history and structure of German language; advanced stylistics leading to research project of cultural, literary, or linguistic topic.

6970 Seminar in German Literature. Three credits. Prerequisites: 9 hours of German at the 4000 level or higher or permission of instructor; graduate status in the M.A. or M.A.T. program. An indepth study of an author, genre, period, or literary movement in German literature from 1850 to present. May be taken twice.

## Course in Humanities [HUM]

5550 The Grail Legend in Film and Literature. Three credits. Prerequisites: ENGL 2030 and either HUM 2610 or ENGL 2020 or permission of instructor. Explores the origin and development of the Grail legend in Western art primarily in literature and film.

## Courses in Spanish [SPAN]

5010 History of the Spanish Language. Three credits. Historical development of Spanish from Latin. Students also become familiar with the characteristics of Old Spanish.

5015 Advanced Spanish Grammar. Three credits. Prerequisites: SPAN 3010 and 3020 and one other 3000-level course or permission of instructor. An in-depth study of problematic grammar structures.

5020 Spanish Literature I. Three credits. Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Spanish literature from its beginnings to 1700 , emphasis on literary history, styles, and themes. Prose fiction and nonfiction, poetry, and drama included.

5030 Spanish Literature II. Three credits. Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Works from different genres which represent major literary movements from the eighteenth century to the present.

5040 Latin American Literature I. Three credits. Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Latin American literature from pre-Columbian times through Romanticism. Prose fiction and nonfiction, poetry, and drama included.

5045 Topics in Hispanic Cinema. Three credits. Prerequisite: SPAN 3020 or permission of instructor. A cultural study of the peoples and societies of Latin America and Spain through film.

5050 Latin American Literature II. Three credits. Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Major works of Latin American literature from the late nineteenth century to the present.

5060 Special Topics in Hispanic Studies. Three credits. Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Topics in language, culture, or literature.

5070 Special Topics in Spanish Literature or Culture. Three credits. Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Topics in peninsular Spanish literature or culture.

5090 Special Topics in Latin American Literature or Culture. Three credits. Prerequisite: 6 hours of Spanish beyond the intermediate level or permission of instructor. Topics in specialized areas of Latin American literature or culture vary.

5120 Spanish Phonetics and Pronunciation. Three credits. A practical introduction to phonetic principles involved in achieving native-sounding Spanish pronunciation, including sounds, stress, intonation, and smooth speech stylistics. Native Spanish speakers or students with native-like Spanish pronunciation may not take this course for credit without instructor permission.

5900 Directed Readings in Spanish Literature and Culture.
5910 Directed Readings in Latin American Literature and Culture. One to six credits. Prerequisite: 15 hours of Spanish or permission of instructor. Individualized intensive reading in primary and secondary sources relating to a specific topic in Spanish or Latin American literature or culture. Arrangements must be made with instructor prior to registration.

5920 Spanish for Reading Knowledge. Three credits. Prerequisite: Admission to College of Graduate Studies or permission of instructor. For graduate students seeking proficiency in reading Spanish for research purposes. Open to undergraduates seeking to prepare for graduate study. Will not count toward a major or minor in Spanish or the undergraduate foreign language requirement.

5990 Study Abroad. Three to twelve credits. Prerequisites: Enrollment in the Master of Arts in Teaching program or approval of the instructor. Students will spend at least four weeks in a Spanish-speaking country studying the Spanish language, literature, and culture. Credits may be earned in Murcia, Spain, or other study abroad programs approved by the Department of Foreign Languages and Literatures. Course may be used for elective credit for the Master of Arts in Teaching degree.

6000 Seminar in Spanish Studies. Three credits. Prerequisite: Permission of instructor. Comprehensive study of history and structure of Spanish language; advanced stylistics leading to research project of cultural, literary, or linguistic topic.

6970 Seminar in Hispanic Literature. Three credits. Prerequisite: 9 hours of Spanish at the 4000-5000 level or higher or permission of the instructor. An in-depth study of an author, genre, period, or literary movement in Peninsular or Latin American literature. May be taken twice.

## Department of Geosciences

Ronald L. Zawislak, Chair<br>Kirksey Old Main 325B

The Department of Geosciences offers a graduate certificate in Geoscience. The certificate program consists of 12-16 hours taken from a variety of geography and geology courses. The certificate in Geoscience should be of particular interest to those in the private sector, K-12 and community college education, and government agencies. The department also offers a minor at the graduate level. Hours taken in the certificate program normally can be applied toward the minor.
The required courses for the graduate certificate in Geoscience are
GEOL 5060 Principles of Geoscience, 4 hours
One of the following:
GEOG 5530 Geographic Information Systems, 4 hours
GEOG 5490 Remote Sensing, 4 hours
Required courses total $6-8$ hours credit. In addition to the required hours listed above, students will take 6-8 additional hours in geography and/or geology under the guidance of their academic advisors for a total of 12 to 16 hours to complete the graduate certificate in Geoscience.

## Courses in Geography [GEOG]

5280 Special Problems and Topics in Geography. One to six credits. Research participation or guided readings in a particular area or topic appropriate to the student's interests and professional objectives. The type and amount of additional work will be decided upon when student registers for the course.

5310 Resource Management and Conservation. Three credits. Current problems related to an intelligent use and management of our environmental resources. Additional projects, reports, and/ or papers.

5320 Economic Geography. Three credits. Relationship of the physical factors of the environment to the productive occupations of humans and the distribution of the products produced. Additional projects, reports, and/or papers.

5330 Political Geography. Three credits. Significance of geographical factors in understanding political relationships within and among nations; spatial implications of political decision-making processes. Additional projects, reports, and/or papers.

5340 Historical Geography. Three credits. Prerequisite: GEOG 2000 or permission of instructor. The changing human geography of the United States during four centuries of settlement and development. Emphasis on changing population patterns as well as patterns
of urban and rural settlement. Additional projects, reports, and/or papers.

5360 Cultural Geography. Three credits. Prerequisite: GEOG 2000 or permission of instructor. Description and explanation of spatial patterns and ecological relationships in human culture. Emphasis on "reading" the cultural landscapes. An in-depth field component will be required.

5370 Urban Geography. Three credits. An introduction to the development of towns, cities, and associated urban areas. Environmental problems also examined. Classroom analysis of various theories of urban development and of data collected by field work. Preparation of appropriate land-use map.

5380 Cartography. Four credits. General knowledge of the field including familiarity with the techniques and tools of professional cartography and graphics. Selected lectures and class discussions. A series of map construction assignments; a specialized map assignment supported by written analysis. Three hours lecture and one two-hour laboratory per week.

5401- Field Course. Four credits. Supervised study in some geographi-
5402 cal area, preceded by classroom preview and concluded by a time of evaluation. Emphasis on the natural and cultural elements of the environment, with special attention directed toward the pattern of human occupancy. An intensive period of study and research on a full-time basis. Work required will depend on area researched and time involved. Consult department chair for specific fees.

5410 Geography of the United States and Canada. Three credits. Natural, cultural, and geographic environment of these regions. Additional projects, reports, and/or papers.

5420 Geography of Latin America. Three credits. Geographic regions of Mexico, Central America, the West Indies, and South America. Policy analysis and supporting data.

5430 Geography of Europe. Three credits. General distribution of natural and cultural features of Europe followed by a detailed study of the regions and countries of the southern, central, and northwestern parts of the continent. Policy analysis of a Europeanoriented problem.

5460 Geography of the Former Soviet Union. Three credits. Analysis of the natural, cultural, and human use regions of the former Soviet Union. A policy analysis of an aspect of the region's geography is required.

5470 Rural Settlement. Three credits. Prerequisite: GEOG 2000 or permission of instructor. A geographical analysis of forms, structures, and distribution of rural settlements in distinctive parts of the earth based upon their origin, function, and development. Special emphasis given in analyzing rural settlements of middle Tennessee. Additional projects, reports, and/or papers.

5490 Remote Sensing. Four credits. Prerequisites: GEOG 1030 and 4380 (or 5380). Various vehicles of remote sensing such as radar, satellite imagery, and infrared data. Use of data in preparation of maps and applications to land use and environmental problems examined. Selection of data from either a numeric or image remote sensing system, interpreting, and developing a report from the interpretations. Three hours lecture and one two-hour laboratory per week.

5500 Geography of the Middle East. Three credits. An analysis of the problems, issues, and theories involved in understanding the physical, cultural, and regional geography of the area. Additional projects, reports, and/or papers.

5510 Laboratory Problems in Remote Sensing. Four credits. Computer processing of selected satellite imagery. Laboratory will provide practical experience through design, execution, and completion of applied remote sensing projects, one of which will be the effects of an environmental impact.

5520 Image Interpretation. Four credits. Principles, methods, and techniques of image interpretation including maps, satellite data, and aerial photos. Environmental impact of a special project. Three hours lecture and one two-hour laboratory per week.

5530 Geographic Information Systems. Four credits. Lecture and laboratory work relative to computer-manipulated geographic data base. Laboratory work will involve experience in practical application of a geographic information system (GIS) to prob-lem-solving. Student will take appropriate data and compile an environmental impact statement (EIS). Three hours lecture and two hours laboratory per week.


## Courses in Geology [GEOL]

5000 Petrology and Petrography. Four credits. Prerequisite: GEOL 3000. Igneous, sedimentary, and metamorphic rocks. Theories of formation and evolution based upon mineralogical and geochemical evidence. Examination and classification of rocks in hand sample and thin section. Additional assignments involving data analysis and interpretation and completion of a research paper required for graduate credit.

5020 Geomorphic Regions of the United States. Four credits. Prerequisite: GEOL 1030/1031 or 1040/1041. The origin, regional distribution, and geomorphic features and history of the landforms of the United States. Students required to analyze maps, structure sections, and aerial photography to determine geomorphic form and the forces and processes that produced these forms plus research a geomorphical problem resulting in a thesis-type paper. Three hours lecture and two hours laboratory per week.

5030 Invertebrate Micropaleontology. Four credits. Invertebrate and microscopic animal life of the past including recent preserved representatives and their ancient fossilized ancestors. Numerous field trips to local fossil-collecting sites. Designed to aid in the preparation of earth science teachers, geologists, and biologists. Research paper on a topic approved by instructor. An oral presentation of this material may be required. Three hours lecture and two hours laboratory per week.

5050 Meteorology. Three credits. Prerequisite: GEOL 1030/1031 or 1040/1041 or GEOG 1030 or consent of instructor. (PHYS 2010/2011 or 2110/2111 and CHEM 1110/1111 recommended.) Physical laws as they relate to the atmosphere, atmospheric processes and their effects on air masses, fronts, and atmospheric circulation, the dynamics of the atmosphere and its relationship to the hydrosphere. Special problem to be assigned by the instructor.

5060 Principles of Geoscience. Four credits. Includes topics from geology, astronomy, meteorology, and oceanography. Specifically designed to aid in the preparation of earth science teachers in the public schools. Term paper on topic approved by the instructor. Three hours lecture and two hours laboratory per week.

5070 Sedimentation and Stratigraphy. Four credits. Prerequisites: GEOL 1030/1031 or 1040/1041, 1050, and 3000, or consent of instructor. Sedimentary rocks; the processes of sedimentation, the alteration of sediments through time, and an examination of the resulting stratigraphic units. For geoscience majors and those with interests in soil mechanics and civil engineering. Research paper on a topic approved by the instructor. An oral presentation may also be required. Three hours lecture and two hours laboratory per week.

5080 Structural Geology. Three credits. Prerequisites: Knowledge of trigonometry, GEOL 1030/1031 or 1040/1041; GEOL 1050 recommended. Orientation and deformation of rock. Geometric, analytical, and statistical solutions to structural problems. Emphasis on three-dimensional visualization, problem solving, geological map interpretation, and the mechanics of deformation. Case analyzing, research, and interpretation required. Lecture and laboratory.

5090 Problems in Geology. One to six credits. Prerequisite: A minimum of 12 semester hours of geology, at least 6 hours of which must be upper division and excluding GEOL 1030/1031 or by consent of instructor. An independent research-oriented project commensurate with the student's interests and qualifications. In -depth research requiring extensive and intensive search of applicable literature and large study area. An oral examination and discussion required. May be repeated up to a maximum of six hours.

5100 Geophysical Prospecting. Four credits. Prerequisites: GEOL 3060, MATH 1910, PHYS 2010/2011 or 2110/2111, or consent of instructor. PHYS 2020/2021 or 2120/2121, GEOL 1030/1031 or 1040/1041, and MATH 1920 also recommended. Survey of seismic, gravimetric, and magnetic/electrical exploration methods. Applied course covering some elementary theory, basic field practice, computation fundamentals, interpretation techniques. Case analysis, research, and interpretation required. Two-hour lecture and two hours laboratory per week.

5120 Environmental Geology. Four credits. Prerequisite: GEOL 1030/1031 or 1040/1041 or GEOG 1030 or consent of instructor. Application of geologic information to minimize possible environmental degradation and maximize utilization of resources in the natural and modified environment, local examples and field trips. Topics include engineering properties of earth materials, natural hazard prediction and reduction, water supply, solid and hazardous wastes, mineral resources, global change, land-use planning, environmental impact analysis. Three hours lecture and two hours laboratory per week. An in-depth research project and paper required.

5130 Hydrogeology. Four credits. Prerequisites: GEOL 1030/1031 or 1040/1041 or consent of instructor. Basic processes and measurement of the hydrologic cycle, including precipitation, evaporation, surface runoff, stream flow, soil moisture, and ground water. Emphasis placed on ground water, including geology of occurrence, principles of flow, conceptual models of regional flow, chemistry and quality, well hydraulics, aquifer characteristics, resource development, detection of pollutants, and contaminant transport. Additional individual research project required, including a written and classroom report. Lecture and laboratory.

5140 Inorganic Geochemistry. Three credits. Prerequisites: CHEM 1120/1121 and GEOL 1040/1041. Principles of inorganic geochemistry. Geochemistry of the earth and solar system, isotope geochronometers, thermodynamics of geochemical processes, mineral stability diagrams, isotope fractionation, rates of geochemical processes, chemical weathering, chemical compositions of surface and groundwater, geochemical exploration, geochemical cycles, environmental geochemistry. Additional assignments involving data analysis and interpretation and completion of a research paper required for graduate credit. Three-hour lecture per week.

5150 Environmental Applications of Hydrogeology. Three credits. Prerequisite: GEOL 4130 or 5130 with a minimum grade of C. Advanced course that emphasizes applied methods for assessing hazardous and solid waste facilities and contaminated ground water remediation techniques. Included will be site characterization methods, ground water sampling procedures, and monitoring well installation techniques. Additional assignments involving case history analysis with an oral presentation will be required of graduate students. Three hours lecture per week.

5401- Field Course. Four credits. Supervised study in some geological
5402 area preceded by classroom preview and concluded by a time of evaluation. Emphasis on the natural and physical elements of the environment, with special attention directed toward the geomorphology and geology of scientific areas. An intensive period of study and research on a full-time basis. Work required will depend on area researched and time involved. Consult department chair for specific fees.

Some geography and/or geology courses may be accepted as either geography or geology; others are accepted only in one discipline. Substitutions are made at discretion of department chair in consultation with the academic minor advisor.

# Department of Health and Human Performance 

Dianne Bartley, Chair Murphy Athletic Center 111

The Department of Health and Human Performance offers two Master of Science degrees: one with a major in Health, Physical Education, and Recreation with concentrations in Health, Physical Education, Recreation, and Sport Management and one with a major in Exercise Science. All students in the Master of Science program in Health, Physical Education, and Recreation must choose one of the four concentrations.

The department also offers the Ph.D. in Human Performance with specializations in four areas: Exercise Science, Health, Leisure Studies, and Physical Education.
Admission decisions will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for graduate study. Admission decisions are based upon consideration of a number of criteria which are believed to indicate a high potential in the graduate program. Successful applicants to the master of science programs typically have scores on the GRE Verbal and Quantitative measures which exceed 400 with a total combined score that exceeds 800 or a score on the Miller Analogies Test above 400 (38 on the old scale). Successful applicants to the Ph.D. program typically have scores on the GRE Verbal and Quantitative measures each of which exceeds 450 with a combined score that typically exceeds 1000. The Analytical Writing Assessment score is also considered. Applicants should provide three letters of recommendation from persons who can address their academic qualifications and potential for success in graduate study.

Applicants to the M.S. in HPER are required to provide a 400-word statement of purpose giving their reason for applying to the program, their academic interest, and professional goals.

NOTE: The Department of Health and Human Performance has developed proposals establishing individual M.S. degrees in Health Behavior and Promotion, Teaching Physical Education, and Leisure and Sport Management. If these three new degrees are approved the existing M.S. in HPER will be phased out. Please contact the College of Graduate Studies for further information.

## Admissions Process

Listed below are the general admission and graduation standards for the M.S. in HPER, the M.S. in Exercise Science, and the Ph.D. in Human Performance. Applications for Summer/Fall admission must be complete by March 1 and applications for Spring admission must be complete by October 31. Late applicants who meet the admission criteria may be considered on a case-bycase basis.

## Requirements for the Master of ScienceHPER Major (5000 and 6000 level)

## Thesis Option

Candidate must

1. have earned undergraduate prerequisites of at least 18 semester hours in health and human performance professional courses or a baccalaureate degree from an approved college in an area determined by the admissions committee to be related to the competencies required in the fields of health, physical education, or recreation.
2. complete 30 semester hours of academic work to include thesis requirements; degree core course requirements (HHP 6610 and 6700); and 21 semester hours of concentration requirements to be selected in consultation with the candidate's advisor. NOTE: No more than 30 percent of the total degree hours (or 3 courses) at the 5000 level can be counted toward the degree.
3. complete a minimum of 3 semester hours of thesis credit.
4. select a thesis committee composed of two members, one of whom must be from the Department of Health and Human Performance.
5. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
6. successfully complete a written comprehensive examination during the last semester of coursework (may be taken no more than twice).
7. successfully complete an oral examination relating to the thesis.
Candidate may incorporate 6 semester hours of designated cognate courses or a minor of 12 semester hours into the program upon approval of the graduate advisor and the dean of Graduate Studies.

## Non-thesis Option

## Candidate must

1. have earned undergraduate prerequisites of at least 18 semester hours in health and human performance professional courses or a baccalaureate degree from an approved college in an area determined by the admissions committee to be related to the competencies required in the fields of health, physical education, or recreation.
2. complete 32 semester hours of academic work to include degree core course requirements (HHP 6610 and 6700) and 26 semester hours of concentration requirements to be selected in consultation with the candidate's advisor.

NOTE: No more than 30 percent of the total degree hours (or 3 courses) at the 5000 level can be counted toward the degree.
3. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
4. successfully complete a written comprehensive examination during the last semester of coursework (may be taken no more than twice).
Candidate may incorporate 6 semester hours of designated cognate courses or a minor of 12 semester hours into the program upon approval of the graduate advisor and the dean of Graduate Studies.

## Concentration: Health

Candidate must have earned appropriate undergraduate prerequisites.
Student is required to select either the thesis or non-thesis option.

## Thesis Option Requirements:

Core Requirements ( 6 hours):
HHP 6610 Research Methods in Health and Human Performance
HHP 6700 Data Analysis and Organization for Human Performance

## Concentration Requirements (21 hours):

HLTH 6102 Theory of Health Education and Behavior
HLTH 6510 The Nation's Health
HLTH 6850 Methods in Epidemiology
HLTH 6860 Program Planning for Health Promotion
HLTH 6910 Special Problems
HLTH 5600 Technology Applications
HLTH 5601 Technology Applications Lab
HLTH 6640 Thesis Research
Guided Electives (select $\mathbf{3}$ hours from the following:)
HLTH 5270 Bioethical Issues in Health Education
HLTH 5340 Fitness Education for the Adult
HLTH 5900 Certified Health Education Specialist (CHES) Review (1 hr.)
HLTH 6000 Stress Management in Health and Health Promotion
HLTH 6010 Holistic and Complementary Health Care
HLTH 6020 Somatic Therapy Techniques for Health Care Providers
HLTH 6500 Pathopharmacology in Health and Human Performance
HLTH 6870 Health Promotion
HLTH 6930 Principles and Philosophy of School Health Education Programs
HLTH 6950 Advanced Methods of Community Health Education
HLTH 6970 Advanced Methods in Human Sexuality Education

## Non-thesis Option Requirements:

Core Requirements ( 6 hours):
HHP 6610 Research Methods in Health and Human Performance
HHP 6700 Data Analysis and Organization for Human
Performance
Concentration Requirements ( 21 hours):
HLTH 6102 Theory of Health Education and Behavior
HLTH 6510 The Nation's Health
HLTH 6850 Methods in Epidemiology
HLTH 6860 Program Planning for Health Promotion
HLTH 5600 Technology Applications
HLTH 5601 Technology Applications Lab
HLTH 6880 Internship/Special Projects (6 hours)
Guided Electives (select 5 hours from the following:)
HLTH 5270 Bioethical Issues in Health Education
HLTH 5340 Fitness Education for the Adult
HLTH 5900 Certified Health Education Specialist (CHES) Review (1 hr.)
HLTH 6000 Stress Management in Health and Health Promotion
HLTH 6010 Holistic and Complementary Health Care

HLTH
HLTH
HLTH
HLTH
HLTH
HLTH
HLTH

6020 Somatic Therapy Techniques for Health Care Providers 6500 Pathopharmacology in Health and Human Performance 6870 Health Promotion 6910 Special Problems (1 hr.)
6930 Principles and Philosophy of School Health Education Programs

## Concentration: Physical Education (NCATE Accredited)

Candidate must have earned appropriate undergraduate prerequisites.

| Core Requirements ( 6 hours): |  |  |
| :--- | ---: | :--- |
| HHP | 6610 | Research Methods in Health and Human <br> Performance |
| HHP | 6700 | Data Analysis and Organization for Human <br> Performance |
| Concentration |  |  |

*The student is required to take the thesis option of 3 hours of thesis research plus 3 hours of electives or the non-thesis option with 8 hours of electives.

## Concentration: Recreation

Candidate must have earned appropriate undergraduate prerequisites.

## Core Requirements ( 6 hours):

HHP 6610 Research Methods in Health and Human Performance
HHP 6700 Data Analysis and Organization for Human Performance
Concentration Requirements (Select 12 hours from the following:)
LSM 6500 Legal Issues and Risk Management in Sport and Leisure Services
LSM 6510 Financial Management and Marketing of Leisure and Sport Services
LSM 6520 Management Practices in Recreation and Leisure Services
LSM 6530 History and Philosophy of Leisure
LSM 6570 Issues, Trends, and Research in Recreation and Leisure
LSM 6670 Behavioral Concepts in Recreation and Leisure Services

## Concentration Electives (9-12 hours):

In consultation with the advisor, student selects a minimum of: a) if thesis option, 3-6 hours from the REC/LSM courses listed below and 3-6 hours of non-REC/LSM coursework, or b) if non-thesis option, 6-9 hours from the REC/LSM courses listed below and 3-6 hours of non-REC/LSM coursework. NOTE: Students are highly encouraged to take non-REC/LSM course(s) outside the department.
REC 5340 Fitness Education for the Adult
REC 5380 Introduction to Recreation for Persons with Disability
REC 5480 Recreational Therapy Techniques
REC 5490 Campus Recreation
REC 5500 Introduction to Recreational Therapy
REC 5510 Recreational Therapy in Clinical Settings
REC 5520 Transitional and Community Recreational Therapy
REC 5560 Field Studies in Recreation and Parks
REC 5570 Outdoor Recreation Workshop
REC 5580 Seminar: Outdoor Recreation and Environmental Issues
REC 5590 Readings in Parks and Recreation
REC 5600 Technology Applications
REC 5601 Technology Applications Lab
REC 5660 Evaluation of Recreation and Leisure Services
REC 5790 Sport and Society
LSM 6500 Legal Issues and Risk Management in Sport and Leisure Services
LSM 6510 Financial Management and Marketing of Leisure and Sport Services
LSM 6520 Management Practices in Recreation and Leisure Services
LSM 6530 History and Philosophy of Leisure
LSM 6550 Outdoor Environmental Education
LSM 6570 Issues, Trends, and Research in Recreation and Leisure
LSM 6670 Behavioral Concepts in Recreation and Leisure Services
LSM 6850 Cross-Cultural Perspectives in Leisure and Tourism
LSM 6880 Internships/Special Projects
LSM 6910 Special Problems

## Thesis Option Requirements:

LSM 6640 Thesis Research (3 hours minimum requirement; (no more than 3 hours apply to degree)
Non-thesis Option Requirements
LSM 6910 Special Problems (2 hours minimum requirement; (no more than 2 hours apply to degree)

## Concentration: Sport Management

Candidate must have earned appropriate undergraduate prerequisites.

## Core Requirements ( 6 hours):

HHP 6610 Research Methods in Health and Human Performance
HHP 6700 Data Analysis and Organization for Human Performance
Concentration Requirements (18 hours):
LSM 6500 Legal Issues and Risk Management in Sport and Leisure Services
LSM 6710 The Sport Industry
LSM 6720 Sport Event Planning, Promotion, and Fundraising
LSM 6730 Sociocultural, Philosophical, and Ethical Issues in Sport and Human Performance
PHED 6820 Administration and Supervision of Physical Education and Sport
LSM 6050 Design and Management of Leisure and Sport Facilities
Electives ( 5 hours):
ACTG 6000 Survey of Accounting Principles
ATHC 5060 Sport Psychology
ATHC 5800 Administration of High School and College Athletics
BLAW 6430 Legal Environment of Management
FIN 6000 Survey of Financial Management

| HIST | 5680 | History of Sport in America |
| :--- | :--- | :--- |
| MC | 6300 | Media Law and Ethics |
| MGMT | 6000 | Management and Operations Concepts |
| PHED | 5600 | Technology Applications |
| PHED | 5601 | Technology Applications Lab |
| LSM | 6910 | Special Problems |
| REC | 5790 | Sport and Society |
| Thesis Option Requirement: |  |  |
| LSM | 6640 | Thesis Research (3 hours minimum requirement; |
| (no more than 3 hours apply to degree) |  |  |
| Non-thesis Option Requirement: |  |  |
| LSM | 6880 Internship/Special Project (3 hours minimum) |  |

NOTE: All students (thesis or non-thesis) MUST do an internship, LSM 6880, at the end of their coursework.

## Requirements for the Master of ScienceExercise Science Major (5000 and $\mathbf{6 0 0 0}$ level) <br> Thesis Option:

## Candidate must

1. have completed a course in human anatomy and physiology, be certified in CPR, and submit three letters of recommendation.
2. complete 30 semester hours to include the following courses:
Required courses - preferred sequence ( 21 hours):
HHP 6700 Data Analysis and Organization for Human Performance
EXSC 6650 Physiological Bases of Human Performance
HHP 6610 Research Methods in Health and Human Performance
EXSC 6830 Measurement in Exercise Science
EXSC 6840 Advanced Principles of Exercise Prescription and Assessment
EXSC 6880 Internship/Special Project (3 credits)
EXSC 6640 Thesis Research
Approved electives ( 9 hours):
Nine hours of electives selected in consultation with advisor. Six hours must have an EXSC prefix.
3. select a thesis committee composed of two members, one of whom must be from the Department of Health and Human Performance.
4. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
5. successfully complete an oral examination relating to the thesis.

## Non-thesis Option:

Candidate must

1. have completed a course in human anatomy and physiology, be certified in CPR, and submit three letters of recommendation.
2. complete 36 semester hours which include the following courses:

## Required courses (24 hours)

HHP 6610 Research Methods in Health and Human Performance
HHP 6700 Data Analysis and Organization for Human Performance
EXSC 6650 Physiological Bases of Human Performance
EXSC 6830 Measurement in Exercise Science
EXSC 6840 Advanced Principles of Exercise Prescription and Assessment

## EXSC 6880 Internship/Special Projects ( 6 credits) <br> EXSC 6890 Seminar in Exercise Science and Health Promotion

Approved electives ( 12 hours)
Twelve hours of electives selected in consultation with advisor. Six hours must have an EXSC prefix.
3. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
4. successfully complete a written comprehensive examination during the last semester of coursework (may be taken no more than twice).

## Requirements for the Doctor of Philosophy in Human Performance (6000 and 7000 level)

The Ph.D. degree is offered for the purpose of developing doctoral level expertise in research (both applied and theoretical) and as preparation for teaching at the collegiate level.
The Ph.D. in Human Performance requires 60 credit hours past the master's degree. A maximum of 12 hours from the master's degree may be transferred in from an accredited program. Two-thirds of the program must be at the 7000-level. Applicants holding only a bachelor's degree will complete the requirements for an M.S. (thesis option) in addition to the Ph.D. requirements.
The general degree plan includes 10 hours of pedagogy, 15 hours of research tools, 23 hours in coursework and independent research in one of four areas of specialization (Exercise Science, Health, Leisure Studies, Physical Education). Twelve credit hours of dissertation are included in the 60 hours required.

## Ph.D. in Human Performance ( 60 credit hours) <br> Pedagogy (10 hours) <br> HHP 7600 Practicum in Human Performance (2 credits) <br> HHP 7610 Practicum in Human Performance (2 credits) <br> Select 6 hours from the following: <br> FOED 7520 Problems of Evaluation in Higher Education (3 credits) <br> FOED 7560 Seminar in College Teaching (3 credits) <br> FOED 7570 Issues in Higher Education (3 credits) <br> FOED 7580 The College Student ( 3 credits) <br> SPSE 7210 Legal Issues in Higher Education (3 credits) <br> SPSE 7530 Administration of Higher Education (3 credits) <br> SPSE 7540 Overview of Higher Education (3 credits) <br> SPSE 7550 Instructional Development in Higher Education (3 credits) <br> PHED 7680 Current Issues in Physical Education Pedagogy (3 credits) <br> Research Tools ( 15 hours) <br> HHP 7700 Advanced Data Analysis and Organization for Human Performance (3 credits) <br> HHP 7710 Experimental Design in Human Performance (3 credits) <br> HHP 7030 Research Seminar in Human Performance (3 credits)

Choose 6 additional hours (two courses) from statistics, research design, and data analysis in consultation with the graduate program advisor (6 credits).
Dissertation (12 hours)
HHP 7640 Dissertation Research (12 credits)

## Specialization (23 hours)

A total of 23 hours coursework and independent research is to be selected in consultation with the graduate program advisor.

Note: Two-thirds (40 hours) of total credits must be at the 7000 level.

## Admissions

Admissions decisions will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for doctoral study. Admission decisions are based on consideration of a number of criteria that are believed to predict success in the Ph.D. program including

1. scores on the Graduate Record Examination (GRE). Successful applicants usually have scores on the GRE Verbal and Quantitative measures each of which exceeds 450, with a combined score that typically exceeds 1000. The Analytical Writing Assessment score on the GRE is also considered.
2. previous academic performance. Successful applicants typically have a grade point average (GPA) on the last 60 hours of academic work of 3.00 or above on a 4.00 scale.
3. letters of recommendation. Applicants should provide three letters of recommendation from persons who can address their academic qualifications and potential for success in doctoral study.
4. statement of purpose. Applicants should provide a 400-500 word statement of purpose giving their reasons for applying to the $\mathrm{Ph} . \mathrm{D}$. program, academic interests, and professional goals.
5. research skills. Successful applicants typically have statistical and research methodology skills as evidenced by coursework in both areas.
6. coursework in a related field. Applicants with a bachelor's degree will be expected to have completed at least 30 hours of coursework in a related field. Applicants with a master's degree are expected to have completed at least 20 graduate hours in a related field.
NOTE: All students will have completed a thesis or scholarly equivalent prior to admission to candidacy.

## Pre-dissertation Advising

Upon admission to the Ph.D. program the candidate will be assigned an advisor who (in cooperation with the graduate coordinator) will serve to advise the student on an appropriate program of study and of any deficiencies to correct.

## Preliminary Examinations

Upon completion of coursework the candidate will be eligible to take preliminary exams.
The written exams will be structured to test the student on the breadth of knowledge gained from statistics, research methods, and design components as well as the specialization component. All exams are to be taken within one calendar year.

## Advancement to Candidacy

Upon successful completion of the preliminary exams the student will file an Advancement to Candidacy form with the Graduate Studies Office. No more than six credit hours of C
grade will count toward the Ph.D. degree requirements. D and F grades will not count toward degree requirements but will be computed in the GPA. The student must have a GPA of 3.25 for the program of studies to advance to candidacy.

## Dissertation Committee

Upon advancement to candidacy the student will formally construct his/her dissertation committee. The committee should include at a minimum three faculty members; two must be from the department and one must be from outside the department. The chair of the committee must be a doctorallevel graduate faculty member.

## Residency

Ph.D. students must be enrolled in full-time study ( 9 semester hours) for at least one semester to fulfill residency requirements.

## Time Limit

There is a ten-year limit for completing all Ph.D. degree requirements, i.e., all doctoral coursework taken at MTSU, as well as the dissertation must be completed within ten years of the first semester of enrollment.


## Courses in Athletic Coaching [ATHC]

5060 Sport Psychology. Three credits. (Same as PSY 5060.) Application of the knowledge base of psychology to the human endeavors of athletics. Introduction of behavioral principles, motivational research, personality factors, social/psychological findings, cognitive processes, dysfunctional behavior knowledge, and psychometric assessment procedures for the purpose of enhancing performance.

5180 Coaching Speed/Strength Conditioning for Sports. Three credits. Organizing and developing speed and strength conditioning programs for sports. Setting up and supervising proper methods and techniques in running, weight lifting, and conditioning exercise for athletics today.

5220 Coaching Soccer. Two credits. Theory and practice of soccer fundamentals as well as introduction of offensive and defensive plays.

5600 Advanced Coaching of Football. Two credits. Philosophies of coaching football and close examination of the master plan of coaching responsibilities.

5620 Advanced Coaching of Basketball. Two credits. Philosophies of coaching basketball discussed, along with a detailed study of the master plan of coaching responsibilities.

5640 Coaching of Baseball. Two credits. Theory and practice in baseball fundamentals as well as reviewing the various systems and types of plays.

5650 Coaching Cross-Country, Track and Field. Two credits. Theory and practice in fundamentals and skills.

5680 Coaching and Judging Women's Gymnastics. Three credits. Includes classroom instruction and practical experience in principles and techniques of coaching, spotting, and judging women's gymnastics; a USGF Judges Rating may be obtained.

5690 Psychology of Coaching. Three credits. Application of basic psychological principles to everyday coaching situations and problems. Designed to improve communication and motivation for players and coaches.

5800 Administration of High School and College Athletics. Three credits. National, state, and local policies concerning athletic eligibility, contest management, equipment, awards, finances, budgets, safety, maintenance of facilities, public relations, publicity, and current athletic trends.

## Courses in Athletic Training [ATHT]

5610 Prevention and Care of Athletic Injuries. Three credits. Theory and practice in the prevention and care of athletic injuries including treatment, taping, and rehabilitation.

5960 Rehabilitation Techniques in Sports Medicine. Three credits. Methods and techniques in the selection and application. The N.A.T.A. Competencies in Athletic Training will be a guideline for knowledge that each student should obtain. Students will engage in the process of reviewing, analyzing, discussing, and reflecting about athletic training.

5965 Aquatic Exercise and Therapeutic Techniques. Three credits. (Same as EXSC/REC 5965.) Examines the various uses of the aquatic environment to develop, maintain, and improve physical performance with practical development of skills and techniques
and aquatic exercise programming. Combines both didactic and laboratory activities in an experiential learning environment.

5970 Therapeutic Modalities in Sports Medicine. Three credits. Methods and techniques in the application of selected therapeutic modalities and the evaluation of injuries relative to modalities. The N.A.T.A. Competencies in Athletic Training will be a guideline for knowledge that each student should obtain. Reviewing, analyzing, discussing, synthesizing, and reflecting about athletic training.

6020 Somatic Therapy Techniques for Health Care Providers. Three credits. (Same as HLTH 6020.) Examines the concepts, knowledge, theories, and history of Somatic Therapy. Emphasis on SwedishEsalen, Sports Massage, Shiatsu, and Connective Tissue. Includes advanced rehabilitative and therapeutic modality techniques and combines didactic and some experiential opportunities.

## Courses in Exercise Science [EXSC]

5000 Strength, Conditioning, and Human Performance. Three credits. Prerequisites: Anatomy, physiology, kinesiology, and weight training or permission of instructor. Theories and principles of strength training and conditioning and techniques used to become a certified strength and conditioning specialist or personal trainer.

5240 Principles of Exercise Prescription and Assessment. Three credits. Prerequisites: EXSC 4810 and 4830; PHED 4910. Application of knowledge gained to practical situations; develop proficiency in using equipment and skills to evaluate an individual's health risks and fitness.

5965 Aquatic Exercise and Therapeutic Techniques. Three credits. (Same as ATHT/REC 5965.) Examines the various uses of the aquatic environment to develop, maintain, and improve physical performance with practical development of skills and techniques and aquatic exercise programming. Combines both didactic and laboratory activities in an experiential learning environment.

6640 Thesis Research. One to six credits. (Same as HLTH/PHED/LSM 6640.) Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6650 Physiological Bases of Human Performance. Three credits. Principles of exercise physiology. Acute responses and chronic adaptations of the body to physical activity, exercise, and sports participation and their impact on homeostasis examined. Physiological systems examined in detail

6750/ 7750 Exercise Physiology for the Child and Adolescent. Three credits. Prerequisite: EXSC 4830 or 6650. Review, analysis, and synthesis of current knowledge and literature about the exercise responses of children. Emphasis on understanding the influence of physical growth and measurement on the mechanisms which underlie the developing functional capacities of the exercising child and adolescent

6800/ 7800 Environmental Exercise Physiology. Three credits. Prerequisite: EXSC 6650. Examines how the human body responds and adapts to diverse forms of environmental stress during exercise. Emphasis on delineating the mechanisms which underlie immediate responses and long-term adaptations that humans make while exercising under various environmental conditions.

6810 Cardiovascular Exercise Physiology. Three credits. Prerequisite: EXSC 6650. Overview of the physiological and biophysical mechanisms underlying cardiac function. Neurochemical properties of
the myocardial cell, the physiological basis of cardiac muscle function, and the overall performance of the intact heart during exercise.

6830 Measurement in Exercise Science. Three credits. Laboratory experiences in testing, evaluating, and reporting in exercise science. Measurement theory related to validity and reliability of assessments addressed.

6840 Advanced Principles of Exercise Prescription and Assessment. Three credits. Prerequisite: EXSC 4240 or equivalent. Provides theoretical and laboratory learning experiences for health risk appraisal, cardiovascular evaluation, and exercise prescription for healthy people and special populations.

6850/7850 Physical Activity, Exercise, and Disease. Three credits. Prerequisite: EXSC 6650 or equivalent. In-depth survey and synthesis of the research literature examining historical and recent trends in physical activity participation and the health-related aspects of exercise, physical activity, and physical fitness. Physiological mechanisms underlying the positive effects of physical activity and exercise on risk reduction for disease identified and explored. Behavioral and environmental determinants of physical activity and regular participation in exercise reviewed.

6880 Internship/Special Projects. Three to six credits. (Same as HLTH/ PHED/LSM 6880.) On-site practical experience in an exercise science, health promotion, or sport management program. Those with extensive work experience will develop, implement, and conclude a project (research or applied) in consultation with the major professor.

6890 Seminar in Exercise Science and Health Promotion. Three credits. Current issues and research in exercise science and health promotion. Written and oral presentation of a research project required.

6910 Special Problems. One, two, or three credits. (Same as HLTH/ PHED/LSM 6910.) Individual study of current problems or areas of interest. $\mathrm{S} / \mathrm{U}$ grading.

7100 Mechanical Analysis of Sports Skills. Three credits. A synthesis of scientific principles as they relate to teaching simple and complex motor patterns.

7200 Applied Human Exercise Physiology. Three credits. Prerequisite: EXSC 6650. Investigation of how the physiological response to exercise is impacted by intensity, duration, type of muscular contraction, limbs involved, and body position.

## Courses in Health [HLTH]

5270 Bioethical Issues in Health Education. Three credits. Analysis of current bioethical issues, problems, needs, trends, and interests in health education.

5280 Instructor Course: First Aid and CPR. Two credits. Prerequisite: HLTH 3300 or current American Red Cross certification in multimedia first aid or standard first aid and CPR. Organizing, planning, and teaching American Red Cross safety courses. Red Cross instructor certification awarded for successful completion.

5340 Fitness Education for the Adult. Three credits. (Same as PHED and REC 5340.) Planning, teaching, and participating in individual and group fitness programs for the adult. Administers and interprets assessments of related components with an understanding of physiological principles related to exercise in the adult. Major lifetime wellness activities covered.

5600 Technology Applications. One credit. (Same as PHED and REC 5600.) Prerequisite: Introductory course in computer literacy or equivalent with instructor permission. Corequisite: 5601. Focus on understanding of and competency in use of a variety of technology applications related to the profession. Students required to enroll in the corresponding lab during the same semester.

5601 Technology Applications Lab. Two credits. (Same as PHED and REC 5601.) Corequisite: HLTH 5600. Investigation and application of profession-specific software and hardware applications.

5900 Certified Health Education Specialist (CHES) Review. One credit. Responsibilities and competencies on the Certified Health Education Specialist examination. Pass/Fail.

6000 Stress Management in Health and Health Promotion. Three credits. Evaluation techniques and instruments considered. Effects of stress on physical and mental domains of health examined. Methods of conducting stress management workshops and classes emphasized.

6010 Holistic and Complementary Health Care. Three credits. Concepts and theories that make up the disciplines and practices constituting the holistic and complementary approach to health promotion and disease treatment and prevention.

6020 Somatic Therapy Techniques for Health Care Providers. Three credits. (Same as ATHT 6020.) Theoretical concepts, knowledge, theories, and history of Somatic Therapy. Emphasis on SwedishEsalen, Sports Massage, Shiatsu, and Connective Tissue. Includes advanced rehabilitative and therapeutic modality techniques. Combines didactic and some experiential opportunities.

6102 Theory of Health Education and Behavior. Three credits. (Same as PSY 6102.) Links behavioral change theory to the research and practice of interventions in health behaviors. Application of the theoretical constructs is linked to design, implementation and evaluation of individual, and group behavioral change programs.

6320 Global Health. Three credits. Explores patterns of medical care delivery and public health practices; factors that inhibit or enable the reduction of excess morbidity, mortality, and disease among the poor; threats to health resulting from economic crises, unhealthy environments, and risky behaviors; and demographic influences on the status of health around the world.

6500 Pathopharmacology in Health and Human Performance. Three credits. Etiology and pathology of disease and how functional physiological changes affect health and human performance. Involves the study of pharmacological considerations used in the treatment of disease and musculoskeletal conditions.

6510 The Nation's Health. Three credits. Investigates the determinants of health and the role of public health and health care on the health status of the population of the United States. Study of biological, socioeconomic, cultural, and behavioral factors that influence health status and care in America.

6640 Thesis Research. One to six credits. (Same as EXSC/PHED/LSM 6640.) Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6850 Methods in Epidemiology. Three credits. Principles and methods of epidemiologic analysis including standardization; stratified analysis; confounding and its control; planning and conducting epidemiologic research; role of multivariate analysis in epidemiologic research.

6860 Program Planning for Health Promotion. Three credits. Program planning, theories and models of health education and promotion, development of interventions, and program implementation, including mission, goals, objectives, and activities of health education and promotion programs. Introduces needs assessment and program evaluation.

6870 Health Promotion. Three credits. Health promotion knowledge as well as the ability to impart this knowledge to the lay population. In-depth information will be covered regarding lifestyle and its relationship to risk factors for cardiovascular disease and cancer.

6880 Internship/Special Projects. Three to six credits. (Same as EXSC/ PHED/LSM 6880.) On-site practical experience in an exercise science, health promotion, or sport management program. Those with extensive work experience will develop, implement, and conclude a project (research or applied) in consultation with the major professor.

6910 Special Problems. One, two, or three credits. (Same as EXSC/ PHED/LSM 6910.) Individual study of current problems or areas of interest. $\mathrm{S} / \mathrm{U}$ grading.

6930 Principles and Philosophy of School Health Education Programs. Three credits. A detailed overview.

6950 Advanced Methods of Community Health Education. Three credits. Review of program planning, development of interventions, and implementation of programs. Budgeting, needs assessment, and evaluation of health education and promotion programs covered.

6970 Advanced Methods in Human Sexuality Education. Three credits. Methodology, teaching techniques, and the organization of sexuality education programs for schools (K-12) and other community settings. Additional emphasis directed to concepts and information about human sexuality education, i.e., the psychological, physiological, sociological, and ethical aspects.

7120 Research in Epidemiology. Three credits. Advanced study in epidemiological analysis, methods, and critique with an emphasis within the field of health and human performance. Areas include epidemiology and chronic disease, public health, exercise science, and sports medicine.

## Courses in Health and Human Performance [HHP]

6610 Research Methods in Health and Human Performance. Three credits. Location of information, methods of research, methods of collecting data, application of the computer in analyzing data, and preparation and presentation of a research paper.

6700 Data Analysis and Organization for Human Performance. Three credits. Prerequisites: PHED 4810 or equivalent, good understanding of mathematical concepts, and computer literacy. Pertinent skills needed to analyze and organize research data through introduction of concepts, principles, techniques, and activities that lead to the appropriate organization and analysis of research data collected for health and human performance.

6999/ 7999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

7030 Research Seminar in Human Performance. Three credits. Current problems, issues, trends, and research in human performance; selected lectures, reports, and class discussion.

7060 Field Work or Laboratory Experiment in Human Performance. One to six credits. Professional assignments in human performance appropriate to the student's background and interests will be pursued.

7080 Professional Preparation in Human Performance. Three credits. Comparisons of current programs and trends; the development of individual programs.

7300 Current Measurement Issues in Health and Human Performance. Three credits. Prerequisites: HHP 6610 and 6700 or equivalent. Advanced applications of measurement theories (i.e., item response theory), test construction, statistical techniques, and computer software for measurement research in the area of health and human performance.

7600/ 7610 Practicum in Human Performance. Two credits. Careful supervision given to actual teaching, clinical, or research experience. Assignment by department or chair of candidate's committee. $\mathrm{S} / \mathrm{U}$ grading.

7640 Dissertation Research. One to six credits. Assignment by department or chair of candidate's committee. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled, student should register for at least one credit hour of doctoral research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

7700 Advanced Data Analysis and Organization for Human Performance. Three credits. Prerequisites: HHP 6610 and 6700 or equivalent. Skills and understanding necessary to read, conduct, report, and interpret advanced data analytical techniques using data from HHP. Practical and written assignments, presentations, examinations, and projects will furnish doctoral student with tools necessa-ry for data analysis associated with dissertation requirement.

7710 Experimental Design in Human Performance. Three credits. Prerequisites: HHP 6610 and 7700 or equivalent. Skills and understanding necessary to evaluate designs used in HHP research literature. Practical and written assignments, evaluation of current research, examinations, and projects; knowledge and skills for planning appropriately the design for future research projects.

## Courses in Leisure and Sport Management [LSM]

6050 Design and Management of Leisure and Sport Facilities. Three credits. The planning, design, and management process as it relates to leisure and sport facilities. Design and planning process, facility operation, and risk management.

6500 Legal Issues and Risk Management in Sport and Leisure Services. Three credits. Understanding the legal basis for management actions, concepts of legal liability including torts, contracts, and constitutional law as applied to sport and leisure services organizations. Emphasis on the ability to plan, develop, and implement risk management programs.

6510 Financial Management and Marketing of Leisure and Sport Services. Three credits. Principles and practices of budgeting, financial methods and strategies, and revenue sources for recreation and leisure service agencies and sport organizations, including cost accounting and fiscal control. Includes traditional approaches to
marketing with particular focus on approaches unique to leisure and sport organizations.

6520 Management Practices in Recreation and Leisure Services. Three credits. Administrative processes and management techniques used in planning, organizing, staffing, directing, and controlling with respect to leisure service delivery systems.

6530 History and Philosophy of Leisure. Three credits. In-depth study of history and philosophy as related to recreation and leisure in society. Emphasis on tracing the historical and philosophical underpinnings of the profession and their impact on current research and practice.

6550 Outdoor Environmental Education. Three credits. Camping leadership and outdoor education principles with implications for management, planning of, and interpretation in recreation areas as well as for policy development.

6570 Issues, Trends, and Research in Recreation and Leisure. Three credits. Identification and analysis. Emphasis on meaningful, outstanding studies and research in the field of recreation and leisure.

6640 Thesis Research. One to six credits. (Same as EXSC/HLTH/PHED 6640.) Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6670 Behavioral Concepts in Recreation and Leisure Services. Three credits. Social psychological concepts concerning recreation and leisure behavior in various types of park, recreation, and tourism settings. Range of different theoretical perspectives and behavioral concepts underlying pertinent research.

6710 The Sport Industry. Three credits. Overview of career paths in the sport industry with a focus on philosophical foundations, management theory, business communications, and marketing integration in the performance, promotion, and production segments of the sports industry.

6720 Sport Event Planning, Promotion, and Fundraising. Three credits. In-depth synthesis of marketing practices in sports including general marketing theory; pricing, distribution, and promotional techniques; media relations; and branding and sponsorship theory.

6730 Sociocultural, Philosophical, and Ethical Issues in Sport and Human Performance. Three credits. Philosophical and sociocultural basis of sport and consideration of ethical issues that provide a foundation for the development of sound judgment by sport professionals.

6850 Cross-Cultural Perspectives in Leisure and Tourism (Study Abroad). Three credits. In-depth study of the leisure experience in other cultures (non-U.S.) through on-site observation; visits to cultural/historic sites; and interactions with managers and staff at parks, museums, attractions, and world heritage sites.

6880 Internship/Special Project. Three to six credits. (Same as EXSC/ HLTH/PHED 6880.) On-site practical experience in an exercise science, health promotion, or leisure/sport industry program. Those with extensive work experience will develop, implement, and conclude a project (research or applied) in consultation with the major professor.

6910 Special Problems. One, two, or three credits. (Same as EXSC/ HLTH/PHED 6910.) Individual study of current problems or areas of interest. $\mathrm{S} / \mathrm{U}$ grading.

## Courses in Physical Education [PHED]

5340 Fitness Education for the Adult. Three credits. (Same as HLTH and REC 5340.) Planning, teaching, and participating in individual and group fitness programs for the adult. Administers and interprets assessments of related components with an understanding of physiological principles related to exercise in the adult. Major lifetime wellness activities covered.

5600 Technology Applications. One credit. (Same as HLTH/REC 5600.) Prerequisite: Introductory course in computer literacy or equivalent with instructor permission. Corequisite: 5601 . Focus on understanding of and competency in use of a variety of technology applications related to the profession. Students will be required to enroll in the corresponding lab during the same semester.

5601 Technology Applications Lab. Two credits. (Same as HLTH/REC 5601.) Corequisite: PHED 5600. Investigation and application of profession-specific software and hardware applications.

5700 Skills and Techniques of Teaching Rhythmic Activities. Three credits. (Same as DANC 5700.) Various dance forms, methods and materials, evaluative procedures, and experiences in teaching all forms of dance to students at the K-12 level.

5810 Directing Intramural. Two credits. The organization and administration of intramural programs. Actual participation in developing and supervising intramural activities.

5910 Applied Kinesiology and Biomechanics. Three credits. The science of human motion. Emphasis on principles of anatomy, physiology, and mechanics of human activity.

6090/7090 Motor Learning in Physical Education. Three credits. Theories of learning related to the acquisition of motor skills; a review of the literature pertaining to motor skill development and the implications for teaching.

6640 Thesis Research. One to six credits. (Same as EXSC/HLTH/LSM 6640.) Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

6680/ 7680 Current Issues in Physical Education Pedagogy. Three credits. Examines current issues in contemporary physical education pedagogy with an emphasis on teaching P-16 physical education. Particular attention given to professional issues for practitioners teaching physical education in the public schools and trends in current professional literature.

6800 Program Planning in Physical Education. Three credits. Modern programs of physical education for all grade levels and the contribution of activities to the goals of education.

6801 Advanced Sport and Exercise Psychology. Three credits. Examines the psychological factors that explain high quality performance in sport and exercise. Sample topics include motivation, coaching psychology, the use of mental skills, communication strategies, and factors that affect participation and adherence to exercise.

6820 Administration and Supervision of Physical Education and Sport. Three credits. The organization, planning, and functions involved in administering and supervising programs of physical education and sport. Clinical or field experience required of students with a sport management concentration.

6880 Internship/Special Projects. Three to six credits. (Same as EXSC/ HLTH/LSM 6880.) On-site practical experience in an exercise
science, health promotion, or sport management program. Those with extensive work experience will develop, implement, and conclude a project (research or applied) in consultation with the major professor.

6910 Special Problems. One, two, or three credits. (Same as EXSC/ HLTH/LSM 6910.) Individual study of current problems or areas of interest. $\mathrm{S} / \mathrm{U}$ grading.

6920/7920 Analysis of Teaching Physical Education. Three credits. Prerequisite: at least one year teaching experience in a physical activity setting or permission of instructor. Explores systematic and informal observation techniques for identifying and analyzing teacher and student behaviors occurring in physical activity settings.

6940/7940 Supervision of Teaching in Physical Education. Three credits. Theoretical and clinical approaches to instructional supervision in physical activity settings.

7000 Adapted Physical Activity. Three credits. Cognitive, neuromuscular, sensory, and orthopedic impairments; identification of current topics and procedures for testing and programming for individuals with disabilities; current research findings and practices to assist students in developing necessary skills to design and implement appropriate physical activity programs for individuals with disabilities.

7010 Analysis and Criticism of Professional Literature. Three credits. Thorough consideration of selected specialized literature most likely to influence physical education programs, procedures, and practices in the school and community.

7020 College Physical Education Administration. Three credits. Provides administrators and professional students with a broad base of workable administrative principles and guides.

7040 History of Physical Education. Three credits. The role of physical activity in the lives of people from antiquity to the present with an emphasis on the major events, movements, and people that have influenced the development of physical education.

## Courses in Recreation [REC]

5340 Fitness Education for the Adult. Three credits. (Same as HLTH and PHED 5340.) Planning, teaching, and participating in individual and group fitness programs for the adult. Administers and interprets assessments of related components with an understanding of physiological principles related to exercise in the adult. Major lifetime wellness activities covered.

5380 Introduction to Recreation for Persons with Disability. Three credits. Important issues such as advocacy, accessibility, legalities, and the importance of and broad range of opportunities in the provision of recreational services for persons with disability in our society.

5470 Leisure and Aging. Three credits. Aging relative to the individual, family, peers, and society with an emphasis on leisure. The holistic approach including physical, psychological, social, cultural, environmental, and cognitive aspects explored. Interdisciplinary approach ideal for the developing or practicing human service professional.

5480 Recreational Therapy Techniques. Three credits. Activity-based therapeutic interventions currently utilized to alleviate existing health-related problems, maintain current level of functioning, or to assist in overall rehabilitation efforts of transdisciplinary treatment team

5490 Campus Recreation. Three credits. For those wishing to acquire a specific and comprehensive knowledge of the recreational sports program and an understanding of its place and value in education and society.

5499 Therapeutic Terminology in Recreational Therapy. Three credits. Offers preparation for establishing a vital knowledge base necessary to work in today's fast changing rehabilitation settings. Terminology related to third-party reimbursement, accreditation of health care organizations, and basic medical abbreviations used in charting.

5500 Introduction to Recreational Therapy. Three credits. Prerequisite: REC 3010. Explores the profession of recreational therapy, the wide range of disabilities, and the role of intervention in a variety of settings: clinical, community, and transitional. Topics include history, philosophy, professional development/certification, systemic program design, and implementation.

5510 Recreational Therapy in Clinical Settings. Three credits. Prerequisites: REC 3010 and 4500 . Increases understanding of recreational therapy in clinical settings working with persons with health-related issues and/or disabilities. Concepts of disease and disability, holistic approach, interdisciplinary treatment, assessment, intervention planning and implementation, evaluation, documentation, and third-party reimbursement explored.

5520 Transitional and Community Recreational Therapy. Three credits. Issues clients may face when leaving institutions and returning to their communities. Examines the role and provision of recreational therapy services in transitional and community-based settings.

5540 Organization and Administration of Recreation. Three credits. Prerequisites: REC 3010 and 9 hours of recreation courses. Duties and responsibilities of an administrator and how these are performed.

5560 Field Studies in Recreation and Parks. Three credits. Prerequisites: REC 2500 and 3530 . Opportunity for supervised practical application of classroom theory in professional field work.

5570 Outdoor Recreation Workshop. Three credits. Off-campus course that provides materials and experiences not available in the classroom. Exposure to issues, trends, and concerns relevant to outdoor recreation, resource management, and the delivery of programs and services in outdoor environments. Public, private non-profits, and commercial agencies experienced through a series of field trips, lectures, group exercises, and other experientialbased activities.

5580 Seminar: Outdoor Recreation and Environmental Issues. Three credits. Awareness of the importance of environmental considerations when planning, managing, or administering outdoor recreation programs. Includes environmental issues and methods of seeking solutions to environmental problems.

5590 Readings in Parks and Recreation. Three credits. In-depth reading and preparation of an annotated bibliography and report. Arrangements for this course should be made with the instructor prior to registration.

5600 Technology Applications. One credit. (Same as HLTH and PHED 5600.) Prerequisite: Introductory course in computer literacy or equivalent with instructor permission. Corequisite: 5601. Focus on understanding of and competency in use of a variety of technology applications related to the profession. Students required to enroll in the corresponding lab during the same semester.

5601 Technology Applications Lab. Two credits. (Same as HLTH and PHED 5601.) Corequisite: REC 5600. Investigation and application of profession-specific software and hardware applications.

5660 Evaluation of Recreation and Leisure Services. Three credits. Research and evaluation procedures and techniques applicable to assessing recreation and leisure service programs, participants, administrative structures, and resources. Emphasis on beginning and completing a "real-world" evaluation project.

5700 Challenge Course Facilitation. Three credits. A systematic approach to the fundamentals of group management in an experiential ropes course setting. Focuses on both interpersonal and technical facilitation skills. Several on and off-campus experiential, demonstration, and practical application sessions will be required.

5790 Sport and Society. Three credits. (Same as SOC 5790.) A behavioral approach to the sport and leisure phenomena from the related perspectives of sociology and anthropology.

5965 Aquatic Exercise and Therapeutic Techniques. Three credits. (Same as ATHT/EXSC 5965.) Examines the various uses of the aquatic environment to develop, maintain, and improve physical performance with practical development of skills and techniques and aquatic exercise programming. Combines both didactic and laboratory activities in an experiential learning environment.

## Courses in Safety [SAFE]

5320 Principles of Accident Control. Three credits. Principles, concepts, and methodology of the safety movement. Introductory experiences dealing with accident prevention as well as control efforts recommended by various social institutions and agencies reviewed.

5350 Automotive Transportation Safety Programs. Three credits. Federal, state, and local legislation concerning transportation control and design.

5850 Driver and Traffic Safety Fundamentals. Three credits. Prerequisite: Valid driver's license. Introduction to the field of driver and traffic safety education. Primary focus is on current concepts related to safe driving.

5870 Teaching Driver and Traffic Safety. Three credits. Prerequisite: SAFE 4850 or 5850 . Designed to develop teaching techniques for laboratory instruction including on-street, driving simulator, and multiple-car range programs.

6410 Administration and Supervision of Safety Programs in Schools and Colleges. Three credits. An overview of the total program administration through analysis of tasks, strategies, and situational factors affecting them; examines handicaps to safety programming, needed change, and methods for implementation.

6450 Field Practice in Safety Education. Three credits. Professional assignment under supervision of one or more safety educators or agency directors in school or community organizations.

6470 Disaster Preparedness and Emergency Care Systems. Three credits. Major elements involved in disasters and emergencies, preparedness planning, systems utilization, and attention to essential human services, with emphasis on community action.

6920 School Safety and Safety Education. Three credits. School safety education concepts in all disciplines and levels, including content, methodology, and teacher liability.

# Department of History 

## Amy Sayward, Chair <br> Peck Hall 223

The History Department offers the Master of Arts in History, Master of Arts in History with a concentration in Public History, and a Ph.D. in Public History.
For the most current information about the program, department policies, and admission standards, please visit the department Web site at www.mtsu.edu/history.
Application deadline for the M.A.: March 15 for Fall admission; October 15 for Spring admission.
Application deadline for the Ph.D.: February 15 for Fall admission; September 15 for Spring admission.

## Requirements for the Master of ArtsHistory Major (5000 and 6000 levels only)

Admission to the program requires

1. an earned bachelor's degree from an accredited university or college.
2. an acceptable grade point average in all college work taken.
3. completion of at least 18 semester hours of undergraduate history courses.
4. completion of the Graduate Record Exam with acceptable scores.
Modifications to the above requirements may be made with the permission of the department's director of graduate studies and the department's graduate committee.
Once admitted to the program, candidate must
5. complete 30 hours of graduate history courses with at least 70 percent of the hours to be taken at the 6000 level. The 30 hours include:
a. core seminar courses HIST 6010 Historiography
HIST 6020 Historical Research Methods
b. 12 to 15 hours of graduate courses in a thesis field: American or European history;
c. 6 to 9 hours of graduate courses (at least one course being at the 6000 level) in courses outside the thesis field;
d. HIST 6640 Thesis Research (at least 3 hours).
6. complete comprehensive examinations in the thesis field.
NOTE: Students may add a field outside of history toward their master's programs. Specific provisions on graduate minors are elsewhere in this catalog.
7. maintain satisfactory progress toward completion of the degree each semester.
8. fulfill a skill set requirement by choosing one of the following options:
a. demonstrate a reading competency in a foreign language by passing the specific reading examination administered by the Foreign Languages and Literatures Department;
b. students in consultation with their advisors can elect an alternative tool such as oral history techniques, linguistic analysis, quantitative analysis, CIS, feminist methods, historical theory (general or particular, such as Marxist or post-modern) computer science for history, information technology to develop Web sites, or other techniques.

Students, with their advisor's support, then petition the Graduate Committee to approve an alternative tool. Students are responsible for finding appropriate courses and an expert willing to train them and test competency. The Graduate Committee will approve petitions for alternative tools of research only if they are directly related to students' work and if presented before advancement to candidacy.

The skill set must be satisfied before the student can take comprehensives.
5. file a degree plan with the Graduate Office prior to the completion of 21 semester hours.
6. submit and successfully defend an acceptable thesis.

## Requirements for the Master of Arts with a Concentration in Public History (5000 and 6000 levels only)

The Public History concentration offers specialized education in one of four tracks: historic preservation, museum management, cultural resource management, and archival management. All public history students must complete the seminar for their chosen track and an internship off campus. The archival track requires an additional practicum.
Admission to the program requires

1. an earned bachelor's degree from an accredited university or college.
2. an acceptable grade point average in all college work.
3. completion of at least 18 semester hours of undergraduate history courses.
4. completion of the Graduate Record Exam with acceptable scores.
Modifications to the above requirements may be made with the permission of the department's director of graduate studies and the department's graduate committee.

Once admitted to the program, candidate must

1. complete at least 33 semester hours of graduate-level history and public history courses ( 36 hours if archival track), with at least 70 percent of the hours to be taken at the 6000 level. The 33 hours ( 36 hours if archival track) include
a. core seminar courses

HIST 6010 Historiography
HIST 6020 Historical Research Methods
b. Public History courses

HIST 6510 Seminar: Public History
HIST 6570 Public History Internship
HIST 6590 Practicum in Archival Management (Archival track only)
c. Public History seminar option (3 hours)

HIST 6520 Seminar: Historic Preservation OR
HIST 6540 Seminar: Museum Management OR HIST 6560 Seminar: Cultural Resource Management OR HIST 6620 Seminar in Archival Management
d. Public History electives (6 hours) selected in consultation with public history faculty;
e. history electives (9 hours) outside the public history field (at least 3 hours of which must be at the 6000 level);
f. HIST 6640 Thesis Research (at least 3 hours).
2. fulfill a skill set requirement by choosing one of the following options:
a. demonstrate a reading competency in a foreign language by passing the specific reading examination administered by the Foreign Languages and Literatures Department;
b. students in consultation with their advisors can elect an alternative tool such as oral history techniques, linguistic analysis, quantitative analysis, GIS, feminist methods, historical theory (general or particular, such as Marxist or post-modern) computer science for history, information technology to develop Web sites, or other techniques.

Students, with their advisor's support, then petition the Graduate Committee to approve an alternative tool. Students are responsible for finding appropriate courses and an expert willing to train them and test competency. The Graduate Committee will approve petitions for alternative tools of research only if they are directly related to students' work and if presented before advancement to candidacy;

The skill set must be satisfied before the student can take comprehensives.
3. maintain satisfactory progress toward completion of the degree each semester.
4. file a degree plan with the Graduate Office before the completion of 21 semester hours.
5. complete comprehensive examinations in the field of public history, that field to include an examination in the area of American history in which the student will complete the thesis.
6. submit and successfully defend an acceptable thesis.

## Requirements for the Ph.D. in Public History-(6000 and 7000 levels only)

Applicant must

1. formally apply for admission to the College of Graduate Studies and fulfill all its requirements, including submission of transcripts from all academic work.
2. hold a master's degree and have earned at least 18 semester hours of undergraduate history credit or a minimum of 21 semester hours of graduate history credit. Applicants who do not meet these minimums and are admitted conditionally have one year to satisfy the conditions of admission.
3. have an acceptable grade point average (GPA) in master's degree work (and an acceptable GPA in undergraduate history classes).
4. submit acceptable GRE scores.
5. provide letters of recommendation from at least three public history professionals or academics that address the candidate's potential for successfully completing a Ph.D. in Public History and describe the qualities that will make him/her an excellent public historian.
6. submit an approximately 500-word letter of intent noting why he/she wishes to pursue a Ph.D. in Public History, why he/she wishes to do so at Middle Tennessee State University, and career goals after a Ph.D. in Public History is attained.
7. submit a professional portfolio containing work that demonstrates mastery of research methods, historical analysis, interpretation, and presentation. The portfolio may include research papers, projects, publications, proposals, exhibits, and other public history related work.
Once admitted to the program, each candidate must
8. complete a minimum of 36 hours of seminars in three fields, 12 hours of a Professional Residency Colloquium, and 12 hours of dissertation for a total of 60 hours.
9. fulfill a skill set requirement in the same manner as stipulated for the Master of Arts.

Public History Field: Total credits - 24-27 hours (9-15 hours seminars; 12 hours professional residency)

Required of all candidates: $\mathbf{1 5}$ hours
HIST 7510 Public History, 3 hours
Professional Residency Colloquium, 6/6 hours
Candidates will choose the remaining hours for their public history fields from the public history seminars offered by the department according to their areas of specialization.

History Field: Total credits - 9-15 hours
In order to practice effectively in any area of specialization within public history, candidates must have an excellent grasp of historic context. Hence, each candidate will be required to demonstrate mastery in a history field focused chronologically, geographically, or topically. In preparation for qualifying exams and in consultation with the pre-dissertation advisory committee, each candidate will construct a coherent field chosen from the general history seminars offered by the department.

Interdisciplinary Field: Total credits - 9-12 hours
It is important that candidates understand their practice fields from multiple perspectives. In preparation for qualifying exams, each candidate will design, in consultation with his/her pre-dissertation advisory committee, an interdisciplinary field that will strengthen the public history specialization, potentially completing coursework in anthropology, geography, music, economics, English, recreation and leisure, business, and/or other fields as appropriate.
10. file a degree plan with the Graduate Office prior to the completion of 30 hours.
11. maintain satisfactory progress toward completion of the degree each semester.
12. develop a residency proposal and identify a professional mentor for the professional residency colloquium.
13. take and pass written and oral preliminary exams in the history field. The written exam is based on coursework and a substantial history field reading list, which is developed by both the student and the history field advisor. As part of the oral exam, the candidate must defend the residency proposal. The written exam is evaluated by the student's history advisor; the oral exam is evaluated by the student's pre-dissertation advisory committee.
14. enroll in the professional residency colloquium for two consecutive semesters and develop a residency portfolio.
15. constitute a dissertation committee and develop a dissertation prospectus.
16. orally defend the residency portfolio (which includes a substantial essay evaluating the residency experience) and dissertation proposal.
17. enroll in dissertation seminars, complete a dissertation, and successfully defend it in the final oral examination.

## Courses in History [HIST]

5010 Colonial America. Three credits. Exploration and colonization of North America, relations between Native Americans, Europeans, Africans, and colonial societies in the context of the Atlantic world from 1492 to 1760.

5020 The American Revolution. Three credits. Examines international conflicts from the Seven Years' War through the War of 1812 while emphasizing political, social, intellectual, and economic developments in the new United States.

5030 Jacksonian America, 1815-1850. Three credits. The major political, social, and economic developments in the awakening of American nationalism, Jacksonian Democracy, expansionism, and the Mexican War.

5040 Civil War and Reconstruction. Three credits. Sectional differences of the 1850s. Civil War, Reconstruction, and the Grant Era.

5050 Modern America, 1877-1914. Three credits. The nature and consequences of the shift of the United States from an agrarian to an urban and industrialized society between Reconstruction and World War I.

5060 Modern America, 1914-1945. Three credits. The increasing involvement of the United States in world affairs from World War I through World War II and of the social and political consequences of economic complexity which resulted in prosperity, depression, and the New Deal.

5070 Modern America, Post-1945. Three credits. The major social, political, economic, and diplomatic developments in the history of the United States from 1945 to the present with particular emphasis on the role of the United States in world affairs and the changing role of government.

5130 The Sunbelt. Three credits. The Southern rim of states from a nineteenth-century American outpost to the modern pacesetting position in economics, culture, racial relationships, and politics with such leaders as King, Nixon, Carter, and Reagan.

5140 The United States West. Three credits. History of the United States West with an emphasis on the area west of the Mississippi River from pre-contact to the twenty-first century. Explores major social, political, economic, and environmental issues with particular attention to race, class, gender, and the original inhabitants.

5150 The American South. Three credits. The major themes that have created and recreated southern culture from the colonial period to the present. Major social, political, and economic factors that made and remade the region through time.

5210 Middle Ages. Three credits. An intensive survey of the progress of medieval civilization with emphasis on Byzantine, Moslem, and Germanic cultures in the Middle Ages.

5212 Intellectual and Cultural History of Early Modern Europe. Three credits. Major trends and movements in artistic, literary, social, economic, political, scientific, and religious thought in cultural context and diffusion in society; how these trends and movements
have changed European concepts since the Enlightenment. Begins about 1200 to establish a background and then focuses on 1400 to 1789 .

5213 Intellectual and Cultural History of Modern Europe. Three credits. Major trends and movements in artistic, literary, social, economic, political, scientific, and religious thought in cultural context and diffusion in society; how these trends and movements have changed European concepts since the Enlightenment. Begins about 1650 to establish a background and then focuses on 1789 to the present.

5220 Renaissance Europe. Three credits. Survey of political, economic, social, intellectual, and cultural developments of Italy, France, England, Germany, and the Low Countries during the fourteenth through the seventeenth centuries.

5230 Reformation Europe. Three credits. Survey of political, economic, social, intellectual, and cultural developments of Italy, France, England, Germany, and the Low Countries during the sixteenth and seventeenth centuries.

5240 Europe: Absolutism and Enlightenment. Three credits. European history in the seventeenth and eighteenth centuries, covering social, economic, intellectual, and political developments.

5250 Europe: The French Revolution and Napoleon. Three credits. The social, political, and economic aspects of the old regime, the French Revolution, and the Napoleonic period in European history.

5260 France since 1870. Three credits. The social, political, intellectual, cultural, and economic history of France from the origins of the Third Republic to the present.

5270 Europe: 1815-1900. Three credits. Nineteenth-century Europe.
5280 Europe: 1900-1945. Three credits. Emphasis on the impact of continued industrialization, total war, and totalitarian ideologies in the early twentieth century.

5290 Europe since 1945. Three credits. The major European countries and common European-wide themes from World War II to the present.

5310 Germany to 1870. Three credits. The evolution of the German states from their Indo-European origins to their unification in a single German nation in 1871 with particular emphasis on the history of German men and women since the Middle Ages. History of Austria and its possessions also included.

5320 Germany since 1870. Three credits. The history of Germany from national unification in 1871 through its reunification in the contemporary world. Course emphasizes major social, cultural, political, intellectual, and economic developments of the period as they relate to both German men and women. History of the Austro-Hungarian empire (1867-1918) and the modern Austrian state also included.

5330 Russia to the Twentieth Century. Three credits. Russian history from its beginnings to the end of the nineteenth century.

5340 Russia in the Twentieth Century. Three credits. A continuation of 5330 emphasizing the Revolution and the Soviet era.

5350 England to 1783. Three credits. English history from earliest times to the end of the American Revolution, with emphasis on major political, economic, cultural, and social developments.

5360 Britain in the Nineteenth Century. Three credits. Survey of British political, economic, diplomatic, military, and cultural developments from the end of the Napoleonic era to Gladstone's retirement in 1894.

5370 Britain in the Twentieth Century. Three credits. The political, military, imperial, economic, and social history of a changing Britain in its century of total war, imperial decline, and economic readjustment.

5410 Classical History. Three credits. Ancient Greece and Rome, from about 2,000 B.C. to A.D. 476, emphasizing the classical historians and Greek and Roman culture.

5420 The Medieval Mediterranean World. Three credits. A regional survey of political, economic, social and intellectual, and cultural development of the countries bordering the Mediterranean.

5440 The Middle East. Three credits. The development of the Near East, the rise and spread of Islam, the Ottoman Empire, European imperialism in the Near East, contemporary developments. Emphasis on cultural contributions of the Near East to western civilization.

5450 Japan. Three credits. Survey of Japanese history from the formation of the first Japanese political state to the country's emergence as a post-World War II economic superpower.

5460 China. Three credits. Survey of Chinese history from antiquity to the present People's Republic, stressing social history and the unique cultural features defining China's civilization.

5470 Canada. Three credits. Canadian history from the colonial era to the present.

5480 South America. Three credits. The development of cultural, economic, and political traditions since 1492.

5490 Mexico and the Caribbean. Three credits. The development of cultural, economic, and political traditions since 1492.

5510 Colonial Latin America. Three credits. The indigenous societies present before European colonization and the first encounters in Mexico, the Caribbean, and South America. Analysis of political structures imposed by the Spanish as well as the social and cultural implications of colonialism and miscegenation.

5520 Modern Latin America. Three credits. Examination of colonial background of Latin America, moving to an exploration of economic, political, social, and cultural developments in Latin America since independence.

5530 Latin American-United States Relations. Three credits. Relations between the United States and Latin America in the nineteenth and twentieth centuries with emphasis on the effect of cultural differences on inter-American diplomacy.

5610 History of Medicine. Three credits. Medical developments and in particular the relationship between medicine and society. Examines two medical traditions: the West and China. Discussions not only on major developments in medicine but also of the systems of healing in these cultures and comparison of the different roles medicine played within these societies. Also investigates the impact of Western scientific medicine on the various systems of traditional medicine.

5620 American Medical History. Three credits. The history of health in the United States and the changing role and perception of the medical profession from 1607 to the present.

5630 Computer and Quantitative History. Three credits. Examines quantitative reasoning in historical research. Covers historiographical questions and practical research skills. Includes historical causality, historical change over time, data preparation, sampling, and the interpretation of quantitative data.

5640 Environmental History. Three credits. Traces environmental change in America from the Puritans to the present and from wilderness to suburbia. Explains impact of growth, settlement, and resource exploitation on our national landscape and institutions.

5650 Religious Experience in America. Three credits. Explores the nature of religion as experienced in American history focusing on the questions "How has religion affected America?" and "How has America affected religion?" Emphasis on the nineteenth and twentieth centuries and on the contact of and exchanges among traditions such as Protestant-Catholic Christianity, Judaism, Islam, and Animism.

5660 American Architectural History. Three credits. An analysis of the historical development of American architecture and of architecture as evidence of America's cultural, social, economic, and technological growth from 1607 to the present.

5670 American Urban History. Three credits. A survey of the development and growth of cities and suburbs from the colonial period to the present with particular emphasis on urban institutions, problems, politics, culture, and society.

5680 History of Sport in America. Three credits. The role of sport in American society from the colonial era to the present, with emphasis on how sporting activities reflect political, cultural, and economic characteristics of various time periods.

5690 Native American History. Three credits. United States American Indian history from pre-contact to the present with emphasis on issues important to native people and on their active participation in a constantly changing world.

5710 American Biography. Three credits. A survey of the lives and achievements of men and women most prominent in American history. Selected biographies and autobiographies read and analyzed.

5720 Boone's and Crockett's America. Three credits. Studies the mass movement of farm families into the interior of North America before 1860, with particular emphasis on Native American life, frontier politics, society, and culture, as well as the subsequent development of a frontier myth celebrating this migration.

5730 American Social History. Three credits. An examination of class, ethnicity, family life, and community in America from the colonial period to the present.

5740 American Cultural and Intellectual History. Three credits. Explores the major issues in American cultural and intellectual history through an examination of American literature, philosophy, social sciences, fine arts, and popular culture.

5750 African American Social and Intellectual History. Three credits. The changing role and status of African Americans in American life and the contributions to the culture and institutions of the United States.

5760 America Divided: Race, Class, and Gender. Three credits. Interaction of race, class, and gender in the lives of Americans within historical frameworks; how such interactions have shaped American social and political institutions.

5770 Women in America to 1890. Three credits. Examines women's roles in the United States from colonial times to 1890, emphasizing the experiences of women of different classes, races, and ethnic groups with work, family, and politics.

5780 Women in America since 1890. Three credits. Examines women's roles in the United States since 1890, emphasizing the experiences of women in different classes, races, and ethnic groups with work, family, and politics.

5790 Women in Europe since 1700. Three credits. A comparative study of the social, intellectual, cultural, political, and economic history of women's lives in Great Britain, France, Germany, and Russia since 1700.

5810 History of Women in the Third World. Three credits. Examines the connections between modern colonialism and the development of third-world feminisms. First focuses on conquest and colonialism and the consequences for third-world women of that process, then moves to postcolonial societies and expands to include women's political, economic, and social roles in the three regions of Africa, China, and Latin America.

5820 Diplomatic History of the United States to 1900. Three credits. United States foreign relations to 1900.

5830 Diplomatic History of the United States since 1900. Three credits. United States foreign relations since 1900.

5840 World War II. Three credits. Examines various aspects of the military, diplomatic, social, economic, and cultural changes caused by the global cataclysm of World War II.

5850 Material Culture Resources in World History. Three credits. A survey of the architecture, furniture, tools, utensils, weapons, ceremonial objects, etc., of the world's major civilizations. Provides a basis for studying how various cultural styles have influenced the development of our own material culture resources.

5860 Historical Archaeology. Three credits. (Same as ANTH 5860.) Introduces the disciplines of historical archaeology, including examination of archaeological evidence, historical documentation, and interpretation of evidence.

6010 Historiography. Three credits. An introduction to history's major schools of thought. Through reading, class discussion, and essays, students explore critical interpretations in American, European, and non-Western history.

6020 Historical Research Methods. Three credits. Sharpens comprehension of historical interpretation by exploring, through reading, research, and class discussion, possible alternative explanations for specific historical events and themes.

6110/ 7110 Seminar: Colonial and Early American History to 1800. Three credits. Exploration of major themes in the history of early North America, focusing on the interaction between Indians, Europeans, and Africans, and the place of colonial American in the Atlantic world.

6120/ 7120 Seminar: The Era of the American Revolution. Three credits. Secondary reading, discussion, and primary research on the period between the beginning of the Seven Years' War in 1756 and the death of Thomas Jefferson in 1826.

6130/ 7130 Seminar: Jacksonian America. Three credits. Exploration of a variety of social, economic, political, and cultural topics in the Jacksonian era and an analysis of the relationship between these topics and similar events abroad.

6140 Seminar: Old South. Three credits. Examines the major secondary works which have shaped our understanding of the colonial and antebellum South.

6150/ 7150 Seminar: New South. Three credits. Readings and research in aspects of the American South since 1865.

6160/ 7160 Seminar: American West. Three credits. Major issues in the history of the West and developments in U.S. West historiography.

6170/ 7170 Seminar: Recent American History. Three credits. The bibliography, interpretation, and selected topics of the history of the United States since 1900.

6180/ 7180 Seminar: American Diplomatic History. Three credits. Selected topics of U.S. diplomatic history treated in depth. Conflicting scholarly interpretations are analyzed and diplomatic source materials are consulted. Formal paper required.

6190/ 7190 Seminar: State and Local History. Three credits. An intensive inquiry into sources of state and local history. Several research papers using primary materials required.

6210/ 7210 Seminar: American Social History. Three credits. Prerequisite: Instructor's permission required. Focuses on selected topics in American social history through directed readings, research, and discussion.

6220/ 7220 Seminar in Public Programming for Historical Organizations and Archives. Three credits. Examines the theory and practice of educational outreach and public programming for historical

organizations. Designed to provide in-depth study in reference services, outreach, history education, advocacy, exhibit development, and assessment for a variety of cultural institutions.

6230/ 7230 Seminar: American Women's History. Three credits. Focuses on selected topics in American women's history through directed readings, research, and discussion.

6240/ 7240 Seminar: African American History. Three credits. Selected topics in African American history. Emphasis on the post-Reconstruction period of United States history.

6250/ 7250 Seminar: American Cultural and Intellectual History. Three credits. Readings and research in selected topics from the colonial period to the present.

6260/ 7260 Seminar: American Religious History. Three credits. Specific themes in the development of religion in America explored through directed readings, research, writing, and discussion.

6310 Seminar: Medieval Europe. Three credits. A reading seminar stressing bibliography, interpretation, and methodologies for either the socioeconomic, cultural-intellectual, or political-military history of the Middle Ages.

6320 Seminar: Renaissance and Reformation Europe. Three credits. A reading seminar stressing bibliography, interpretation, and methodologies for either the socioeconomic, cultural-intellectual, or political-military history of the Renaissance and Reformation.

6340 Seminar: Topics in Premodern Europe. Three credits. A research seminar covering selected topics in European history before 1715.

6350/ 7350 Seminar: Eighteenth-Century Europe. Three credits. Prerequisite: Elementary knowledge of French. The story, sources, and significance of eighteenth-century Europe from the decline of Louis XIV to the rise of Napoleon I. A combination of lectures, discussions, oral reports, and research projects.

6360/ 7360 Seminar: Nineteenth-Century Europe. Three credits. Selected topics. A research paper using primary materials required.

6370/ 7370 Seminar: Recent European History. Three credits. A combined readings and research seminar of twentieth-century Europe. The readings will be over several major topics. The research will involve thorough knowledge and use of available materials-primary and secondary-on each student-selected topic.

6380/ 7380 Seminar: The Third Reich. Three credits. Preparation for students to think critically, research competently, and write intelligently about the history of National Socialist Germany.

6390 Seminar: European Women's History. Three credits. Investigates aspects of women's lives in Europe. Countries and time periods covered selected by the instructor. Topics include women and religion, women and war, women and the family, and the impact of ethnicity, class, nationality, gender, and race on European women's lives.

6410/ 7410 Seminar: Latin America. Three credits. Selected topics in the social, economic, and political development of Latin America.

6420/ 7420 Seminar: Far East. Three credits. The bibliography interpretation and selected topics in the history of China and Japan.

6510/ 7510 Seminar: Public History. Three credits. The professional nature of public history, the interpretation of history for diverse audiences, and the application of historical methods in the wider world. Combines reading and discussion, interaction with practicing professionals, and possible experiential learning component.

6520/ 7520 Seminar: Historic Preservation. Three credits. Readings and research on selected topics related to the history, organization, and administration of historic preservation in the United States and to the use of the community as a classroom.

6530/ 7530 Seminar: Administration of Historical Organizations. Three credits. Intensive study of administrative functions, issues, and problems common to historical organizations. Combines reading and discussion, team problem-solving, and experiential learning component served in a local historical organization.

6535/ 7535 Essentials of Museum Management. Three credits. Examines history, theory, and methodologies of museums. Explores the roles of history museums in diverse communities and career options in museums, including administration, exhibit development, education, and collections.

6540/7540 Seminar: Museum Management. Three credits. In-depth analysis of museum management issues from acquisitions and collections to curatorial care and exhibitions. Includes advanced problem-solving for museum staff and consideration of ethical issues such as repatriation of artifacts.

6545/ 7545 Seminar in Management of Collections for Historical Organizations and Archives. Three credits. Prerequisite: HIST $4910 / 5910$ or $4920 / 5920$ or equivalent. Examines theory and practice of collection management practices in archives and museums; designed to prepare students to manage archives and museum collections in a variety of cultural institutions.

6550/ 7550 Seminar: American Material Culture. Three credits. Intensive study of cultural heritage resources available in the local community and methods for identifying, analyzing, and incorporating them into existing social studies and history courses.

6551/ 7551 Seminar: American Architectural History. Three credits. Prerequisite: HIST 4660/5660 or equivalent. In-depth, field-based exploration of the historiography, research questions, literature, and methodology of American architectural history designed to prepare students to conduct research and to prepare resource documentation to current professional standards.

6560/ 7560 Seminar: Cultural Resource Management. Three credits. Intensive study of cultural resource preservation planning and protection using National Park Service themes and definitions for history and prehistory. Emphasizes ethnic diversity in evaluating historic sites, linear parks, heritage trails, and national monuments.

6570 Public History Internship. Three credits. Full-time apprenticeship (300 hours) with a public or private historical agency or institution of regional or national significance. Internships offered during the summer months and may be paid. Enrollment limited to history students in the public history program.

6590 Practicum in Archival Management. Three credits. Opportunity for students interested in careers in archival management to complete an in-depth practice-based study in a specialized topic in archival management and to develop skills in project design and management under the joint supervision of MTSU faculty and staff of a sponsoring entity.

6610/7610 Essentials of Historic Preservation and Cultural Resources Management. Three credits. Regulatory policies and procedures
employed by federal, state, and local agencies in the work of identifying, evaluating, recording, preserving, and managing the historical, architectural, and cultural resources of the United States. Emphasis on implementing the National Historic Preservation Act and the documentation requirements of the National Register of Historic Places.

6615/7615 Essentials of Archival Management. Three credits. Examines major concepts, vocabulary, standards, professional ethics, and current issues in archival management. Includes readings, class discussions, and in-class exercises supplemented by guest lectures, field trips, and a field project.

6620/7620 Seminar in Archival Management. Three credits. Prerequisite: HIST 4910/5910 or equivalent. In-depth study of the nature of records and record keeping, communication and information management theory, and the seven domains of archival practice through lectures, readings, discussion, and research. Also addresses the impact of emerging technologies on archival management.

6640 Thesis Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6910/ 7910 Selected Studies in American History. Three credits. Intensive reading on a carefully defined topic in American history to be selected by the student in conference with the instructor. $\mathrm{S} / \mathrm{U}$ grading.

6920/ 7920 Selected Studies in European History. Three credits. Indepth reading on a well-defined topic in European history to be selected by the student in conference with the instructor.

6990 Teaching American History Summer Institute. Three credits. Week-long session for teachers of grades 4-12 American history. Using historical scholarship and primary source materials, session is intended to enhance teachers' instruction in and knowledge of historical content by focusing on the study of a particular era in American history as determined by the 2001 Tennessee Curriculum Standards framework.

6993/7993 Current Issues in Public History Practice. Three credits. Examines timely issues of public history practice in depth with a nationally recognized scholar in the field of historic preservation, cultural resources management, museum management, or other area of professional practice.

6994/7994 Advanced Projects in Public History. Three credits. Provides individualized, advanced training in historic preservation, cultural resources management, museum management, archival management, or other areas of public history practice.

7640 Dissertation Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled student should register for at least one credit hour of doctoral research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

7950/ 7960 History Internship. One to three credits. Students given careful supervision in actual teaching experiences.

7991/ 7992 Professional Residency Colloquium. Six credits each. Students participate in a colloquium in conjunction with an assignment to a professional residency at one of the centers of excellence or at an institution of similar national reputation. Participants meet at least once each month, in sessions open to faculty and staff, to analyze common readings and individual/group projects.

# Department of Human Sciences 

Dellmar Walker, Chair<br>Ellington Human Sciences Building 100

The Department of Human Sciences offers a Master of Science in Human Sciences with a choice of two concentrations: Child Development and Family Studies or Nutrition and Food Science.

To be considered for unconditional admission, an undergraduate grade point average (GPA) of 2.75 is required. Normally, a test score of either 800 on the Graduate Record Exam or 388 on the Miller Analogies Test ( 35 on the old scale) is recommended. Conditional admission may be granted for students not meeting unconditional admission requirements. Students who are admitted on a temporary conditional basis will be expected to complete 9 semester hours in the Human Sciences Department with a grade of B or better with 6 of the 9 hours at the 6000 level and to successfully complete a departmental admission review. Letters of recommendation along with a writing sample may be required.

## Requirements for the Master of Science (5000 and 6000 level)

Candidate must

1. have completed an undergraduate minor in Child Development and Family Studies or Nutrition and Food Science or the equivalent;
2. complete 33 hours including HSC 6530, 6620, and a major of 18 hours with no more than 30 percent of the total degree hours dually listed as undergraduate/graduate hours:
a. a concentration in Child Development and Family Studies to include CDFS 6300 or 6310,6320 , and 6330 , or
b. a concentration in Nutrition and Food Science to include NFS 6200, 6210, and 6220 or 6230;
3. file a degree plan with the Graduate Office prior to the completion of 21 credit hours;
4. complete an approved research tool with grade of C or better (PSY 6280 or STAT 6160);
5. complete a thesis (HSC 6640);
6. successfully complete a written comprehensive exam (may be taken no more than twice);
Candidates may select a 12 -hour minor with approval of the advisor as defined on page 59 of the Graduate Catalog.

NOTE: Dual-listed (4000/5000) courses taken at the undergraduate level cannot be repeated as graduate (5000) courses.

## Courses in Human Sciences [HSC]

5040- Seminar in Human Sciences. Three credits. Prerequisite:
5044 Permission of chair. Individual research and/or analysis of contemporary problems and issues in a concentrated area of study. For advanced students.
5041 Human Development-Family Life. Three credits.
5042 Foods-Nutrition. Three credits.
5043 Clothing-Textiles. Three credits.
5044 Housing-Design. Three credits.
5050- Advanced Problems in Human Sciences. Prerequisite: Permission
5054 of chair. Provides an opportunity for advanced students to do independent study or conduct research in their areas of concentration. One hour seminar per week plus independent study in: 5051 Human Development-Family Life. Three credits.
5052 Foods-Nutrition. Three credits.
5053 Clothing-Textiles. Three credits.
5054 Housing-Design. Three credits.
5060 Readings in Human Sciences. One to three credits. Prerequisite: Permission of chair. Selected readings of current trends, developments, and research in human sciences of interest to teachers and students. One hour seminar per week and independent study.

5410 Consumer Economics. Three credits. Consideration of theoretical economics as related to the family. An overview of the choices available and the decision-making process confronting the family in the American economy.

5420 Personal and Family Management. Three credits. Management theories applied to personal and family resources throughout the life cycle. Emphasis on the development of knowledge from which to draw conclusions about the financial elements of life. Offered once a year.

5430 Resource Management. Three credits. Opportunity to coordinate the many areas of human sciences in the solution of individual and group management problems.

5450 Professionalism in Consumer Services. Three credits. The roles, functions, and responsibilities of consumer services professionals employed in business, government, and other organizations.

6500 Issues and Trends in Human Sciences. One to three credits. An in-depth analysis of one or more current issues or trends in human sciences. Topics will vary.

6520 Public Policy on Consumer and Family Issues. Three credits. The ideological roots, impact, and effectiveness of family policy. Family well-being in the areas of health, child care, care of the elderly and disabled, and poverty examined in relation to the development of public policy.

6530 Effective Program Management. Three credits. Integration of human sciences concepts and content with the principles of program management, including planning, organization, staffing, implementation, and evaluation.

6620 Research Methods in Human Sciences. Three credits. Introduction to methods and tools of research. Selection and statement of research problems, formulation of research proposal.

6640 Thesis Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

## Courses in Textiles, Merchandising, and Design [TXMD]

5130 History of Costume. Three credits. Survey of clothing and design from ancient to modern times; consideration given to social, economic, and cultural conditions reflected in dress.

5170 Social Aspects of Clothing. Three credits. Principles of sociology and psychology applied to the study of clothing behavior. Research methods for studying sociopsychological aspects of clothing included. Offered once a year.

## Courses in Nutrition and Food Science [NFS]

5200 Diet and Disease. Three credits. Prerequisites: BIOL 2030/2031, NFS 4270. Nutritional problems in disease and modifications of normal diet to meet dietary requirements of pathological conditions. Offered once a year.

5210 Nutrition in Aging. Three credits. Prerequisite: NFS 1240 or 2220. Nutritional needs of elderly individuals and how these requirements are affected by physiological, pathological, and socioeconomic changes associated with aging. Emphasis on assessment, nutrition counseling skills, and resource to assist elderly individuals with adequate nutrient intake.

5220 Food Systems Management I. Three credits. Prerequisite: NFS 3200 or 3210 or permission of instructor. Principles and production of quantity foods. Emphasis on types of food service systems, delivery systems, menu planning and evaluation, procurement, receiving, quality control, inventory, cost containment, safety, and sanitation. Five hours per week.

5221 Food Systems Management I Lab. Zero credits.

5240 Experimental Food Study. Three credits. Prerequisites: NFS 3200 and CHEM 2030/2031 or permission of instructor. Chemical and physical factors affecting the flavor, texture, color, and appearance of food. Emphasis on evaluation of sensory qualities of food using subjective and objective measurements and new food product development. Offered once per year.

5250 Child Nutrition. Three credits. Prerequisite: NFS 1240 or 2220. Nutritional needs during pregnancy, infancy, and childhood related to physical and mental development. Emphasis on cultural, social, and psychological aspects of the development of food patterns and nutrition education resources.

5260 Food Safety Issues from Production to Consumption. Three credits. Food safety issues that impact food production, food storage and transportation, food processing, and food consumption within food production facilities, the home, and food service facilities. Consumer concerns evaluated based on risk theory and scientific evaluation of safety, including decision-making through critical thinking. Food standards and regulations designed to improve safety of food also discussed.

5270 Advanced Nutrition. Three credits. Prerequisite: NFS 1240 or 2220. Nutrient utilization, cellular metabolism, and nutritional status assessment. Participation includes seminar presentation on a current issue in nutrition. Offered once a year.

5280 Food Systems Management II. Three credits. Functions of management applied to food service industry. Emphasis on systems approach to food service operation, organizational structure, personnel management, leadership and management styles, work improvement, and labor relations. Offered once a year.

5290 Dietetic Practicum. Six credits. Prerequisites: NFS 4200 and 4220. Practical preparation in clinical dietetics. Clinical experience provided with the cooperation of Middle Tennessee Medical Center and other facilities. For dietetics students only. Offered summer only.

5800 Diet and Disease Seminar. One credit. To be taken concurrently with NFS 5200. Nutrition and Food Science majors only. Practice in applying the knowledge base acquired in NFS 5200 to structured case studies and development of the critical thinking skills needed to design accurate and systematic nutrition care plans in the clinical setting.

6200 Advances in Carbohydrates, Lipids, and Proteins. Three credits. Prerequisite: CHEM 3530/3531 or equivalent. Sequential to NFS 5270 or equivalent. Advanced study of carbohydrates, lipids, and proteins with emphasis on the metabolic interactions at the cellular, tissue, and organ levels. Offered alternate years.

6210 Vitamin and Mineral Metabolism. Three credits. Prerequisite: CHEM 3530/3531 or equivalent. Sequential to NFS 5270 or equivalent. Metabolic functions and mechanisms of micronutrient action in human nutrition with an emphasis on physiological requirements, assessment techniques, and interrelationships in disease prevention. Offered alternate years.

6220 Food Industry Applied Nutrition. Three credits. Integration of food technological considerations, nutrition attributes, consumer perceptions, and socio-demographic influences to determine food choice, and thus diet quality.

6230 Advanced Clinical Nutrition. Three credits. Sequential to NFS 5200 and 5270. Integration of the principles of basic biological diseases in the pathogenesis, diagnosis, and management of the nutritional aspects of disease including nutritional assessment and dietary implication in the etiology of disease.

6290 Clinical Dietetics. Six credits. Planned educational experiences in administration of food service systems and experiences in a health care facility applying principles of normal and clinical nutrition to nutritional problems occurring throughout the life cycle.

## Courses in Child Development and Family Studies [CDFS]

5140 Violence in the Family. Three credits. (Same as SOC 5140.) Causes, dynamics, and consequences of violence in the family. Includes the discussion of violence toward children, spouses, dating partners, siblings, and elders. Emphasizes the social conditions which lead to these types of violence.

5300 Preschool Practicum. Three credits. Prerequisites: CDFS 2350, 3310, 4370 or permission of instructor. Advanced information and skills working with three- and four-year-olds. Lab interaction with children; planning and implementation of curriculum. Three-hour laboratory plus two-hour seminar per week.

5301 Preschool Practicum Lab. Zero Credits.

5330 Primary Practicum. Three credits. Prerequisites: CDFS 4300, 4380; ELED 3050; admission to teacher education. Advanced knowledge and skills in working with kindergarten and primary age students. Consists of field experiences in the appropriate development and implementation of curriculum in kindergarten and one other primary grade. Three-hour laboratory and two-hour seminar per week.

5331 Primary Practicum Lab. Zero credits.

5340 The Contemporary Family. Three credits. Prerequisite: CDFS 3320 or permission of instructor. An ecological approach to the study of contemporary issues, problems, questions, and lifestyles as they relate to families and individuals.

5350 Parenting. Three credits. Developing knowledge and understanding of parenting and parent/child interaction theories. Examination and development of parent education programs.

5360 Day Care Perspectives. Three credits. Prerequisites: CDFS 2350 and 3310 or permission of instructor. Examination of diverse day care settings and their influence on human development. Emphasis on the organization/administration of day care programs. Participation in day care center experiences required. Three hours plus one hour observation per week.

5370 Effective Instruction (Birth - $\mathbf{5}$ years). Three credits. Prerequisites: CDFS 2350, 3310, or permission of instructor. A comprehensive exploration of the knowledge and skills necessary for designing and implementing curricula appropriate for programs serving children birth to five years.

5380 Infant/Toddler Practicum. Three credits. Prerequisites: CDFS 2350,3310 , and $4370 / 5370$ or permission of instructor. Advanced information and skills in working with infants and toddlers (birth to three years). Lab participation involving interactions with children as well as planning and implementing curriculum required. Three-hour laboratory and a two-hour seminar per week.

5381 Infant/Toddler Practicum Lab. Zero credits.
5390 Families in Later Life. Three credits. Prerequisite: Human Sciences majors - CDFS 3320; Sociology majors - SOC 2600; or permission of the instructor. Examination of families in later life from an ecological approach with emphasis on family forms and relationships.

5391 Aging Health and Development. Three credits. Prerequisite: CDFS 4390 or SOC 2600 or permission of the instructor. A service learning opportunity that seeks to provide students with understanding of the concepts and application of aging, families in later life, assessment, and gerontological program planning and implementation.


6300 Application of Child Development Principles I. Three credits. A comprehensive exploration of human growth and development from conception to age six. Recognizing and assessing developmental ages and stages as well as special needs is an integral part of this course.

6310 Application of Child Development Principles II. Three credits. Prerequisite: CDFS 6300 or equivalent. Advanced study of the child from the age of six through adolescence from a holistic perspective.

6320 Families at Risk. Three credits. Prerequisite: CDFS 3320 or permission of the instructor. The dynamics, context, and overall impact of factors which place families at risk. Methods by which family members cope with normative and/or catastrophic stressor events analyzed from a variety of theoretical perspectives.

6330 Theories of Child Development and Family Relations. Three credits. The advanced study of individual and family theory, as well as theory principles and evaluation criteria.

## Courses in Family and Consumer Sciences Education [FCSE]

5500- Occupational Field Experience. Three credits each. Prerequi-
5502 site: Consent of instructor. Directed participation in planned and supervised occupational experiences of eight hours field experience per week. Must apply previous semester.
5501 Care and Guidance of Children.

## Three credits.

5502 Food Management, Production, and Services. Three credits.

5540 Teaching Family and Consumer Sciences Education. One to six credits. Synthesis and application of relevant concepts relating to educational planning; changes relating to the development of effective family and consumer sciences education programs. A maximum of six semester hours credit may be applied toward a degree.

5550 Curriculum Development. Three credits. Review of recent advances in home economics education. Analysis and evaluation of selected topics, materials, and methods in terms of their appropriateness for reaching curriculum objectives in home economics.

5560 Problems in Teaching Materials. One to three credits. Prerequisite: Permission of chair. Application of principles and techniques involved in the selection and preparation of effective teaching materials and visual aids.

5570 Occupational Family and Consumer Sciences Seminar. Three credits. Prerequisite: Consent of instructor. Examination and analysis of program development, execution, and evaluation in a selected occupational area.

## Courses in Interior Design [IDES]

5700 History of Interiors. Three credits. Historical interiors: survey analysis, application. Emphasis on major design characteristics of interior furnishing styles. Offered once a year.

5710 Survey of Contemporary Interior Design. Three credits. Prerequisite: IDES 4700/5700 or consent of instructor. Development of contemporary interiors from the early nineteenth century to the present with consideration given to style characteristics, cultural influences, designers, and relationships among styles. Offered once a year.

# Department of Management and Marketing 

Jill Austin, Chair<br>Business and Aerospace Building N121D

The Department of Management and Marketing offers courses in management and marketing in the Master of Business Administration degree. The associate dean for Graduate and Executive Education serves as advisor for the Master of Business Administration (page 74).

## Courses in Management [MGMT]

## General Management [MGMT]

5840 Study Abroad. Three credits. Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

6000 Management and Operations Concepts. Three credits. Concepts of the management functions of planning, organizing, leading, and controlling as applied to managing people in organizations. Production and operations management concepts with emphasis on using quantitative models for decision making. Prerequisite for M.B.A. program. May not be used for elective credit in graduate business degree program.

6600 Study of Organizations. Three credits. Prerequisite: MGMT 3610 or 6000 . Behavioral science concepts and research in the management of organizations; theories dealing with interpersonal relationships, motivation systems, group dynamics, communications, and authority related to organizational behavior, control, and structure problems.

6660 Seminar in Organization Development. Three credits. Prerequisite: MGMT 3610 or 6000. Approaches for effecting change in organizations. Emphasis on the individual and personal development of the student to be more effective in managing change and innovation.

6670 Seminar in Management. Three credits. Prerequisite: MGMT 3610 or 6000. In-depth study of current developments in management theory and practice. An evaluation of contemporary thought on managerial roles in modern conglomerates and a comparative analysis of these roles in specialized organizations and across variations in national and international operative environments.

6690 Current Issues in Management. Three credits. Prerequisite: MGMT 6600 or permission of department. Seminar course investigating current issues in management, using recent events
and emerging theoretical developments to examine relevant complexities facing practitioners.

6740 Leadership and Motivation. Three credits. Prerequisite: MGMT 3610 or 6000. Issues in leadership and motivation in business organizations. An examination of the theoretical framework for leadership and motivation processes serves as foundation. Emphasis on practical issues and applications of leadership development and motivation.

6750 Business Ethics. Three credits. Prerequisite: MGMT 3610 or 6000. Impact of individual values and ethics on the management of organizations. Topics include legal and ethical aspects of dealing with organization stakeholders: stockholders, consumers, employees, and the general community. Emphasis on using ethical theory to make good business decisions.

6770 International Management. Three credits. Prerequisites: MGMT 3610 or 6000 and MKT 3820 or 6000. Major issues associated with the formulation and implementation of corporate strategy for international and global operations. Emphasis on the understanding of global environmental forces surrounding international business operations and the management issues facing global organizations.

6780 Health Care Management. Three credits. Prerequisite: MGMT 3610 or 6000 . An overview of the U.S. health care system, including managed care, governmental and private sector programs and policies affecting the delivery of health care (e.g., Medicare, Medicaid, and private health insurance), and legal, ethical, and budgeting issues relevant to managing health care organizations. Presents strategic and operational considerations unique to the management of health care organizations.

6790 Problems in Management. Three credits. Prerequisite: 21 graduate hours and/or approval of department chair. Individual research and analysis of contemporary problems and issues in a concentrated area of study under the guidance of an approved faculty member.

## Human Resources [MGMT]

6510 Current Problems in Human Resource Management and Industrial Relations. Three credits. Prerequisite: MGMT 3610 or 6000. Investigation of current problems. Emphasis on current theory, problems, and practices in the public and private sector. Consideration of legal and political environment stressed as related to management policy formulation.

6680 Seminar in Human Resources Management. Three credits. Prerequisite: MGMT 3610 or 6000. Focus on the responsibility of all managers with respect to the effective development of human resources. The responsibility of all functional areas in the human resource department or impinging forces such as technology, organized labor, and government legislation examined along with the emerging concepts, problems, and theories supported by research in the field.

## Operations [MGMT]

6650 Operations Management. Three credits. Prerequisite: MGMT 3620 or 6000 . Strategic and tactical decisions involved with planning, operating, and controlling the operations functions in a firm. Emphasis on problem identification and solution.

6700 Production and Operations Management Strategy. Three credits. Prerequisite: MGMT 3620 or 6000 . Focuses on operations strategy
concepts and operations management as a competitive weapon. Topics include global production and operations management strategy, capacity of facilities, vertical integration, performance controls, and the importance of manufacturing for overall business strategy.

6730 International Supply Chain Management. Three credits. Prerequisite: MGMT 3620 or 6000 . Principles of supply chain management and supply chain management environments. Examines integration with other companies to manage flow of resources, including materials, information, people, etc., in a global supply chain environment.

6760 Total Quality Management. Three credits. Prerequisites: MGMT 3610 and 3620 or 6000 . Examination of the major total quality management philosophies; consideration of implementation issues; quality costs, off- and online tools and techniques; vendor certification.

## Courses in Marketing [MKT]

5840 Study Abroad. Three credits. Prerequisites: Graduate standing and completion of core courses in respective field as determined by graduate business studies. A short-term international business education experience designed to expose the student to the economic, political, cultural, and social environments of a foreign country(ies), with specific emphasis directed toward the international state/status of the subject matter pertinent to the discipline.

6000 Marketing Concepts. Three credits. A survey of the functions, processes, and institutions involved in the creation, promotion, pricing, and distribution of consumer and industrial goods and services with an emphasis on the decision-making process. May not be used for elective credit in graduate business degree program.

6800 Marketing Management. Three credits. Prerequisite: MKT 3820 or 6000. An analytical managerial approach to the marketing activities of a business enterprise. Emphasis on problem solving and marketing simulation.

6810 Promotional Strategy. Three credits. Prerequisite: MKT 3820 or 6000. Promotional goals, plans, and concepts in marketing; the role of marketing communication in society; the organization, budgeting, and scheduling of promotion; innovation and the adoption process; managerial decision making in the promotional mix.

6820 Market Behavior. Three credits. Prerequisite: MKT 3820 or 6000. Behavioral science concepts and applied research relating to the process of buyer behavior. Topics include cognition, motivation, personality, group influence, social class, culture, and behavior models.

6830 Marketing Systems Three credits. Prerequisite: MKT 3820 or 6000. An analytic, decision-oriented study of marketing channels. Problems of integrating relevant variables within the marketing system to achieve optimum returns for all members.

6840 Marketing Seminar: Current Topics in Marketing. Three credits. Prerequisite: MKT 3820 or 6000 . Theoretical bases of marketing concepts, principles, and strategies; the development, acceptance, and possible future direction of emerging concepts and practices.

6850 International Marketing Seminar. Three credits. Prerequisite: MKT 3820 or 6000 . Difference in market arrangements and in legal, cultural, and economic factors in different countries. Planning and organizing for international marketing operations, forecasting, and analyses; interrelationships with other functions; strategy of product pricing, promotion, and channels.

6860 Marketing Research and Decision Making. Three credits. Prerequisite: MKT 3820 or 6000 . Investigates research methods for providing marketing information to assist managers in making better decisions, particularly in identifying marketing opportunities and problems. Specifically focuses on understanding both primary and secondary research processes and developing an ability to evaluate primary and secondary sources of information.

6870 Electronic Commerce and Direct Marketing. Three credits. Prerequisite: MKT 3820 or 6000 . Channels used in direct marketing with an emphasis on electronic commerce; strategic differences among the channels of direct marketing and the managerial implications of each. The impact of changing technology, regulations, and privacy issues.

6880 Sport and Entertainment Marketing. Three credits. Prerequisite: MKT 6000 or 6800 . Issues pertaining to marketing in the sport and entertainment industries. Focuses on role of sponsorship in a firm's marketing strategy.

6890 Problems in Marketing. Three credits. Prerequisites: MKT 6000 or 3820 and approval of department chair. Individual research and analysis of contemporary problems and issues in a concentrated area of study under the guidance of an approved graduate faculty member. Not approved or substituted for core requirements. Approval of supervisory faculty member and department chair must be obtained in writing before student will be allowed to register for independent study.

6900 Health Care Marketing. Three credits. Prerequisite: MKT 3820 or 6000 . The role of marketing in the delivery of health care services. Topics include the history of health care in the United States, the evolution of marketing in health care, marketing strategy and implementation in health care, and the future of health care marketing. Students will apply marketing concepts and theory to practical situations.

## Course in Business Administration [BUAD]

6980 Business Policy. Three credits. Advanced problem analysis requiring the synthesis of theory and practice gained from both the functional and managerial areas of study with emphasis on formulation, integration, and implementation of policies and strategies of the firm. This is a capstone course and must be taken after all core requirements or by consent of the director of the M.B.A. program in the last semester prior to graduation.

## Mass

## Communication

Clare Bratten, Graduate Advisor<br>Bragg Mass Communication

The College of Mass Communication offers the Master of Science degree in Mass Communication. A graduate minor in Mass Communication is also offered. A score of 900 on the verbal and quantitative portions of the Graduate Record Examination is usually required for admission to the degree program. Students may take up to 6 credit hours (two courses) before being admitted to the program. However, one of those MUST be MC 6000 or 6010. Enrollment in all other courses in the program requires permission of the graduate director.

## Requirements for the Master of Science

The degree is designed for media professionals in fields such as advertising, electronic media, journalism, public relations, publishing, or recording industries seeking to broaden their understanding of the field of mass communication and to develop research and management skills relevant to decision making in media-related organizations. It is also appropriate for those who wish to pursue the doctoral degree.
Students admitted for the Spring 2007 semester and beyond may choose from two options organized around (1) the thesis/professional project or (2) the media management emphasis.
The thesis/project option is designed for the student seeking to concentrate studies in a particular area and to experience in-depth independent research. The thesis results in the production of traditional academic research; the professional project results in the application of research knowledge to a professional production or other project.

The media management option is designed for the working person who is integrating graduate education and professional life and for the traditional student seeking a broad conceptual grounding in mass communication.

All students must take the comprehensive examination.

## Thesis and Project Options

Those applying for the program must

1. have earned 18 credits in the social sciences (anthropology, economics, history, political science, psychology, sociology).
2. provide evidence of a minimum of one year of full-time professional experience in a media-related position. In certain cases, a student without sufficient professional experience may be admitted on the condition he or she
completes an approved program of skills courses and/or an internship in a mass communication field.
3. complete 36 semester hours as follows:

## Required courses:

MC 6000 The Science of Communication
MC 6010 Cultural Studies in Communication
MC 6110 Quantitative Research Methods (required research tool)
MC 6120 Qualitative Research Methods (required research tool)
MC 6300 Media Law and Ethics
MC 6640 Thesis Research (6 hours) OR
MC 6650 Professional Project (6 hours)
Two of the following courses:
MC 6200 Media Management
MC 6230 Media in the Marketplace
MC 6250 Media Organizations
One of the following:
MC 6320 Mass Media and Public Opinion
MC 6350 Cultural Studies in Popular Music
MC 6380 News, Culture, and Democracy
MC 6400 Communication and Technology
6 hours of approved electives (taken inside or outside the College of Mass Communication as benefits research orientation; no more than 3 credits may be taken at the 5000 level).
4. file a degree plan with the Graduate Office before the completion of 21 hours.
5. submit and defend an acceptable thesis or project.
6. pass a written comprehensive examination.

## Media Management Track

## Candidate must

1. have earned 18 credits in the social sciences (anthropology, economics, history, political science, psychology, sociology).
2. provide evidence of a minimum of one year of full-time professional experience in a media-related position. In certain cases, a student without sufficient professional experience may be admitted on the condition he or she completes an approved program of skills courses and/or an internship in a mass communication field.
3. complete 36 semester hours as follows:

Required courses:
MC 6000 The Science of Communication
MC 6010 Cultural Studies in Communication
MC 6110 Quantitative Research Methods (required research tool)
MC 6120 Qualitative Research Methods (required research tool)
MC 6200 Media Management
MC 6230 Media in the Marketplace
MC 6250 Media Organizations
MC 6300 Media Law and Ethics
MC 6590 Case Studies in Media Management OR
MC 6600 Seminar in Applied Research
At least two of the following:
MC 6320 Mass Media and Public Opinion
MC 6350 Cultural Studies in Popular Music
MC 6380 News, Culture, and Democracy
MC 6400 Communication and Technology
3 hours general elective.
4. file a degree plan with the Graduate Office before the completion of 21 hours.
5. pass a written comprehensive examination.

## Courses in Mass Communication [MC]

6000 The Science of Communication. Three credits. Quantitative and qualitative research dealing with the uses and effects of mass communication.

6010 Cultural Studies in Communication. Three credits. Relationship of communication to culture with particular emphasis on the everyday life contexts of media audiences.

6100 Research Design. Three credits. Prerequisite: Permission of graduate director. Formulating research questions, developing operational definitions, selecting measures. Analysis of surveys, observational techniques, and interpretive studies.

6110 Quantitative Research Methods. Three credits. Prerequisite: MC 6000. Techniques of communication research emphasizing survey and experimental methods. Sampling, questionnaire construction, data gathering, and statistical methods.

6120 Qualitative Research Methods. Three credits. Prerequisite: MC 6010. Techniques of communication research emphasizing participant observation, ethnography, and focus groups. Interviewing, observation, problems of generalization, ethics of fieldwork.

6200 Media Management. Three credits. Prerequisite: Permission of graduate director. Application of the case study method to understanding the role of management and managers in the delivery of media to the marketplace. Application of management and organization theory to the problems of the mass media.

6230 Media in the Marketplace. Three credits. Prerequisite: Permission of graduate director. The use of various forms of audience research in media organizations. Social and ethical conflicts related to marketing.

6250 Media Organizations. Three credits. Prerequisite: Permission of graduate director. An examination of the structure of media organizations. Roles of creators, producers, distributors, publics, institutional frameworks.

6300 Media Law and Ethics. Three credits. Prerequisite: Permission of graduate director. An overview of the laws relating to the media. Ethical and social dimensions of law. Emphasis on case studies.

6320 Mass Media and Public Opinion. Three credits. Prerequisite: MC 6000. Theories of democracy, the nature of a "public" and of "public opinion." Readings in the classics on mass media and democracy and in public opinion research.

6350 Cultural Studies in Popular Music. Three credits. Prerequisite: MC 6010. Relationship of popular music to society with attention to institutional, textual, and audience studies.

6380 News, Culture, and Democracy. Three credits. Prerequisite: MC 6010. Critical examination of the news process with attention to the relationship of economic, cultural, and political constraints.

6400 Communication and Technology. Three credits. Prerequisite: Permission of graduate director. Readings in the cultural history of media technology explore technological change and social development as a system of interrelated social relations and practices.

6430 Special Topics in Communication. Three credits. Prerequisite: Permission of graduate director. An in-depth analysis of one or more current issues or subdisciplines. Topics will vary from semester to semester.

6590 Case Studies in Media Management. Three credits. Prerequisite: Permission of graduate director. A capstone course that emphasizes the integration of communication theory and method with management philosophy in the planning of strategy for media organizations. Emphasis on case studies and student presentations. Requires consent of director of graduate studies or instructor.

6600 Seminar in Applied Research. Three credits. Prerequisite: Permission of graduate director. A capstone course that emphasizes the application of various research methodologies to decision making in media organizations.

6610 Directed Reading and Research. Three credits. Completion and execution of a research project under the direction of a faculty advisor. P/F grading.

6640 Thesis Research. One to six credits. Under the direction of a faculty advisor and graduate committee, the student will plan and execute an original research or creative project. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. S/U grading.

6650 Professional Project. One to six credits. Completion and execution of a professional project under the direction of a faculty advisor and graduate committee. Once enrolled, student should register for at least one credit hour of master's project each semester until graduation. $\mathrm{S} / \mathrm{U}$ grading.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.


# Department of Mathematical Sciences 

Terrance Quinn, Chair<br>Kirksey Old Main 223D

The Department of Mathematical Sciences offers the Master of Science with a major in Mathematics, the Master of Science in Teaching with a major in Mathematics, and a minor in Mathematics at the graduate level.

Three concentrations are offered under the Master of Science: General Mathematics, Industrial Mathematics, and Research Preparation. Two concentrations are offered under the Master of Science in Teaching: Middle Grade Mathematics and Secondary Mathematics.

Admission to either master's program normally requires an expected GRE score of 900 or an MAT score of at least 402 ( 44 on old scale).

The department also offers courses in the Master of Science in Professional Science degree. Students interested in a concentration in Biostatistics should refer to the Master's of Science in Professional Science program on page 163.

## Requirements for the Master of Science in Mathematics

The Master of Science in Mathematics requires a core of 9 hours plus 18 hours of specified courses in the department and a 9-hour cognate of supporting courses. Every candidate is required to declare a concentration selected from General Mathematics, Industrial Mathematics, or Research Preparation.

All candidates must

1. have completed an undergraduate prerequisite of at least 21 hours of college-level mathematics including calculus; any deficiency should be removed during the first year of study.
2. complete 36 hours including the core ( 9 hours), a concentration ( 18 hours), and a cognate area ( 9 hours).
3. complete at least 21 hours at the 6000 level.
4. participate in the graduate seminar and give an oral presentation of an approved topic.
5. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
6. successfully complete a written comprehensive examination (may be taken no more than twice).

## M.S. Core

Each candidate for the Master of Science in Mathematics must complete the following core ( 9 hours):
MATH 6120 Advanced Linear Algebra
MATH 6170 Sets and Logic
MATH 6190 Analysis I

## Concentration: General Mathematics

Students desiring a broad background in mathematics should pursue this concentration. In addition to the core, students must complete the concentration and a cognate as outlined below.

## Concentration

Eighteen (18) hours from approved courses in mathematical sciences, including at least one course from each of three different groups:
Actuarial and Financial Mathematics: ACSI/MATH 5200, ACSI 5330, 5340, 5630, 5640, 6010, MATH 6603, 6604
Algebra/Number Theory: MATH 5420, 5530, 6140, 6510
Analysis: MATH 6141, 6200, 6210, 6250
Combinatorics/Graph Theory: MATH 5700, 6700
Geometry/Topology: MATH 5270, 6400, 6142
Industrial Mathematics: MATH 5310, 5320, 6260, 6270, 6300, 6310
Statistics: STAT 5200, 5320, 5360, 5370, 5380, 6160, 6180, 6602, 6603, 6604

## Cognate

Nine (9) additional hours approved by advisor. The master's thesis is an option in this concentration. See MATH 6640 Thesis Research (1-6 credits).

## Concentration: Industrial Mathematics

Students interested in positions in industry or further graduate work in applied mathematics should pursue this concentration. In addition to the core, students must complete the concentration and a cognate as outlined below.

## Concentration

Eighteen (18) hours including MATH 5310, 5320, 6260, and 6270 plus two courses from MATH 6210, 6300, 6310, 6400, 6410, 6700, or STAT 6160, 6180.

## Cognate

Nine (9) additional hours chosen from the above list; MATH 6640, and/ or courses from relevant disciplines approved by advisor. The master's thesis is an option in this concentration. See MATH 6640 Thesis Research (1-6 credits).

## Concentration: Research Preparation

Students wishing to pursue the Ph.D. in mathematics should choose this concentration. In addition to the core, students must complete the concentration and a cognate as outlined below.

## Concentration

Eighteen (18) hours including MATH 5270, 5530, 5700, 6200, 6140, and 6210 .

## Cognate

Nine (9) hours including MATH 6640 and six (6) additional hours approved by advisor.

## Requirements for the Master of Science in Teaching

This degree should be pursued by students interested in teaching. Admission is open to those licensed as teachers as well as those seeking initial licensure.

Candidates seeking initial licensure must meet the major requirements listed below, satisfy a professional education component, and meet discipline-related requirements. The candidate should contact the chair of the Department of Educational Leadership for the professional education component and the chair of the Department of Mathematical Sciences for the discipline-related requirements.
The Master of Science in Teaching requires the M.S.T. core of 9 hours plus 15 hours of specified courses in the department and a 12 -hour cognate in professional education. Every candidate is required to declare a concentration in either Middle Grade or Secondary Mathematics.
All candidates must

1. complete 36 hours including the core ( 9 hours), a concentration ( 15 hours), and a cognate ( 12 hours).
2. complete at least 21 hours at the 6000 level.
3. file a degree plan with the Graduate College prior to the completion of 21 hours credit.
4. successfully complete a comprehensive examination (may be taken no more than twice).

## M.S.T. Core

Each candidate for the Master of Science in Teaching in Mathematics must complete the following core ( 9 hours):
MATH 6320 Mathematical Problem Solving
MATH 6380 Current Trends in Mathematics Education
MATH 6900 Research in Mathematics Education

## Concentration: Middle Grade Mathematics

## Admission Requirements:

A candidate for admission to the Master of Science in Teaching program with a concentration in Middle Grade Mathematics must

1. hold a valid elementary teaching certificate.
2. have one year teaching experience.
3. submit two letters of recommendation.
4. have an acceptable GRE or MAT score.

Any applicant not meeting these requirements may petition to the Mathematics Education Graduate Admissions Committee.

## Degree Requirements:

In addition to the core, students must complete the concentration and cognate as outlined below.

## Concentration

Fifteen (15) hours selected from MATH 5620, 6100, 6330, 6340, 6350 and other courses in the department selected in consultation with advisor.

## Cognate

Twelve (12) hours in the College of Education and Behavioral Science (determined jointly by the departments of Mathematical Sciences, Educational Leadership, and Elementary and Special Education).

## Concentration: Secondary Mathematics Admission Requirements

A candidate for admission to the Master of Science in Teaching program with a concentration in Secondary Mathematics must

1. hold a valid secondary mathematics teaching certificate, or have completed 9 hours of mathematics past the calculus sequence.*
2. have one year teaching or related work experience.
3. submit two letters of recommendation.
4. have an acceptable GRE or MAT score.

Any applicant not meeting these requirements may petition to the Mathematics Education Graduate Admissions Committee.
*NOTE: Candidates seeking initial licensure may be required to complete additional hours in mathematics and/or professional education. (An advisor should be consulted.)

## Degree Requirements

In addition to the core, students must complete the concentration and cognate as outlined below.

## Concentration

Fifteen (15) hours including STAT 5190, MATH 6170, and three other courses from the department selected in consultation with advisor.

## Cognate

Twelve (12) hours in the College of Education and Behavioral Science (determined jointly by the departments of Mathematical Sciences and Educational Leadership).

## Courses in Mathematics [MATH]

5010 Concepts of Mathematics. Three credits. Recommended for students preparing to become elementary school teachers. Topics include complex numbers, finite mathematical systems, linear equations and inequalities, functions and their graphs, introductory matrix algebra, interest and consumer credit, and microcomputer applications in the mathematics classroom.

5200 Introduction to Mathematics of Investment. Three credits. (Same as ACSI 5200.)

5270 Introduction to Topology. Three credits. Prerequisites: MATH 3110 and a previous upper-division course in which the student has been required to write proofs. Fundamental concepts of topology including continuity, compactness, connectedness, separation axioms, and metric spaces.

5310/ 5320 Numerical Analysis I and II. Three credits each. Prerequisite: CSCI 3180 or equivalent. Application of computer-oriented numerical algorithms to algebraic equations, differential and integral equations, and linear algebra. Rigorous mathematical treatment of error included.

5420 Number Theory. Three credits. Divisibility congruences, quadratic residues, Diophantine equations, quadratic forms, and continued fractions.

5470 Introduction to Modern Algebra. Three credits. A treatment of sets, relations, operations, and the construction of number systems in algebra.

5510 Abstract Algebra I. Three credits. Groups with a brief introduction to rings, integral domains, and fields.

5530 Abstract Algebra II. Three credits. Prerequisite: MATH 4510/5510. Theory of rings, fields, integral domains, matrices, and vector spaces.

5600 Problems in Contemporary Mathematics. One to six credits. Pass/Fail grading in specified sections.

5620 History and Philosophy of Mathematics. Three credits. Prerequisites: Background in geometry, number theory, and/or symbolic logic helpful. The character of mathematical thought by way of mathematical problems which have occupied successively the outstanding mathematicians of Babylon, Egypt, Greece, China, the Renaissance, and modern times paralleled with a study of three schools of mathematical philosophy: intuitionism, logicism, and formalism. Open only to senior and graduate mathematics majors.

5700 Combinatorics and Graph Theory. Three credits. Prerequisite: MATH 2010 or 3080 . Selected topics in combinatorics and graph theory emphasizing combinatorial problem solving and algorithmic proof.

6100 Mathematics for Teachers. Three credits. Mathematics as problem solving, communication, and reasoning. Connecting different fields of mathematics. Topics include number and number relationships, number systems and number theory, computation and estimation, patterns and functions, statistics and probability, algebra, geometry, measurement.

6120 Advanced Linear Algebra. Three credits. Prerequisite: MATH 2010. Continuation of linear algebra topics in MATH 2010 including advanced topics in inner product spaces and structure of linear operators.

6140 Selected Topics of Modern Mathematics: Algebra. Three credits. Prerequisite: MATH 5530 or consent of instructor. Extension of previous work in algebra with emphasis on topics not treated in other courses.

6141 Selected Topics of Modern Mathematics: Analysis. Three credits. Prerequisite: MATH 6200 or consent of instructor. Extension of previous work in analysis with emphasis on topics not treated in other courses.

6142 Selected Topics of Modern Mathematics: Topology. Three credits. Prerequisite: MATH 4270/5270 or consent of instructor. Extension of previous work in topology with emphasis on topics not treated in other courses.

6170 Sets and Logic. Three credits. Includes topics in three categories: 1) Propositions, predicates, quantifiers, truth tables, tautologies, and methods of mathematical proof including mathematical induction. 2) Sets, relations, functions, graphs, cardinality, and the Axiom of Choice. 3) Applications of these foundations to selected results in algebra and analysis as time permits. It is recommended that this course be taken early in the graduate program.

6190 Analysis I. Three credits. Prerequisite: MATH 4250 or equivalent. Rigorous treatment of limits, continuity, differentiation, and integration in n -dimensional Euclidean space; infinite series; introduction to metric spaces.

6200 Analysis II. Three credits. Prerequisite: MATH 6190 or equivalent. A continuation of MATH 6190. Lebesgue measure, Lebesgue integral, functions of bounded variation.

6210 Complex Variables. Three credits. Prerequisite: MATH 6190. Theory of functions of complex variables and their application in mathematics and physics.

6230 Teaching of Introductory College Mathematics. Three credits. Foundations and pertinent topics in college algebra, trigonometry, analytic geometry, and calculus with emphasis on techniques of presentation.

6250 Real Analysis. Three credits. Prerequisite: MATH 6200. A continuation of MATH 6200. Advanced topics in real analysis. Abstract measure and integration theory. Introduction to functional analysis.

6260 Advanced Differential Equations I. Three credits. Prerequisites: MATH 3120 and 4250. Qualitative and quantitative analysis of systems of differential equations. Gradient systems, Sturm-Liouville problems. Elementary techniques for boundary value problems of partial differential equations.

6270 Advanced Differential Equations II. Three credits. Prerequisite: MATH 6260. Solution techniques for boundary value problems. Problems involve heat, wave, and potential equations. Topics include the method of characteristics, series solutions, integral transforms, and Green's functions.

6300 Optimization. Three credits. Prerequisite: MATH 5320 or consent of instructor. Constrained and unconstrained optimization problems, including the generalized least squares problem and Eigenvalue problems. Methods include orthogonalization, conjugate gradient, and quasi-Newton algorithms.

6310 Control Theory. Three credits. Prerequisite: MATH 6260 or consent of instructor. Vector space applications to system analysis; observability, controllability, and stabilization of systems; feedback systems; Lyapunov methods; optimal control, and the calculus variations.

6320 Mathematical Problem Solving. Three credits. Prerequisite: Permission of instructor. A basis for reflection on teaching and learning mathematics. Problem-solving strategies and heuristics. Focuses on all branches of mathematics, providing an opportunity to synthesize mathematical knowledge.

6330 Algebra for Teachers. Three credits. Prerequisite: Permission of instructor. Review and extension of algebraic skills and concepts as they relate to the teaching and learning of algebra. Focus on algebraic thinking and problem solving, algebraic systems, functions, graphing, and linear algebra.

6340 Geometry for Teachers. Three credits. Prerequisite: Permission of instructor. Investigations into the foundations of plane, solid, and coordinate geometry, motion geometry, similarities and congruencies, measurement and the application of geometry. Instruction will model the suggested pedagogy appropriate for school mathematics.

6350 Probability and Statistics for Teachers. Three credits. Prerequisite: Permission of instructor. Relation to school mathematics. Development of central tendency and variation, concepts of chance including sample space, randomness, conditional probability, and independence.

6360 Technology Tools for School Mathematics. Three credits. Integrates technology into the teaching and learning process for teachers of middle and secondary school mathematics. Investigates a variety of mathematical subject matter appropriate for middle and secondary school students via technology. Lessons designed for use with a variety of technologies, including graphing calculators, dynamic geometry software, spreadsheets, authoring software, presentation software, and the World Wide Web. Highly individualized due to varying backgrounds and interests of students.

6380 Current Trends in Mathematics Education. Three credits. Prerequisite: Permission of instructor. Innovative topics or critical issues related to the teaching and learning of mathematics. Includes history of mathematics education, pedagogical content knowledge, assessment and evaluation, and technologies.

6400 Advanced Geometry. Three credits. Prerequisite: MATH 3070 or consent of instructor. Detailed study of one or more of the various branches of geometry including non-Euclidean geometry, projective geometry, algebraic geometry, and differential geometry.

6410 Computer-Aided Geometric Design. Three credits. Prerequisites: MATH 5320 and 6400 or consent of instructor. Parametric curves and surfaces; Bezier and B-spline interpolation and approximation techniques; visual smoothness and parameterization for curves; Coons, Bezier, and triangular patches; scattered data methods.

6510 Advanced Algebra. Three credits. Prerequisite: MATH 5530. Polynomial rings, theory of fields, vector spaces and intermediate group theory necessary for Galois theory, and Galois theory.

6601- Problems in Mathematics. One to nine credits. Prerequisite:
6608 Mathematical maturity, preparation in the area, and normally nine semester hours of graduate study. Problems course dealing with theory methods and applications.
6601 Advanced Calculus
6602 Number Theory
6603 Mathematics of Finance
6604 Mathematics of Life Contingencies
6605 Numerical Analysis
6606 Topology
6607 Abstract Algebra
6608 Combinatorics and Graph Theory
6610 Introduction to Graduate Study. Two credits.
6640 Thesis Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6700 Advanced Combinatorics and Graph Theory. Three credits. Prerequisite: MATH 4700/5700. Selected topics in combinatorics and graph theory extending topics studied in MATH 4700/5700.

6900 Research in Mathematics Education. Three credits. Prerequisite: Permission of instructor. An examination of factors influencing research and critical analyses of selected research in mathematics education. Studies representing different methodologies critiqued.

6999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

7060 Independent Study. One to nine credits.
7640 Dissertation Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of dissertation. Once enrolled student should register for at least one credit hour of doctoral research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

## Courses in Statistics [STAT]

5130 Applied Statistics. Three credits. Prerequisite: Two years of high school algebra or equivalent. Topics include descriptive statistics, probability, and statistical inference. The inference unit covers means proportions and variances for one and two samples, one-way ANOVA, regression and correlation analysis, chi-square analysis, and topics in nonparametrics.

5140 Probabilistic and Statistical Reasoning. Three credits. Prerequisite: STAT 5130 or equivalent or enrollment in the Master's of Science in Professional Science program. Focuses on probability and statistics concepts. Topics include binomial and normal probabilistic modeling; important statistical concepts such as confounding, randomization, sampling variability and significance; statistical testing of significant differences and associations; and design experiments to test research hypotheses.

5190 Mathematical Statistics II. Three credits. Prerequisite: STAT 3150 or equivalent. Theory of statistical inference. Topics include sampling distributions, decision theory, estimation, test of hypothesis, regression analysis, analysis of variance, and selected applications.

5200 Statistical Methods for Forecasting. Three credits. Prerequisite: STAT 4190. Application of the regression model in forecasting regression and exponential smoothing methods to forecast nonseasonal time-series, seasonal series and globally constant seasonal models, stochastic time series models; and forecast evaluation. (Prepares actuarial science students for the Society of Actuaries Exam \#120 and Exam Part 3A administered by the Casualty Actuarial Society.)

5320 Probability and Stochastic Processes. Three credits. Prerequisite: Two semesters of calculus and STAT 3150 (or MATH 2050) or consent of instructor. Theoretical basis for stochastic processes and use as models of real-world phenomena. Topics include Markov chains, Poisson processes, and Brownian motion and stationary processes. Applications include Gambler's Ruin, birth and death models, hitting times, stock option pricing, and the Black-Scholes model.

5360 Regression Analysis. Three credits. Prerequisite: STAT 3150 or equivalent. Theory and application of regression models. Approaches to model building and data analysis treated. Computation and interpretation of results facilitated through use of statistical software packages.

5370 Nonparametric Statistics. Three credits. Prerequisite: STAT 3150 or equivalent. Statistical tests that require no assertions about parameters or about the form of the population from which the samples are drawn. A wide range of practical problems.

5380 Experimental Design. Three credits. Prerequisite: STAT 3150 or equivalent. Topics include one-way analysis of variance, multiple comparison, multifactor analysis of variance, and various practical issues in experimental design. Computation and interpretation of results are facilitated through the use of statistical software packages.

5600 Problems in Statistics. One to six credits. Prerequisite: Senior standing and consent of instructor. Students wishing to enroll must submit a written course/topic proposal to the department prior to the semester in which STAT 5600 is taken. Proposal must be approved prior to student taking the course. At the conclusion of the course, each enrollee must submit a written report to the department.

6020 Introduction to Biostatistics. Three credits. Prerequisite: Introductory probability/statistics course or permission of instructor. Contemporary and medical research methodology for biostatistics. Descriptive and inferential statistics including parametric and nonparametric hypothesis testing methods, sample size, statistical significance and power, survival curve analysis, relative risk, odds ratios, chi square modeling, and analysis of variance. Data will be analyzed using statistical software.

6160 Advanced Mathematical Statistics I. Three credits. Prerequisite: Two semesters of calculus or permission of instructor. Introduction to theoretical probability used in statistics with an emphasis on the
mathematical theory. A rigorous treatment of random variables, their probability distributions, and mathematical exceptions in a univariate and multivariate setting. Includes conditional probabilities, stochastic independence, sampling theory, and limit laws.

6180 Advanced Mathematical Statistics II. Three credits. Prerequisite: STAT 6160 or permission of instructor. Theory of estimation and hypothesis tests. Topics include minimum variance unbiased estimation, methods of estimation, most powerful tests, likelihood ratio tests, decision theory, and sequential test procedures.

6510 Biostatistical Methods. Three credits. Prerequisites: STAT 6020 and 6160 or permission of instructor. Biostatistical methods focusing on the design and analysis of clinical trials and sample surveys. Topics include clinical trial designs and phases, bias, random error, sample size, power, estimating clinical effects, design-based methods of data analysis from sample surveys, sampling techniques, nonresponse, and sampling frame issues.

6520 Advanced Biostatistical Methods. Three credits. Prerequisites: STAT 6020 and 6160 or permission of instructor. Mathematically rigorous presentation of categorical data analysis methods for univariate and correlated multivariate responses including contingency table analysis, logistic regression, and loglinear models; survival analysis for analyzing time-to-event data including survivor functions, KaplanMeier curves, and Cox proportional hazards model; and other health applications of multivariate analysis methods.

6600- Problems in Statistics. One to nine credits (in 6601-6604).
6604 Prerequisite: Mathematical maturity, preparation in the area and (normally) nine semester hours of graduate study. Problems course dealing with theory, methods, and applications.
6601 Mathematical Statistics
6602 Regression Analysis
6603 Nonparametric Statistics
6604 Experimental Design

## Courses in Actuarial Science [ACSI]

5140 Mathematical Foundations of Actuarial Science. Three credits. Prerequisites: ACSI/MATH 3020 (or MATH 3110) and STAT 3150 or consent of instructor. A preparatory course for the Society of Actuaries/Casualty Actuarial Society Course/Exam 1. Integrates calculus, probability, and risk management topics into fundamental tools for assessing risk in an actuarial environment. Calculus and probability topics include derivatives, integrals, partials, random variables, distributions, and conditional probability. Risk topics include frequency and severity. Insurance concepts such as retention, deductible, coinsurance, and risk premium.

5200 Introduction to Mathematics of Investment. Three credits. (Same as MATH 5200.) Prerequisites: MATH 1910 and one semester of probability/statistics or consent of instructor. Calculus and probability/statistics used to model and analyze investments in bonds, treasury bills, stocks, and other derivatives. Topics include obtaining the price of a bond as a function of interest rate, developing formulas for duration and convexity to study the sensitivity of price to interest rate, and mathematical modeling of investor preference and attitude toward risk.

5220 Mathematics of Pricing Theory. Three credits. Prerequisites: ACSI/MATH 4200/5200 and ECON 2410, 2420, or consent of instructor. A preparatory course for the Society of Actuaries/Casualty Actuarial Society Course/Exam 2. Applies calculus and theory of interest tools to intermediate topics in microeconomics. Topics include the mathematics of supply, demand, and equilibrium; prices, costs, and the gains from trade; consumer behavior; elasticities; competition; monopoly; market power, collusion, and
oligopoly; the mathematics of risk and uncertainty; and surplus economics.

5230 Mathematics of Compound Interest. Three credits. Prerequisite: ACSI/MATH 4200/5200 or consent of instructor. A preparatory course for the Society of Actuaries/Casualty Actuarial Society Course/Exam 2. Topics include measurement of interest (including accumulating and present value factors), annuities certain, yield rates, amortization schedules, sinking funds, and bonds and related securities.

5240 Mathematics of Interest Theory, Economics and Finance. Three credits. Prerequisites: ACSI 4230/5230 or consent of instructor. A preparatory course for the Society of Actuaries/Casualty Actuarial Society Course/Exam 2. Applies calculus and theory of interest tools to intermediate topics in microeconomics and macroeconomics and topics in finance. Topics include pricing activities, the simplified Keynesian model, interest and discount rates, valuation of payment streams, yield rates, amortization, cash flows and internal rate of return, stock and bond valuation, portfolio risks, the Capital Asset Pricing Model (CAPM), efficient markets, capital structure, leverage, financial performance measurement, and basic option pricing and the Black-Scholes model.

5330 Actuarial Mathematics I. Three credits. Prerequisites: ACSI 4230/5230 and STAT 4190 or consent of instructor. First of a two-semester sequence; a preparatory course for the Society of Actuaries/Casualty Actuarial Society Course/Exam 3. Topics include survival distributions and life tables, life insurance, life annuities, and net premiums.

5340 Actuarial Mathematics II. Three credits. Prerequisite: ACSI 4230/5230 and STAT 4190 or consent of instructor. Second of a two-semester sequence; a preparatory course for the Society of Actuaries/Casualty Actuarial Society Course/Exam 3. Topics chosen from net premium reserves, multiple life functions, multiple decrement models, valuation theory and pension plans, and insurance models (including expenses and nonforfeiture benefits and dividends).

5600 Problems in Actuarial Science. One to six credits. Prerequisite: Consent of instructor. Students wishing to enroll must submit a written course/topic proposal to the department prior to the semester in which ACSI 5600 is taken. The proposal must be approved prior to student taking the course. At the conclusion of this course, each enrollee must submit a written report to the department.

5630 Mathematics of Risk Management. Three credits. Prerequisite: ACSI/MATH 4200/5200. A preparatory course for the Society of Actuaries Course 6. Topics include mathematical modeling of volatility; pricing of bonds, stocks, and other derivatives with uncertainty; benchmark portfolios; asset/liability management for property/casualty insurers; liability associated with a financially distressed company. Heath-Jarrow-Morton and Cox-Ingersoll-Ross models studied.

5640 Mathematics of Options, Futures, and Other Derivatives. Three credits. Prerequisites: ACSI/MATH 4630/5630 and 4200/5200. A preparatory course for the Society of Actuaries Course 6. Topics include risk management using options, interest rate swaps, interest rate caps, Black-Scholes analysis, Taylor series expansion to obtain hedge parameters, portfolio insurance, numerical procedures, interest rate derivatives, and use of Black's model.

6010 Credibility Theory and Loss Distributions. Three credits. Prerequisite: STAT 5190 or consent of instructor. A preparatory course for Exam Part 4B of the Casualty Actuarial Society. Topics include Bayes Theorem and its relationship to credibility theory and analysis of statistical distributions for modeling insurance claims by size.

## School of Music

## George T. Riordan, Director <br> Wright Music Building 150

The School of Music offers a Master of Arts degree in Music with specializations in collaborative piano (instrumental emphasis), collaborative piano (vocal emphasis), conducting, jazz studies, music composition, music composition for contemporary media, music education, musicology, and performance. A minor in Music is offered at the graduate level.
Applicants seeking admission to the Master of Arts degree must have completed an undergraduate degree in music with a GPA of at least 3.00. They must also submit scores from the general Graduate Record Examination (GRE) and three letters of recommendation.
Applicants intending to specialize in collaborative piano, conducting, jazz studies, or performance must audition. Applicants who do not pass the audition may be allowed, at the discretion of the faculty, to be admitted with probationary status for one semester and must register for MUAP 5020, Private Instruction. They must reaudition at the end of their first semester of study. Students who do not pass the audition on their second attempt will be excused from the program.
Applicants intending to specialize in music composition or music composition for contemporary media must submit recordings and scores of their compositions. Those intending to specialize in music education must submit a 30-minute video recording of themselves teaching. Applicants intending to specialize in musicology must submit two research papers of at least five pages in length, one of which is on a music topic.

## Requirements for the Master of Arts in Music

1. Before graduation, students must establish proficiencies in the areas required for the relevant specialization. (See curricula below for details.) Diagnostic examinations in music theory, music history, and diction will be scheduled during the first week of the first semester of study. Students who do not pass the diagnostic examinations should consult with the graduate coordinator to plan how to meet the requirements. Courses taken to meet proficiency requirements do not count toward the degree.
2. Seventy percent of the total degree hours must be at the 6000 level.
3. Prior to the completion of 21 semester hours, a degree plan must be filed with the Office of Graduate Studies.
4. No earlier than the student's last semester of study, the student must pass both written and oral comprehensive examinations. Comprehensive examinations may be repeated once.

## Areas of Specialization

## Specialization 1: Collaborative Piano with an <br> Instrumental Emphasis (32 hours)

I. Proficiencies Required
a. Music History
b. Music Theory
c. Foreign Language (French or German)
II. Group A - Core Courses (9 hours)
a. MUS 6620 Bibliography and Research
b. MUTH 6050 Analytical Techniques
c. MUS 6630 Music Seminar
III. Group B - Courses in Specialization (20 hours)
a. MUAP 6682 Private Instruction (Collaborative Piano)
b. Three semesters of MUAP 6670 Graduate Recital One recital with voice, two with instruments
c. MUHL 5710 Vocal Literature
d. MUHL 5780 Chamber Music for Keyboard
e. One of the following instrumental literature courses

1. MUHL 5730 Brass Literature
2. MUHL 5750 String Literature
3. MUHL 5760 Woodwind Literature
IV. Group C (3 hours)

Free electives

## Specialization 2: Collaborative Piano with a <br> Vocal Emphasis (32 hours)

I. Proficiencies Required
a. Music History
b. Music Theory
c. Foreign Language: French, Italian, and German
II. Group A - Core Courses (9 hours)
a. MUS 6620 Bibliography and Research
b. MUTH 6050 Analytical Techniques
c. MUS 6630 Music Seminar
III. Group B - Courses in Specialization (20 hours)
a. MUAP 6682 Private Instruction (Collaborative Piano)
b. Three semesters of MUAP 6670 Graduate Recital One recital with instruments, two with voice
c. MUHL 5710 Vocal Literature
d. MUHL 5770 Opera Literature
e. MUPD 5340 Techniques of Vocal Coaching
IV. Group C - Elective Courses (3 hours)

## Specialization 3: Conducting (30 hours)

I. Proficiencies Required
a. Music History
b. Music Theory
c. Keyboard
II. Group A - Core Courses (9 hours)
a. MUS 6620 Bibliography and Research
b. MUTH 6050 Analytical Techniques
c. MUS 6630 Music Seminar
III. Group B - Courses in Specialization (18 hours)
a. MUS 6030 Conducting Problems and Score Interpretation
b. MUS 6060 Advanced Conducting
c. MUAP 6709 Private Instruction - Conducting
d. Two ensembles
e. MUAP 6670 Graduate Recital

For Instrumental Conductors
f. MUHL 5790 Orchestral and Wind Ensemble Literature
g. MUED 5240 Instrumental Rehearsal Problems

For Choral Conductors
f. MUHL 5680 Choral Literature
g. MUTH 5270 Choral Arranging
IV. Group C - Elective Courses (3 hours)

## Specialization 4: Jazz Studies (32 hours)

I. Proficiencies Required
a. Music History
b. Music Theory
II. Group A - Core Courses (9 hours)
a. MUS 6620 Bibliography and Research
b. MUTH 6050 Analytical Techniques
c. MUS 6630 Music Seminar
III. Group B - Courses in Specialization (14 hours)
a. MUAP 668_ Private Instruction
b. MUAP 669_Private Instruction
c. MUAP 670_Private Instruction
d. MUAP 6670 Graduate Recital
e. Two ensembles (Jazz Ensemble or Jazz Combo)
IV. Group C - Guided Elective Courses (9 hours)

Three courses to be selected from the following:
a. MUHL 5530 History of Jazz
b. MUPD 6330 Jazz Pedagogy and Program Administration
c. MUTH 5280 Advanced Jazz Arranging
d. MUTH 6060 Advanced Improvisation

## Specialization 5: Music Composition (33 hours)

I. Proficiencies Required
a. Performance skill on an applied instrument or voice
b. Keyboard (may also fulfill performance-skill requirement)
c. Music History
d. Music Theory
II. Group A - Core Courses (9 hours)
a. MUS 6620 Bibliography and Research
b. MUTH 6050 Analytical Techniques
c. MUS 6630 Music Seminar
III. Group B - Courses in Specialization (18 hours)
a. MUAP 6140 Composition
b. MUAP 6150 Composition
c. MUAP 6160 Composition
d. MUAP 6670 Graduate Recital
e. MUHL 6040 Twentieth-Century Music
f. MUTH 5190 Principles and Practices of Electronic Music
IV. Group C - Elective Courses ( 6 hours)
a. Guided elective to be chosen from fields of philosophy, art history, anthropology, or literature with consent of advisor (3 hours)
b. Free elective (3 hours)

## Specialization 6: Music Composition for Contemporary Media (36 hours)

I. Proficiencies Required
a. Performance skill on an applied instrument or voice
b. Keyboard (may also fulfill performance-skill requirement)
c. Music History
d. Music Theory
II. Group A - Core Courses (9 hours)
a. MUS 6620 Bibliography and Research
b. MUTH 6050 Analytical Techniques
c. MUS 6630 Music Seminar
III. Group B - Courses in Specialization (24 hours)
a. MUAP 6140 Composition
b. MUAP 6150 Composition
c. MUAP 6160 Composition
d. MUAP 6670 Graduate Recital
e. MUHL 6040 Twentieth-Century Music
f. MUTH 5190 Principles and Practices of Electronic Music
g. MUTH 5290 Electronic Music II
h. MUTH 5590 MIDI Studio Techniques
IV. Group C - Elective Courses (3 hours)

## Specialization 7: Music Education (32 hours)

I. Proficiencies Required
a. Music History
b. Music Theory
II. Group A - Core Courses (9 hours)
a. MUS 6620 Bibliography and Research
b. MUTH 6050 Analytical Techniques
c. MUS 6630 Music Seminar
III. Group B - Courses in Specialization (20 hours)
a. MUED 6010 Foundations of Music Education
b. MUED 6632 Contemporary Issues and Research in Music Education
c. MUS 6060 Advanced Conducting
d. MUED 6621 Music Education Research Project
e. Two ensembles
f. Six (6) hours to be selected from the following:

MUED 5210 General Music Program K-6
MUED 5670 Music for the Young Child
MUED 5220 Choral Music in the Middle and Senior High School
MUED 5190 General Music in the Middle and Senior High School
MUED 5240 Instrumental Rehearsal Problems
MUED 5250 Advanced Marching Techniques
MUED 5260 The Application of Technology to Music Teaching
IV. Group C - Elective Courses (3 hours)

## Specialization 8: Musicology (30 hours)

I. Proficiencies Required
a. Music History
b. Music Theory
c. Foreign Language
II. Group A - Core Courses (9 hours)
a. MUS 6620 Bibliography and Research
b. MUTH 6050 Analytical Techniques
c. MUS 6630 Music Seminar
III. Group B - Courses in Specialization (12 hours)
a. Two semesters of MUS 6630 Music Seminar
b. Course at the 6000 level in a related field (must be approved by the graduate coordinator)
c. MUS 6640 Thesis Research
IV. Group C - Elective Courses (9 hours)

## Specialization 9: Performance (32 hours)

I. Proficiencies Required
a. Music History
b. Music Theory

Vocalists must also establish proficiency in diction and in two
languages from among French, German, and Italian
II. Group A - Core Courses (9 hours)
a. MUS 6620 Bibliography and Research
b. MUTH 6050 Analytical Techniques
c. MUS 6630 Music Seminar
III. Group B - Courses in Specialization (20 hours)
a. MUAP 668_ Private Instruction
b. MUAP 669_- Private Instruction
c. MUAP 670_ Private Instruction
d. MUAP 6670 Graduate Recital
e. Two ensembles
f. Six (6) hours of music literature courses
V. Group C - Elective Courses (3 hours)

## Courses in Music [MUS]

5000 Special Topics in Music. One, two, or three credits. Study of a topic in music. Topic and prerequisites to be announced.

5100 Independent Study in Music. One, two, or three credits. Intensive study of a chosen subject. An indication of reasonable skill and knowledge of research techniques, writing, and creativity expected.

5270 Music Internship. Three to six credits. Prerequisite: Permission of instructor. Examination and experiences in either the area of music industry, music education, or instrumental or choral conducting. Three credits require 15 hours per week; six credits, 30 hours per week. S/U grading.

5570 The Body Intelligent: A Study of the Alexander Technique. Two credits. (Same as THEA 5570.) For those interested in improving ease and freedom of movement, balance, support, flexibility, and coordination in daily activity.

6000 Special Topics in Music. One, two, or three credits. Study of a topic in music. Topic and prerequisites to be announced.

6030 Conducting Problems and Score Interpretation. Three credits. Analysis and marking of scores. Refinement of conducting techniques. Elimination of undesirable conducting habits. Diction as applied to conducting.

6060 Advanced Conducting. Three credits. Techniques in advanced conducting of orchestral, choral, band, and chamber ensembles. Includes irregular meters, score reading, warm-up procedures, conducting patterns, attacks, and releases.

6100 Independent Study in Music. One, two, or three credits. Intensive study of a chosen subject. An indication of reasonable skill and knowledge of research techniques, writing, and creativity expected.

6500 Aesthetics of the Arts. Three credits. The place of aesthetics in philosophy, the properties of music and the visual arts, the alternative and corollary views of the arts, the process of aesthetic creation, and meaning and values in music and the visual arts.

6620 Bibliography and Research. Three credits. Survey of bibliography and problems and methods of research. Analysis and evaluation of research in the arts.

6630 Music Seminar. Three credits. Prerequisite: MUS 6620. Study and research of a topic in music determined by the instructor.

6640 Thesis Research. One to six credits. Types of research in music surveyed. A problem is selected and developed into a thesis report in acceptable form and style. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6999 Comprehensive Examination Preparation. One credit. Open only to students enrolled in another graduate course who will take the master's comprehensive examination during the term. Contact the graduate advisor during the first two weeks of the term for course details and specifics. Credit may not be applied to degree requirements.

## Courses in Applied Music [MUAP]

5020 Private Instruction. Two credits. One hour lesson weekly on one of the various instruments or voice. Offers preparation to entering graduates for the graduate audition. Does not count toward the graduate degree; may be repeated.

5040 Service Playing. Two credits. Skills and knowledge necessary for playing for church services including hymn and anthem accompaniments, conducting from the console, study of liturgical service music, solo accompaniments, and church music materials.

5100 Private Instruction. One credit. Prerequisite: Permission of instructor. One half-hour private lesson weekly on one of the various instruments or voice. May be repeated.

5140 Composition. Two credits. Prerequisite: Permission of instructor. Experience composing original works in numerous media and styles to develop technique and self-expression. May be repeated.

6140/ 6150/6160 Composition. Three credits each. Development of skills and ability in handling musical materials with goals of some individual style or expression within the framework of current practices. Taken in consecutive order. MUAP 6160 may be repeated with no limit, but only three hours of credit may be applied toward the degree.

6670 Graduate Recital. Three credits. Prerequisites: Completion of MUAP 6682 for the collaborative piano specializations; MUS 6030, 6060, and MUAP 6709 for the conducting specialization; the appropriate courses from among MUAP 6681-6688, 66916698, and 6701-6708 for the jazz studies and performance specializations; MUAP 6140, 6150, and 6160 for the music composition and music composition for contemporary media specializations; and permission of the appropriate music faculty in all specializations. One-hour private lesson per week in the selected performance field and recital preparation until recital completed. Those specializing in collaborative piano may take course three times.

6681- Private Instruction. Three credits. Prerequisite: Completion 6688 of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.

## 6681 Private Instruction Voice

6682 Private Instruction Piano
6683 Private Instruction Organ
6684 Private Instruction Brass
6685 Private Instruction Winds
6686 Private Instruction Strings
6687 Private Instruction Percussion
6688 Private Instruction Guitar
6690- Private Instruction. Three credits. Prerequisite: Completion 6698 of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the
selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area.
6690 Private Instruction
6691 Private Instruction Voice
6692 Private Instruction Piano
6693 Private Instruction Organ
6694 Private Instruction Brass
6695 Private Instruction Winds
6696 Private Instruction Strings
6697 Private Instruction Percussion
6698 Private Instruction Guitar
6700- Private Instruction. Three credits. Prerequisite: Completion 6709 of undergraduate recital. Consult graduate coordinator as to performance area availability. One-hour private lesson per week in the selected performance field. In-depth study of stylistic, technical, and musical problems in music performance and exploration of advanced repertoire in the applied area. Course may be repeated with no limit, but only three hours of credit may be applied toward the degree within the nine-hour private instruction requirement.
6700 Private Instruction
6701 Private Instruction Voice
6702 Private Instruction Piano
6703 Private Instruction Organ
6704 Private Instruction Brass
6705 Private Instruction Winds
6706 Private Instruction Strings
6707 Private Instruction Percussion
6708 Private Instruction Guitar
6709 Private Instruction Conducting

## Courses in Music Education [MUED]

5190 General Music in the Middle and Senior High School. Two credits. Introduces graduate students in music education to methods and materials available for teaching general music to students in grades 6-12. Active student participation and observations of music teachers in the school expected.

5210 General Music Program K-6. Three credits. The role of music and music teaching in elementary education; its objectives, methods, materials, and procedures; innovative trends and exemplary practices; evaluative techniques.

5220 Choral Music in the Middle and Senior High School. Two credits. Methods for teaching music to students at the middle and senior high levels (grades 5-12). Topics include recruitment, auditions, repertoire, programming, musical analysis and score preparation, planning rehearsals, rehearsing the choir, classroom management, vocal techniques and musicianship skills, changing voice, and overall management of a choral program. Observation and public school field experiences required.

5230 Secondary School Methods and Materials. Two credits. The role of music and music teaching in secondary education; its objectives, methods, materials, and procedures; innovative trends and exemplary practices; evaluative techniques.

5240 Instrumental Rehearsal Problems. Two credits. Improving teaching in instrumental music classes through a study of rehearsal planning and techniques; the interpretation of music to students; group dynamics.

5250 Advanced Marching Techniques. Two credits. Prerequisite: Marching band class. Further development and application of marching band techniques as utilized in half-time and contest show production. Selection and analysis of the music score.

5260 The Application of Technology to Music Teaching. Two credits. Introduction to music technology and its applications in music education. Topics include electro-acoustical generation of musical sound, synthesis equipment and MIDI networks, sequencing and scoring software, music education instructional software, and recording techniques. Application assignments in the computer lab and reading assignments in references and software and hardware manuals. Students will search for, examine, and log relevant World Wide Web and other Internet sites.

5670 Music for the Young Child. Four credits. Music fundamentals, materials, and methods appropriate for preschool through grades three; pantomime, role playing, improvisation, rhythm, movement, listening, and singing.

6010 Foundations of Music Education. Three credits. Philosophies of music education; meaning in music and aesthetic theories; principles of learning; objectives for music education.

6621 Music Education Research Project. Three credits. Prerequisite: MUS 6620 and completed candidacy form. Study and research of a topic in music education determined by the student.

6632 Contemporary Issues and Research in Music Education. Three credits. Focuses on contemporary issues and research in music education, the current educational landscape, learning theory and music education, curriculum design and assessment, and accountability in music education.

## Courses in Music Ensemble [MUEN]

5100- Ensemble. One credit each semester. Study and public perfor6420 mance of music literature appropriate to the ensemble.

5100 The Band of Blue Marching Band
5110 Symphonic Band
5130 Tennessee Valley Winds
5200 Concert Chorale
5210 Meister Singers
5220 Women's Chorus
5240 MTSU Singers
5260 University Chorus
5300 Accompanying
5312 Wind Ensemble
5323 Schola Cantorum
5325 Opera Workshop
5330 Symphony Orchestra
5340 Jazz Ensemble
5343 Jazz Combos
5350 Percussion Ensemble
5371 Brass Chamber Ensembles
5372 Guitar Chamber Ensembles
5373 Piano Chamber Ensembles
5374 String Chamber Ensembles
5375 Woodwind Chamber Ensembles
5410 Salsa Band
5420 Commercial Music Ensemble
5700 Mixed Chamber Ensemble

## Courses in Music History and Literature [MUHL]

5050 Church Music. Two credits. Survey of church music and various denominational worship traditions, hymnology, graded choir programs, handbell choirs, materials and methods of church music, and administration and organization of church music.

5060 Guitar Literature. Three credits. Basic literature for the guitar from the Renaissance to the present. Analysis, listening, research, performance.

5070 Music History Survey. Three credits. Review of music in history and culture to degree necessary for candidate to pursue work on graduate level. Does not count toward the M.A. in Music. S/U grading.

5130 Survey of World Music. Three credits. A study of selected music of cultures from around the world and here at home. Listening, watching, reading, research, and concert attendance required.

5140 Music of the Middle East. Three credits. Examines various Middle Eastern cultural soundscapes from an ethnomusicological perspective, including the relationship between folk, classical, and popular musical traditions and music's role in religious expression.

5530 History of Jazz. Three credits. Study of the history and literature of jazz music including African roots, developments, and aspects of style periods, and the contemporary state of jazz. Listening and analysis.

5630 Seventeenth- and Eighteenth-Century Music. Three credits. Prerequisite: Permission of instructor. A survey of Western classical music during the Baroque and Classical periods; emphasis on topics selected by the instructor.

5640 Nineteenth-Century Music. Three credits. Prerequisite: Permission of instructor. A survey of Western classical music during the Romantic period; emphasis on topics selected by the instructor.

5660 American Music. Three credits. Prerequisite: Permission of instructor. A survey of American music from the colonial era to the present; added emphasis on topics selected by the instructor. Examines folk, popular, and art music, as well as sacred and secular traditions within their cultural contexts.

5680 Choral Literature. Two credits. Examines choral literature from the Renaissance to the present. Program selection. Analysis of choral pieces.

5690 Piano Literature. Three credits. Survey of the basic literature of the harpsichord and piano from the eighteenth century to the present. Live performance; analysis and research.

5710 Vocal Literature. Three credits. Basic repertory of Italian airs, German lieder, French art song, and solo vocal works of nationalistic schools, as well as English and American song literature.

5720 Organ Literature. Two credits. A chronological study of organ literature from the Medieval period to the present. Objectives include knowledge of the repertoire and composers and historical perspective of styles and organ building.

5730 Brass Literature. Two credits. A chronological study of brass literature from the Renaissance period to the present. Objectives include knowledge of the repertoire and composers, historical perspective of styles, types, and common performance practice.

5740 Percussion Literature. Two credits. A chronological study of percussion literature from the nineteenth century to the present. Objectives include knowledge of the repertoire and composers, historical perspective of styles, types, and common performance practice.

5750 String Literature. Two credits. A chronological study of string literature from the nineteenth century to the present. Objectives include knowledge of the repertoire and its composers, historical perspective of styles, types, and common performance practice.

5760 Woodwind Literature. Two credits. A chronological study of woodwind literature from the Renaissance period to the present. Objectives include knowledge of the repertoire and composers, historical perspective of styles, types, and common performance practice.

5770 Opera Literature. Three credits. A study of major operatic works and styles. Focuses on composers, librettists, and performers as well as the vocal, musical, and dramatic resources necessary for performance. Listening and analysis of select pieces will be included in student projects.

5780 Chamber Music for Keyboard. Three credits. A study of chamber music written for the piano. Emphasis will be placed on music written during the eighteenth, nineteenth, and twentieth centuries. Listening and analysis of select pieces will be included in student projects.

5790 Orchestral and Wind Ensemble Literature. Two credits. An indepth study of orchestral and wind ensemble repertoire.

5800 Art Music and African Americans. Two credits. A chronological and topical overview of African American musicians and composers and the primary genres of African American art music from slavery to the present.

6040 Twentieth-Century Music. Three credits. Styles and compositional techniques found in representative masterworks of the twentieth century from Debussy to present. Analysis, listening, and research.

## Courses in Music Pedagogy [MUPD]

5110 Advanced Brass Pedagogy. Two credits. Advanced study of conceptual, physiological, acoustical, pedagogical methods and materials used in the teaching of beginning, intermediate, and advanced brass students.

5120 Advanced Percussion Pedagogy. Two credits. Advanced study of conceptual, physiological, acoustical, pedagogical methods and materials used in the teaching of beginning, intermediate, and advanced percussion students.

5130 Advanced String Pedagogy. Two credits. Advanced study of conceptual, physiological, acoustical, pedagogical methods and materials used in the teaching of beginning, intermediate, and advanced string students.

5140 Advanced Woodwind Pedagogy. Two credits. Advanced study of conceptual, physiological, acoustical, pedagogical methods and materials used in the teaching of beginning, intermediate, and advanced woodwind students.

5300 Diction for Singers II. Three credits. Lecture demonstration course for familiarization with the International Phonetic Alphabet and correct pronunciation of a variety of texts in English, Italian, German, and French.

5310 Vocal Pedagogy. Two credits. Teaching techniques of the fundamentals of singing. Vocalises and repertoire. Physical aspects of singing.

5320 Piano Pedagogy. Two credits. Various technical and philosophical approaches in teaching piano. Examination of teaching repertory through intermediate level. Supervised teaching through intermediate level.

5330 Organ Pedagogy. Two credits. The principles of teaching organ: manual and pedal techniques, organ methods, and organ repertoire of varying degrees of difficulty and of all period-styles from pre-Bach through twentieth century.

5340 Techniques of Vocal Coaching. Two credits. Methods and techniques necessary for vocal coaching in a professional setting. Topics include the German Fach system, effective rehearsal techniques, playing of orchestral reductions, sight-reading, and repertoire building. Listening and in-class coaching sessions included.

5350 Guitar Pedagogy. Two credits. Study of the theoretical and practical bases of teaching guitar.

6330 Jazz Pedagogy and Program Administration. Three credits. In-depth study of materials and techniques for teaching jazz at the high school and college level. Rehearsal techniques and identification of and solutions to performance problems. Study of the development and implementation of a successful jazz studies program including educational jazz festival administration.

6340 Woodwind Teaching. Two credits. Seminar on problems encountered in advanced instruction of woodwinds. Experimentation and performance involving old and new concepts of performance.


6350 Brass Teaching. Two credits. Teaching materials for trumpet, cornet, horn, trombone, baritone, and tuba; elementary and advanced exercises, etudes; methods for class and private instruction, clef and transposition studies, orchestral and band repertoire. Survey of sources providing announcement and evaluation of new materials.

## Courses in Music Theory [MUTH]

5010 Theory Survey. Three credits. A review of musicianship skills and knowledge of musical theory to the degree necessary for the candidate to pursue work at the graduate level. Does not count toward the M.A. in Music. $\mathrm{S} / \mathrm{U}$ grading.

5180 Improvisation. Two credits. Lecture demonstration course exploring improvisation, musical vocabularies, and shorthands including figured bass, Nashville shorthand, and other contemporary styles of writing and performing.

5190 Principles and Practices of Electronic Music. Three credits. Includes history and techniques, acoustics, electronic sound generation, recording, operation of audio equipment, basic principles of composition, and experience with tape recorders and a music synthesizer. Open to nonmusic majors with permission of instructor.

5270 Choral Arranging. Two credits. The fundamentals of arranging musical works for vocal ensembles of various sizes, combinations, and skill levels.

5280 Advanced Jazz Arranging. Three credits. Prerequisite: MUTH 4170. Advanced analysis and arranging for various combinations of instruments and voice for small and large jazz ensembles. Periods, performance practices, stylistic features, and artists.

5290 Electronic Music II. Three credits. Prerequisite: MUTH 5190. Advanced principles of digital sound synthesis, programming the digital synthesizer, electronic composition, contemporary trends in digital music, and programming with a MIDI work station.

5590 MIDI Studio Techniques. Three credits. Prerequisites: RIM/MUTH 4290 and RIM 4400 or permission of instructor. MIDI systems design and the total integration of all MIDI-controllable devices. SMPTE and MIDI Time Code and their application to tape synchronization. A continuation of advanced techniques for digital sampling, sequencing, sound manipulation, and use of alternate controllers. Other topics include sound effects and music scoring for film and video, and the MIDI Machine Control and MIDI Show Control specifications. Laboratory required.

6050 Analytical Techniques. Three credits. Prerequisite: MUTH 5010 or permission of instructor. Skills and procedures of musical analysis as they apply to all periods through analysis of representative compositions. Evaluation of work from all standpoints: craftsmanship, expression, and stylistic correctness.

6060 Advanced Improvisation. Three credits. Exploration of the art of improvisation. Emphasis on advanced harmonic and melodic principles and on the development of a personal style. Listening and analysis of solos by great jazz artists and in-class performances of student projects and improvisations.

# School of Nursing 

Lynn C. Parsons, Director
Cason-Kennedy Nursing Building 201
The School of Nursing offers the Master of Science in Nursing (M.S.N.) through the Regents Online Degree Program (RODP) and the Master of Science in Professional Science (M.S.) degree in collaboration with the Biology and Mathematical Sciences departments.

## Master of Science in NursingRegents Online Degree Program (RODP)

The Master of Science in Nursing degree (M.S.N.) is delivered following the standard protocol established for the delivery of RODP courses and programs. The program includes four concentrations: Nursing Administration, Nursing Education, Nursing Informatics, and Advanced Practice (Family Nurse Practitioner). Courses are offered each semester (Fall, Spring, and Summer) through all six Tennessee Board of Regents universities. The program requires completion of 33-46 semester credit hours depending on the concentration.

| Nursing Administration (34 hours) |  |  |
| :--- | :--- | :--- |
| Core (15 hrs.) |  |  |
| NURS | 6000 | Theoretical Foundations |
| NURS | 6001 | Health Care Policy |
| NURS | 6002 | Advanced Nursing Research |
| NURS | 6003 | Advanced Role Development |
| NURS | 6990 | Scholarly Synthesis/Research |
| Concentration (15 hrs.) |  |  |
| NURS | 6301 | Nursing Administration I |
| NURS | 6302 | Nursing Administration II |
| NURS | 6330 | Health Care Finance |
| NURS | 6304 | Human Resources Management |
| NURS | 6305 | Quality Management in Nursing and Health Care |
| Practicum (4 hrs.) |  |  |
| NURS | 5309 | Nursing Administration Practicum |
| Total practice contact hours - 240 |  |  |

## Nursing Education (39 hours)

Core ( 15 hrs.)
NURS 6000 Theoretical Foundations
NURS 6001 Health Care Policy
NURS 6002 Advanced Nursing Research
NURS 6003 Advanced Role Development
NURS 6990 Scholarly Synthesis/Research
Concentration ( $\mathbf{1 2} \mathbf{h r s}$.)
NURS 6201 Theories of Nursing Education
NURS 6202 Teaching Strategies and Evaluation Methods
NURS 6203 Curriculum Design
NURS 6103 Advanced Pathophysiology
Clinical Focus Courses (choose 6 hrs. from the following):

## Adult Health

| NURS | 6501 |
| :--- | :--- |
| NURS | 6503 |
| Critical Care | Advanced Adult Health Nursing I |
| NURS Adult Health Nursing II |  |
| NURS 6522 | Critical Care I |
| Pediatrics | Critical Care II |
| NURS 6631 |  |
| NURS | 6633 |

Practicum (6 hrs.)
NURS 6207 Clinical Focus Practicum
NURS 6209 Nursing Education Practicum
Total practice contact hours - 360
Clinical Focus Practicum-120; Nursing Education Practicum - 240
NOTE: Psychology Mental Health and Women's Health and Perinatal Nursing are not currently available.

| Nursing Informatics (33 hours) |  |  |
| :--- | :--- | :--- |
| Core (15 hrs.) |  |  |
| NURS | 6000 | Theoretical Foundations |
| NURS | 6001 | Health Care Policy |
| NURS | 6002 | Advanced Nursing Research |
| NURS | 6003 | Advanced Role Development |
| NURS | 6990 | Scholarly Synthesis/Research |
| Concentration (14 hrs.) |  |  |
| NURS | 6401 | Informatics and Information Management |
| NURS | 6402 | Health Care Information Systems |
| NURS | 6403 | Analysis and Design of Health Care Information |
|  |  | Systems |
| NURS | 6404 | Evaluation of Health Care Information Systems |
| NURS | 6405 | Health Care Data Analysis Techniques |
| Practicum (4 hrs.) |  |  |
| NURS | 6407 | Informatics Applications/Practicum I |
| NURS | 6409 | Informatics Applications/Practicum II |
| Total practice contact hours - 240 |  |  |

Advanced Practice: Family Nurse Practitioner (46 hours)

## Core (15 hrs.)

NURS 6000 Theoretical Foundations
NURS 6001 Health Care Policy
NURS 6002 Advanced Nursing Research
NURS 6003 Advanced Role Development
NURS 6990 Scholarly Synthesis/Research
Concentration (10 hrs.)
NURS 6101 Advanced Health Assessment
NURS 6102 Advanced Health Assessment - Clinical
NURS 6103 Advanced Pathophysiology
NURS 6104 Advanced Pharmacology
Family Nurse Practitioner Courses ( $\mathbf{1 7}$ hrs.)

| NURS | 6601 | Family Nurse Practitioner I |
| :--- | :--- | :--- |
| NURS | 6602 | Family Nurse Practitioner I - Clinical |
| NURS | 6603 | Family Nurse Practitioner II |
| NURS | 6604 | Family Nurse Practitioner II - Clinical |
| NURS | 6605 | Family Nurse Practitioner III <br> NURS 6606 |
|  |  | Family Nurse Practitioner III - Clinical <br> Practicum |

Practicum (4 hrs.)
NURS 6609 Advanced Family NP Practicum
Total practice contact hours - 780
(NURS 6102-60 contact hours which do not count in certification eligibility requirements)

For more information, please contact the School of Nursing at (615) 898-2437 or visit www.tn.regentsdegrees.org/msn/.

## Courses Transferred to Other Programs

The School of Nursing also offers selected graduate courses which may be transferred to programs offering the Master of Science in Nursing. Other courses designed to assist individuals to meet the requirements of the State of Tennessee Board of Nursing for a Certificate of Fitness to practice as an Advanced Practice Nurse are also available. Please contact the School of Nursing for further information.

## Courses in Nursing [NURS]

5035 Special Topics. Three credits. Explores selected nursing topics in depth. Specified topic offered each semester according to student interest and faculty availability.

5055 Informatics for the Health Care Professional. Three credits. Present and potential impact of health care and nursing informatics on the nursing and allied health care disciplines and how informatic tools and systems can assist in providing solutions to health care education and practice. Emphasis on the provider's role as a leader and advocate in this rapidly emerging field.

6005 Advanced Independent Health Care Study. One to three credits. Students pursue individual interests in the health care arena by contracting with an instructor and documenting the plan of learning as well as its fulfillment.

6101 Advanced Health Assessment. Three credits. Prerequisite: Undergraduate adult physical assessment course. Physical assessment skills and clinical practice related to evaluation of the health status of the adult client. Refines physical assessment skills learned at the undergraduate level. Predictable pathological findings and the mechanisms underlying these findings in selected diseases. Emphasis on differentiating normal and abnormal findings and on techniques used to distinguish the abnormal. Two lecture hours and two clinical hours per week.

6103 Advanced Pathophysiology. Three credits. An exploration and analysis of scientific knowledge relevant to selected pathophysiological states confronted in health care management. Basis for the foundation of clinical decisions related to selected diagnostic tests and the initiation of therapeutic regimens. Pathophysiology across the lifespan correlated with clinical diagnoses and management.

6104 Advanced Pharmacology. Three credits. Advanced pharmacokinetics and pharmacodynamics of commonly used drug categories analyzed in depth with consideration to safe, quality, cost effective drug therapy for client care. Emphasis on pharmacologic therapy management by nurse clinicians in independent and collaborative practice for clients across the lifespan. Prescriptive guidelines included.

6400 Introduction to the Clinical Health Care Environment. Two credits. For M.S. in Professional Science informatics professionals without a clinical health care background. Topics include an overview of the health care industry with a cursory analysis of the various players and their roles, as well as current issues in health care delivery. Students with two or more years of clinical health care experience are not required to take this course and may choose an elective.

6401 Introduction to Health Care Informatics. Three credits. Prerequisite: Digital literacy. Foundation to informatics study providing the theoretical framework for information management within various health care setting. Topics include an overview of health care information systems and applications and national health care information management initiatives.

6402 Health Care Information Systems and Technology Integration. Three credits. Pre/Corequisite: NURS 6401. Corequisite: Instructor/advisor permission. Foundations of information system hardware and software interaction inclusive of the structure and function of networks and the Internet. Offers preparation for leading technology integration projects in practice. Additional topics will include computer hardware found in health care information systems, interface standards, and human-computer interaction such as ergonomics and workflow analysis.

6403 Project Management in the Design and Analysis of Health Care Information Systems. Three credits. Prerequisite: NURS 6407.

Explores project management concepts and skills related to the analysis and design of information systems. Topics include project management, systems lifecycle and solution design, vendor and system selection, and evaluating solutions against strategic objectives.

6404 Project Management in the Implementation and Evaluation of Health Care Information Systems. Three credits. Prerequisite: NURS 6403. Explores project management concepts and skills related to the implementation and evaluation of information systems. Topics include project management, systems testing, implementation strategies, and solution evaluation.

6405 Health Care Data Analysis and Evidenced-based Practice. Three credits. M.S.N. prerequisite: NURS 6002 and 6402. M.S. in Professional Science prerequisite: STAT 5140 and NURS 6402. Complex data analysis within the health care environment with emphasis on health care practice outcomes for quality improvement. Principles of data collection, organization, statistical analysis, and interpretation presented. Data analysis used as a tool for problem identification and data mining.

6407 Informatics Applications I. Two credits. Prerequisite: NURS 6402. Integrates informatics concepts with tools used in health care informatics practice. Topics include database design, concept mapping, workflow analysis, and solution modeling.

6409 Informatics Applications II. Two credits. Prerequisite: NURS 6404. Integrates further informatics concepts with tools used in health care infomatics practice. Topics include Web applications, Web site and media design, and data presentation.

6522 Core Concepts in Critical Care - Part I. Two to three credits. Focuses on the interrelatedness of major organ systems in health and disease. Physiology, pathophysiology, system failure, and clinical management integrated to provide advanced knowledge necessary to deliver care to critically ill patients. Includes cellular metabolism, the neurological system, the gastrointestinal system, and the hepatic system.

6523 Core Concepts in Critical Care - Part II. Two to three credits. Focuses on the interrelatedness of major organ systems in health and disease. Physiology, pathophysiology, system failure, and clinical management integrated to provide advanced knowledge necessary to deliver care to critically ill patients. Includes the cardiovascular system, the hematologic system, and electrolyte balance.

6525 Electrocardiography for Critical Care Nurses. Three credits. A systematic approach to the interpretation of cardiac dysrhythmias and 12-lead electrocardiographic abnormalities. Disturbances of automaticity and conductivity are summarized, including electrocardiographic characteristics, hemodynamic consequences, and therapeutic interventions of sinus, atrial, junctional, and ventricular arrhythmias and conduction abnormalities. An overview of 12lead, 15-lead, and 18-lead electrocardiograms is presented as a foundation for recognizing abnormalities, such as myocardial infarction patterns and bundle branch blocks.

6991 Scholarly Synthesis in Informatics. Three credits. Opportunity to synthesize informatics theory and skill into clinical practice. Students will complete a total of 200 clinical practice hours in health care facilities of their choice. Students will identify a specific project within the health care setting, identify learning objectives with the faculty and preceptor, implement the project, and then evaluate the project.

## Department of Physics and Astronomy

## Ron Henderson, Interim Chair <br> Wiser-Patten Science Building 219

The Department of Physics and Astronomy offers a minor at the graduate level.

## Courses in Physics [PHYS]

Graduate standing and consent of instructor are prerequisites for graduate courses in physics.

5310 Electricity and Magnetism. Three credits. Topics including electric and magnetic fields, electrostatic potential, and potential energy and fields in matter discussed in a mathematically rigorous manner. A variety of good applications of mathematical methods in physics.

5380 Introduction to Quantum Mechanics. Three credits. Origin of quantum theory; wave packets and deBroglie waves; Heisenberg uncertainty principles. Schroedinger wave equation, operators, eigenfunctions, square well potential, the harmonic oscillator, the hydrogen atom, molecular binding and molecular spectra.

6330 Principles of Modern Physics. Three credits. Charged particles and their behaviors; electronic structures of the atoms; nuclear structures and processes; and radiation.

6340 Fundamentals of Physics. Six credits. Basic laws and principles of classical and modern physics. Lecture topics and laboratory experiences designed to advance student's knowledge of physics.


## Department of Political Science

## Clyde Willis, Interim Chair <br> Peck Hall 209

The Department of Political Science offers a minor at the graduate level.

## Courses in Political Science [PS]

5000 Quantitative Methods of Research. Three credits. Fundamentals of quantitative methods in empirical research problems in the social sciences.

5020 Political Science Laboratory. Three credits. Research, statistics, data processing, or simulation studies related to political and social questions.

5050 Introduction to City and Regional Planning. Three credits. Analysis of the basis of particular forms in urban settlements and regions; introduction to planning history, theory, methods, processes, and current trends.

5060 The U.S. Congress. Three credits. An analysis of the United States Congress. The origins of the Congress, political power, the nature of the institutionalized Congress, campaigns, elections.

5120 Tennessee Government. Three credits. Structure, functions, and processes of Tennessee's governmental and political institutions. Policy issues studied.

5200 Problems in Government. Three credits. Work done on a tutorial basis under the close direction of a professor. Student must present a proposal for departmental consideration and acceptance before enrolling in this course.

5210 International Relations. Three credits. National power, balance of power, nationalism, imperialism, colonialism, war as an instrument of national policy, economic instruments of national policy, diplomacy, collective security, international law, and organization.

5220 World Politics. Three credits. Experiencing contemporary international politics through the medium of simulation. Particular focus areas include the U.S., former Soviet Union, People's Republic of China, the Middle East, South Asia, and Southern Africa.

5230 Classical Political Theory. Three credits. Western political theory from the ancient Greeks through the medieval Christians. Includes Sophocles, Aristophanes, Plato, Aristotle, stoicism, skepticism, Lucretius, Augustine, Thomas Aquinas, Thomas More.

5240 American Foreign Policy. Three credits. Foreign policies in the nuclear age from Kennan and containment to the present with emphasis on contemporary problems and policies.

MTSU has proposed the establishment of a Master of Arts degree in International Affairs with concentrations in International Security and Peace Studies and International Development and Globalization. Persons desiring to learn more about this degree should contact the College of Graduate Studies.

5250 Public Administration. Three credits. Fundamentals of public management-organization theory, leadership, policy making, planning, budgeting, personnel, administrative law, bureaucratic behavior.

5260 Applied Public Administration. Three credits. Selected issues and problems. Normally entails the application of administrative concepts to administrative problems and learning by doing.

5300 Comparative European Governments. Three credits. Comparative analysis of the governmental forms and practices of England, France, Germany, the European Community, and others.

5320 Public Opinion and Propaganda. Three credits. The nature of public opinion and its role in the political and social process; myths, symbols, other instruments; techniques of propaganda.

5330 Political Parties. Three credits. The nature of democracy, politics, and political parties; party organization and role in government; campaigning, primaries, conventions, general elections; the electoral college; voting behavior and pressure groups.

5360 Legislative Internship. Twelve credits. A cooperative program with the state of Tennessee that provides for student service with the legislature on a full-time basis during the spring semester. Students selected on a competitive basis. Only six hours may count toward the degree for graduate programs.

5370/ 5380 American Constitutional Law. Three credits each. The Supreme Court as a policy-making body in the governmental system. Emphasis on case studies in major areas of conflict including federalism, civil liberties, criminal procedure, and economic regulation.

5400 Municipal Government. Three credits. The structure, powers, functions, and politics of municipal governments from the standpoint of city management. Attention is given to problems of municipal policy implementation.


5410 Business and Government. Three credits. Government's role in regulating and supporting business and its impact on the economic health of the private sector. Analyses of the business-government relationship at the federal, state, and local levels. The new role of organized consumers.*

5440 Governmental Budgeting and Finance Administration. Three credits. Analysis of the legal and social nature of government budgets emphasizing the procedures and administrative methods of fiscal control. Study of budget documents at state and local levels.*

5500 International Law. Three credits. General principles of modern international law taught by the case study method in a seminar format encouraging debate and discussion. Issues concerning the development of international law and human rights.

5510 International Political Economy. Three credits. Prerequisites: PS 1010 and 3210 or permission of instructor. The relationship between politics and economics in international affairs and its implications for global peace, security, the ecology, and social welfare.

5590 Administrative Law. Three credits. Procedural aspects, substantive issues, judicial review of the type of law concerned with the powers and procedures of government agencies and the rights of citizens affected by them.

5630 Personnel Management. Three credits. Prerequisite: PS 3250 or permission of instructor. The development and characteristics of public personnel administration in the United States with attention to recruitment, selection, position classification, compensation, performance evaluation, promotion, motivation, morale, discipline, separation, and public service unionism.*

5700 American Political Thought. Three credits. Major thinkers and movements in American political thought from colonial times to the twentieth century with special emphasis on the thoughts of the framers of the American Constitution and their contemporaries.

5910 International Organization. Three credits. Development and prospects of the United Nations Organization and its major approaches to peace-pacific settlement, collective security, international law, arms control, trusteeship, preventive diplomacy, international conferences, functionalism.*

5920 Modern Political Theory. Three credits. Western political theory from the Renaissance to the present. Includes Machiavelli, Hobbes, Locke, Rousseau, J.S. Mill, Marx and Engels, Kierkegaard, Nietzsche, facism, existentialism, Strauss, Arendt, and contemporary thought.

6000 Comparative Social Change. Three credits. (Same as SOC 6000.) A historical comparative examination of the structure, institutions, and development of the modern world system; a review of major theoretical and empirical research on the world system.

6260 Readings in Political Science or Public Administration. Three credits. Individual study focusing on subject matter selected by the student and approved by the instructor; strengthens knowledge in a subfield of political science or public administration. Focus guided by the student's professional interests, career objectives, and program requirements.

6300 Readings in International Relations. Three credits. The theoretical basis of international politics. The biological, sociological, psychological, economic, and ideological aspects of international relations.

[^1]
## Professional Science

Saeed Foroudastan, Associate Dean and Program Director<br>Jones Hall 159

The College of Basic and Applied Sciences offers the Master of Science with a major in Professional Science (M.S.) with three concentrations: Biostatistics, Biotechnology, and Health Care Informatics. See departmental listings in this catalog for complete course descriptions.

## Requirements for the Master of ScienceProfessional Science Major

Once accepted into the College of Graduate Studies, students interested in the Master of Science in Professional Science program may enroll for one semester before being fully admitted to the program.
Candidate must

1. complete a minimum of 36 semester hours of graduate credit. This includes 15 hours of the following core courses that are required for all three concentrations-Biostatistics, Biotechnology, and Health Care Informatics.
Core Courses
BCEN 6820 Managerial Communication, 3 hours
MGMT 6740 Leadership and Motivation, 3 hours
ACTG 6100 Accounting and Legal Issues for Managers, 3 hours
STAT 5140 Probabilistic and Statistical Reasoning, 3 hours BCEN 6910 Internship Program, 3 hours
2. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.

## Application Process

All applicants to the Master of Science in Professional Science degree program must formally apply to the College of Graduate Studies as degree-seeking students. A complete application package consists of the graduate application, application fee, official transcripts from all collegiate institutions attended, three letters of reference, and an official Graduate Record Examination (GRE) report. A composite GRE score of 900 is expected for consideration for unconditional admission. Also, the applicant must have the appropriate undergraduate preparation for the area of concentration.

## General Admission Requirements

General admission requirements include basic competency in word processing, electronic mail, library retrieval systems, presentation graphics, spreadsheets, and databases, and completion of a basic applied statistics course (STAT 5130 or the equivalent) with a grade of $\mathrm{C}(2.00)$ or better.

## Concentration in Biostatistics

For admission to the Biostatistics concentration, candidates are expected to have completed a course in multivariate calculus with a grade of C (2.00) or better (MATH 3110 or the equivalent) and a course in linear algebra with a grade of $C$ (2.00) or better (MATH 2010 or the equivalent).

In addition to the 15 hours of core courses, the Biostatistics concentration requires 21 hours from the following courses:

## Required

| STAT | 6020 | Introduction to Biostatistics, 3 hours |
| :--- | :--- | :--- |
| STAT | 6160 | Statistics, 3 hours |
| STAT | 6180 | Statistical Inference, 3 hours |
| STAT | 6510 | Biostatistical Methods, 3 hours |
| STAT | 6520 | Advanced Biostatistical Methods, 3 hours |
| Six hours from the following: |  |  |
| STAT | 6602 | Problems in Statistics, Regression Analysis, 1-4 hours |
| STAT | 6603 | Problems in Statistics, Nonparametric Statistics, 1-4 |
|  |  | hours |
| STAT | 6604 | Problems in Statistics, Experimental Design, 1-4 hours |

## Concentration in Biotechnology

For admission to the Biotechnology concentration, candidates must possess an undergraduate degree with a major in biology or chemistry or another major and must haven taken organic chemistry and at least three undergraduate courses related to biotechnology, including genetics.
In addition to the 15 hours of core courses, the Biotechnology concentration requires 21 hours from the following courses:

## Required

$\begin{array}{lll}\text { BIOL } & 5550 & \text { Biotechnology, } 3 \text { hours } \\ \text { BIOL } & 6770 & \text { Issues in Biotechnology, } 2 \text { hours }\end{array}$

## 16 hours to be selected from the following:

BIOL 5460/5461 Human Genetics/Lab, 3 hours
BIOL $5510 \quad$ Food/Industrial Microbiology, 4 hours
BIOL 6350/6351 Biostatistical Analysis/Lab, 4 hours
BIOL 6380/6381 Experimental Immunology/Lab, 4 hours
BIOL 6390/6391 Advanced Cell and Molecular Biology/Lab, 4 hours
BIOL 6410 Advanced Transmitting Electron Microscopy, 4 hours
BIOL 6430 Clinical and Pathogenic Microbiology, 4 hours
BIOL 6440 Advanced Virology, 4 hours
BIOL 6450 Advancements in Molecular Genetics, 4 hours
BIOL 6500 Special Problems in Biology, 4 hours
BIOL 6590 Environmental Toxicology, 4 hours
BIOL 6650 Seminar, 1 hour
BIOL 6660 Seminar, 2 hours
BIOL 6720/6721 Advanced Animal Development/Lab, 4 hours
BIOL 6730 Advanced Microbial Physiology and Biochemistry, 4 hours
BIOL 6750 Advanced Plant Biotechnology, 4 hours
BIOL 6760 Bioinformatics, 4 hours
CHEM 6510 Biochemistry II, 3 hours
CHEM 6530 Biochemical Techniques, 2 hours

## Concentration in Health Care Informatics

Candidates should possess an undergraduate degree with a major in health care or work experience in a health-related field. Applicants without a relevant degree or work experience may be admitted but may be required to complete appropriate prerequisite assignments.
In addition to the 15 hours of core courses, the Health Care Informatics concentration requires 21 hours from the following courses:
NURS 6400 Introduction to the Clinical Health Care Environment, 2 hours
NURS 6401 Informatics and Information Management, 3 hours
NURS 6402 Health Care Information Systems, 3 hours
NURS 6403 Analysis and Design of Health Care Information Systems, 3 hours
NURS 6404 Evaluation of Health Care Information Systems, 3 hours
NURS 6405 Health Care Data Analysis Techniques, 3 hours
NURS 6407 Informatics Applications Practicum I, 2 hours
NURS 6409 Informatics Applications Practicum I, 2 hours


## Professional Studies

## Dianna Rust, Associate Dean and Program Director Fairview, Room 009

The College of Continuing Education and Distance Learning offers the Master of Professional Studies (M.P.S.) with a concentration in Strategic Leadership in conjunction with all six of the Tennessee Board of Regents universities. Courses are offered online each semester through the Regents Online Degree Program (RODP). For more information contact mps@mtsu.edu, call (615) 898-5611, or visit www.mtsu.edu/learn/mps/index.shtml.

## Requirements for the Master of Professional Studies Major

Once accepted into the College of Graduate Studies, students interested in the Master of Professional Studies may enroll for one semester before being fully admitted to the program.
Candidate must

1. complete a minimum of 33 semester hours of graduate credit. This includes 9 hours of the following core courses.
Core Courses:
PRST 6100 Professional Environment: Issues and Ethics
PRST 6200 Globalization and the Professions
PRST 6300 Research Methods (requires a statistics course prerequisite)
2. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.

## Application Process

All applicants to the Master of Professional Studies degree program must formally apply to the College of Graduate Studies as degree-seeking students. A complete application package consists of the graduate application, application fee, official transcripts from all collegiate institutions attended, three letters of reference, and an official Graduate Record Exam (GRE) report. A composite GRE score of 900 is expected for consideration of unconditional admission. Also, the applicant must have a 2.75 undergraduate GPA for unconditional admission. Applicants with a 2.75 GPA or higher and 5 years of professional full-time work experience may submit a portfolio of works in place of a GRE score. Applicants who meet this requirement may inquire about the portfolio requirements by e-mailing mps@mtsu.edu.
Students considering this degree program must be competent in word processing, library retrieval systems, presentation graphics, spreadsheets, and databases. Students must be computer literate (using e-mail, posting discussions, using chat, Web page navigation, uploading attachments, etc.) as well as have excellent time management skills in order to be successful in the online course environment. Students must also have regular access to a computer and reliable Internet connection.

To view hardware and software requirements please go to www.rodp.org/students/hardware_software.htm.

## Concentration in Strategic Leadership

In addition to the 9 hours of core courses, the Strategic Leadership concentration requires 24 hours from the following courses.
Seven courses must be completed, including at least one course from each of the five subject areas.

## Leadership Theory

| PRST 6500 | Foundations of Leadership |
| :---: | :---: |
| LDSP 6000 | Current Issues and Cases in Leadership |
| ELPA 6560 | Small Group Leadership |
| Research/Data Analysis |  |
| PRST 6770 | Computer-based Decision Modeling |
| PRST 6600 | Statistical Analysis |
| Organizational Structure and Change |  |
| PRST 6310 | Leadership in Organization |
| PRST 6800 | Organizational Skills and Development |
| Communication |  |
| COMM 6110 | Leadership and Communication |
| JOUR 6450 | Public Relations Management |
| PRST 6700 | Conflict Management and Negotiation |
| Strategic Planning and Assessment |  |
| TECH 6105 | Project Planning and Scheduling |
| PRST 6040 | Human Resources Management |
| Required |  |
| PRST 6998 | Professional Project (must be taken during the final semester of the program) |

## Courses in Professional Studies [PRST]

6100 Professional Environment: Issues and Ethics. Three credits. Introduces the discipline of ethics and values. Explores the various theories and practices that have led to, and continue to dominate the study of ethics and values in public service. Students will display their knowledge of ethics and values in various reading, writing, and oratorical assignments.

6770 Computer-based Decision Modeling. Three credits. Advanced techniques in quantitative methods. Modeling and optimization techniques. Computer applications emphasized.

6800 Organizational Skills and Development. Three credits. Examines concepts and techniques of organizational development (OD) and the leadership skills required for organizational change. Emphasis on understanding and application of OD theory, skills, and methods.


# Department of Psychology 

## Dennis Papini, Chair Jones Hall 103

The Department of Psychology offers programs which lead to three graduate degrees: the Master of Arts with a major in Psychology and concentrations in Clinical, Experimental, Industrial/Organizational, Quantitative Psychology, and Pre-Specialist in Education: School Psychology; the Specialist in Education with a major in Curriculum and Instruction, concentration in School Psychology; and the Master of Education with a major in Professional Counseling and concentrations in School Counseling and Mental Health Counseling. The department also offers a minor at the graduate level.

## Admissions Process

Admission to graduate study is competitive and not automatic for students meeting minimal admission requirements. Students are selected from a pool of qualified applicants. Each year the number of students admitted to the program depends on the availability of adequate faculty supervision. In order to be considered for unconditional admission, candidates must meet two standards: an undergraduate grade point average (GPA) of 3.0 or higher and a minimum score on the Graduate Record Exam (GRE). A minimum of 900 on the combined Verbal and Quantitative sections is expected for the Master of Arts in Clinical, Experimental, Quantitative, and Pre-Specialist in Education: School Psychology. A GRE Quantitative of 450 is expected for the Industrial/Organizational concentration. For admission to the Quantitative Psychology concentration, a GRE Quantitative of 600 is expected. Individuals with a Quantitative score below 600 may be considered for conditional admission into the Quantitative Psychology concentration. Admission to the Master of Education program requires a GRE score of no less than 400 on either the Quantitative or Verbal section. A combined Verbal and Quantitative GRE score of 1000 is expected for admission to the Master of Education with a concentration in Mental Health Counseling; a combined score of 900 is expected for admission to the Master of Education with a concentration in School Counseling. Unconditional admission to the Educational Specialist in Curriculum: Concentration School Psychology program requires a minimum of 900 combined Verbal and Quantitative scores.

Applications for Summer/Fall admission must be complete by March 1 and applications for Spring admission must be complete by October 1. Late applicants who meet the admission criteria may be considered on a case-by-case basis. (See admission standards under Admission to the College of Graduate Studies.) Applicants to the Clinical, School Psychology, and Professional Counseling programs should contact the department for a special application and reference forms.

Applicants to the Experimental, Industrial/Organizational, Quantitative, and School Psychology programs must provide letters of intent stating goals and objectives.

## Conditional Admission

Students who do not meet admission requirements may be admitted conditionally to a specific concentration. Students admitted conditionally must maintain a 3.25 GPA in their first semester ( 9 hours minimum) of required graduate courses in their concentration areas.

Readmission: See each area coordinator and program handbook for readmission policy.

## Degree Plan

Students must file a degree plan with the Graduate Office prior to the completion of 21 credit hours.

## Performance Requirements

Students must be able to meet the demands required for professional work in psychology. Therefore, students may be subject to dismissal from the Psychology Department if they (a) commit a serious breach of ethics or gross professional negligence or (b) present evidence of impaired psychological functioning that would present a danger to themselves or others in a professional role. Students who are dismissed may reapply and will be considered for readmission on a competitive basis. Students who reapply may be asked to provide evidence of improved ability to meet performance requirements.

## Requirements for the Master of Arts

The Master of Arts in Psychology has five different concentrations. Each concentration has specific admission standards and required courses. Most applicants have completed 15 semester hours of psychology classes prior to admission to their graduate programs. Those applicants without 15 semester hours of undergraduate psychology may be admitted to the programs, but must complete those credits in addition to their graduate programs.

## Psychology Major

Concentration: Clinical

## Admissions Criteria for M.A. Clinical Curriculum with Specializations

All potential students must apply to the clinical program and will be evaluated on the current criteria as delineated in the graduate catalog (i.e. GRE, GPA, transcript, three letters of reference, supplemental reference forms, and the supplemental clinical application).
If a student already has an M.A. degree from either the Clinical or School Psychology programs at MTSU and wants to return to take specific courses to prepare for either the psychological assistant or the behavior analyst specialization, s/he may be considered in the applicant pool. If admitted, however,
no new degree would be obtained; the student would be a non-degree-seeking student but would be admitted to take specific clinical courses.
If a student has a master's degree or graduate coursework from another MTSU program or from another university, s/he may also be considered in the applicant pool. If accepted, credit for previous coursework would be allocated on an individual basis, consistent with the following MTSU policies:

1. If no previous graduate degree was obtained, up to 12 graduate credit hours may be applied to the Clinical master's degree.
2. If a previous master's degree was obtained, no credit that applied to that degree can be applied to the Clinical master's degree at MTSU. Additional coursework would be necessary to meet the 46 -hour program requirement.

## Graduation Requirements

## Candidate must

1. demonstrate knowledge of the core areas of psychology by completing the following courses at either the undergraduate or graduate level prior to entering the Clinical Program or during enrollment in the program (relevant courses offered at MTSU are listed in parentheses):
a. group measurement/testing (PSY 4260/5260 or 6050);
b. abnormal psychology (PSY 3230/5230);
c. learning or cognition (PSY 4040, 4480, 5480*, or 6190*);
d. social or developmental (PSY 2210, 2300, 4190, 4210/5210, 4610/5610, 6120*, 6130*, 6410);
e. brain and behavior, sensation and perception, or research methods (PSY 3070/5070, 4780/5780, 4240/5240, or 4030/5030); Courses marked with an asterisk (*) may be counted as approved graduate electives depending upon specialization.
2. complete a total of 46 semester hours, including at least 33 hours in psychology. Only 30 percent of the total number of hours may be dually listed (5000-level meeting in conjunction with 4000- or 3000-level) courses;
3. complete PSY 6280 (PSY 3020 or equivalent is a prerequisite for PSY 6280 and 6290), 6290, and 6640 (3 hours);
4. successfully write and orally present a written thesis evaluated by a committee of psychology faculty in conjunction with PSY 6640;
5. pass a written comprehensive examination prepared by the faculty in the student's concentration (may be taken no more than twice).
Students must be admitted to the clinical program prior to enrolling in required clinical core courses. Non-degree-seeking students may not enroll in required clinical courses, except by special permission.

| Core Clinical Courses (Required of all clinical students) |  |  |
| :--- | :--- | :--- |
| PSY | 5470 | Theories of Counseling OR |
| PSY | 6841 | Theories of Individual Psychotherapy OR |
| PSY | 6080 | Interventions with Children and Adolescents |
|  |  | (PSY 6080 must be taken for Behavior Analyst specialization) |
| PSY | 6020 | Theories of Personality |
| PSY | 6100 | Intellectual Assessment |
| PSY | 6101 | Laboratory in Intellectual Assessment |
| PSY | 6250 | Objective Personality Assessment |
| PSY | 6280 | Psychological Statistics: Regression |
| PSY | 6290 | Psychological Statistic: Anova |
| PSY | 6510 | Psychopathology |
| PSY | 6640 | Thesis Research |
| PSY | 6690 | Professional Issues and Roles |
| PSY | 6801 | Interviewing and Intervention |
| PSY | 6851 | Assessment Field Practicum (Clinical) |

## Electives

In addition to the required courses in the core area and the research area, students in the clinical concentration must take 12 elective credits to form a specialization. Students must choose a specialization from within the clinical concentration.

## Psychological Assistant: General Clinical Specialization

Choose four courses ( 12 hours) from the following list. At least one of these courses must be marked with an asterisk (*).
PSY 5480 Learning Theories*
$\begin{array}{lll}\text { PSY } & 5610 & \text { Adult Psychology and Aging } \\ \text { PSY } & 5720 & \text { Multicultural Perspectives in }\end{array}$
PSY 5720 Multicultural Perspectives in Psychology and Education
PSY 5780 Human Neuropsychology*
PSY 5820 Psychology of Language
PSY 6120 Developmental Psychology: Child
PSY 6130 Developmental Psychology: Adolescent
PSY 6190 Advanced Cognitive Psychology*
PSY 6240 Projective Measurements
PSY 6340 Behavioral Medicine: Theory and Application
PSY 6390 Independent Research in Psychology: Clinical
PSY 6400 Psychological Disorders of Children
PSY 6440 Advanced Applied Behavioral Analysis
PSY 6500 Behavioral Methodology
PSY 6520 Psychopharmacology*
PSY 6530 The Psychology of Reading and Reading Development
PSY 6580 Multivariate Data Analysis
PSY 6710 Community Psychology
PSY 6750 Psychology and Assessment of Learning Disabilities
PSY 6770 Assessment and Therapeutic Interventions for Children's Emotional Problems
PSY 6780 Clinical Neuropsychology*
PSY 6820 Family Therapy: Evaluation and Treatment Planning
PSY 6890 Consultation
PSY 7100 Multicultural and Social Bases for Assessment and Intervention Practices
PSY 7520 Assessment and Treatment of Addictions
Health/Neuropsychology Specialization
Required:
PSY 6780
Choose three courses (9 hours) from the following:
PSY
P780 Human Neuropsychology

| Behavior Analyst Specialization |  |  |
| :--- | :--- | :--- |
| Required: Nine (9) hours from the following: |  |  |
| PSY | 5480 | Learning Theories OR |
| PSY | 6785 | Principles of Behavior Analysis |
| PSY | 6440 | Advanced Applied Behavioral Analysis |
| PSY | 6500 | Behavioral Methodology (and BA ethics) |
| Choose one course (3 hours) from the following: |  |  |
| PSY | 6390 | Independent Research in Psychology: Clinical (3 credits) |
| PSY | 6400 | Psychological Disorders of Children |
| PSY | 6520 | Psychopharmacology |
| PSY | 6770 | Assessment and Therapeutic Interventions for |
|  |  | Children's Emotional Problems |
| PSY | 6340 | Behavioral Medicine: Theory and Application |
| PSY | 6350 | Laboratory in Behavioral Medicine |

Professional liability insurance (\$1,000,000 each incident/\$3,000,000 annual aggregate) must be maintained throughout enrollment in the program with a current insurance binder filed with the department at all times.

## Psychology Major <br> Concentration: Experimental

A major goal of the Experimental concentration in psychology is to prepare the student to be a research psychologist. The primary objective is to prepare the student to enter a Ph.D. program in psychology. However, many industries, clinical settings, and research universities are interested in students with the analytical and statistical skills of a research psychologist. In addition, students with master's degrees in experimental psychology may also be employed as faculty at the community college level as psychology instructors.
Experimental students need to have a strong background in the core areas of experimental psychology. Some of this background can be attained at the undergraduate level (see item 1 below); however, the students must also complete a core of graduate experimental courses (see item 6 below). In addition, students are encouraged to become involved in research and to participate in research projects throughout their graduate enrollment. Toward this goal, the student should enroll in at least one hour of research (PSY 6600) or thesis work (PSY 6640) each semester.

## Graduation Requirements

## Candidate must

1. demonstrate knowledge of the core areas of psychology by completing the following courses at either the undergraduate or graduate level prior to entering the Experimental program or during enrollment in the program (relevant courses offered at MTSU are listed in parentheses):
a. introductory/general psychology (PSY 1410);
b. research methods (PSY 3070 or 5070);
c. social psychology or personality (PSY 2210, 3230/5230, 3590, 5420, 6020, or 6030);
d. learning or cognition (PSY 4040, 4480/5480, or 6190);
e. developmental (PSY 2300, 4190, 4210/5210, 4610/5610, 6120, 6130, 6410);
f. brain and behavior or sensation and perception (PSY 2190, 4030/5030, 4240/5240, or 4780/5780);
g. statistics (PSY 3020).
2. complete a total of 36 semester hours, including at least 30 hours in graduate psychology courses. Only 30 percent of the total number of hours may be dually listed (5000level meeting in conjunction with 4000- or 3000-level) courses;
3. complete PSY 6280 and 6290 (PSY 3020 or equivalent is a prerequisite for PSY 6280 and 6290);
4. successfully write and orally present a written thesis evaluated by a committee of psychology faculty in conjunction with PSY 6640;
5. pass a written comprehensive examination prepared by the Experimental faculty (may be taken no more than twice);
6. complete the following Experimental core courses:

## Core Courses

PSY 5240 Behavioral Neuroscience
PSY 6120 Developmental Psychology: Child (or PSY 6130 if the student has had a course in Child Psychology, e.g. PSY 4190)
PSY 6190 Advanced Cognitive Psychology
PSY 6600 Independent Research in Psychology: General/Experimental (3 hours total)

PSY 6615 Basic and Applied Research Methods in Psychology
PSY 6640 Thesis (3 hours total)
PSY 6670 Literature Review and Reading in Psychology:
Behavioral Neuroscience (3 hours total)
6 hours of elective chosen with the approval of the student's advisor.

## Psychology Major <br> Concentration: Industrial/Organizational

The goal of the Industrial/Organizational (I/O) concentration is to produce professionals who are able to apply the science of psychology in business, industry, and government settings. The program is designed to prepare students for positions in human resource departments or consulting, or for entry into an I/O doctoral program.

## Graduation Requirements

Candidate must

1. demonstrate knowledge of the core areas of psychology by completing the following courses at either the undergraduate or graduate level prior to entering the Industrial/Organizational Program, or during enrollment in the program (relevant courses offered at MTSU are listed in parentheses):
a. group measurement/testing (PSY 4260/5260 or 6050);
b. abnormal psychology or personality (PSY 3230/5230, 3590, or 6020);
c. learning or cognition (PSY 4040, 4480/5480, or 6190);
d. social or developmental (PSY 2210, 2300, 4190, 4210, 4610/5610, or 6410);
e. brain and behavior, sensation and perception, or research methods (PSY 3070/5070, 4240/5240, or 4030/5030);
f. introductory course in I/O psychology (PSY 3320).
2. complete a total of 46 semester hours, including at least 38 hours in psychology. Only 30 percent of the total number of hours may be dually listed (5000 level meeting in conjunction with 4000 or 3000 level) courses;
3. complete PSY 6280 (PSY 3020 or equivalent is a prerequisite for PSY 6280 and 6290), 6290, and 6640 (3 hours);
4. successfully write and orally present a written thesis evaluated by a committee of psychology faculty in conjunction with PSY 6640;
5. pass a written comprehensive examination prepared by the Industrial/Organizational faculty (may be taken no more than twice).

## Required

PSY 6070 Advanced Industrial Organizational Training and Development
PSY 6090 Practicum: Industrial/Organizational Psychology
PSY 6300 Literature Review and Reading in Psychology: Industrial/Organizational
PSY 6320 Performance Appraisal and Job Analysis
PSY 6330 Professional Issues in Industrial/Organizational Psychology
PSY 6420 Advanced Personnel Selection and Placement
PSY 6450 Advanced Organizational Psychology
PSY 6570 Psychological Research Methods in Human Resource Management
PSY 6085 Pre-Practicum: Industrial/Organizational Psychology

[^2]| Electives (not an inclusive list; consult advisor) |  |  |
| :--- | :--- | :--- |
| PSY | 5340 | Human Factors Psychology |
| PSY | 6370 | Organizational Skills |
| PSY | 6460 | Factor Analysis and Related Methods |

## Psychology Major Concentration: Quantitative

## Graduation Requirements

Candidate must

1. demonstrate knowledge of the core areas of psychology by completing the following courses at either the undergraduate or graduate level prior to entering the Quantitative program or during enrollment in the program (relevant courses offered at MTSU are listed in parentheses):
a. basic statistics (PSY 3020);
b. research methods (PSY 3070/5070);
c. group measurement/testing (PSY 4260/5260 or 6050);
d. abnormal psychology, personality, social, or developmental (PSY 2210, 2300, 3230/5230, 3590, 4190, 4210/5210, or 4610/5610);
e. learning, cognition, brain and behavior, or sensation and perception (PSY 2190, 4040, 4480/5480, 4780/5780, 4240/5240, or 4030/5030).
2. complete a total of 45 semester hours, including at least 33 hours in psychology. Only 30 percent of the total number of hours may be dually listed (5000- level meeting in conjunction with 4000- or 3000-level) courses;
3. complete PSY 6280, 6290, (PSY 3020 or equivalent is a prerequisite for PSY 6280 and 6290), and 6640 (thesis, 3 hours);
4. successfully write and orally present a written thesis evaluated by a committee of psychology faculty in conjunction with PSY 6640;
5. pass a written comprehensive examination prepared by the faculty in the student's concentration (may be taken no more than twice).

## Required

PSY 6210/7210 Advanced Psychometrics
PSY 6460 Factor Analysis and Related Methods
PSY 6490 Practicum: Quantitative Psychology
PSY 6550 Structural Equation Modeling
PSY 6560 Computer-Based Statistical Packages
PSY 6580/7580 Multivariate Data Analysis
PSY 6585/7585 Test Construction and Validation
PSY 6660 Literature Review and Reading in PsychologyQuantitative (3 credits)

## Electives

Students must take 12 elective credits in addition to required courses. The courses may be in psychology or related areas with the permission of the academic advisor.

## Psychology Major <br> Concentration: Pre-Specialist in Education: School Psychology

The School Psychology program includes two degrees. Program completion and endorsement for a State Department of Education license require successful completion of both degrees. The M.A. portion of the program comes first. The Ed.S. is an advanced degree. It is only available to students who have master's degrees in school psychology. Respecializing students from other master's programs in psychology or
counseling may apply, but they will be required to complete deficiencies.

The School Psychology program is field based. As such, a student is required to be continuously enrolled in at least one field-based course every semester from the completion of PSY 6140 until the completion of the program. PSY 6960, 6980, 7080, and 7810 are field-based courses. The policy excludes summer sessions.

Tennessee teacher licensing in school psychology is obtained through MTSU's program. Licensing requires (1) completion of the Ed.S. with a concentration in School Psychology, (2) 1,200 hours of internship in school psychology, (3) acceptable scores on the school psychology Praxis II Test, and (4) verification of readiness for independent practice by an internship supervisor. The School Psychology PRAXIS II test assesses the following areas: a) diagnosis and fact finding; b) prevention and intervention; c) applied psychological foundations; and d) ethics and legal considerations.

## M.A. Graduation Requirements:

## Concentration: Pre-Specialist in Education

Candidate must

1. demonstrate knowledge of the core areas of psychology by completing the following courses prior to entering the School Psychology program or during enrollment in the program (relevant courses offered at MTSU are listed in parentheses):
a. testing (PSY 6100 and 6101 ; PSY 4260 or equivalent is a prerequisite);
b. abnormal psychology (PSY 6400);
c. learning (PSY 6440);
d. developmental (PSY 6120, 6130, or 6410);
e. research methods (PSY 6640; 3 hours).
2. complete a total of 45 semester hours, including at least 33 hours in psychology. Only 30 percent of the total number of hours may be dually listed (5000-level meeting in conjunction with 4000- or 3000-level) courses; students without at least an undergraduate minor in psychology (at least 15 hours) will be required to complete up to 15 hours of additional psychology coursework that will not count toward the M.A. degree;
3. complete PSY 6280 and 6290 (PSY 3020 or equivalent is a prerequisite for both);
4. successfully write and orally present a written thesis evaluated by a committee of psychology faculty in conjunction with PSY 6640;
5. pass a written comprehensive examination prepared by the faculty in the student's concentration (may be taken no more than twice).

## Required Courses

PSY 6060 School Psychology: Ethics and Practice
PSY 6080 Interventions with Children and Adolescents
PSY 6100 Intellectual Assessment
PSY 6101 Laboratory in Intellectual Assessment
PSY 6140 Practicum: School Psychology
PSY 6750 Psychology and Assessment of Learning Disabilities
PSY 6760 Educational Assessment
PSY 6770 Assessment and Therapeutic Interventions for Children's Emotional Problems
PSY 6890 Consultation
PSY 6950 Literature Review and Reading in Psychology: School

Professional liability insurance, coverage amount at the student's discretion, must be maintained throughout enrollment in the program, with a current insurance binder filed with the department at all times.

## Requirements for the Specialist in Education

## Ed.S. Graduation Requirements <br> Curriculum and Instruction Major Concentration: School Psychology

Candidate must

1. hold a master's degree in psychology, educational psychology, or school counseling and normally should have completed all courses listed under the M.A. program for the Pre-Specialist in Education: School Psychology concentration.
2. complete a minimum of 30 graduate semester hours with a minimum of 15 hours at the 7000 level.
3. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.
4. satisfy a residency requirement consisting of (a) the completion of 18 semester hours of graduate study within a 12-month period and (b) full-time enrollment (at least 9 semester hours) for at least one semester.
5. complete FOED 6610/7610 (for those who did not have a thesis listed on their transcripts as part of their master's degree).
6. complete courses in the following areas (based on National Association of School Psychologists standards): a. databased decision making and accountability; b) consultation and collaboration; c) effective instruction and development of cognitive/academic skills; d) socialization and development of life skills; e) student diversity in development and learning; f) school and systems organization, policy, development, and climate; g) prevention, crisis intervention, and mental health; h) home/school/community collaboration; i) research and program evaluation; j) school psychology practice and development; k) information technology.
7. complete PSY 7810, an internship of 1,200 hours after completion of the M.A. degree.
8. pass a written comprehensive examination prepared by the faculty (may be taken no more than twice).

## Required

SPSE 6390 School Law
SPSE6640 Microcomputers in the K-12 Educational Setting
PSY 7530 The Psychology of Reading and Reading Development
PSY 7080 Practicum: Advanced Interventions with Children
PSY 7100 Multicultural Social Bases for Assessment and Intervention
PSY 7810 Advanced Internship: School Psychology (6 hours)
Professional liability insurance, coverage amount at the student's discretion, must be maintained throughout enrollment in the program, with a current insurance binder filed with the program coordinator at all times.

## Requirements for the Master of Education

The Master of Education in Professional Counseling has two concentrations: Mental Health Counseling and School Counseling. Each concentration has its own admission standards and required courses. Students select one concentration to prepare for work in mental health or school (PreK-12) settings. The curriculum covers the eight core areas of professional counseling programs required by the Council for Accreditation of Counseling and Related Education Programs (CACREP) as well as requirements of the Tennessee Board of Professional Counselors, Marital and Family Therapists, Clinical Pastoral Therapists, and State Department of Education. A student successfully completing the program will have satisfied the educational requirements necessary for licensure as professional counselors with mental health service provider designation (LPC MHSP) or school counselor. A student seeking licensure as school counselors must be recommended for such by the program faculty; completion of the School Counseling concentration is not a guarantee of the recommendation for licensure.

## Performance Requirements

Students must be able to meet the demands required for professional work in counseling. Therefore, students may be subject to dismissal from the Professional Counseling program if they (a) commit a serious breach of ethics or gross professional negligence, or (b) present evidence of impaired psychological functioning that would present a danger to themselves or others in a professional role. Students who are dismissed may reapply and will be considered for readmission on a competitive basis. Students who reapply may be asked to provide evidence of improved ability to meet performance requirements.

## Professional Counseling Major

## Concentration: Mental Health Counseling

The goal of the Mental Health concentration is to prepare students to provide professional counseling services to children, adolescents, and their parents in mental health-related settings. Students are trained to diagnose and treat select mental and emotional disorders and to promote optimal mental health. A 100-hour combined practicum in a middle school setting and the MTSU Psychological Services Center and a 900-hour internship in a mental health setting are required.

## Admissions

Students apply separately to the College of Graduate Studies and Professional Counseling program. Admission to the Mental Health Counseling program is not automatic for students meeting minimum admission requirements. Admissions decisions for the Mental Health Counseling program will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for graduate study in this area. Students are required to submit undergraduate transcripts, GRE scores, a supplemental application, and three recommendation forms to be considered for program admission. The supplemental application and recommendation form can be found on the Professional Counseling Web site (www.mtsu .edu/~psych/counsel.htm. Successful applicants typically have demonstrated the following:

1. Completion of an undergraduate major or minor in psychology including courses in abnormal psychology and statistics (with minimum grades of $B$ in both courses). Although an undergraduate course in research methods is not an admission requirement, it is a prerequisite for PSY 6615.
2. A 3.0 or higher undergraduate grade point average.
3. A combined GRE Verbal plus Quantitative score of at least 1000 with scores on both the Verbal and Quantitative measures of the test above 400 .
4. Participation in an assessment center conducted by the professional counseling faculty and practicing mental health counselors and school counselors within the first 12 hours of coursework with a positive recommendation from the evaluation team.

Application materials for Summer/Fall admission must be submitted by March 1; October 1 is the deadline for Spring admission.

## Graduation Requirements

## Candidates must

1. demonstrate knowledge of the core areas of psychology by completing the following courses at either the undergraduate or graduate level prior to entering the Mental Health Counseling program or during enrollment in the program (relevant courses offered at MTSU are listed in parentheses):
a. group measurement/testing (PSY 4260/5260);
b. abnormal psychology or personality (PSY 3230/5230);
c. learning or cognition (PSY 4040, 4480/5480, or 6190);
d. social or developmental (PSY 2210, 2300, 4190, 4210/5210, 4610/5610, 6120, 6130, or 6410);
e. brain and behavior, sensation and perception, or research methods (PSY 3070/5070, 4780/5780, 4240/5240, or 4030/5030).
2. complete 28 hours of core professional counseling courses and 33 hours of courses specific to mental health counseling ( 61 hours total). No more than 30 percent of the total number of hours may be dually listed (i.e., 5000level meeting in conjunction with 4000 or 3000-level) courses;
3. successfully complete a written comprehensive examination prepared by the professional counseling faculty (may be taken no more than twice).

## Prerequisites/Corequisites:

PSY 3020 Basic Statistics for Behavioral Science with a minimum grade of $B$ (or an equivalent undergraduate statistics course taken at another accredited educational institution)
PSY 3230 Abnormal Psychology with a minimum grade of B (or an equivalent undergraduate abnormal psychology course taken at another accredited educational institution)

Professional Counseling Core Courses (28 hours; required of all professional counseling students):
PSY 5260 Introduction to Psychological Testing
PSY 5470 Theories of Counseling
PSY 5720 Multicultural Perspectives in Psychology and Education
PSY 6150 Career Counseling
PSY 6170 Group Counseling and Psychotherapy
PSY 6180 Laboratory in Group Counseling and Psychotherapy

| PSY | 6230 | Legal and Ethical Issues in Counseling |
| :--- | :--- | :--- |
| PSY | 6260 | Pre-Practicum in Counseling |
| PSY | 6270 | Practicum in Counseling |
| PSY | 6410 | Development Across the Lifespan |
| Mental Health Counseling Courses (33 hours; required of mental |  |  |
| health counseling students) |  |  |
| PSY | 5655 | Foundations of Mental Health Counseling |
| PSY | 6020 | Theories of Personality |
| PSY | 6080 | Interventions with Children and Adolescents |
| PSY | 6400 | Psychological Disorders of Children |
| PSY | 6540 | Internship: Mental Health Counseling (two semesters, |
|  |  | 6 credits) |
| PSY | 6615 | Basic and Applied Research Methods in Psychology |
| PSY | 6765 | Diagnosis and Treatment Planning in Counseling |
| PSY | 6820 | Family Therapy: Evaluation and Treatment Planning |
| PSY | 6885 | Play Therapy: Therapy and Practice |
| PSY | 7520 | Assessment and Treatment of Addictions |

## Concentration: School Counseling

The School Counseling concentration is developmental with a prevention/intervention focus. Students are required to complete a 100 -hour practicum and two 300-hour internships in elementary and high school settings. An additional 60 hours of school experience for persons not licensed to teach are also required. Students seeking Tennessee school counseling licensure must obtain a positive recommendation from the professional counseling faculty at the end of their programs. Coursework completion is not a guarantee of the recommendation for licensure.

## Admissions Criteria

Students apply separately to the College of Graduate Studies and Professional Counseling program. Admission to the School Counseling program is not automatic for students meeting minimum admission requirements. Admissions decisions for the School Counseling Program will be made after reviewing all materials and determining the applicant's capacity, suitability, and preparation for graduate study in this area. Students are required to submit undergraduate transcripts, GRE scores, a supplemental application, and three recommendation forms to be considered for program admission. The supplemental application and recommendation form can be found on the Professional Counseling Web site (www.mtsu.edu/~psych/counsel. htm.) Successful applicants typically have demonstrated the following:

1. completion of an undergraduate course in statistics;
2. a 3.0 or higher undergraduate grade point average;
3. a combined GRE Verbal plus Quantitative score of at least 900 with scores on both the Verbal or Quantitative measures of the test above 400;
4. participation in an assessment center conducted by the Professional Counseling faculty and practicing mental health counselors and school counselors within the first 12 hours of coursework with a positive recommendation from the evaluation team.

Application materials for Summer/Fall admission must be submitted by March 1; October 1 is the deadline for Spring admission.

## Graduation Requirements

Candidates must

1. complete 28 hours of core professional counseling courses and 21 hours of school counseling courses ( 49 hours total). No more than 30 percent of the total number of hours may be dual listed (i.e., 5000-level meeting in conjunction with 4000- or 3000-level) courses.
2. successfully complete a written comprehensive examination prepared by the professional counseling faculty (may be taken no more than twice).

## Prerequisites/Corequisites:

PSY 3020 Basic Statistics for Behavioral Science with a minimum grade of $C$ (or an equivalent undergraduate statistics course taken at another accredited educational institution)
ELED 5201 Observation and Participation: Grades 1-6 (with a minimum grade of $B$ if not a licensed teacher)

Professional Counseling Core Courses (28 hours; required of all professional counseling students)

| PSY | 5260 | Introduction to Psychological Testing |
| :--- | :--- | :--- |
| PSY | 5470 | Theories of Counseling |
| PSY | 5720 | Multicultural Perspectives in Psychology and Education |
| PSY | 6150 | Career Counseling |
| PSY | 6170 | Group Counseling and Psychotherapy |
| PSY | 6180 | Laboratory in Group Counseling and Psychotherapy |
| PSY | 6230 | Legal and Ethical Issues in Counseling |
| PSY | 6260 | Pre-Practicum in Counseling |
| PSY | 6270 | Practicum in Counseling |
| PSY | 6410 | Development Across the Lifespan |
| School Counseling Courses (21 hours; required of school counseling |  |  |
| students) |  |  |
| PSY | 6160 | Foundations of School Counseling |
| PSY | 6220 | Organization and Administration of School Counseling |
|  |  | Services |
| PSY | 6610 | Introduction to Educational and Psychological Research |
| PSY | 6920 | Internship: Secondary School Counseling (3 credits) |
| PSY | 6930 | Internship: Elementary School Counseling (3 credits) |
| PSY | 6890 | Consultation |

## One of the following: <br> PSY 5250 Psychology of Exceptional Children <br> SPED 6800 Exceptional Children and Youth

## School Counseling Candidates Seeking Tennessee School

 Counseling LicensureAll candidates seeking licensure as a school counselor in Tennessee must take and pass the Praxis II Specialty Area Test in School Guidance and Counseling (per State Department of Education criteria). This test is taken when the student is near the end of the master's program.

## Non-Degree-Seeking School Counseling Students

Students who hold a master's degree in an area other than school counseling who seek to take classes to obtain licensure as a school counselor in Tennessee must be accepted into the School Counseling program in order to do so. This admission is not automatic. Successful applicants have generally met the same criteria as other School Counseling program applicants, as described above.
These applicants should take the following steps:

1. consult with the School Counseling program coordinator regarding what additional coursework is needed for licensure;
2. apply to the College of Graduate Studies under the category of "Addition of School Counseling License to Previous Master's";
3. submit official copies of undergraduate and graduate transcripts and GRE or MAT scores to the College of Graduate Studies;
4. submit a supplemental application, three recommendation forms, and a resume to the School Counseling program; and
5. attend the Assessment Center if invited to do so.

## Courses in Psychology [PSY]

5030 Psychology of Sensation and Perception. Three credits. Prerequisite: PSY 1410. Modern theories of perception as they relate to knowledge of the external world through perceptual acquaintance. Philosophy of perception, history of sensory psychology, physiological mechanisms of perception, and ecological determinants of perceptual capabilities.

5050 Applied Psychopharmacology. Three credits. Impact of drugs on behavior in today's society. The nature of drug use, abuse, psychological and physiological dependence examined.

5060 Sport Psychology. Three credits. Prerequisite: PSY 1410 or consent of instructor. (Same as ATHC 5060.) Application of psychological principles, motivational research, and social/psychological findings to the arena of sports. Theory and application of performance enhancement and teamwork in sports.

5070 Research Methods. Four credits. Prerequisite: PSY 3020. Analysis of methodological issues in psychological research. Offers skills in the formulation, execution, interpretation, and presentation of psychological investigations. Three hours lecture and one one-hour laboratory.

5071 Research Methods Lab. Zero credits. Corequisite: PSY 5070.
5120 Psychology of Criminal Behavior. Three credits. Survey of theory and research pertaining to criminal behavior, covering topics such as mental illness and crime, criminal homicide, assault, and sex offenses.

5130 Laboratory in Psychology of Sensation and Perception. One credit.

5150 Laboratory in Behavioral Neuroscience. One credit.
5180 Laboratory in Learning Theories. One credit.
5210 Adolescent Psychology. Three credits. Physiological, emotional, mental, and social characteristics of adolescent development, including primary vectors of influence.

5220 Correctional Psychology. Three credits. Law enforcement, delinquency, and criminal psychology, including psychological evaluation, classification, therapy, and rehabilitation. Special classifications. Field problems. Preventive implications.

5230 Abnormal Psychology. Three credits. Patterns of maladaptive behavior, including anxiety, depression, schizophrenia, antisocial behavior, and mental retardation.
5240 Behavioral Neuroscience. Three credits. The role of the brain in those areas which are typically considered by psychology, such as sensory and motor functions, motivation, higher mental functions, and mental disorders.

5250 Psychology of Exceptional Children. Three credits. Identification and etiology of patterns of exceptionality, with consideration given to behavioral manifestations and preventive and correctional programs.
5260 Introduction to Psychological Testing. Three credits. Modern practices in test construction, selection, and application to classroom and guidance situations. (Student required to participate as principal and subject in administration, scoring, profiling, and in making predictions based on test results.)

5290 Wage and Salary Administration. Three credits. Analysis of theory and practice in administering compensation. Practices and issues related to job evaluation, salary market data, pay for performance, and legal considerations.

5320 Introduction to Industrial/Organizational Psychology. Three credits. Application of psychology to business and industry. Topics include employee selection, performance appraisal, training, leadership, motivation, job analysis, legal issues, job satisfaction, work teams, and occupational health.

5340 Human Factors Psychology. Three credits. Prerequisite: PSY 3320/5320 or consent of instructor. The process of designing for human use. Considers individual differences, visual, auditory, and tactile displays, anthropometry, illumination, noise, humans in motion, and space and environmental studies.

5350 Safety Psychology. Three credits. Basic theories of accident causation, safety research literature, methods of accident prevention, and industrial hygiene.

5370 Motivation and Work Attitudes. Three credits. Motivation theories and applications to workplace. Emotions, attitudes, e.g., job satisfaction, organizational commitment, work-family balance. Performance effects.

5380 Group Dynamics. Three credits. Functioning of groups. Includes development of group structure, group conflict, cohesion, social influence, leadership, group productivity, group decision making, and growth groups.

5390 Persuasion. Three credits. Survey and analysis of theory and research on interpersonal influence. Applications of findings to various areas of human experience.

5440 Social Psychology of Close Relationships. Three credits. Prerequisites: PSY 1410 and 2210. Theoretical and empirical issues in the scientific study of adult, close relationships from a social psychological perspective: initial attraction, relationship formation and maintenance, and dissolution. (Not a course in the broad area of marriage and the family; See CDFS 3320 Family Relationships and SOC 2500 Marriage and Family.)

5470 Theories of Counseling. Three credits. Integration of the major theories of counseling and psychotherapy and their application.

5480 Learning Theories. Three credits. Research and experiments in learning and the related growth of the major theories of learning with emphasis on classical and instrumental conditioning and related topics.

5490 Operant Conditioning. Three credits. Prerequisite: PSY 1410. Philosophy of B.F. Skinner's behaviorism explored in his own writings and those of his followers and critics. Current applications of behaviorism in all areas of psychology (child, marriage and family, animal conditioning, mental health, addictions, etc.) also examined.

5600 Psychosexual Adjustment. Three credits. Psychological, cultural, and biological facets of the human sexual experience. Attitudes and behaviors, variances and dysfunctions, implications, and strategies for intervention.

5610 Adult Psychology and Aging. Three credits. A survey of the research on adult development with emphasis on old age. Examines the physical, intellectual, social, vocational, and personality changes during the adult years.

5620 Psychology of Women. Three credits. Psychological impact of the culture on women's attitudes, roles, aspirations, problems, and personality development.

5630 Death and Dying. Three credits. An experiential course covering the folklore of thanatology, the funeral industry, handling grief, counseling the bereaved, the hospice concept. Objectives include an attempt to view death with equanimity and personal growth through confronting death.

5655 Foundations of Mental Health Counseling. Three credits. Prerequisites: PSY 1410 and 3230 or equivalent. History, roles, and duties of the professional mental health counselor. Managed care and third party reimbursement issues, administration and supervision of mental health services, and other salient issues relating to the role of the professional mental health counselor.

5660- Psychology Seminar. One credit each. Representative and inte5680 grative study of scientific journals of the field. May be taken for total of three credits.
5660 Industrial-Social
5670 Clinical-Personality
5680 General-Experimental
5700 History and Systems of Psychology. Three credits. A survey of the history and intensive coverage of current systems of psychology.

5720 Multicultural Perspectives in Psychology and Education. Three credits. Theories and research relative to the education of multiethnic/racial minorities. Relation of culture and socialization to learning styles, assessment practices, and counseling considerations.

5740- Apprenticeship. One to three credits each. Supervised practi-
5760 cal experience utilizing psychological principles and tools in an established organization.
5740 Child
5750 Pre-Clinical
5760 Adolescent
5780 Human Neuropsychology. Three credits. Prerequisite: PSY 5240 or consent of instructor. Organization and function of specific brain areas and the behavioral deficits and changes resulting from focal and diffuse brain damage.

5820 Psychology of Language. Three credits. Prerequisite: PSY 1410. A cognitive approach to how people learn and use language to communicate. Covers basic psycholinguistics (production, perception, comprehension, and mental representation), language acquisition, and applied psycholinguistics (bilingualism, language disorders, and machine language).

6010 Clinical Interventions. Three credits. Prerequisites: Admission to the clinical program or permission of instructor; PSY 6510, 6800, and 6840. A supervised experience in which the student learns how to apply techniques of clinical interviewing for the purpose of developing, implementing, and evaluating treatment plans for clients. Liability insurance required prior to enrollment.

6020 Theories of Personality. Three credits. Examines traditional schools of personality theory and current developments within each.

6030 Current Topics in Personality. Three credits. Examines current research findings on personality traits and personality-related processes.

6040 Topics in Industrial/Organizational Psychology. Three credits. Focus on practical aspects of functioning as a professional in the field. Current issues, recent developments, and less-traditional relevant areas.

6050 Psychological Testing. Three credits. Prerequisite: PSY 3020 or equivalent. Modern practices in test construction, selection, and application; legal guidelines, reliability, and validity. Intelligence, abilities, interests, attitudes, values, and personality testing. Students required to participate as examiners and subjects in administering, scoring, profiling, and in making predictions based on test results.

6060 School Psychology: Ethics and Practice. Three credits. An introduction with particular emphasis on the psychosocial perspective. Adaptive instruction of behavior measures included, as are observations of classrooms and teacher interviews.

6065 Introduction to School-Based Mental Health Services. Three credits. School psychologist's role as a mental health service provider with both a practical and theoretical focus. Basic helping and interviewing skills.

6070 Advanced Industrial Organizational Training and Development. Three credits. Prerequisite: PSY 3020 or equivalent. Theory and methodology used in the training and development of human resources in organizations: needs assessment, program development, program evaluation, and legal and special issues in training and development.

6080 Interventions with Children and Adolescents. Three credits. Prerequisite: PSY 5250 or 6400 or permission of instructor. Theoretical and practical issues related to interventions with children and adolescents exhibiting behavioral and emotional problems. Intervention strategies for specific problems. Experience designing and evaluating intervention plans. Legal, ethical, and practical issues.

6085 Pre-Practicum for Industrial/Organizationl Psychology. One credit. Expectations, requirements, and procedures involved in a practicum in the Industrial/Organizational Psychology program. Encourages students to assess career goals and helps facilitate selection of a practicum that moves toward exploring and meeting those career goals.

6090 Practicum: Industrial/Organizational Psychology. Three credits. Prerequisite: Consent of instructor. Supervised experience in industry, business, or government using psychological principles at a professional, applied level.

6100 Intellectual Assessment. Three credits. Prerequisite: PSY 4260/5260 or 6050. Practical didactic instruction in theory and practice of intelligence testing. Practical supervised experience in rapport, administration, scoring, and interpretation of individual intelligence tests for all age levels. Liability insurance required.

6101 Laboratory in Intellectual Assessment. One credit. Skill development in completing intellectual assessments, calculating scores, and conducting parent conferences in a laboratory setting.

6102 Theory of Health Education and Behavior. Three credits. (Same as HLTH 6102.) Links behavioral change theory to the research and practice of interventions in health behaviors. Application of the theoretical constructs is linked to design, implementation and evaluation of individual, and group behavioral change programs.

6105 Psychoeducational Assessment of Preschool Children. Three credits. Prerequisite: PSY 6100. Instruction in theory and practice relevant to the assessment of preschool age children's cognitive, social, and emotional functioning. Field experience and liability insurance required.

6120 Developmental Psychology: Child. Three credits. Survey of research including prenatal, neonatal, and general physical development, emotional development, cognitive development, and social and personality development. Observations.

6130 Developmental Psychology: Adolescent. Three credits. Survey of research on adolescence from a biopsychosocial perspective. Student observation and study of developing adolescents from cognitive, biological, social, and psychological frameworks.

6140 Practicum: School Psychology. Three credits. Prerequisite: 15 semester hours of related graduate credits, including 6060, 6080 , 6100, 6750, and 6770. Supervised assessment of low incidence learning and adjustment problems with follow-up parent, teacher, and administrator conferences. Practicum experience includes 90 hours of supervised work with a practicing, certified, full-time psychologist. At least 50 percent of the practicum placement shall be in a school setting. Liability insurance required prior to enrollment.

6150 Career Counseling. Three credits. Prerequisites: PSY 5260 (or 6050 ) and 6260 or permission of department. History, theory, and issues related to career development, career choice, and career education. Demonstration of the ability to teach career information seeking behavior and decision-making skills.

6160 Foundations of School Counseling. Three credits. History, foundations, philosophy, and principles of developmental school counseling; roles and functions of school counselors, including professional and personal requirements.

6170 Group Counseling and Psychotherapy. Three credits. Prerequisites: PSY 5470 or 6020; PSY 6260 or 6010; permission of instructor. Corequisite: PSY 6180. Group process, ethics, and techniques. Application of counseling theory, group procedures, sociometrics, and group dynamics to interpersonal relations, mental health, school, and industrial settings. Supervised experience. Liability insurance required prior to enrollment.

6180 Laboratory in Group Counseling and Psychotherapy. One credit. Taken in conjunction with PSY 6170. Students will experience group process as members of a growth group during the first half of the semester and will demonstrate group skills as leaders of group session(s) during the second half of the semester.

6190 Advanced Cognitive Psychology. Three credits. Topic-oriented overview of cognitive psychology. Models of attention, perception, memory, language, reasoning, problem solving, and decision making. Issues in cognitive development and cognitive neuropsychology.

6210/ 7210 Advanced Psychometrics. Three credits. Prerequisites: PSY 6280, HHP 6700, or equivalent. Classical test theory and item response theory. Model, assumptions, and problems of classical test theory. Mathematical modeling, parameter estimating, and adaptive testing procedures using item response theory. Both theories utilized for test construction.

6220 Organization and Administration of School Counseling Services. Three credits. Prerequisite: PSY 6160. Organizing, administering, and managing the various components of a developmental school guidance and counseling program.

6230 Legal and Ethical Issues in Counseling. Three credits. Legal, ethical, and professional issues pertaining to the practice of school and mental health counseling.

6240 Projective Measurements. Three credits. Prerequisite: PSY 6100, $4260 / 5260$, or 6050 . Rationale and systematic supervised training in use and scoring of Rorschach (half semester) and other projective devices (half semester). Liability insurance required prior to enrollment.

6250 Objective Personality Assessment. Three credits. Prerequisites: PSY 4260/5260 or 6050; PSY 6100. Practical supervised experience in objective measurement, analysis, and pattern confirmations of key variables of personality, both for normative and specific divergent groups. Emphasis on MMPI. Liability insurance required prior to enrollment.

6260 Pre-Practicum in Counseling. Three credits. Prerequisite: PSY 5470 or permission of instructor. Introduces basic communication skills, techniques, and process involved in working with clients in a counseling relationship; extensive role-play practice with peer and faculty feedback. Liability insurance required prior to enrollment.

6270 Practicum in Counseling. Three credits. Prerequisites: PSY 5470, 6170, 6180, 6230, 6260; permission of instructor. Practical supervised experience in individual and group counseling in a school setting and MTSU Psychological Services Center; audio and/or video taping of sessions for peer and faculty feedback.

6280 Psychological Statistics: Regression. Three credits. Prerequisite: PSY 3020 or equivalent and satisfactory score on screening examination. Corequisite: PSY 6281. Review of basic statistics; various correlation coefficients; multiple and partial correlation; simple and multiple regression. Laboratory included.

6281 Psychological Statistics Regression Lab. Zero credits. Corequisite: PSY 6280.

6290 Psychological Statistics: Anova. Three credits. Prerequisite: PSY 3020 or equivalent. Corequisite: PSY 6291. Review of basic statistics. Scientific quantification, research design, and statistical analysis from the perspective of analysis of variance: one-way, factorial, repeated measures, and mixed designs. Laboratory included.

6291 Psychological Statistics: Anova Lab. Zero credits. Corequisite: PSY 6290.

6320 Performance Appraisal and Job Analysis. Three credits. Prerequisites: PSY 6280 or permission of instructor. Analysis of theory and practice in job analysis and performance appraisal, including legal aspects, a survey of techniques available, current research, cognitive aspects, and reliability and validity issues.

6330 Professional Issues in Industrial/Organizational Psychology. One credit. Survey of issues related to professional ethics, relevant legislation, professional affiliations, professional identity, and professional responsibilities.

6340 Behavioral Medicine: Theory and Application. Three credits. Prerequisite: Consent of instructor. Review theory, methodology, and application of behavioral medicine. Includes behavioral science issues in health and applications of this information to diagnosis,
prevention, treatment, and rehabilitation of health problems for which "life-stress" factors predominate. See PSY 6350.

6350 Laboratory in Behavioral Medicine. One credit. Prerequisite: Consent of instructor.

6360 Organizational Change and Development. Three credits. Prerequisite: PSY 6450 or permission of instructor. Analysis of theory and practice of organizational change and development, process of change, organizational development (OD) interventions, and evaluation and research of OD effectiveness.

6365 Organizational Surveys and Employee Attitudes and Motivation. Three credits. Prerequisite: PSY 6450. Special topics in employee attitudes and motivation and the measurement of employee attitudes through the use of organizational surveys. Develops skills in survey techniques and includes practical experience with surveys.

6370 Organizational Skills. Three credits. Prerequisite: PSY 6450 or permission of instructor. Analysis of a variety of interpersonal situations which impact organizational effectiveness and climate. Development of skills: conflict resolution, interviewing, performance feedback, effective meetings, giving recognition, discipline.

6380 Work Group Effectiveness. Three credits. Prerequisite: PSY 5380, 6450, or permission of instructor. Analysis of factors leading to effective work groups. Topics covered include task effects on performance, group composition, leadership, group processes, and team building.

6400 Psychological Disorders of Children. Three credits. Current research and theory of behavioral, cognitive, and emotional disorders in childhood and adolescence.

6410 Development Across the Lifespan. Three credits. Theories and characteristics of human development covering the lifespan.

6420 Advanced Personnel Selection and Placement. Three credits. Prerequisites: PSY 5260 or 6050 and preferably PSY 6280 . Legal and research aspects of personnel selection. Methods used for selection, including assessment centers, work samples, and psychological testing.

6430 Internship: Behavior Modification. Two to ten credits; may be repeated; enrollment must be continuous. Prerequisites: 30 semester hours of psychology including 4400, 5480, or 6020. Minimum of 128 hours of supervised internship in an institutional setting. Liability insurance required prior to enrollment.

6440 Advanced Applied Behavioral Analysis. Three credits. Prerequisite: PSY 4400 or permission of instructor. Intensive presentation of methods used in behavioral assessment and therapy. Application of various behavioral and cognitive-behavioral procedures.

6450 Advanced Organizational Psychology. Three credits. Review of theory and empirical research in organizational psychology. Students will apply theory and research findings to understand and explain work behavior at the individual, group, and organizational levels and will use this knowledge to solve organizational problems.

6460 Factor Analysis and Related Methods. Three credits. Prerequisites: PSY 6280, HHP 6700, or equivalent. Surveys each of the major factor analysis techniques and related latent trait theory with main focus on application. Nature, power, procedure, computer programming, interpretation, and limitations of each technique.

6480 Advanced Topics in Quantitative Psychology. Three credits. Prerequisites: PSY 6280 or equivalent. Advanced topics in quantitative psychology. Focus on current topics, recent issues, and less traditional areas of quantitative psychology. Relevant computer programs. May be repeated for a total of six credits.

6490 Practicum: Quantitative Psychology. Three credits. Prerequisites: 30 credit hours of psychology including 6050, 6210, 6280, 6290, $6460,6560,6580$, or consent of the instructor. Supervised experience in statistical consultation for social and behavioral sciences. 300 clock hours.

6500 Behavioral Methodology. Three credits. Techniques for design and evaluation of clinical treatment and research. Includes single subject and group designs. Emphasis on direct observation and data collection procedures, reliability, social validity, and generalization.

6510 Psychopathology. Three credits. Prerequisite: PSY 3230/5230. Extensive examination of the disorders included in the current diagnostic manual. Emphasis on adult disorders. Objectives are to enhance understanding of psychopathology and to develop minimal competence in diagnosis.

6520 Psychopharmacology. Three credits. Biochemical, neurophysiological, and neuroanatomical basis; emphasis on drugs used in investigating and treating psychological disorders.

6530/ 7530 The Psychology of Reading and Reading Development. Three credits. Overview of the cognitive processes involved in reading. The structure of both oral and written language; cognitive mechanisms in reading; language development and the acquisition of reading skills; developmental and acquired disorders of language and reading.

6540 Internship: Mental Health Counseling. Three to six credits. Prerequisites: PSY 6270 and permission of the Mental Health Counseling program coordinator. Minimum of 900 supervised internship hours in a mental health setting. May be repeated; enrollment must be continuous.

6550 Structural Equation Modeling. Three credits. Prerequisites: PSY 6280, HHP 6700, or equivalent. Structural equation modeling. Review of correlation, multiple regression and path analysis. Conceptual review of measurement models. Model specification, estimation, goodness of fit, and power of structural equation models. Relevant computer programs.

6560 Computer-Based Statistical Packages. Three credits. Prerequisite: PSY 3020 or equivalent. History, principles, and skills of data analysis, using major statistical packages. Commands in both DATA and PROC steps. Other features including various functions, graphics, full screen process (FSP), and interactive matrix language (IML).

6570 Psychological Research Methods in Human Resource Management. Three credits. Prerequisite: PSY 6280 or permission of instructor. Theory and appropriate methodology for conducting research relevant to human resource practices in organizations. Applied psychometric theory and quasi-experimental design.

6580/ 7580 Multivariate Data Analysis. Three credits. Prerequisites: PSY 6280, HHP 6700, or equivalent. Surveys each of the major multivariate data analysis techniques, with main focus on their application. Nature, power, procedure, computer programming, interpretation, and limitations of each.

6585/ 7585 Test Construction and Validation. Three credits. Prerequisite: PSY 6210/7210 or equivalent. Surveys principles in item and test construction. Actual development of items and tests in the student's own field and validation of the items and tests through both classical test theory and item response theory.

6610 Introduction to Educational and Psychological Research. Three credits. Prerequisites: PSY 3020 and 4260/5260 or 6050. Research in education and psychology, research strategies, research ethics, research writing and reporting. Planning, implementing, and writing an approved scholarly research proposal.

6615 Basic and Applied Research Methods in Psychology. Three credits. Prerequisite: A grade of C or higher in PSY 3020 and 3070 or equivalent training (permission of department). Survey of experimental and quasi-experimental research designs employed in mental health fields. Theoretical and practical knowledge of various research designs and data analysis procedures explored through class lectures and lab assignments. Offers preparation for those training to become mental health practitioners to understand and critically evaluate psychological research.

6620 Independent Study: Industrial/Organizational Psychology. One to three credits. Prerequisite: Permission of instructor. Individualized library or empirical research project approved by instructor. A maximum of three credits will apply to a masters degree.

6640 Thesis Research. One to six credits. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6645 Foundations of Health Psychology. Three credits. Introduction to principles, practices, theories, and research in health psychology. Study of factors influencing psychological and physical health. Involves a biopsychosocial approach to research in illness and behavioral health.

6650 Positive Psychology. Three credits. Introduction to theories and research in positive psychology. Topics relevant to the nature of psychological well-being: research on happiness, life satisfaction, creativity, wellness, self-actualization, wisdom, plus applications in a number of areas.

6655 Field Study in Health Psychology. One credit. Prerequisite: 9 hours of graduate health psychology courses. Students will be required to work in an applied setting under the supervision of a health psychology research professional. May be repeated for a total of 3 credit hours. $\mathrm{S} / \mathrm{U}$ grading.

6690 Professional Issues and Roles. Three credits. Systematic survey of ethical practice requirements, certification, and licensure for psychological practice. Examines critical issues facing psychology and roles of psychologists.

6710 Community Psychology. Three credits. Examines community psychology and how person-environment interactions contribute to the mental health and well-being of the community. Research, environmental influences on psychological and community wellbeing, prevention and health promotion, program evaluation and consultation in community settings examined. Field experiences included.

6750 Psychology and Assessment of Learning Disabilities. Three credits. Prerequisite: PSY 6100; corequisite: PSY 6760. Characteristics and biological bases of learning disabilities. Assessment methods
including CBMs, interventions including RTI, and consultation strategies for working with children with learning disabilities with reference to family, school, and community as sources of understanding and treatment. Liability insurance required prior to enrollment.

6760 Educational Assessment. One credit. Prerequisite: PSY 6100; corequisite: PSY 6750. Skills in conducting educational assessment for completing evaluations of children suspected of having learning disabilities.
6765 Diagnosis and Treatment Planning in Counseling. Three credits. Prerequisites: PSY 3230/5230 and 6270 or equivalent; PSY 6410 recommended. Development of skills in the diagnosis and treatment of select mental disorders across the life span. Treatment planning strategies using empirically based treatment interventions. Examines effect of mental disorders on normal development.

6770 Assessment and Therapeutic Interventions for Children's Emotional Problems. Three credits. Prerequisites: PSY 6100 and either 5250 or 6400 . Personality and behavioral assessment with children. Linking assessment and diagnosis to therapeutic intervention. Developing therapeutic relationships with children.

6780 Clinical Neuropsychology. Three credits. Prerequisites: PSY 5780, 6100 , and 6250 or consent of instructor. Review of human neuroanatomy and neurophysiology. Administration of representative neuropsychological test batteries, especially the Halstead-Reitan Neuropsychological Test Battery. Applied experience with clinical population. Liability insurance required prior to enrollment.

6785 Principles of Behavior Analysis. Three credits. Reinforcement theory and practice in applied settings with an emphasis on basic and advanced issues and best practices in behavioral control using reinforcers, punishers, discrimination, avoidance, shaping of new behaviors, chaining, contingencies, maintenance, and transfer. Special topics include language learning and training and the moral and legal controls in behavioral analysis.

6801 Interviewing and Intervention. Three credits. Interview and intervention techniques common to most psychological assessment procedures and therapies: rapport-building, interviewing skills, management of dangerous or suicidal clients, consultation, and referrals.

6820 Family Therapy: Evaluation and Treatment Planning. Three credits. Examination of evaluation and intervention procedures of major models of family therapy. Emphasis on ethical issues for practitioners of family therapy.

6841 Theories of Individual Psychotherapy. Three credits. Prerequisites: PSY 6800 or 6801. Intensive presentation of theory and methods used in psychotherapy. Evaluation of standard of care and treatment effectiveness.

6850 Field Practicum (Clinical). Three credits. Prerequisites: Admission to the clinical program or permission of the instructor; 24 hours including PSY 6010, 6100, 6101, 6250, 6510, 6690, and 6840. Supervised clinical training in a community mental health agency. Supervision by a licensed psychologist at the agency. 300 clock hours for 3 credit hours. Liability insurance required prior to enrollment.

6851 Assessment Field Practicum (Clinical). Three credits. Prerequisites: Admission to the clinical master's program (or permission of instructor) and successful completion of clinical master's program core coursework. Supervised clinical training in psychological assessment and diagnostics in a community mental health or related agency. Supervision by a licensed psychologist at the agency required and provided. Liability insurance required prior to enrollment.

6860 Field Practicum (Clinical). Three credits. Prerequisite: PSY 6850. Must be taken in semester immediately following 6850. Continuation of supervised clinical training in a community mental health agency. Supervision by a licensed psychologist at the agency. 300 clock hours for 3 credit hours. Liability insurance required prior to enrollment.

6870 Field Practicum (Clinical). Three credits each. Prerequisites: Admission to the clinical program or permission of the instructor; 24 hours including PSY 6510, 6100, 6250, 6010, 6840, and 6690. Supervised clinical training in a community mental health agency. Supervision by a licensed psychologist at the agency. 300 clock hours for 3 credit hours. Liability insurance required prior to enrollment.

6885 Play Therapy: Therapy and Practice. Three credits. Prerequisites: Permission of instructor and one of the following: PSY 6010, 6080, or 6270 or equivalent. Covers various theories and techniques of play therapy useful to both the school counselor and school psychologist and to the practitioner in community practice. Includes a practicum experience using play therapy with young children in play therapy lab. Liability insurance required prior to enrollment.

6890 Consultation. Three credits. Prerequisite: PSY 6270 or 6010 or 6080 or permission of instructor. Course must be taken prior to or concurrent with the first internship (6920 or 6930). Theory and practice of consultation as a useful technique in the helping professions. Applied experiences in schools and other settings. Liability insurance required prior to enrollment.

6900 Assessment of School Counseling Area Licensing Competencies. One to two credits. For the advanced student who by exceptional prior training or experience believes coursework for competence mastery is unnecessary in one or more of the licensing areas. All credit earned may be applied to a Master of Education degree in Psychology. May be repeated ten times.

6920 Internship: Secondary School Counseling. One to six credits. Prerequisite: PSY 6270. Actual experience in the counseling, consulting, coordinating services to adolescents, teachers, and parents. Requires 300 hours in the schools, with at least 40 percent in direct service. Liability insurance required prior to enrollment.

6930 Internship: Elementary School Counseling. One to six credits. Prerequisite: PSY 6270. Actual experience in the school providing counseling, consulting, coordinating services to children, teachers, and parents. Requires 300 hours in the schools, with at least 40 percent in direct service. Liability insurance required prior to enrollment.

6960 Internship: School Psychology. Two to ten credits; may be repeated. Prerequisites: 30 semester hours of psychology including 6060, 6100, 6140, and 6770; approved thesis proposal. Minimum of 720 hours supervised internship, at least half in a school system. Not acceptable as Ed.S. internship. Liability insurance required prior to enrollment.

6970- Independent Study in School Psychology. One credit each.
6990 Competencies-oriented individualized study.
6970 Learning
6980 Fieldwork. Competencies-oriented field experience. Fortyfive hours of work as a school psychologist in training. Course may be repeated up to three times for credit.
6990 Assessment and Consultation
Independent Research in Psychology. One to three credits per semester; may be taken more than once. Prerequisite: Permission of instructor. Individualized empirical research and library research approved by the instructor.

6310 Industrial/Organizational (1-3 credits applicable to degree)
6390 Clinical (1-3 credits applicable to degree)
6600 General/Experimental (1-9 credits applicable to degree)
6910 Counseling (1-3 credits applicable to degree)
6940 School (1-3 credits applicable to degree)
Literature Review and Reading in Psychology. One to three credits. Supervised literature review and/or readings on a topic of current importance in psychology. Topics and requirements obtained from individual faculty members. Specific courses may be repeated to a total of 6 credits.
6300 Industrial/Organizational
6590 General/Experimental
6630 Clinical
6660 Quantitative
6670 Behavioral Neuroscience
6680 Cognitive
6700 Developmental
6720 Learning
6730 Personality
6740 Reading
6790 Sensation and Perception
6810 Social
6950 School
6999/ 7999 Comprehensive Examination and Preparation. One credit. Open only to students who are not enrolled in any other graduate course and who will take the master's comprehensive examination during the term. The student must contact the graduate advisor during the first two weeks of the term for specifics regarding the details of this comprehensive examination preparatory course. Credit may not be applied to degree requirements.

7080 Practicum: Advanced Interventions with Children. Three credits. Prerequisite: PSY 6080. Theoretical and practical issues related to school interventions with children exhibiting psychological and behavior problems. Advanced skills development in consultation with parents and teachers, psychotherapy with children, and brief, short-term family therapy.

7100 Multicultural and Social Bases for Assessment and Intervention Practices. Three credits. Prerequisite: PSY 6140 or PSY 6270. Theoretical and practical issues related to appropriate practices in assessment, diagnosis, and therapeutic interventions for youth of diverse ethnic and cultural groups.

7520 Assessment and Treatment of Addictions. Three credits. Systematic analysis of the addictional phenomena with particular emphasis on dynamics and behavioral manifestations. Alcohol, street and prescription drugs, gambling, TV, religion, politics, and sex as aberrational forms of altering consciousness explored. Causation, clinical diagnostics, and treatment procedures as well as prevention are addressed in detail.

7810 Advanced Internship: School Psychology. Three to six credits. Prerequisites: 60 semester hours of approved graduate classes and an M.A. degree; PSY 6140, 6890, and 7080. Minimum of 1200 hours supervised internship, at least half in a public school system. Liability insurance required prior to enrollment. May be repeated; enrollment must be continuous.

# Department of Recording Industry 

Christian Haseleu, Chair<br>Bragg Mass Communication 251<br>Bob Wood, Graduate Coordinator<br>Bragg Mass Communication 208

The Department of Recording Industry offers the Master of Fine Arts in Recording Arts and Technologies (MRAT).* In addition to MRAT courses, the department offers two other courses at the graduate level. These courses (RIM) are primarily intended as a cognate or electives for M.B.A. or other graduate students.

## Requirements for the Master of Fine Arts

The purpose of the Master of Fine Arts program is to prepare practitioners in the field of audio recording and production for advanced work in an integrated electronic media environment. Preparation for advanced professional practice requires that students specialize in one area and develop a common understanding of the theoretical concepts behind other disciplines such as video production, digital animation, music, and computer science. The program offers a strong technical component utilizing the latest advancements in software and hardware. The degree plan also offers preparation for graduates to teach at the postsecondary level in the field of audio recording and production.

The M.F.A. degree is a 60 -hour, six-semester program as outlined below including 33 hours of required courses, 9 hours of guided electives, 9 hours of work in a cognate area (courses in a single department outside of the program), plus 9 hours of work on a final project. Students are required to attend full time taking 9 to 12 hours per semester.
Guided electives may be chosen from Recording Arts and Technologies courses and approved courses from other areas such as art, computer science, English, education, industrial technology, mass communication, music, psychology, sociology, or speech and theatre. At least 6 hours of guided electives must be graduate-level courses from the Department of Recording Industry. The cognate requires 9 hours of courses from a single department. No more than 12 hours of guided electives and cognate area courses may be from the same department. A maximum of 12 hours of 5000 -level courses may be counted toward the degree.

[^3]
## Admission Requirements

All students desiring to enroll for the M.F.A. program in Recording Arts and Technologies must make application to the Office of the Dean of the College of Graduate Studies. Minimum requirements for admission are
a. possession of a bachelor's degree.
b. a brief essay explaining the applicant's career goals, related work experience, and how this degree will help attain the stated career goals.
c. undergraduate preparation or significant professional experience appropriate to the graduate curriculum and a minimum overall grade point average of 3.00 on all courses attempted, excluding repeated courses.
d. a satisfactory score on the general portion of the Graduate Record Examination (GRE) that is not more than five years old. Scores for unconditional admission should meet or exceed 460 verbal, 560 quantitative, or a total score at or above 1020. A minimum score of 4 is required for the analytical writing portion of the exam.
e. a portfolio of works representative of the candidate's creative achievements in the areas of audio recording, composition, video, film, multimedia, Web design, or areas strongly related to the degree curriculum. Note: The portfolio has no specific guidelines because applicants are expected to have developed varying types of creative skills. It is extremely important to document your contribution to each item you submit. For example, if you submit an audio recording, state if you were composer, performer, engineer, producer, or several of these things.
f. two letters of recommendation for graduate study, one from the student's undergraduate major advisor if the student is a recent graduate.

## Conditional Admission

An applicant who meets all requirements for admission to the M.F.A. program except the grade point average of 3.0 on all undergraduate work attempted may be granted conditional admission status if the applicant has a 3.0 average on all up-per-division undergraduate work. An applicant who meets all requirements for admission to the M.F.A. program except the minimum GRE scores may also be granted conditional status. Conditional students must maintain at least a 3.0 GPA for the first 12 semester hours of graduate work or one year after first matriculation (whichever occurs earlier) in order to achieve regular status and continue in the program. Students may also be admitted under conditional status if the admissions review committee recommends that work be done at the undergraduate level to make up deficiencies. Conditional status will be removed when deficiencies are satisfactorily completed.

YEAR 1
Fall Semester
MRAT 6030 MIDI and Music Synthesis Seminar, 3 hours
MRAT 6040 Digital Audio Studio Seminar, 3 hours
MRAT 6050 Multitrack Recording Seminar, 3 hours
MRAT 6070 Visual Aesthetics and Technology I, 3 hours

## Spring Semester

MRAT 6010 Recording in Cultural Context, 3 hours
PSY 5380 Group Dynamics, 3 hours OR
COMM 5800 Special Topics in Speech Communication: Creative Collaboration, 3 hours
MRAT 6110 Production Seminar I, 3 hours
MRAT 6090 Visual Aesthetics and Technology II, 3 hours
YEAR 2
Fall Semester
MRAT 6130 Production Seminar II, 3 hours
Cognate, 3 hours
Guided Elective, 3 hours

## Spring Semester

Portfolio Jury
MRAT 6150 Legal Rights of the Creative Individual, 3 hours
MRAT 6210 Production Seminar III, 3 hours
Cognate, 3 hours
YEAR 3
Fall Semester
MRAT 6650 Final Project, 3 hours
Guided Elective, 3 hours
Cognate, 3 hours

## Spring Semester

Comprehensive Examination
MRAT 6650 Final Project, 6 hours
Guided Elective, 3 hours

## Courses in Recording Arts and Technologies [MRAT]

5810 Topics in Recording Industry. Three credits. Prerequisites: Permission of department. Examination and critical evaluation of current issues related to operation and function of various aspects of the recording industry. Subject matter varies. Course may be repeated one time for additional credit.

6010 Recording in Cultural Context. Three credits. Designed to acquaint learners with the evolution of the complexities of technologies and to provide tools for cultural analysis and critique of recorded artifacts. An interdisciplinary mosaic of scholarly approaches to the examination of contemporary recorded culture will be engaged.

6030 MIDI and Musical Synthesis Seminar. Three credits. Technical skills and conceptual foundation necessary to undertake advanced creative projects. Emphasis on mastery of hardware and software platforms currently used in MIDI-based production.

6040 Digital Audio Studio Seminar. Three credits. Technical skills and conceptual foundation necessary to undertake advanced creative projects. Emphasis on the mastery of hardware and software platforms currently used for DAW hard disk-based digital audio systems.

6050 Multitrack Recording Seminar. Three credits. Systematic examination of the technology used in the modern recording studio. Techniques for using this technology in the creative recording and mixing process examined.

6070 Visual Aesthetics and Technology I. Three credits. Designed to help the beginning graduate student develop skills to effectively communicate an idea visually.

6090 Visual Aesthetics and Technology II. Three credits. Prerequisite: MRAT 6070. Continuation of MRAT 6070 with introduction to visual elements and technology used in the entertainment industry. Introduction to creative conceptualization, elements of composition, and how the production process works. Demonstration of basic and advanced visual technology as a foundation for more advanced courses in the graduate program.

6110 Production Seminar I. Three credits. Prerequisites: MRAT 6030, 6050, and 6070. Applications course in which students use skills and theory obtained in previous courses and work in a cooperative environment toward the completion of an audio or multimedia production.


6120 Disk-Based Audio Postproduction. Prerequisites: MRAT 6030 and 6050. Advanced practitioner-oriented approach to the principles of tapeless digital audio recording on a variety of digital workstation platforms. In-depth discussion of the principles of digital audio, synchronization, and audio for video.

6130 Production Seminar II. Three credits. Prerequisite: MRAT 6110. Continuation of MRAT 6110.

6140 Graduate Seminar in Audio Recording. Three credits. Prerequisites: MRAT 6030 and 6050. Advanced application of techniques in a digital multitrack setting.

6150 Legal Rights of the Creative Individual. Three credits. Examines legal rights and duties of creative persons. Students apply concepts from copyright, trademark, trade secrets, privacy, publicity, defamation, and other branches of the law to media productions.

6160 Composition for Contemporary Media. Three credits. Prerequisites: Fundamental skills in reading music notation, a basic understanding of harmonic analysis, and the ability to play either guitar or keyboard and sing. Students will apply concepts drawn from analysis of contemporary popular music for elements of melody, harmonic language, form, and lyric craft to their own compositions.

6180 Introduction to Film Scoring. Three credits. Prerequisites: Four semesters of theory/sight singing/ear training; MRAT 6030 and 6050. Overview of the film scoring process. Discussion of the aesthetic relationship between music and film. Thematic analyses of representative film scores. Composition exercises demonstrating traditional film scoring techniques. Application of compositional techniques through laboratory assignments using computers, synthesizers, and digital samplers. SMPTE time code, MIDI time code, and film time formats and their application to tape synchronization.

6210 Production Seminar III. Three credits. Prerequisite: MRAT 6130. Continuation of MRAT 6110 and 6130.

6320 Directed Research. Three credits. Prerequisite: Permission of department. Research in recording techniques and related topics.

6340 Directed Production. Three credits. Prerequisite: Permission of department. Independent advanced audio production.

6360 Graduate Internship. Three to six credits. Prerequisite: Permission of department. Practical experience for advanced students in a professional recording industry setting. Pass/Fail.

6650 Final Project. One to nine credits. Prerequisite: Permission of department. A directed production project of substantial size and scope proposed, developed, and realized under the guidance of the major faculty advisor in consultation with the final project faculty committee. The culminating experience in the M.F.A. program. $\mathrm{S} / \mathrm{U}$ grading used.

## Courses in Recording Industry [RIM]

6300 Recording Industry Economics. Three credits. Prerequisite: ECON 6030 or equivalent. Focuses on macro- and microeconomic issues and analysis of the recording industry, with particular attention to market/demand analysis, economics of the firm, and political economic issues.

6630 Applied Recording Industry Research. Three credits. Prerequisites: QM 6000; MKT 6000; acceptance to M.B.A. program. Focuses on applied qualitative and quantitative research projects for the recording industry, with particular attention to research design and implementation.

## Department of Social Work

## Rebecca Smith, Chair Peck Hall 101A

The Social Work Department offers the Master of Social Work (M.S.W.) with a concentration in Advanced Generalist Social Work Practice. The M.S.W. is a partnership among MTSU, APSU, and TSU and will be offered beginning Fall 2009; advanced standing will begin Fall 2010.

## Requirements for the Master of Social Work

The purpose of the Master of Social Work program is to prepare students for advanced generalist social work practice with systems of all types and sizes in both rural and urban areas, to prepare knowledgeable and competent professionals, and to provide leadership in the development of social delivery services, especially public social services.
The M.S.W. degree is a 60 -hour program as outlined below, including 30 hours of foundation courses and 30 hours of concentration courses. There are 9 hours of electives ( 3 from foundation courses and 6 from concentration courses). This is a non-thesis program with a capstone course culminating in a written comprehensive examination.

## Admission Requirements

Candidate must

1. be admitted to the graduate college of his/her home campus (MTSU, APSU, or TSU).
2. have a minimum GPA of 2.75 for admission to the program.
3. apply for admission to the M.S.W. program at the social work department of the selected home campus.
4. submit an application which includes an essay and resume.
5. submit three letters of recommendation from professionals who can address the applicant's interest in social work, potential for successfully completing a master's program, and potential for professional social work practice.
6. have completed a bachelor of social work from a program accredited by the Council on Social Work Education to be admitted to advanced standing (requires a minimum GPA of 3.0 in undergraduate B.S.W. coursework).

## Admission to Candidacy

All M.S.W. students will be reviewed for candidacy by the social work faculty prior to beginning their second practicum. Students must obtain a favorable candidacy recommendation to remain in the program.

## M.S.W. Foundation Courses ( $\mathbf{3 0} \mathbf{~ h r s . )}$

MSW Practice I*
Human Behavior and the Social Environment (online)*
Research I*
Social Welfare Policy and Services (online)*
MSW Practice II*
Social Justice (online)*
Research II*
Practicum IA*
Practicum IB*
Special Topics (online)*

## M.S.W. Concentration Courses ( $\mathbf{3 0} \mathbf{h r s}$.)

Advanced Practice with Individuals*
Advanced Practice with Families**
Advanced Group Practice**
Advanced Macro Practice*
Social Policy Analysis (online)*
Empirical Social Work Practice*
Practicum IIA*
Practicum IIB*
Special Topics (online)*
*Indicates course is in development
**Either course meets requirement; the other one may be taken as an elective.
Electives (9 hours)
5000-level courses


## Department of Sociology and Anthropology

Jackie Eller, Interim Chair<br>Andrew L. Todd Hall 342<br>Angela Mertig, Graduate Program Director Andrew L. Todd Hall 328

The Sociology and Anthropology Department offers the Master of Arts with a major in Sociology and a minor in sociology at the graduate level.

## Requirements for the Master of Arts

## Admission Requirements

Full admission for a degree-seeking candidate: Receipt of all materials by April 1 for Fall admission, September 15 for Spring admission. A complete application includes application, letter of interest and goals, an example of written work, three letters of recommendation, all transcripts, at least a 2.75 GPA, acceptable GRE scores, and the successful completion of at least 18 hours of undergraduate sociology which includes the prerequisites of research methods (SOC 3040), statistics (SOC 3050), and sociological theory (SOC 3060), or their equivalents. A grade of C or better must be earned in the prerequisite courses.
Conditional admission for a degree-seeking candidate: Conditional admission is possible, but not guaranteed, under the following circumstances: (a) GRE score is less than acceptable (exception is dependent upon the strength of the other admission criteria); (b) prerequisites are missing or the grade is less than a C. All prerequisites must be completed within the next semester following this conditional admission and prior to enrollment in the twelfth hour of graduate study. If these conditions are not met, the candidate will be dropped from the program and must seek readmission in a subsequent semester; (c) GPA is less than 2.75 (exception is dependent upon the strength of the other admission criteria).

## Degree Requirements

Candidate must

1. complete a minimum of 36 semester hours in graduatelevel courses, 24 of which must be graduate-level sociology courses with no more than 6 of the 36 hours dual listed as undergraduate/graduate hours (4000/5000).
2. complete all required courses, including SOC 6560,6620 , 6675,6720 , and 6660 or 6010 with a minimum grade of B-.
3. complete 6 hours of thesis research (SOC 6640) and submit and successfully defend a thesis.
4. file a degree plan with the Graduate Office prior to the completion of 21 credit hours.

## Graduate Assistantship Application

Applications are due by April 1. Applicant must meet the following conditions: (a) be admitted to the M.A. program in sociology and (b) have an undergraduate GPA of at least 3.00 OR a graduate GPA of at least 3.00 over a minimum of 9 hours of completed graduate courses.

## Courses in Sociology [SOC]

5010 Social Inequality. Three credits. The origins, variations, and consequences of class, status, and power in society. Includes individual and group economic interests, social prestige, ideology, market, and institutional inequality.

5050 Sociology of Families. Three credits. An analysis: contemporary American family patterns; racial, ethnic, and class variations.

5100 Sociology of Work. Three credits. Comparative analysis of work structure and processes in organizational contexts, including study of management and employee organizations and legal environments regulating workplace relations.

5140 Violence in the Family. Three credits. (Same as CDFS 5140.) Causes, dynamics, and consequences of violence in the family. Includes the discussion of violence toward children, spouses, dating partners, siblings, and elders. Emphasizes the social conditions which lead to these types of violence.

5150 Topics in Sociology. Three credits. An in-depth topic significant in current sociological literature.

5160 Sociology of Gangs. Three credits. History of gangs in the U.S., the factors which account for their formation and perpetuation, and current empirical data on gang composition, demographics, and culture. Policy strategies for prevention, law enforcement, and nonlegal interventions assessed.

5170 The Social Context of Southern Music. Three credits. A sociohistoric analysis of Southern music providing a framework for examining the relationship between culture and popular culture, the production of popular culture, and popular culture as a vehicle for examining social issues of the southern region.

5240 Race and Ethnic Relations. Three credits. Theories and dynamics of intergroup relations in a multiethnic society.

5300 Criminology. Three credits. Theories of the causes of criminal behavior and coverage of its development and incidence; punishment and methods of control and rehabilitation.

5320 Public Opinion and Propaganda. Three credits. (Same as PS 5320.) Public opinion and its role in the political and social processes.

5360 Medical Sociology. Three credits. Sociological analysis of health care delivery including problems, policies, and issues faced by recipients and providers of care. Focuses on the U.S., role theory, and demographics.

5500 Social Psychology. Three credits. Individual behavior in social contexts and symbolic interaction among groups. Includes social influences on perception, conformity, attitudes, communication, group structure, leadership, and role behavior.

5510 Social Movements and Social Change. Three credits. Sociological theories of revolutions, rebellions, civil wars, and protest movements of the past and present and the relationship to significant social changes.

5520 Population and Society. Three credits. Examines world and U.S. population trends and the impact of social forces on such demographic variables as births, deaths, migration, age, sex, education, marital status, and how these impact social conditions.

5540 Juvenile Delinquency. Three credits. Social factors related to delinquency including family, peer group, school, and community. Includes the juvenile justice system and its agents.

5550 Sociology of Religion. Three credits. Religion as social process and institution. An ideological, structural, and functional analysis. Specific U.S. religions examined in detail.

5560 Organizational Structures and Processes. Three credits. Analysis of structure and processes of change, organizational environments, modes of power, ideologies, forms of control and resistance, including alternatives to bureaucracy.

5660 Urban and Community Studies. Three credits. Focuses on concept of community as a core idea in the historical development of sociology, concentrating on theories and historical trends of urbanization and current urban problems and policies.

5790 Sport and Society. Three credits. (Same as REC 5790.) Behavioral approach to the sport and leisure phenomena from the related perspectives of sociology and anthropology.

5800 Special Projects. One to three credits. Field experiences or reading courses through which special interests or needs of the student may be pursued under individual supervision. No more than three hours may be used in the major. Arrangements must be made with instructor prior to registration.

6000 Comparative Social Change. Three credits. (Same as PS 6000.) A historical comparative examination of the structure, institutions, and development of the modern world system; a review of major theoretical and empirical research on the world system.

6010 Social Policy Analysis. Three credits. A historical comparative examination of social policy formulation, structure, and consequences. Focus on policy formation in modern and developing nations. Critical analysis of social policy development.

6510 Independent Study. Three credits. Recommended for students past the midpoint in their master's programs. Designed to provide an opportunity to fill perceived gaps in the program of study and as precursor for the thesis. Arrangements must be made with instructor prior to registration.

6540 Topics in Crime and Deviance. Three credits. Critical analysis of selected topics in the fields of crime and deviance. Students pursue individual projects that require integration of their theoretical understanding with contemporary applications.

6545 Topics in Gender. Three credits. Critical analysis of selected topics in the study of gender in sociology with a focus on such issues as race/ethnicity, social class, work, deviance, and sexuality. Examines the major contemporary scholarly debates about gender and explores how gender is embedded in different institutions and organizations. A maximum of six hours may be credited to one's major.

6560 Sociological Theory. Three credits. Prerequisite: SOC 3060. Encourages students to think sociologically, integrating theoretical knowledge with a critical examination of everyday experiences and social problems/issues. Addresses both classical and contemporary theories: structural, interpretive, micro and macro applications.

6570 Seminar in Advanced Social Psychology. Three credits. The dynamics of human interaction: attitudes, processes, group structures, settings, and properties.

6620 Quantitative Research Methods. Three credits. Prerequisites: SOC 3040 and 3050 or equivalent. Focuses on the design and application of quantitative data collection and analysis procedures to practical problems and issues. Students pursue supervised independent design and analysis using SPSS or SAS.

6630 Seminar in the Family. Three credits. Principles of family organization; family as a sociocultural institution in various societies; theories of family structure, change, and deviance.

6640 Thesis Research. One to six credits. Prerequisite: Student must have filed Candidacy Form and selected thesis committee before enrolling. Selection of a research problem, review of pertinent literature, collection and analysis of data, and composition of thesis. Once enrolled, student should register for at least one credit hour of master's research each semester until completion. $\mathrm{S} / \mathrm{U}$ grading.

6650 Contemporary Social Issues. Three credits. An in-depth investigation of a particular sociological issue or subdiscipline. A maximum of six hours may be credited to one's major.

6660 Program Evaluation. Three credits. Prerequisite: SOC 3040 or permission of instructor. Methods and issues of client-centered social program evaluation. Topics include evaluation methods, proposal construction, report writing, and presentation techniques.

6675 Social Statistics. Three credits. Prerequisites: SOC 3040 and 3050 or equivalent. An intermediate level treatment of statistical concepts and methods for the analysis of sociological data with emphasis on the application of multivariate statistical methods for basic and applied sociological research. Statistical analysis software (e.g., SPSS, SAS) applied to existing datasets.

6690 Death and Survivorship. Three credits. The social complexities of dying, death, and survivorship with particular emphasis given to the aging population.

6700 Introduction to Community and Regional Development: An Interdisciplinary Seminar. Three credits. Analysis of the problems and proposed solutions of community development from an interdisciplinary point of view.

6710 Japanese Society and Business. Three credits. (Same as ECON 6540.) Japanese economy, business practices, and social and physical environment in comparison with those in other countries, particularly the United States.

6720 Qualitative Research Methods. Three credits. Prerequisites: SOC 3040 and 3050 or equivalent. Focuses on the design and application of qualitative data collection and analysis procedures to practical problems and issues. Students pursue supervised independent and group projects.

6900 Practicum: Applied Analysis. Three credits. Prerequisite: SOC 6620 and permission of instructor. Supervised independent study in which student is placed in an organization on a contractual basis. Course directed toward student pursuing career in applied sociology.

## Courses in Anthropology [ANTH]

5120 Practicing Anthropology. Three credits. Culture change theory and the practical dimension of anthropology in research and planned change implementation.

5740 Law and Politics in Traditional Societies. Three credits. Law and methods of social control in primitive societies. Emphasis on the importance of a cross-cultural perspective for understanding Western political behavior.

5750 Anthropology of Religion. Three credits. Cross-cultural exploration of religion, including beliefs in the supernatural, the use of ritual in secular and sacred context, and the roles of ceremonial practitioners. Focuses on how people interpret and control their worldviews through religion and ritual.


5751 Ritual. Three credits. Ritual in sacred and secular contexts. Examination of function and logic of ritual in social systems.

5860 Historical Archaeology. Three credits. (Same as HIST 5860.) Introduces the disciplines of historical archaeology, including examination of archaeological evidence, historical documentation, and interpretation of evidence.

5890 Seminar in Anthropological Theory. Three credits. Prerequisites: 18 hours of anthropology, including ANTH 2010, 3210, 3310, 3410. A critical examination of the major anthropological theories within their historical, cultural, and political context.

5910 Special Projects. One to six credits. Experience in research through which special interests or needs of the student may be pursued under individual supervision. Arrangements should be made with an instructor prior to registration.

5940 Ethnographic Field School. Three to six credits. Field experience in a cross-cultural setting. Training in ethnographic research techniques.

5950 Archaeological Field School. Three to six credits. Basic techniques of archeology and paleoecology through participation in actual excavation and laboratory work.

## Courses in Aging Studies [SOC]

5020 Sociology of Aging. Three credits. Demographic, social, and cultural aspects of aging. Emphasis on the types of problems encountered by older persons in American society.

5030 Topics in Gerontology. Three credits. An opportunity to integrate gerontological theory and research techniques in working with the practical problems of older persons.

5040 Health Care Delivery Issues. Three credits. An assessment of critical issues with special emphasis on policies, procedures, and intervention strategies in long-term care settings.

5090 Health Care Management. Three credits. Details of the technical aspects of health care management with an emphasis on long-term care settings.

5800 Special Projects. One to three credits. Experiences in research through which special interests or needs of the student may be pursued under individual supervision. Arrangements should be made with an instructor prior to registration.

6550 Seminar on Aging. Three credits. In-depth investigation of selected topics in social gerontology.

6670 Mental Health and Aging. Three credits. The basic concepts associated with mental health and the aging process. The epidemiology, assessment process, and approaches to treatment stressed. A positive approach to the mental well-being of the older adult provided.

6680 Counseling Elders. Three credits. Prerequisite: SOC 6670 recommended but not required. Counseling techniques and outcomes common to late life therapy. Special application to specific problems and social environments of the elderly.

Courses from communication disorders, human sciences, psychology, and recreation are to be used in conjunction with these sociology courses to complete the requirements for a multidisciplinary minor in Aging Studies. Students should consult their advisors for specific courses from the various departments.

## Department of Speech and Theatre

Rebecca Fischer, Chair
Boutwell Dramatic Arts 205
The Department of Speech and Theatre offers a minor at the graduate level.

## Courses in Communication [COMM]

5000 Communication in the Educational Environment. Three credits. For the classroom teacher. Successful communication strategies applicable to the classroom environment.

5040 Debate Across the Curriculum: Practicum. Three credits. Prerequisite: COMM 3210. Advanced techniques and methods for using argumentation and debate in teaching core curriculum in upper elementary and secondary school classes and developing intrascholastic debate and interscholastic debate activities. Practicum experiences provided.

5210 Argumentation. Three credits. The theory and practice of advocacy speaking with emphasis on organization, refutation, reasoning, and rebuttal. In-class debating on questions of fact, value, and policy.

5220 Small Group Communication. Three credits. Prerequisites: COMM 2200, 2300, or permission of department. Theories of group dynamics and practical application. Study and practices of leadership in groups as decision-making organizations.

5230 Advanced Public Speaking. Three credits. Prerequisite: COMM 2200 or permission of the instructor. Application of the principles of public speaking through analysis and criticism of speech structure and delivery of classroom speeches.

5260 Readings in Speech Communications. Three credits. Prerequisite: Permission of instructor. Intensive work in a specific area of speech communication; topic is chosen in instructor-student conference.

5280 Political Communication. Three credits. Selected outstanding speakers and their techniques of speech communication.

5320 Theories of Persuasive Communication. Three credits. Recent writing and research on theories of oral persuasion and on current practices of persuasion. Emphasis on the ethical, critical, cultural, and functional implications in contemporary persuasion theory and practice.

5560 Intercultural Communication. Three credits. Dynamics of the communication process as it functions in intercultural contexts; training for successful cross-cultural communication interactions.

5620/5630 Applied Speech. One credit each. Prerequisite: Recommendation by a faculty member. Applies principles of effective communication and/or dramatic production through laboratory courses.

5710 Senior Seminar in Speech Communication. Three credits. Intensive investigation of the major research methodologies in speech communication, presentation of senior projects, and a synthesis of the speech communication discipline.

5800 Special Topics in Speech Communication. One to three credits. Designed to meet individual and group needs for advanced study in speech communication. Topic to be determined at time of scheduling. A maximum of six semester hours may be applied toward a degree.

## Courses in Communication Disorders [CDIS]

5000 Language Development, Speech, and Literacy. Two credits. Introduces development of language, language production, and language perception, and how these processes are related to literacy development. Stages of language development, reading acquisition, word recognition, and language and reading disorders.

5250 Speech and Language Development. Three credits. Child speech and language acquisition from birth to seven years of age. Emphasis on normal linguistic development.

5260 Language Acquisition and Analysis. Three credits. Study of language development and procedures for analyzing child language. Semantic, syntactic, and pragmatic development will be explored through examining child language transcripts.

5800 Speech and Language Disorders in the Adult Population. Three credits. Overview of the impact of age on communication. Identification and remediation of communication problems associated with the aging process.

## Courses in Dance [DANC]

5010 Dance Performance II. One credit. All aspects of concert planning and production as performer and crew member. May be taken for two semesters.

5100 Choreography I. Three credits. Prerequisite: PHED 2080 or equivalent. Exploration of movement, technique sequences, and choreographic forms; basic elements of Labanotation.

5120 Dance Therapy. Three credits. The use of movement in helping to reduce physiological, psychological, and sociological aberrations. Designed to help the classroom teacher or specialist working with children who have these problems.

5130 Dance for the Theatre. Three credits. Prerequisites: PHED 1010, 1020, 2160, 2180, and 2190 or equivalent. Techniques of dance for musicals, comedies, opera, television, and stage and choreography for these forms.

5160 Advanced Ballet - Individual Study, Solo and Ensemble Performance. Three credits. Refine and polish ballet skills at the advanced level leading to performance in classical and contemporary styles.

5170 Advanced Ballet - Individual Study and Choreography. Three credits. Concentrates on choreography for solo and ensemble performance in both classical and contemporary styles.

5700 Skills and Techniques of Teaching Rhythmic Activities. Three credits. (Same as PHED 5700.) Various dance forms, methods and materials, evaluative procedures, and experiences in teaching all forms of dance to students at the K-12 level.

5760 Choreography II. Three credits. Exploration of choreographic techniques to develop an original group dance and the execution of plans for costumes, lighting, and makeup.

5770 Advanced Modern Dance. Three credits. Prerequisite: PHED 2080 or equivalent. Techniques, choreography, and various aspects of Labanotation for the experienced dancer and choreographer.

## Course in Organizational Communication [ORCO]

5240 Organizational Communication. Three credits. Emphasis on communication problems in contemporary organizations and ways and means of resolving such problems.

## Courses in Theatre [THEA]

5100 Special Effects Make-up. Three credits. Prerequisites: THEA 3100 or permission of instructor. Orientation to special effects makeup design, techniques and design realization through make-up projects, and research for various performance venues with a focus on student career and portfolio development.

5220 Theatrical Costume Design for Arts and Entertainment. Three credits. Prerequisite: THEA 3200 or permission of instructor. Costume design in the performing arts; an orientation to the costume application of design and development principles through costume design projects developed through research for various performance venues with a focus on student career and portfolio development.

5240 Theatrical Costume History. Three credits. Prerequisite: THEA 3200 or permission of instructor. An advanced course incorporating all aspects of costume production in the performing arts focusing on historical research, historical reproduction methods, construction design, resource management, creative problem solving, and portfolio and resume development. Laboratory hours required.

5290 Topics in Theatrical Costume. One to three credits. Prerequisite: THEA 3200 or permission of instructor. Designed to meet individual and group needs for advanced study in theatrical costume. Topic to be determined at time of scheduling.

5300 Scene Design. Three credits. Prerequisites: THEA 2110 or permission of instructor. Lecture and practical experience in planning and designing stage settings. Emphasis on forms and styles of scenery, historical period research, designers, and new theatrical materials, methods, and techniques. Major projects in set design. Laboratory hours and/or crew requirement.

5350 Advanced Scenic Design. Three credits. Prerequisites: THEA 2110 and 3300 or permission of instructor. Advanced methods and theories of scenic design. Strong emphasis on practical projects, the design process, and critical methods of study. Components on design history and theory/criticism.

5390 Topics in Scenography. One to three credits. Prerequisites: THEA 2110 and permission of instructor. Designed to meet individual and group needs for advanced study in theatre. Topic to be determined at time of scheduling. A maximum of six semester hours credit may be applied toward a degree.

5400 Stage Lighting. Three credits. Lectures and practical experience in methods and techniques. Emphasis on developing plots through knowledge of electricity, circuitry, instrumentation, and control
equipment. Major projects in lighting design. Laboratory hours and/or crew requirement.

5450 Advanced Stage Lighting. Three credits. Prerequisite: THEA 3400 or permission of instructor. Advanced methods and theories of lighting design. Strong emphasis on practical projects, design process, and critical methods of study. Includes components on design history and theory/criticism.

5500 Advanced Acting. Three credits. Prerequisite: THEA 2500 or permission of instructor. The development of advanced skills in the ability to analyze and interpret the more complex characters in drama. Study of classical acting styles.

5570 The Body Intelligent: A Study of the Alexander Technique. Two credits. (Same as MUS 5570.) For those interested in improving ease and freedom of movement, balance, support, flexibility, and coordination in daily activity.

5600 Storytelling. Three credits. Instruction and experiences in storytelling in educational, corporate management, and performance contexts. Investigation of influence of storytelling on culture, organizational behavior, leadership, and education.

5610 Theatre in Education. Three credits. For current and prospective teachers. Integration of drama across the curriculum. The creation, construction, performance, and touring of a play for elementary school children.

5620 Drama Across the Curriculum: Practicum. Three credits. Prerequisite: THEA 3600. Advanced techniques and methods for teaching core curriculum in upper elementary classes using drama and role playing. Practicum experiences provided.

5650 Children's Drama and Speech. Three credits. Creative dramatics, children's theatre, puppetry, mask-making. Motivational, self-directed learning through creative and performance arts.

5700 Fundamentals of Play Directing. Three credits. Prerequisite: THEA 2500 or permission of instructor. Director as literary analyst and production critic. Play analysis, production concepts, staging theory and techniques, rehearsal methods and procedures. Scene work.

5750 Advanced Play Directing. Three credits. Prerequisite: THEA 5700 or permission of instruction. Case studies and problem solving of rehearsals and production. Director's relationship with designers. Investigation of style. Rehearsal and presentation of one-act play.

5800 Theatre History I: Greek Period to Restoration. Three credits. Development of drama and the theatre; critical study of representative plays of the period.

5850 Theatre History II: Restoration to Present. Three credits. Development of drama and the theatre; critical study of representative plays of the period.

5880 Theatre Organization and Stage Management. Three credits. Prerequisite: Permission of the instructor. Lectures and practical experience in basic methods and principles. Emphasis on ways in which theatre organization and stage management complement each other while striving to create the desired dramatic effect upon an audience. Major projects required. Crew requirement.

5890 Topics in Dramatic Theory. Three credits. Prerequisite: THEA 4800 or 4810 or permission of instructor. A variable topics seminar concentrating on selected major playwrights linked by theme, or on a particular genre of dramatic theory; an intensive examination of plays which either survey playwrights' careers or represent a significant portion of a genre's canon. May be repeated for credit for up to six hours.

5910 Practicum in Summer Theatre. One to three credits. Prerequisite: Employment in summer theatre during the previous summer. A seminar for students who have worked in summer theatre. Includes discussion of assets of training there, auditioning, interviewing, production problems, impact on local community, and impact on college theatre.

5990 Problems in Theatre. One to three credits. Prerequisite: Permission of instructor. Designed to meet individual and/or group needs in all aspects of theatre arts. The topic and credit to be determined at the time of scheduling. A maximum of 6 semester hours credit may be applied toward a degree.


# Graduate Faculty 

## Full Membership

In order to become a member of the graduate faculty, an individual must show evidence of research accomplishments and graduate teaching excellence. Thereafter, members are evaluated for renewal in accordance with Graduate Council criteria. In general, full membership means that the individual

- holds the terminal degree in the teaching field(s);
- has a minimum of three years faculty experience in graduate education;
- has demonstrated an expertise in research/other professional activities;
- has been recommended by the department chair and college dean;
- has been recommended by the Graduate Council; and
- has been approved by the dean of the College of Graduate Studies.


## Doctoral Membership

Faculty teaching in departments or programs which offer study leading to the doctor of philosophy (Ph.D.) degree may seek doctoral membership status. Individuals holding this level of membership are permitted to chair dissertation committees and serve as advisors to students in the Ph.D. program. Doctoral faculty are evaluated every five years to ensure continuing high levels of engagement in research and creative activity. In general, doctoral membership means that the individual

- meets all the criteria for and holds full graduate faculty membership;
- demonstrates expertise and ongoing engagement in research evidenced by a record of publications in peer-reviewed journals;
- holds a faculty appointment in a department or program which offers the Ph.D.;
- has been recommended by the department chair and college dean;
- has been recommended by the Graduate Council; and
- has been approved by the dean of the College of Graduate Studies.


## Associate Membership

This category applies to full-time faculty who do not meet the criteria for full membership. The period of appointment is five years for initial appointment or three years for faculty who previously held full membership. An associate member may not direct doctoral dissertations but may serve as a dissertation committee member/reader. An associate member may direct master's theses after having served as a committee member/reader. In general, associate membership means that the individual

- holds the terminal degree in the field(s);
- has expressed an interest in contributing to graduate instruction;
- has been recommended by the department chair and college dean;
- has been recommended by the Graduate Council; and
- has been approved by the dean of the College of Graduate Studies.


## Adjunct Membership

This category applies to part-time adjunct faculty and individuals who are not MTSU faculty members but have specific expertise pertinent to graduate programs. The period of appointment is three years and may be renewed in accordance with Graduate Council criteria. Adjunct members may not direct a doctoral dissertation or a master's thesis but may serve as a committee member/reader. These members are not listed in the graduate catalog. Adjunct faculty membership means that the individual

- holds the terminal degree in the field(s);
- has provided evidence of qualifications to execute assignments successfully;
- has been recommended by the department chair, the undergraduate college dean, and Graduate Council; and
- has been approved by the dean of the College of Graduate Studies.


## Retired

Retired graduate faculty members are listed in the section immediately following the listing of the current graduate faculty members.


This listing reflects the Spring 2008 faculty members. The date in parentheses is that of first appointment to a position at MTSU.

Adam, Nathan E., Assistant Professor, Recording Industry
B.A.A., 1990; M.B.A., 2000, Pittsburg State University. (2003)

Aday, Ronald H., Professor, Sociology and Anthropology
B.S., 1966, Oklahoma State University; M.S., 1971, Tulsa University; Ph.D., 1976, Oklahoma State University. (1980)

Albakry, Mohammed A., Assistant Professor, English
B.A., 1994; M.A., 1995, Alexandria University; M.A., 2001, University of Massachusetts; Ph.D., 2005, Northern Arizona University. (2005)

Allen, Michael D., Professor, Engineering Technology; Vice Provost for Research and Dean of the College of Graduate Studies
B.S., 1972, Texas A \& M University; M.S., 1974, Texas A \& M University; Ph.D., 1983, University of California at Davis. (2007)

Allsbrook, Nancy Boone, Professor, Music
B.S., 1970, Tennessee Wesleyan College; M.S., 1975, University of Tennessee; Ed.D., 1988, University of Illinois. (1979)

Amey, Foster K., Associate Professor, Sociology and Anthropology B.A., 1979, University of Cape Coast; M.A., 1994; Ph.D., 1997, Bowling Green State University. (1999)

Anshel, Mark, Professor, Health and Human Performance
B.S., 1970, Illinois State University; M.S., 1976, McGill University; Ph.D., 1979, Florida State University. (2002)

Apigian, Charles H., Associate Professor, Computer Information Systems
B.S., 1995, Bowling Green State University; M.B.A., 1998, Wayne State University; Ph.D., 2002, University of Toledo. (2002)

## Applegate, Edward C., Professor, Journalism

A.A., 1973, University of Kentucky; A.B., 1975; M.A., 1976; M.H.Ed., 1976; Ed.S., 1981, Morehead State University; Ed.D., 1984, Oklahoma State University. (1984)

## Arndt, Michael J., Associate Professor, Music

B.M., 1995, University of Missouri; M.M., 1998, University of Minnesota; D.M.A., 2004, Arizona State University. (2002)

## Asthana, Sanjay, Assistant Professor, Journalism

B.A., 1985, Osmania University; M.A., 1992; M.A., 1993, University of Hyderabad; Ph.D., 2003, University of Minnesota. (2003)

Austin, M. Jill, Professor, Management and Marketing; Department Chair
B.B.A., 1979; M.B.A., 1981, Delta State University; D.B.A., 1986, Mississippi State University. (1985)

Badley, Linda C., Professor, English
B.A., 1966, Oklahoma Baptist University; M.A., 1967, University of lowa; Ph.D., 1977, University of Louisville. (1979)

Balachandran, Martha E., Professor, Business Communication and Entrepreneurship
B.S., 1974; M.B.E., 1983, Middle Tennessee State University; Ed.D., 1991, University of Memphis. (1999)

Barnet, Richard D., Professor, Recording Industry
B.M., 1971, Illinois State University; M.M., 1975, Ithaca College; Ph.D., 1986, Arizona State University. (1991)

Barnett, Claudia, Professor, English
B.A., 1988, Cornell University; M.A., 1990; Ph.D., 1994, Ohio State University. (1994)

Barr, Marc J., Professor, Electronic Media Communication
B.A., 1974, State University College of New York, Oswego; M.F.A., 1978, Memphis State University. (1989)

Bartley, Dianne A.R., Professor, Health and Human Performance; Department Chair
B.S., 1969, Howard University; M.Ed., 1970, Pennsylvania State University; Ph.D., 1983, University of Maryland. (1991)

Bass, Alyson, Associate Professor, Elementary and Special Education B.S., 1968, Louisiana State University; M.S., 1989, University of Houston; Ed.D., 2004, Peabody College of Vanderbilt University. (2005)

Baum, Charles L., Associate Professor, Economics and Finance; Department Chair
B.A., 1995, Wake Forest University; Ph.D., 1999, University of North Carolina. (1999)

Beckman, Wendy S., Associate Professor, Aerospace
B.S., 1989, North Carolina State; M.S., 1991, University of Missouri; Ed.D., 1998, Saint Louis University. (2005)

Beemon, F. E., Professor, History
B.A., 1967, University of Mississippi; M.A., 1974, Mississippi College; Ph.D., 1988, University of Tennessee, Knoxville. (1989)

Belcher, Donald G., Associate Professor, Health and Human Performance
B.Ed., 1989, University of Saskatchewan; M.S., 1994, University of Wyoming; Ph.D., 2000, Louisiana State University, Baton Rouge. (2007)

Belsky, Janet K., Associate Professor, Psychology
B.A., 1969, University of Pennsylvania; Ph.D., 1976, University of Chicago. (1991)

Benson, Sandra, Assistant Professor, Accounting
B.A., 1982, Vanderbilt University; J.D., 1990, University of Georgia. (2006)

Benz, George, Associate Professor, Biology
B.S., 1976; M.S., 1980, University of Connecticut; Ph.D., 1994, University of British Columbia. (2004)

Berg, Thomas R., Associate Professor, Electronic Media Communication B.F.A., 1970, University of South Dakota, M.S., 1974, lowa State University; Ph.D., 1988, University of Georgia. (1991)

Bergemann, Sarah E., Assistant Professor, Biology
B.S., 1996; M.A., 1998, Humboldt State University; Ph.D., 2002, University of Wyoming. (2007)

Bernstein, Stuart E., Associate Professor, Psychology; Director, Center for Study and Treatment of Dyslexia
B.A., 1988, University of Rochester; M.A., 1992; Ph.D., 1996, Michigan State University. (1998)

Binkley, Helen, Associate Professor, Health and Human Performance
B.S., 1985; M.S., 1988, University of Delaware; Ph.D., 1996, Temple University. (2004)

Blackwell, Aleka, Associate Professor, English
B.S., 1989, Northwestern University; M.A., 1991, University of Illinois; Ph.D., 1998, Boston University. (2001)

Blair, Robert B., Associate Professor, Business Communication and Entrepreneurship
B.S., 1986, Oral Roberts University; M.B.E., 1987, Middle Tennessee State University; Ph.D., 1993, Louisiana State University. (1996)

Blake, Constance R., Assistant Professor, Nursing
B.S.N., 1999; M.S.N., 2001, University of Tennessee, Chattanooga. (2008)

Blum, Kurt E., Professor, Biology
A.B., 1961, Hanover College; M.A., 1965, Indiana University; Ph.D., 1968, Florida State University. (1969)

Bodle, John V., Professor, Journalism
B.A., 1977, San Jose State University; M.S., 1992; Ph.D., 1993, Ohio University. (1993)

Boles, Walter W., Professor, Engineering Technology; Department Chair
B.S., 1977; M.S., 1978, Virginia Technological University, Blacksburg; Ph.D., 1990, University of Texas, Austin. (2001)

Boyer-Pennington, Michelle, Professor, Psychology
B.A., 1990, Emory University; M.S., 1992; Ph.D., 1995, University of Florida. (1995)

Bradley, Patricia, Associate Professor, English
B.A., 1974, David Lipscomb College; M.A., 1992, Austin Peay State University; Ph.D., 2000, University of Tennessee. (2001)

Brantley, Laura B., Assistant Professor, Psychology
B.A., 1993; M.A., 1997; Ph.D., 2000, University of South Florida. (2004)

Brantley, William, Professor, English
B.A., 1977; M.A., 1981, Georgia State University; Ph.D., 1991, University of Wisconsin, Madison. (1992)

Bratten, L. Clare, Assistant Professor, Electronic Media Communication B.A., 1973, Rutgers; M.A., 1995, University of Texas, Austin; Ph.D., 2002, University of Wisconsin, Madison. (2000)

Bray, Robert, Professor, English
B.A., 1974; L.L.M., 1976, University of Southwestern Louisiana; Ph.D., 2002, University of Mississippi. (1994)

Breault, Kevin D., Professor, Sociology and Anthropology
B.A., 1978, Reed College; M.A., 1983, University of Washington; Ph.D., 1986, University of Chicago. (1999)

Brewer, Gaylord, Professor, English
B.A., 1985, University of Louisville; M.A., 1988; Ph.D., 1992, Ohio State University. (1993)

## Brinthaupt, Thomas M., Professor, Psychology

B.S., 1980, State University of New York; M.A., 1984, St. Bonaventure University; Ph.D., 1989, University of Pittsburgh. (1990)

Brown, Heather J., Associate Professor, Engineering Technology
B.S., 1997; M.S., 1998; Ph.D., 2001, Tennessee Technological University. (2001)

## Bullington, Kimball E., Associate Professor, Management and Mar-

 ketingB.S., 1981, University of Oklahoma; M.S., 1989, Auburn University; Ph.D., 1996, Mississippi State University. (1998)

## Bundage, Raphael B., Professor, Music

B.M.E., 1975; B.M., 1976, Texas Christian University; M.M., 1983; D.M.A., 1986, Eastman School of Music. (1985)

Burke, Beverly G., Associate Professor, Psychology
B.A., 1974; M.S., 1975, University of Southern Mississippi; M.S., 1981;

Ph.D., 1994, Auburn University. (1991)
Burriss, Kathleen Glascott, Professor, Elementary and Special Education B.A., 1972, State University of New York, Fredonia; M.S., 1975, State University of New York, Buffalo; Ed.D., 1992, Arizona State University. (1992)

## Burriss, Larry L., Professor, Journalism

B.A., 1971; M.A., 1972, Ohio State University; M.A. 1978, University of Oklahoma; Ph.D., 1983, Ohio University; J.D., 2006, Concord Law School. (1979)

## Butler, Kyle, Assistant Professor, Educational Leadership

B.S., 1997; M.S., 2000, Eastern Illinois University; Ph.D., 2004, Southern Illinois University. (2004)

## Butler, Ralph M., Professor, Computer Science

B.S., 1976, Tennessee Technological University; M.S., 1981; Ph.D., 1985, University of Missouri, Rolla. (2000)

Bynum, Tommy L., Assistant Professor, History
B.S., 1993, Barton College; M.A., 1995, Clark Atlanta University. (2006)

Cain, Jimmie, Professor, English
B.A., 1979, Southeastern Louisiana University; M.A., 1982, University of Mississippi; Ph.D., 1996, Georgia State University. (1996)

Calder, James E., Professor, Elementary and Special Education B.S., 1968, Murray State University; M.Ed., 1971, University of Louisville; Ed.S., 1972, University of Florida; Ed.D., 1982, University of Alabama. (1991)

## Campbell, A. Ann, Professor, Elementary and Special Education

B.S., 1969; M.S., 1970, University of Tennessee; Ed.D., 1977, Memphis State University. (1981)

## Campbell, Mary Judy, Professor, Nursing

Diploma in Nursing, 1967, Baptist Hospital School of Nursing; B.S.N., 1969, University of Kentucky; M.S., 1973, University of Alabama, Birmingham; Ed.S., 1997; Ph.D., 2006, Middle Tennessee State University. (1988)

Canak, William L., Professor, Sociology and Anthropology
B.A., 1970, University of Wisconsin, Milwaukee; M.S., 1975; Ph.D., 1981, University of Wisconsin, Madison. (1994)

Caputo, Jennifer L., Associate Professor, Health and Human Performance
B.A., 1994, Connecticut College; M.S., 1996; Ph.D., 2000, University of North Carolina, Greensboro. (2000)

Carter, William Craig, Associate Professor, Sociology and Anthropology B.A., 1994, William Penn College; M.A., 1996; Ph.D., 2000, Louisiana State University. (2003)

## Casal, Elvira, Associate Professor, English

B.A., 1976, Tulane University; M.A., 1977, University of Michigan; Ph.D., 1993, Vanderbilt University. (1996)

## Chappell, Michaele F., Professor, Mathematical Sciences

B.S., 1981; M.S.T., 1983, Georgia Southern College; Ph.D., 1991, Florida State University. (2001)

Chen, Chong, Professor, Engineering Technology
B.S., 1982, Hebei Institute of Technology; M.S., 1984, Tianjin University; Ph.D., 1990, University of Kentucky. (1990)

## Chong, Ngee Sing, Associate Professor, Chemistry

B.A., 1981, Hanover College; M.S., 1986, lowa State University; Ph.D., 1991, University of Georgia. (1998)

Church, Curtis K., Professor, Mathematical Sciences
B.A., 1974; M.A., 1976; Ph.D., 1978, University of South Florida. (1986)

## Clark, Carol P., Professor, Computer Information Systems

B.S., 1983, Campbellsville College; M.S., 1985; Ph.D., 1990, Northwestern University. (1988)

Clark, Leigh Anne, Assistant Professor, Management and Marketing B.A., 1988, Mississippi State University; J.D., 1992, Emory University; Ph.D., 2007, Southern Illinois University, Carbondale. (2007)

## Clark, W. Jeff, Professor, Computer Information Systems

B.A., 1975; M.A., 1977, Scarritt College; M.B.A., 1983, Northern Illinois University; Ph.D., 1989, Northwestern University. (1988)

Clark, W. Randall, Assistant Professor, Management and Marketing B.S., 1991, Middle Tennessee State University; M.M.R., 1992, University of Georgia; Ph.D., 2002, Georgia State University. (2005)

## Clayton, Maria, Associate Professor, English

B.A., 1973, North Carolina State University; M.A., 1979, California State University; D.A., 1998, Middle Tennessee State University. (1995)

## Cobb, Vincent A., Professor, Biology

B.A., 1987, University of Tennessee; M.S., 1989, University of Texas at Tyler; Ph.D., 1994, Idaho State University. (2002)

Colclough, Scott H., Professor, Health and Human Performance B.S., 1971, Campbell University; M.A.E., 1972, East Carolina University; D.A., 1986, Middle Tennessee State University. (1998)

Collier, Cosette R., Professor, Recording Industry
B.F.A., 1985; M.A., 1992, Memphis State University. (1993)

## Comas, James N., Associate Professor, English

B.A., 1975, University of Utah; M.S., 1981; Ph.D., 1987, University of Southern California. (2006)

## Compton, William C., Professor, Psychology

B.A., 1977, Northern Illinois University; M.A., 1982, University of Nebraska, Omaha; Ph.D., 1987, George Peabody College of Vanderbilt University. (1989)

## Conard, Rebecca A., Professor, History

B.S., 1973, California State Polytechnic University; M.A., 1976, University of California, Los Angeles; Ph.D., 1984, University of California, Santa Barbara. (1998)

Conley, Patrick C., Assistant Professor, Foreign Languages and Literatures
A.B., 1969; A.M., 1974, Indiana University; M.A., 1980; Ph.D., 1995, University of Tennessee. (1986)

Crabtree, William, Assistant Professor, Recording Industry
B.S., 1990, Middle Tennessee State University; M.E., 2004, Cambridge College. (2006)


Craig, Dorothy Valcarcel, Professor, Educational Leadership
B.S., 1986; M.A.Ed., 1988, East Carolina University; Ed.S., 1995, Middle Tennessee State University; Ed.D., 1997, Tennessee State University, Postdoctoral Studies in ESL, University of Memphis. (1996)

## Craig, Paul A., Professor, Aerospace

B.S., 1979; M.Ed., 1980; Ed.S., 1995, Middle Tennessee State University; Ed.D., 1998, Tennessee State University. (1993)

Cripps, Alfred H., Professor, Computer Science
B.S., 1974; M.S., 1975, Middle Tennessee State University; Ph.D., 1980, University of Tennessee. (1981)

Cunningham, Peter H., Professor, Health and Human Performance; Interim Associate Dean, College of Graduate Studies
B.S., 1976, Austin Peay State University; M.A., 1977, Murray State University; Re.D., 1985, Indiana University. (1991)

Da, Jun, Associate Professor, Foreign Languages and Literatures
B.S., 1985, Shanghai Jiano Tong University; M.A., 1993, Ohio University; Ph.D., 2000, University of Texas. (2000)

## Daicoff, Barbara A., Associate Professor, Nursing

B.S.N., 1970, Indiana University; M.N., 1976; Ph.D., 1993, University of Florida. (2007)

Dansby, Virginia S., Professor, Psychology
B.A., 1969, Davis and Elkins College; A.M., 1973; M.A., 1982; Ed.D., 1989, West Virginia University. (1989)

Davis, Teresa L., Associate Professor, Psychology
B.B.A., 1981, University of Richmond; M.S., 1988; Ph.D., 1992, University of Florida. (1993)

Demé, Mamit, Associate Professor, Economics and Finance
B.B.A., 1974, Western Illinois University; M.P.P.A., 1979; M.A., 1980, Jackson State University; Ph.D., 1990, University of Texas, Austin. (1990)

DePrince, Albert E., Jr., Professor, Economics and Finance
B.A., 1963, Bucknell University; M.A., 1965, University of Michigan; Ph.D., 1978, New York University. (1991)

Detmer, Carol M., Associate Professor, Human Sciences
B.S., 1969, University of Wisconsin; M.A., 1981, Western Kentucky University; Ed.D., 1985, East Texas State University. (1998)

Detmer, Richard C., Professor, Computer Science; Department Chair B.S., 1966, University of Kentucky; M.A., 1970; Ph.D., 1972, University of Wisconsin, Madison. (1998)

Diaz-Ortiz, Oscar A., Associate Professor, Foreign Languages and Literatures
B.A., 1986, Universidad Incca de Colombia; M.A., 1994, Kansas State University; Ph.D., 1997, Arizona State University. (1998)

## Ding, Wandi, Assistant Professor, Mathematical Sciences

B.S., 1998, Normal College of Qingdao University, China; M.S., 2001, Ocean University of Qingdao, China; Ph.D., 2006, University of Tennessee, Knoxville. (2007)

DiVincenzo, John P., Professor, Chemistry
B.A., 1987; M.S., 1993; Ph.D., 1996, University of Delaware. (1996)

Dong, Zhijhiang, Assistant Professor, Computer Science
B.S., 1994; M.S., 1997, Huazong University of Science and Technology; Ph.D., 2006, Florida International University. (2006)

## Donovan, Ellen, Professor, English

B.A., 1978; M.A., 1980, Portland State University; Ph.D., 1988, University of Wisconsin, Madison. (1990)

Donovan, Kevin, Professor, English
B.A., 1978, Boston College; M.A., 1980; Ph.D., 1987, University of Wisconsin, Madison. (1989)

Dornan, Wayne A., Associate Professor, Aerospace; Department Chair
B.A., 1982, Concordia University; M.S., 1985; Ph.D., 1989, University of Newfoundland. (2003)

Dougan, John M., Associate Professor, Recording Industry
B.A., 1994, Westfield State College; M.A., 1990; Ph.D., 2001, College of William and Mary. (2001)

Downs, Kevin M., Associate Professor, Agribusiness and Agriscience B.S., 1995; M.S., 1997, University of Florida; Ph.D., 2000, Auburn University. (2000)

Dubek, Laura, Associate Professor, English
B.A., 1990; M.A., 1993, University of Nebraska-Omaha; Ph.D., 2001, University of lowa. (2002)

DuBois, John D., Professor, Biology
B.S., 1978, Baldwin-Wallace College; M.S., 1980; Ph.D., 1983, Miami University. (1989)

Dunlap, Norma K., Associate Professor, Chemistry
B.S., 1977, Eastern College, PA; Ph.D., 1985, University of Wyoming. (1998)

## Eaker, Robert E., Professor, Educational Leadership

B.S., 1968, University of Chattanooga; M.Ed., 1970, University of Tennessee, Chattanooga; Ed.D., 1972, University of Tennessee. (1972)

## Eff, E. Anthon, Associate Professor, Economics and Finance

B.A., 1981, University of Louisville; Ph.D., 1989, University of Texas, Austin. (1990)

Eller, Jackie L., Professor, Sociology and Anthropology; Interim Department Chair
B.S., 1974, Phillips University; M.S., 1977; Ph.D., 1978, Oklahoma State University. (1985)

Ellis, Cheryl Slaughter, Professor, Health and Human Performance B.S., 1974; M.S.T., 1975, Jackson State University; M.S., 1980, University of Southern Mississippi; Ph.D., 1982, University of Tennessee. (1985)

## Elrod-Erickson, Matthew J., Associate Professor, Biology

B.S., 1991, University of Texas, Austin; Ph.D., 1998, Massachusetts Institute of Technology. (2000)

## Emery, Beth C., Professor, Human Sciences

B.S., 1975, University of Maine; M.S., 1983; Ph.D., 1987, Oregon State University. (1985)

Enderson, Mary C., Associate Professor, Mathematical Sciences
B.S., 1985; M.S., 1990, Old Dominion University; Ph.D., 1995, University of Georgia. (1999)

## Ervin, M. Gore, Professor, Biology

B.S., 1976; M.S., 1978, Middle Tennessee State University; Ph.D., 1982, Mississippi State University. (1997)

Eveland-Sayers, Brandi, Assistant Professor, Health and Human Performance
B.S., 2000; M.S., 2001, University of North Alabama; Ph.D., 2006, Middle Tennessee State University. (2006)

Farley, Richard S., Associate Professor, Health and Human Performance B.A., 1984; M.S., 1990, Western Kentucky University; Ph.D. 1999, University of Alabama. (2000)

## Farone, Anthony L., Professor, Biology

B.S., 1984, Pennsylvania State University; M.S., 1988; Ph.D., 1992, Miami University. (1995)

Fayissa, Bichaka, Professor, Economics and Finance; Director, INROADS
B.S., 1971, Haile Selassie I University; M.S., 1976; M.A., 1981; Ph.D., 1982, University of Tennessee. (1980)

Ferrara, Ronald J., Professor, Aerospace
B.A., 1968, University of Connecticut; A.S., 1979, Western Kentucky University; M.S., 1982; Ed.D., 1992, University of Kentucky. (1985)

Fischer, Paul D., Professor, Recording Industry
B.S., 1979, Northwestern University; M.A., 1981; Ph.D., 1995, Bowling Green State University. (1996)

Fleming, Michael S., Assistant Professor, Recording Industry
B.A., 1994, Carlton College; M.M., 2001, McGill University. (2004)

Foley, Sean Ezra, Assistant Professor, History
B.A., 1996; M.A., 2000; Ph.D., 2005, Georgetown University. (2006)

Foote, David A., Associate Professor, Management and Marketing B.A., 1975, Roberts Wesleyan College; M.B.A., 1993; Ph.D., 1999, University of Kentucky. (1999)

Foroudastan, Saeed, Associate Dean, College of Basic and Applied Sciences
B.S., 1980; M.S., 1981; Ph.D., 1987, Tennessee Technological University. (1996)

## Foster, Martha, Associate Professor, History

B.A., 1967, Colorado State University; M.A., 1991, Montana State Uni-
versity; Ph.D., 2000, University of California, Los Angeles (2001)
Friedli, Andrienne C., Professor, Chemistry
B.A., 1984, Rice University; M.S., 1986, Yale University; Ph.D., 1992, University of Texas. (1993)

## Fromuth, Mary Ellen, Professor, Psychology

B.A., 1976, West Chester State College; M.S., 1978; Ph.D., 1983, Auburn University. (1989)

## Fuller, Dana K., Professor, Psychology

B.A., 1988, Northeastern State University-Oklahoma; M.S., 1991; Ph.D., 1994, University of Oklahoma. (1994)

Gambill, Stanley E., Professor, Computer Information Systems; Department Chair
B.S., 1983; M.I.S., 1983, Arkansas State University; Ph.D. ,1992, Memphis State University. (1992)

Gardner, Justin G., Assistant Professor, Agribusiness and Agriscience
B.S, 1996, University of Tennessee, Martin; M.S., 2002, University of Tennessee, Knoxville; Ph.D., 2007, University of Illinois, Urbana-Champaign. (2007)

## Garrison, Ellen B., Associate Professor, History

B.A., 1965, Queens College; M.A., 1966; Ph.D., 1981, Stanford University. (1989)

Geoghagan, Angel D., Assistant Professor, Criminal Justice Administration
B.S., 1998; M.S., 2000, University of Tennessee, Chattanooga; Ph.D., 2007, University of Tennessee, Knoxville. (2007)

Gilbert, Jacqueline, Professor, Management and Marketing
B.B.A., 1983, University of Texas, Austin; M.B.A., 1991; Ph.D., 1995, University of Houston. (1996)

Gilbert, Linda Arms, Associate Professor, Educational Leadership B.S., 1972; M.A.T., 1979; Ed.S., 1991, Middle Tennessee State University; Ed.D., 1997, Tennessee State University. (2004)

Givens, Gregory E., Assistant Professor, Economics and Finance B.S., 2000, Wake Forest University; Ph.D., 2005, University of North Carolina. (2005)

Goldberg, Nancy S., Professor, Foreign Languages and Literatures B.A., 1971; M.S., 1973, University of Wisconsin, Madison; M.A., 1985; Ph.D., 1987, Vanderbilt University. (1988)

Gore, David W., Associate Professor, Engineering Technology B.S., 1967, Georgia Institute of Technology; M.S., 1970, Florida Institute of Technology. (2000)

Gower, Diane S., Associate Professor, Elementary and Special Education B.A., 1966; M.A.E., 1967, Northwestern State University; Ed.D., 1977, University of Tennessee. (1991)

Graddy, Duane B., Professor, Economics and Finance
B.S., 1964; M.S., 1965, University of Tennessee; M.A., 1969; Ph.D., 1974, Lehigh University. (1972)

Graham, Stacey R., Assistant Professor, History
B.A., 1998, University of Michigan; M.A., 2001; Ph.D., 2005, University of California. (2007)

Gray, Helen, Assistant Professor, Health and Human Performance
B.S., 1996, Averett University; M.S., 2000, North Carolina State University; Ph.D., Indiana University. (2006)

## Green, Lisa A., Associate Professor, Mathematical Sciences

B.A., 1994, Goucher College; M.S., 1996; Ph.D., 2000, Georgia Institute of Technology. (2001)

Greer, Timothy H., Associate Professor, Computer Information Systems
B.S., 1990, Southwest Missouri State University; M.S., 1992, Murray State University; Ph.D., 1999, University of Mississippi. (1999)

Haas, Louis B., Professor, History
B.A., 1979, University of Southern Indiana; M.S., 1982, Ohio State University; Ph.D., 1990, University of Illinois. (2001)

Hague, Angela, Professor, English
B.A., 1972, Florida State University; M.A., 1975, University of Florida; Ph.D., 1979, Florida State University; M.A., 1981, University of Sussex. (1981)

Hamilton, Gloria J., Professor, Psychology
B.A., 1968; M.A., 1971, Middle Tennessee State University; Ph.D., 1985,

George Peabody College of Vanderbilt University. (1991)
Hampton, Lynn, Assistant Professor, Sociology and Anthropology B.A., 1992, Wellesley College; M.A., 1998; Ph.D., 2006, Vanderbilt University. (2004)

Handy, Scott T., Associate Professor, Chemistry
B.S., 1991, University of lowa; Ph.D., 1996, Indiana University. (2005)

Hannah, Richard L., Professor, Economics and Finance
B.A., 1973, University of Tennessee, Chattanooga; B.A., 1974; M.A., 1976, Middle Tennessee State University; Ph.D., 1981, University of Utah. (1992)

Harrington, Jeannie J., Associate Professor, Accounting
B.S., 1983, Murray State University; C.P.A., 1980; М.B.A., 1988; Middle Tennessee State University; Ph.D., 1995, University of Kentucky. (1988)

Harris, Christopher R., Professor, Electronic Media Communication B.F.A., 1969, Rochester Institute of Technology; M.A., 1991, University of Alabama. (1991)

Hart, James B., Associate Professor, Mathematical Sciences B.A., 1986, Hendrix College; M.S., 1988; Ph.D., 1991, Vanderbilt University. (1991)

Haseleu, Christian L., Professor, Recording Industry; Department Chair
B.A., 1972, University of the Pacific; M.A., 1976, San Francisco State University. (1978)

Hausler, Joel W., Professor, Educational Leadership
B.S., 1976; M.Ed., 1981, University of Tennessee, Chattanooga; Ed.D., 1985, Oklahoma State University. (1981)

Hedgepeth, Sonja, Professor, Foreign Languages and Literatures
B.A., 1974, University of Texas, Austin; M.A.T., 1978, Southwest Texas

State University; Ph.D., 1991, Pennsylvania State University. (1985)
Hein, Michael B., Professor, Psychology
B.A., 1984, University of Northern lowa; M.S., 1989; Ph.D., 1990, Georgia Institute of Technology. (1990)

Heinrich, Roger W., Associate Professor, Electronic Media Communication
B.A., 1992; M.A., 1996, Arizona State University; Ph.D., 2001, University of Tennessee. (2001)

Helford, Elyce Rae, Professor, English; Director, Women's Studies B.A., 1984, Lake Forest College; M.A., 1990; Ph.D., 1992, University of lowa. (1992)

Hemby-Grubb, K. Virginia, Associate Professor, Business Communication and Entrepreneurship
B.S., 1991; M.Ed., 1992; Ph.D., 1995, University of Southern Mississippi. (2004)

Hennington, Amy Harris, Assistant Professor, Computer Information Systems
B.A., 1998, Mississippi University for Women; M.S., 2004, Middle Tennessee State University; Ph.D., 2007, University of Memphis. (2007)

Hibbard, Allen Eugene, Professor, English
B.A., 1978, American University; M.A., 1982; Ph.D., 1989, University of Washington. (1990)

Hill, John, Professor, Recording Industry
B.M., 1980, Wilfred Laurier University; M.M.U., 1991, McGill University. (1992)

Hinote, Brian P., Assistant Professor, Sociology and Anthropology B.A., 2000; M.A., 2003; Ph.D., 2007, University of Alabama, Birmingham. (2007)

Hinton, Marcie, Assistant Professor, Journalism
B.A., 1991, Samford University; M.A., 1995, Murray State University; Ph.D., 2000, University of Tennessee. (2004)

## Hixon, Martha, Associate Professor, English

B.A., 1977; M.A., 1980, Northeast Louisiana University; Ph.D., 1997, University of Southwestern Louisiana. (1999)

Hodgson, James M., Professor, Center for the Study and Treatment of Dyslexia
B.Sc., 1977, London School of Economics; Dipl. (Linguistics), 1978, University of London; M.A., 1979, University of London; Ph.D., 1985, Massachusetts Institute of Technology. (2004)

Hoffschwelle, Mary S., Professor, History
B.A., 1977, Chatham College; M.A., 1980, College of William and Mary; Ph.D., 1993, Vanderbilt University. (1992)

Holder, Pamela G., Professor, Nursing; Coordinator for Nursing Education, Regents Online Degree Program (RODP)
B.S.N., 1974; M.S.N., 1979; D.S.N., 1988, University of Alabama, Birmingham. (1999)

## Hollings, Marion, Professor, English

B.S., 1978, Tulane University; M.A.., 1984, University of Montana; Ph.D., 1994, University of Arizona. (1994)

## Holloway, Phillipa E., Associate Professor, History

B.A., 1990, University of North Carolina, Chapel Hill; M.A., 1994, University of North Carolina, Greensboro; Ph.D., 1999, Ohio State University. (1999)

Holt, Aimee, Assistant Professor, Psychology
B.S., 1992, Lambuth University; M.A., 1998, Middle Tennessee State University. (2002)

## Holtzclaw, Robert, Professor, English

B.S., 1981; M.A., 1985; Ph.D., 1991, University of Tennessee, Knoxville. (1992)

Homaifar, Ghassem, Professor, Economics and Finance
B.A., 1975, Tehran University (Iran); M.S., 1978, State University of New York; M.A., 1981; Ph.D., 1982, University of Alabama. (1982)

Hong, Don, Professor, Mathematical Sciences
B.S., 1982, Zheijiang Normal University at Ningbo; M.S., 1987, Zheijiang University; Ph.D., 1993, Texas A\&M University. (2005)

Hopkirk, Susan, Assistant Professor, English
B.A., 1993, McMaster University; Ph.D., 2002, University of Alberta. (2004)

Howard, James C., Professor, Chemistry
B.S., 1966, Purdue University; Ph.D., 1977, Cornell University. (1981)

Howard, Larry W., Associate Professor, Management and Marketing B.A., 1972; M.B.A., 1988, Western Michigan University; Ph.D., 1993, University of Missouri, Columbia. (1999)

Howard, R. Stephen, Professor, Biology
B.S., 1985; M.S., 1987, Eastern Kentucky University; Ph.D., 1994, Indiana University. (1994)

Huffman, James O., Professor, Educational Leadership; Department Chair
B.S., 1966; M.S., 1969; Ed.D., 1972, University of Tennessee. (1974)

## Hunt, Robert, Professor, History

A.B., 1974, University of Northern Colorado; M.A., 1979, University of Wyoming; Ph.D., 1988, University of Missouri, Columbia. (1989)

Hutchison, Thomas W., Professor, Recording Industry
B.S., 1974; M.S., 1991; Ph.D., 1995, Florida State University. (1993)

Ilsley, William H., Professor, Chemistry
B.A., 1972, Millikin University; M.S., 1974, Xavier University; Ph.D., 1978, Wayne State University; M.S., 1995; M.S., 2003, Middle Tennessee State University. (1984)

## Iriarte-Gross, Judith M., Professor, Chemistry

B.S., 1981; M.S., 1984; University of Maryland; Ph.D., 1990, University of South Carolina. (1996)

## James, Kevin L., Associate Professor, Accounting

B.B.A., 1991; M.B.A., 1996, Middle Tennessee State University; CPA, 1993; Ph.D., 2000, University of Tennessee. (2000)

## Jetton, Amy E., Associate Professor, Biology

B.A., 1983, University of Tennessee, Knoxville; Ph.D., 1991, Northwestern University. (1994)

Jih, Wen-Jang, Professor, Computer Information Systems
B.S., 1974, National Central University; M.B.A., 1977, National ChengChi University; Ph.D., 1985, University of North Texas. (2003)

Johnson, Jason D., Assistant Professor, Mathematical Sciences
B.S., 1999, University of Central Florida; M.S., 2001, Nova Southeastern University; Ph.D., 2005, Florida State University. (2005)

Johnson, Newtona, Associate Professor, English
B.A., 1979, Foruah Bay College, University of Sierra Leone; M.A., 1982,

Dalhousie University; M.A., 1986, Concordia University; Ph.D., 1997, Emory University. (1998)

Jones, Connie J., Professor, Elementary and Special Education; Department Chair
B.A., 1975, Fisk University; M.A., 1979; Ed.D., 1988, Tennessee State University. (1988)

Jones, Robert B., Professor, History
A.B., 1964, University of Virginia; M.A., 1968; Ph.D., 1972, Vanderbilt University. (1970)

Jones, Steven D., Associate Professor, Psychology
B.A., 1969, University of the South; M.A., 1974, University of Tennessee;

Ph.D., 1985, University of Houston. (1993)
Joyce, Tara, Manager of Project Planning for Adolescents and Adults, Center for Study and Treatment of Dyslexia
B.A., 1976, Drew University; M.S., 1977, Syracuse University; Ed.D., 1988, Harvard University. (1999)

Jubenville, Colby, Associate Professor, Health and Human Performance
B.A., 1994, Millsaps College; M.S., 1995; Ph.D., 1999, University of Southern Mississippi. (2001)

Kalwinsky, Robert K., Associate Professor, Electronic Media Communication
B.A., 1974, Temple University; M.A., 1993, San Diego State University; Ph.D., 2001, University of lowa. (2000)

Kang, Minsoo, Assistant Professor, Health and Human Performance B.A., 1995; M.A., 1997, Seoul National University; Ph.D., 2004, University of Illinois, Urbana-Champaign. (2004)

Kates, Ron, Associate Professor, English
B.A., 1989, Emory University; M.A., 1991, Miami University; Ph.D., 1997, Georgia State University. (1997)

Kelly, David B., Associate Professor, Psychology
B.A., 1972, Georgetown University; M.S., 1977, Oklahoma State University; Ph.D., 1984, Texas Technological University. (1985)

Kempf, DeAnna S., Associate Professor, Management and Marketing B.S., 1984; M.B.A., 1989; Ph.D., 1995, Indiana University. (2002)

## Kendrick, Donald F., Professor, Psychology

B.A., 1978, Eastern Washington University; M.A., 1980; Ph.D., 1982, Michigan State University. (1983)

Kethley, R. Bryan, Associate Professor, Management and Marketing B.S., 1981, Southern Illinois University at Carbondale; M.S., 1988, University of Arkansas; Ph.D., 1997, University of Mississippi. (1997)

Khaliq, Abdul Q., Professor, Mathematical Sciences
M.S., 1977, Quaid-I-Azam University; M.S., 1980; Ph.D., 1983, Brunel University. (2005)

Khan, Zaf, Assistant Professor, Elementary and Special Education B.A., 1989 ; H.D.E., 1990; B.Ed., 1992, University of Durban-Westville Natal; M.S.S.E., 1993, Minot State University; Ed.D., University of South Dakota. (2006)

Kile, Charles O., Jr., Assistant Professor, Accounting
B.M.E., 1982, Lee University; M.B.A., 1984, Regent University; M.S.B.A., 1990; Ph.D., 1993, Washington University-St. Louis. (2003)

Kim, Jwa Keun, Professor, Psychology
B.Ed., 1980; M.Ed., 1982, Kyungpook National University; Ph.D., 1989, University of Oklahoma. (1989)

Kimmins, Dovie L., Associate Professor, Mathematical Sciences
B.S., 1980, David Lipscomb College; M.S., 1983, Middle Tennessee State University; Ed.D., 1994, University of Tennessee, Knoxville. (1983)

King, Rebecca, Associate Professor, English
B.A., 1972, Hendrix College; B.S.N., 1976, University of Tennessee Center for Health Sciences; M.A., 1991, Middle Tennessee State University; Ph.D., 1997, University of Tennessee. (1995)

Klein, Christopher C., Associate Professor, Economics and Finance
B.A., 1976, University of Alabama; Ph.D., 1980, University of North Carolina. (2002)

Klerlein, Jacob T., Assistant Professor, Mathematical Sciences
B.S., 1994, Appalachian State University; M.Ed., 2002; Ph.D., 2006, University of Georgia. (2007)

Klukowski, Matthew, Associate Professor, Biology
B.S., 1993, Loyola University, Chicago; Ph.D., 1998, Indiana University. (1999)

Koritsanszky, Tibor S., Professor, Chemistry
M.Sc., 1979, Eotvos Lorand University; Ph.D., 1992, Free University of Berlin. (2002)

Korzaan, Melinda L., Assistant Professor, Computer Information Systems
B.S., 1991; M.S., 1998, Southwest Missouri State University; Ph.D., 2004, University of Arkansas. (2004)

Koski, Timothy R., Associate Professor, Accounting
B.S., 1982, Arizona State University; M.S., 1986, Southern Methodist University; C.P.A., 1989; Ph.D., 1998, University of Missouri. (2002)

Kostkowska, Justyna, Associate Professor, English
M.A., 1986, University of Maria Curie-Sklodowska; Ph.D., 1995, University of Delaware. (1996)

Langston, William E., Professor, Psychology
B.A., 1989, University of Houston; Ph.D., 1994, University of Wisconsin, Madison. (1997)

## Lavery, David, Professor, English

B.S., 1971, Clarion University; M.A., 1973, St. Cloud University; Ph.D., 1978, University of Florida. (1993)

Leblond, Jeffrey D., Associate Professor, Biology
B.S., 1993, University of Massachusetts, Amherst; Ph.D., 1997, University of Tennessee. (2000)

Lee, Jong-Sung, Associate Professor, Computer Information Systems B.S., 1977, Yeungnam University; M.B.A., 1983, Central Missouri State University; D.B.A., 1988, Mississippi State University. (1987)

Lee, Leslie Robin, Associate Professor, Psychology
B.A., 1990; M.Ed., 1992, Delta State University; Ph.D., 1997, Mississippi State University. (2006)

## Leone, Janice M., Professor, History

B.A., 1971, College of St. Scholastica; B.S., 1977; M.A., 1979, Mankato State University; Ph.D., 1989, Ohio State University. (1989)

Lester, Donald L., Associate Professor, Management and Marketing B.A., 1976; M.B.A., 1990; Ph.D., 1994, University of Memphis. (2005)

Levine, William, Associate Professor, English
B.A., 1980, State University of New York, Stony Brook; Ph.D., 1989, Indiana University. (1998)

Lewis, Stephen D., Professor, Business Communication and Entrepreneurship; Department Chair
B.S., 1974, Tennessee Technological University; M.Ed., 1975, Memphis State University; Ph.D., 1977, University of North Dakota; C.D.P., 1987. (1977)

## Li, Cen, Associate Professor, Computer Science

B.S., 1993, Middle Tennessee State University; M.S., 1995; Ph.D., 2000, Vanderbilt University. (1999)

Lim, Joon Soo, Assistant Professor, Journalism
B.A., 1994; M.A., 1996, Korea University; Ph.D., 2006, University of Florida. (2006)

Lin, Anhua, Assistant Professor, Mathematical Sciences
B.S., 1997, University of Science and Technology; M.S., 1999; M.S., 2002; Ph.D., 2003, Johns Hopkins University. (2004)

Littlepage, Glenn E., Professor, Psychology
B.A., 1969, University of New Mexico; M.S., 1971; Ph.D., 1974, Kansas State University. (1973)

## Luo, Rong, Associate Professor, Mathematical Sciences

B.S., 1996; M.S., 1998, University of Science and Technology; Ph.D., 2002, West Virginia University. (2002)

## Lutz, Alfred, Professor, English

B.A., 1982, Tubingen University (FRG); M.A., 1987; Ph.D., 1993, University of Colorado, Boulder. (1998)

Lyons, Leah T., Assistant Professor, Foreign Languages and Literatures
B.A., 1995, Middle Tennessee State University; M.A., 1997; Ph.D., 2000, Vanderbilt University. (2007)

MacDougall, Preston J., Associate Professor, Chemistry
B.S., 1983; Ph.D., 1989, McMaster University. (1994)

MacLean, Victoria Marie, Associate Professor, Sociology and Anthropology
B.S., 1982, University of Tulsa; M.A., 1984; Ph.D., 1992, Duke University. (2003)

Magne, Cyrille, Assistant Professor, Psychology
B.S., 2000; M.S., 2001; Ph.D., 2005, Université Paul Cézanne, AixMarseille III. (2007)

## Marcellus, Jane Berry, Associate Professor, Journalism

B.A., 1980, Wesleyan University; M.S.J., 1982, Northwestern University; M.A., 1993, University of Arizona; Ph.D., 2004, University of Oregon. (2003)

Marchant, Jennifer, Assistant Professor, English
B.S., 1985, State University of New York, Brockport; M.S., 1993, State University of New York, Buffalo; M.A., 1996, Tulsa University; Ph.D., 2003, Illinois State University. (2003)

Martin, C. Brenden, Professor, History; Director, Public History Program
B.A., 1989; M.A., 1991, Middle Tennessee State University; Ph.D., 1997, University of Tennessee. (2001)

Martin, Mary B., Professor, Mathematical Sciences
B.S., 1979, Middle Tennessee State University; M.S., 1981; Ph.D., 1984, University of North Carolina. (1998)

## (1998)

McBreen, Theresa M., Associate Professor, Foreign Languages and Literatures
B.A., 1990, Iona College; M.A., 1992; Ph.D., 1999, Purdue University. (2001)

McCarthy, Patrick, Associate Professor, Psychology
B.A., 1987, Drake University; M.A., 1990, West Virginia University;

Ph.D., 1997, George Mason University. (1999)
McCluskey, Peter, Associate Professor, English
B.A., 1987, Hendrix College; M.A., 1988, Indiana University; Ph.D., 1998, University of Arkansas. (1999)

## McCusker, Kristine M., Associate Professor, History

B.A., 1987, University of Massachusetts; M.A., 1994, University of Kansas; Ph.D., 2000, Indiana University. (2000)

## McDaniel, Rhonda, Assistant Professor, English

A.A., 1983, Miami-Dade Community College; B.M.T., 1986, Shenandoah Conservatory of Music; M.A., 1998, University of Tennessee, Chattanooga; Ph.D., 2003, Western Michigan University. (2003)

McGrew, Linda G., Professor, Business Communication and Entrepreneurship
B.S., 1972; M.B.E., 1975, Middle Tennessee State University; C.P.S., 1984; Ed.D., 1987, Vanderbilt University. (1979)

McInnis, Leigh Ann, Associate Professor, Nursing
B.S.N., 1987; M.S.N., 1989, Vanderbilt University; Ph.D., 2005, Touro University. (2005)

McKennie, Douglas, Assistant Professor, Recording Industry
B.A., 1988, Case Western Reserve University; M.M., 1996, McGill University; Ph.D., 2004, University of Surrey. (2006)

McSwain, Dwayne N., Assistant Professor, Accounting
B.S., 1985, University of North Carolina; C.P.A., 1991; M.B.A., 1995, Tarleton State University; Ph.D., 2002, University of Texas. (2003)

## McWatters, D. Lorne, Professor, History

B.A., 1970, Simon Fraser College; M.A., 1972, University of Calgary; Ph.D., 1979, University of Florida. (1993)

## McWhirter, Jamila, Assistant Professor, Music

B.M., 1989, Southwest Baptist University; M.A., 1995, Central Missouri State University; Ph.D., 2005, University of Missouri. (2005)

Melton, Tammy J., Professor, Chemistry
B.S., 1982, Murray State University; Ph.D., 1986, Texas A\&M University. (1999)

Mertig, Angela, Associate Professor, Sociology and Anthropology
B.A., 1987, Ripon College; M.A., 1990; Ph.D., 1995, Washington State University. (2004)

Michello, Franklin A., Associate Professor, Economics and Finance B.S., 1985; M.S., 1987, Middle Tennessee State University; M.A., 1998; Ph.D., 1999, University of Alabama. (1987)

## Miller, Brian T., Professor, Biology

B.S., 1980; M.A., 1983, University of Missouri; Ph.D., 1989, Washington

State University. (1989)
Miller, L. Diane, Professor, Mathematical Sciences; Director, McNair Scholars Program; Interim Vice Provost for Academic Affairs B.S., 1973, University of Tennessee; M.S., 1977, Memphis State University; Ph.D., 1986, University of Missouri. (1993)

Mistron, Deborah, Professor, Foreign Languages and Literatures
B.A., 1972, State University of New York; M.A., 1975, Purdue University; Ph.D., 1982, Indiana University. (2000)

Moffett III, Richard G., Associate Professor, Psychology; Director, Center for Organizational and Human Resource Effectiveness B.A., 1977, University of South Florida; M.S., 1979, Valdosta State College; Ph.D., 1996, Auburn University. (1991)

Morgan, Don W., Professor, Health and Human Performance
B.M.E., 1975, Northwestern University; M.S., 1981, University of Tennessee, Knoxville; Ph.D., 1988, Arizona State University. (2004)

Morris, Richard E., Associate Professor, Foreign Languages and Literatures
B.A., 1990, Cornell College; M.A., 1992; Ph.D., 1998, Ohio State University. (1998)

Morris, Steven A., Associate Professor, Computer Information Systems B.A., 1989; Ph.D., 1999, Auburn University. (1999)

## Moseley, Aubrey H., Professor, Educational Leadership

B.S., 1957, Troy State College; M.A., 1964; Ed.D., 1966, University of Alabama. (1966)

Mpoyi, Richard T., Associate Professor, Management and Marketing B.A., 1981, University of Kinshasa, Congo; M.B.A., 1991, Western Illinois University; D.B.A., 1997, Southern Illinois University. (1998)

Mullane, John V., Associate Professor, Management and Marketing B.S., 1983, Wayne State College; Ph.D., 1995, Arizona State University. (1996)

Mullen, Dennis Michael, Professor, Biology
B.S., 1982, Oregon State University; M.S., 1985, University of Maine; Ph.D., 1991, Michigan State University. (1991)

## Murtaza, Mirza B., Associate Professor, Computer Information

 SystemsB.S., 1981; LL.B., 1984, Lucknow University; M.B.A., 1989, California State University; Ph.D., 1993, University of Houston. (1999)

Nasab, Ahad S., Professor, Engineering Technology
B.S., 1980, California State University, Northridge; M.S.M.E., 1981; Ph.D., 1987, Georgia Institute of Technology. (1991)

Nelson, Lynn A., Associate Professor, History
B.A., 1989, University of Chicago; M.A., 1991, University of Kansas; Ph.D., 1998, College of William and Mary. (1999)

Nelson, Millicent F., Assistant Professor, Management and Marketing B.S., 1977, Lane College; M.B.A., 1979; Ph.D., 2003, Oklahoma State University. (2004)

Neth, Michael James, Professor, English
B.A., 1980, Wichita State University; M.A., 1981; M.Phil, 1985; Ph.D., 1990, Columbia University. (1990)

Newman, Deborah W., Professor, Criminal Justice Administration; Department Chair
B.S., 1973, University of North Alabama; M.S., 1977; Ed.D., 1982, Mississippi State University; J.D., 1985, University of Alabama School of Law. (1990)

Nichols, Mary Lynn, Professor, Electronic Media Communication B.S., 1982, Clarion State College; M.S., 1983, Clarion University of Pennsylvania; Ph.D., 1994, University of North Carolina, Chapel Hill. (1992)

Nies, Carol Reiner, Associate Professor, Music
B.M., 1979, University of Miami; M.M., 1981, Yale University; D.M.A., 2001, University of Cincinnati. (2001)

Noggle, Chad A., Assistant Professor, Psychology
B.A., 2003, University of Illinois, Springfield; M.A., 2004; Ph.D., 2006, Ball State University. (2008)

Nogueira, Soraya, Associate Professor, Foreign Languages and Literatures B.A., 1983, Catholic University of Mina Gerais, Brazil; B.A., 1986, Federal University of Goias, Brazil; Ph.D., 1999, Vanderbilt University. (1999)

Ooi, Beng Guat, Associate Professor, Chemistry
B.S., 1983; Ph.D., 1988, Monash University, Australia. (1999)

Ostrowski, Carl, Associate Professor, English
B.A., 1990, Wayne State University; M.A., 1992, University of Tennessee, Knoxville; Ph.D., 1997, University of South Carolina. (1999)

Otter, Ryan R., Assistant Professor, Biology
B.S., 2001; M.S.Ed., 2002, Michigan State University; Ph.D., 2006, Clemson University. (2007)

Owens, Mark F., Assistant Professor, Economics and Finance B.S., 2001, St. Vincent College; M.A., 2002, Ohio State University; Ph.D., 2006, Ohio State University. (2006)

Owusu, Andrew, Assistant Professor, Health and Human Performance B.S., 1996, University of Alabama; M.S.Ed., 1998, Wayne State University; Ph.D., 2004, Middle Tennessee State University. (2004)

Papini, Dennis R., Professor, Psychology; Department Chair
B.S., 1979, Western Illinois University; M.A., 1982; Ph.D., 1984, West Virginia University. (2004)

Parsons, Lynn C., Professor, Nursing; School Director
B.S.N., 1979; M.S.N., 1987, Northern Michigan University; D.S.N., 1995, University of Alabama, Birmingham. (1995)

Patten, Kathryn B., Associate Professor, Educational Leadership
A.B., 1970, University of Michigan, Ann Arbor; M.S., 1983, Long Island University, C.W. Post Campus. (1999)

Patterson, Patricia M., Associate Professor, Chemistry
B.S., 1975, Virginia State University; M.S.E., 1982; Ph.D., 1985, Case Western Reserve University. (1996)

Penn, David A., Associate Professor, Economics and Finance; Director, Business and Economic Research Center, Jennings A. Jones College of Business
B.A., 1976, Northeastern Oklahoma State University; M.A., 1978, University of Denver; Ph.D., 1984, University of Oklahoma. (2002)

Pennington, John, Associate Professor, Psychology
B.S., 1989, University of Michigan; M.S., 1991; Ph.D., 1994, University of Florida. (1996)

Peres, Tanya M., Assistant Professor, Sociology and Anthropology B.A., 1995; M.A., 1997, Florida State University; Ph.D., 2001, University of Florida (2005)

Perry, Charles H., Professor, Engineering Technology; Chairholder, Russell Chair of Manufacturing Excellence
B.S., 1966; M.S., 1969; Middle Tennessee State University; Ph.D., 1976, Vanderbilt University. (2004)

Perry, Tara L., Associate Professor, Health and Human Performance B.S., 1987; M.S., 1990, Georgia Southern University; Ph.D., 1994, Pennsylvania State University. (1999)

Petersen, Robert C., Professor, English
B.A., 1966, State University of New York, Albany; M.A., 1968; Ph.D., 1980, Purdue University. (1984)

Pettey, Chrisila C., Professor, Computer Science
B.S., 1978, David Lipscomb College; M.S., 1981, Middle Tennessee State University; Ph.D., 1990, Vanderbilt University. (1991)

Peyton, Marvin L., Professor, Educational Leadership
B.A., 1971; M.S., 1974, Marshall University; Ed.D., 1989, University of Tennessee. (1990)

Pfeifer, Daniel, Professor, Recording Industry
B.M., 1983, Middle Tennessee State University; M.A., 1987, Memphis State University. (1991)

Phelps, Amy J., Professor, Chemistry
B.S., 1984, Berry College; M.S., 1988; Ph.D., 1990, Purdue University. (2001)

Phillips, Mary E., Assistant Professor, Accounting
B.S., 1970, Texas Tech University; M.A., 1971, University of Rochester; M.B.A., 1993, Middle Tennessee State University. (2004)

Phillips, Philip, Associate Professor, English
B.A., 1990, Belmont University; M.A., 1992; Ph.D., 1996, Vanderbilt University. (1999)

Piekarski, James L., Professor, Recording Industry
B.F.A., 1989, University of Wisconsin, Milwaukee; M.M., 1991; D.M.A., 1994, University of North Texas. (1994)

## Poirier, Sandra, Associate Professor, Human Sciences

B.S., 1968, Florida State University; M.S., 1978, University of Arizona; Ed.D., 1998, Florida International University. (2005)

Pondillo, Robert J., Associate Professor, Electronic Media Communication
B.S.C., 1973, Ohio University; M.A., 1998, University of Wisconsin, Milwaukee; Ph.D., 2003, University of Wisconsin, Madison. (2001)

Powell, Dennis D., Professor, Criminal Justice Administration
B.S., 1973, Indiana University; M.S., 1978, Southern Illinois University; Ph.D., 1980, Michigan State University. (1980)
Prevost, Suzanne S., Professor, Nursing; Chairholder, National HealthCare Chair of Excellence in Nursing
R.N. Diploma, 1980, South Side Hospital; B.S.N., 1982, Villa Maria Col-
lege; M.S.N., 1986, Medical University of South Carolina; Ph.D., 1992, Texas Women's University. (1998)

Pruitt, Lisa J., Associate Professor, History; Director, Gore Research Center
B.A., 1986, University of Texas, Dallas; M.L.S., 1988; M.A., 1988, University of Maryland; Ph.D., 1998, Vanderbilt University. (1999)

Quarles, Jan P., Professor, Electronic Media Communication
B.A., 1972; Ph.D., 1986, University of Tennessee, Knoxville. (1994)

Quarto, Christopher J., Associate Professor, Psychology
B.S., 1983; M.A., 1984; Central Michigan University; Ph.D., 1992, University of Illinois, Urbana-Champaign. (1997)

Quinn, Terrance J., Professor, Mathematical Sciences; Department Chair
B.S., 1987; M.S., 1988; Ph.D., 1992, Dalhousie University. (2006)

Redditt, Richard S., Professor, Engineering Technology
B.S., 1965; M.S., 1966, Northwest Louisiana State University; Ed.D., 1973, University of Tennessee. (1974)

Renfroe, Alicia M., Assistant Professor, English
B.A., 1991; M.A., 1997; Ph.D., 2002, University of Tennessee; J.D., 1994, University of Florida. (2005)

Rennhoff, Adam D., Assistant Professor, Economics and Finance B.A., 1998, Bucknell University; M.A., 2000; Ph.D., 2006, University of Virginia. (2007)

## Revell, Maria A., Professor, Nursing

B.S.N., 1973, Tuskegee Institute; M.S.N., 1985, University of Alabama, Huntsville; D.S.N., 1992, University of Alabama, Birmingham. (2000)

Rice, Craig, Assistant Professor, Elementary and Special Education B.A., 1991; M.A., 1995, California State University; Ed.D., 1999, University of Maine. (2006)

Rice, Michael, Associate Professor, Foreign Languages and Literatures B.A., 1991, Eastern Kentucky University; M.A., 1994, University of lowa; Ph.D., 2001, University of Cincinnati. (2006)

Rich, Jeremy McMaster, Associate Professor, History
B.A., 1993; M.A., 1994; Ph.D., 2002, Indiana University. (2006)

Richey, Linda H., Associate Professor, Human Sciences B.S., 1968; Ph.D., 1992, University of Tennessee. (1992)

Ridgley, Robyn L., Assistant Professor, Human Sciences
B.S., 1994, Murray State University; M.Ed., 1999, Vanderbilt University; Ed.D., 2004, University of Kentucky. (2005)

Ring, Tracey R., Professor, Elementary and Special Education
B.S., 1984; M.Ed., 1985, Middle Tennessee State University; Ed.D., 1992, Mississippi State University. (1992)

Riordan, George T., Professor, Music; Director, School of Music B.M., 1971, Michigan State University; M.M., 1975, Northwestern University; D.Mus., 1988, Florida State University. (2003)

Roberts, Sherry J., Assistant Professor, Business Communication and Entrepreneurship
B.A., 1976, Central Methodist College; M.S., 1988, Arkansas State University; Ph.D., 2003, University of Louisville. (2007)

Robertson, William M., Professor, Physics and Astronomy
B.Sc., 1980, Imperial College, University of London; M.S., 1982; Ph.D., 1988, Purdue University. (1995)

Rogers, Robert D., Associate Professor, Criminal Justice Administration B.A., 1972, University of Kentucky; M.A., 1975, University of Tennessee; M.S., 1978, Eastern Kentucky University; M.A., 1981; Ph.D., 1985, State University of New York, Albany. (1993)

Rosenmuller, Christoph, Assistant Professor, History
M.A., 1998, University of Hamburg; Ph.D., 2003, Tulane University. (2004)

## Rosing, Wayne C., Professor, Biology

B.S., 1969, University of Wisconsin; Ph.D., 1975, University of Texas. (1980)

Rowe, David L., Professor, History
B.A., 1969, Ithaca College; M.A., 1972; Ph.D., 1974, University of Virginia. (1981)

Rowell, Ginger H., Professor, Mathematical Sciences
B.S., 1987, Birmingham-Southern College; M.A., 1991; Ph.D., 1995, University of Alabama. (2000)

Roy, Donald P., Associate Professor, Management and Marketing B.B.A., 1985, Mississippi State University; M.B.A., 1995, Mississippi College; Ph.D., 2000, University of Memphis. (2000)

Rupprecht, Nancy E., Professor, History
B.A., 1965; M.A., 1967, University of Missouri, Columbia; Ph.D., 1982, University of Michigan. (1985)

Rusciolelli, Judith, Professor, Foreign Languages and Literatures A.B., 1962, University of Michigan, Ann Arbor; M.A., 1966, Middlebury College; Ph.D., 1981, University of California, Los Angeles. (1991)

Rushlow, Kenneth R., Assistant Professor, Elementary and Special Education
B.S., 1971, Middle Tennessee State University; M.Ed., 1978, Clemson University; Ed.D., 1999, Northwestern State University. (2004)

Rust, James O., Professor, Psychology
B.S., 1967, Lehigh University; M.A., 1969, University of Richmond; Ph.D., 1973, University of Virginia. (1973)

Sadler, Kim C., Associate Professor, Biology
B.S., 1976; M.S., 1979; Ed.S., 1999, Middle Tennessee State University; Ed.D., 2002, Tennessee State University. (1996)

Saksena, Divya, Associate Professor, English
B.A., 1977; M.A., 1979, Delhi University; Ph.D., 2003, George Washington University. (2004)

## Sanders, John W., Professor, Educational Leadership

B.S., 1988; M.B.E., 1989; Ed.S., 1994, Middle Tennessee State University; Ed.D., 1996, Tennessee State University. (1994)

## Sanger, Michael, J., Professor, Chemistry

B.S., 1989, University of California, Davis; M.S., 1994; Ph.D., 1996, Iowa State University. (2002)

Sarkar, Medha S., Associate Professor, Computer Science
B.S., 1987; M.C.A., 1990, Sardar Patel University; M.S., 1993; Ph.D., 1999, Queen's University. (2002)

Sauls, Jenny L., Professor, Nursing
A.A., 1981, Middle Tennessee State University; B.S.N., 1984, Tennessee Technological University; M.S.N., 1988, Vanderbilt University; D.S.N., 2000, University of Alabama, Birmingham. (1992)

Sawyer, Diane, Professor, Elementary and Special Education; Chairholder, Katherine Murfree Chair of Excellence in Dyslexic Studies B.S., 1960, Geneseo State College; M.S.E., 1963, Buffalo State College; M.A., 1965, Teacher's College Columbia; Ph.D., 1971, Cornell University. (1989)

Sayward, Amy L.S., Associate Professor, History; Department Chair B.A., 1991, St. Bonaventure University; M.S., 1993; Ph.D., 1998, Ohio State University. (1998)

## Sbenaty, Saleh M., Professor, Engineering Technology

B.S., 1980, Damascus University; M.S., 1985; Ph.D., 1991, Tennessee Technological University. (1993)

## Schmidt, Stephen R., Professor, Psychology

B.Ed., 1975, University of Virginia; M.S., 1977; Ph.D., 1980, Purdue University. (1988)

Seipel, Scott J., Associate Professor, Computer Information Systems B.B.A., 1985; Ph.D., 1998, University of Texas. (2000)

## Seipelt, Rebecca L., Associate Professor, Biology

B.A., 1991, Berea College; Ph.D., 1996, University of Kentucky. (1999)

## Selva, Lance, Professor, Criminal Justice Administration

A.B., 1972; J.D., 1975, University of Alabama; M.S., 1977; Ph.D., 1985, Florida State University. (1979)

## Seo, Suk Jai, Associate Professor, Computer Science

B.A., 1976, Hankuk University of Foreign Studies; M.S., 1986; Ph.D., 2001, University of Alabama, Huntsville. (2002)

## Shearon, Stephen, Professor, Music

B.M., 1977, Northwestern University; M.A., 1985; Ph.D., 1993, University of North Carolina, Chapel Hill. (1994)

## Sheehan-Smith, Lisa M., Assistant Professor, Human Sciences

B.S., 1981, Western Kentucky University; M.Ed., 1982; Ed.D., 2004, Vanderbilt University. (1997)

Shelar, Victoria Dawn, Professor, Health and Human Performance B.S., 1981, University of Florida; M.S., 1984, University of North Florida; Ph.D., 1988, University of Maryland. (1995)

Sherman, Theodore, Professor, English
B.A., 1987, Covenant College; M.A., 1988, University of Central Florida; Ph.D., 1993, University of Southern Mississippi. (1993)

Simmons, James R., Associate Professor, Music
B.M., 1994, University of Wisconsin; M.M., 2002, Eastman School of Music. (2002)

Singer, Marc G., Professor, Management and Marketing
B.B.A., 1968, City College of New York; M.B.A., 1971, Baruch College of New York; Ph.D., 1973, University of Tennessee. (1990)

Sinkala, Zachariah, Professor, Mathematical Sciences
B.S., 1981, University of Zambia; M.S., 1986, University of Michigan; Ph.D., 1989, University of South Florida. (1990)

Slicker, Ellen K., Professor, Psychology
B.S.E., 1969; M.S.E., 1970, University of Kansas; Ed.S., 1983, University of Northern Colorado; Ph.D., 1991, Texas A\&M University. (1992)

Smith, Allison, Professor, English
B.A., 1983; M.A., 1986, California State University; Ph.D., 1994, University of Illinois. (2002)

Smith, Kevin E., Professor, Sociology and Anthropology
B.A., 1986; M.A., 1990; Ph.D., 1992, Vanderbilt University. (1994)

Smith, Vincent W., Professor, Business Communication and Entrepreneurship
B.S., 1984; M.B.E., 1985, Middle Tennessee State University; Ed.D., 1994, Vanderbilt University. (1985)

Smith-Walters, Cindi, Professor, Biology; Co-Director, Center for Environmental Education
B.S., 1978, East Central State University; M.S., 1984; Ph.D., 1988, Oklahoma State University. (1993)

Snead, Donald, Associate Professor, Educational Leadership
B.S., 1975, Fort Valley State College; M.A.T., 1986, Western Kentucky University; Ed.D., 1999, University of Kentucky. (2000)

Sokoya, S. Kim, Professor, Management and Marketing
B.S., 1979; M.A., 1981; M.B.A., 1982, Eastern Illinois University; D.B.A., 1985, Mississippi State University. (1989)

Solley, Bobbie A., Professor, Elementary and Special Education B.S., 1979, David Lipscomb College; M.A.E., 1982, University of Alabama; Ed.D., 1989, University of Georgia. (1991)

Sridhara, Basavapatna S., Professor, Engineering Technology
B.S.M.E., 1978, Bangalore University; M.S.M.E., 1980, Indian Institute of Science; M.S.M.E., 1983, Stevens Institute of Technology; Ph.D., 1991, Auburn University. (1991)

Stephens, David C., Assistant Professor, Mathematical Sciences B.S., 1999, Cumberland College; M.S., 2001; Ph.D., 2004, Vanderbilt University. (2004)

Stewart, Martin V., Associate Professor, Chemistry
A.A., 1964, Oxford College; B.S., 1966, Emory University; Ph.D., 1979, University of Georgia. (1979)

## Stewart, William C., Professor, Biology

B.S., 1987, North Carolina State University; Ph.D., 1994, East Carolina University. (1995)

Stogner, Catherine, Associate Professor, Human Sciences
A.S., 1971, East Tennessee State University; B.S., 1988, Columbus College; M.S., 1993; Ph.D., 1996, Utah State University. (1996)

Strawman, Thomas William, Professor, English; Department Chair B.S., 1973, lowa State University; M.A., 1976, University of Kansas; Ph.D., 1986, University of Washington. (1989)

## Tang, Thomas L., Professor, Management and Marketing

B.S., 1971, Chung Yuan University; M.A., 1977; Ph.D., 1981, Case Western Reserve University. (1983)

Tate, James C., Associate Professor, Psychology
B.S., 1982, College of Charleston; M.S., 1988; Ph.D., 1992, Auburn University. (1993)

Taylor, Pamela, Associate Professor, Nursing
B.S.N., 1977; M.Ed., 1982, University of Tennessee, Chattanooga; Ph.D., 1987, Columbia Pacific University; M.S.N., 1999, University of Tennessee, Chattanooga. (2007)

Therrien, Kathleen M., Associate Professor, English
A.B., 1987, College of Holy Cross; M.A., 1989; Ph.D., 1997, University of Delaware. (1998)

Thomas, Joe G., Professor, Management and Marketing
B.S., 1974; M.B.A., 1975, University of Missouri; Ph.D., 1983, Texas A\&M University. (1986)

Thomas, Paula B., Accounting Advisory Board Distinguished Professor, Accounting
B.B.A., 1978; C.P.A., 1980; M.S., 1983, Middle Tennessee State University; C.M.A., 1984; D.B.A., 1987, Mississippi State University. (1983)

Thomas, R. Earl, Professor, Management and Marketing
B.A., 1972; M.A.T., 1974, Middle Tennessee State University; Ed.D., 1984, Vanderbilt University. (1989)

Thomas, Shelley, Associate Professor, Foreign Languages and Literatures
B.A., 1976, Clemson University; M.A., 1984, University of Suth Carolina; Ph.D., 1991, Purdue University. (1991)

Tillery, Kenneth R., Professor, Management and Marketing
B.S.I.M., 1967, Georgia Institute of Technology; M.B.A., 1972; Ph.D., 1985, Georgia State University. (1988)

Traughber, Belinda, Professor, Psychology
B.S., 1976, Vanderbilt University; M.A., 1977, Middle Tennessee State University; Ph.D., 1982, University of Kansas. (1982)

True, Charlene, Assistant Professor, Educational Leadership
B.S., 1969, Tennessee Technology University; M.A., 1974; Ed.S., 1975; Ed.S., 1981; Ed.D., 1982, University of Alabama. (2006)

Ujcich Ward, Kimberly, Associate Professor, Psychology
B.A., 1990, University of Tennessee, Knoxville; M.A., 1993; Ph.D., 1996, West Virginia University. (1995)

Van Hein, Judith L., Professor, Psychology
B.S., 1983, Carroll College; M.S., 1987; Ph.D., 1992, Georgia Institute of Technology. (1990)

Veal, Mary Lou, Professor, Health and Human Performance
B.S., 1967; M.Ed., 1977, University of North Texas; Ed.D., 1986, Teachers College, Columbia University. (2006?)

Walck, Jeffrey L., Assistant Professor, Biology
B.S., 1989, Cornell University; Ph.D., 1998, University of Kentucky. (1999)

Waldrop, Phillip, Professor, Elementary and Special Education; Associate Dean, College of Education and Behavioral Science
B.S., 1970; M.A., 1971; Ed.D., 1977, University of Alabama. (1989)

Walker, Dellmar, Professor, Human Sciences; Department Chair B.S., 1972, Middle Tennessee State University; M.S., 1974, University of Kentucky; R.D., 1973; Ph.D., 1986, University of Tennessee. (1978)

Wall, Patricia S., Assistant Professor, Accounting
B.A., 1975; J.D., 1979; B.S., 1985, University of Tennessee; M.B.A., 1987, University of Tennessee, Chattanooga; Ed.D., 2004, Tennessee State University; C.P.A., 1992. (2003)

Wallace, J. Brandon, Associate Professor, Sociology and Anthropology; Director, Aging Studies
B.A., 1985, Athens State College; M.A., 1987, Middle Tennessee State University; Ph.D., 1990, University of Florida. (1991)

Wallace, Monica A., Assistant Professor, Psychology
B.A., 1979, University of North Carolina, Greensboro; M.Ed., 1998, University of South Florida; Ph.D., 2003, University of Tennessee, Knoxville. (2004)

Walsh, Dennis P., Associate Professor, Mathematical Sciences B.A., 1982; M.S., 1985, University of New Orleans; Ph.D., 1991, University of Southwestern Louisiana. (1991)


Ward, Cheryl B., Assistant Professor, Management and Marketing B.A., 1982, Morehead State University; M.B.A., 1988, East Carolina University; Ph.D., 2001, University of Kentucky. (1998)

## Ward, Karen S., Professor, Nursing

B.S.N., 1970; M.S.N., 1972, Vanderbilt University; Ph.D., 1988, Cornell University. (1995)

## Ward, Terry J., Professor, Accounting

B.B.A., 1981; M.B.A., 1982, Morehead State University; C.P.A., 1986; Ph.D., 1991, University of Tennessee. (1994)

## Warren, William E., Professor, Management and Marketing

B.S., 1958, Florence State College; M.S., 1962, University of Tennessee; D.B.A., 1985, Memphis State University. (1990)

Watts, Rebecca, Assistant Professor, Educational Leadership
B.S., 1990, Louisiana Tech University; M.Ed., 1998; Ed.D., 2003, University of Louisiana, Monroe. (2006)

Weatherby, Norman, Professor, Health and Human Performance B.S., 1974; M.S., 1977, North Texas State University; Ph.D., 1983, Florida State University. (2000)

Webber, Gretchen R., Assistant Professor, Sociology and Anthropology B.S., 1986; M.B.A., 1989, University of Oklahoma; M.Ed., 1998; Ph.D., 2005, University of Texas. (2007)

Welborn, Cliff A., Assistant Professor, Management and Marketing B.S., 1988, Kansas State University; M.S., 1998, Auburn University; Ph.D., 2005, University of Texas, Arlington . (2006)

West, Carroll Van, Professor, History; Director, Center for Historic Preservation
B.A., 1977, Middle Tennessee State University; M.A., 1978, University of Tennessee, Knoxville; Ph.D., 1982, College of William and Mary. (1985)

White, Raholanda, Associate Professor, Business Communication and Entrepreneurship
B.S., 1980, Lambuth University; M.S., 1984, University of Memphis; Ph.D., 1990, University of Missouri, Columbia. (1990)

Williams, James H., Professor, History
B.A., 1986, Westminster College; M.A., 1987, College of William and Mary; Ph.D., 1993, Vanderbilt University. (1996)

Williams, Jane L., Professor, Educational Leadership
B.S., 1970; M.A., 1972; George Peabody College; Ed.D., 1983, East Tennessee State University. (1988)

Wilson, Debra R., Associate Professor, Nursing
B.A., B.S.N., 1981, Lakehead University; M.S.N., 2002, Tennessee State University; Ph.D., 2006, Walden University. (2007)

## Wilson, Linda Diane, Professor, Nursing

B.S., 1975; M.S.N., 1978, University of Alabama, Birmingham; Ph.D., 1996, Georgia State University. (1996)

Winborn, John Douglas, Associate Professor, Health and Human Performance
B.S., 1976; M.S., 1988, Southern Connecticut State College; Ed.D., 1992, Tennessee State University. (1993)

## Womack, Bob, Professor, Educational Leadership

B.S., 1948, Middle Tennessee State College; M.A., 1952; Ed.D., 1956, George Peabody College. (1957)

Wood, Robert, Professor, Recording Industry
B.M., 1969, Oklahoma Baptist University; M.M., 1974; D.M.A., 1981, University of North Texas. (1991)

Woods, Louis, Assistant Professor, History
B.A., 1999, State University of New York, Stony Brook; M.A., 2001; Ph.D., 2006, Howard University. (2007)

Woodard, Jennifer Bailey, Assistant Professor, Electronic Media Communication
B.S., 1991, Middle Tennessee State University; M.A., 1993, University of Georgia; Ph.D., 2003, Indiana University. (1993)

Wright, Stephen M., Professor, Biology
B.A., 1978, Northwestern College; B.S., 1983; M.S., 1987; Ph.D., 1990, University of North Dakota. (1992)

Wulfsberg, Gary Paul, Professor, Chemistry
B.S., 1966, Iowa State University; Ph.D., 1971, University of Wisconsin. (1981)

Xia, Yu (Amy), Assistant Professor, Management and Marketing
B.E., 1994, Huazhong University of Science \& Technology; M.E., 1997, Shanghai Jiaotong University; M.S., 2003; Ph.D., 2004, Washington State University. (2005)

## Yelverton, William E., Professor, Music

B.M., 1983, Berklee College of Music; M.M., 1985, University of Miami; D.Mus., 1990, Florida State University. (1989)

Yoo, Jungsoon, Professor, Computer Science
B.S., 1979, Ewha Women's University (Seoul, Korea); M.S., 1984, North Carolina State University; Ph.D., 1991, Vanderbilt University. (1991)

Yoo, Sung Kun, Professor, Computer Science
B.S., 1973, Seoul National University; Ph.D., 1983; M.S., 1984, North Carolina State University. (1984)

Young, Barbara N., Professor, Educational Leadership
B.A., 1971, University of Southwestern Louisiana; M.Ed., 1984, Louisiana State University; M.A.T., 1989; Ed.S., 1990, Middle Tennessee State University; Ed.D., 1993, Tennessee State University. (1991)

Yue, Jinfeng, Associate Professor, Management and Marketing B.S., 1983, Peking University; M.E., 1989, Northwestern Polytechnical University; M.B.A., 1995, University of Nebraska; M.S., Ph.D., 2000, Washington State University. (2001)

Zamora, John M., Professor, Biology
B.A., 1979, Columbia University; Ph.D., 1984, Auburn University. (1987)

Zengaro, Franco, Assistant Professor, Health and Human Performance B.A., 1990; M.S.E., 2001, Harding University; M.B.A., 1999, Leicester University; Ph.D., 2006, University of Alabama. (2006?)

## Zha, Xiaoya, Professor, Mathematical Sciences

B.S., 1982, Anhui University, China; M.S., 1984, Huazhong University of Science and Technology, China; M.S., 1990; Ph.D., 1993, Ohio State University. (1997)

Zhang, Ping, Assistant Professor, Mathematical Sciences
B.S., 1993, Hebei Normal University; M.S., 1996, Yangzhou University; M.S., 2002; Ph.D., 2004, Memphis Sate University. (2004)

Zietz, Joachim, Professor, Economics and Finance M.A., 1978; Ph.D., 1981, University of Gottingen. (1989)

Zijlstra, Rebecca C., Professor, Mathematical Sciences
B.S., 1979; M.S., 1981, Middle Tennessee State University; Ph.D., 1990, Auburn University. (1990)

## Retired Graduate Faculty

The two dates in parentheses indicate the years of service.

Arters, Jack D., Professor Emeritus, Educational Leadership B.S., 1959, Bluffton College; M.A., 1961, Marshall University; Ed.D., 1967, University of Tennessee; Postdoctoral Study, University of Wyoming. (1967-95)

Arthur, Hattie Lamb, Professor, Home Economics; Department Chair
B.S., 1957, Baylor University; M.S., 1964; Ed.D., 1969, Texas Woman's University. (1974-85)

Aseltine, Gwen, Assistant Professor, Sociology, Anthropology, and Social Work
Work A.B., 1961, Elmhurst College; M.A., University of South Florida; Ed.S., 1972; Ph.D., 1977, George Peabody College. (1967-81)

Balch, Billy W., Professor Emeritus, Economics and Finance
B.S., 1959, Florence State College; M.B.A., 1960; Ph.D., 1968, University of Alabama. (1964-98)

Ballou, Ralph, Professor Emeritus, Health, Physical Education, Recreation, and Safety
B.S., 1949; M.S., 1956, Springfield College; Ph.D., 1965, University of Oregon. (1968-96)

## Barlow, Sarah F., Professor Emerita, Biology

B.S., 1959; M.A., 1963; Ed.S., 1985, Middle Tennessee State University; Ed.D., 1991, Vanderbilt University. (1979-2003)

## Beers, George, Professor, Mathematical Sciences

B.S., 1955; M.Ed., 1960, University of Florida, M.A., 1963, University of Illinois; Ed.D., 1967, University of Florida. (1966-96)

Bergman, Race P., Professor, Elementary and Special Education; Interim Department Chair
B.S., 1961, State University College, Geneseo, New York; M.A., 1967; Ed.D., 1974, University of Rochester. (1973-2002)

Berry, Mary Tom, Professor Emerita, Elementary and Special Education
A.B., 1946, Blue Mountain College; M.A., 1950, Mississippi Southern College; Ph.D., 1961, University of Alabama. (1960-94)

Brashears, Elizabeth, Professor Emerita, Elementary and Special Education
B.S., 1943, Mississippi State College for Women; M.Ed., 1962, University of Southern Mississippi; Ed.D., 1969, University of Tennessee. (1969-90)

Brooks, James T., Professor, Speech and Theatre; Associate Dean, College of Liberal Arts
B.A., 1965, Appalachian State University; M.A., 1967; Ph.D., 1974, University of Florida. (1969-2000)

## Brookshire, Jerry H., Professor, History

A.B., 1965, University of Georgia; M.A., 1967; Ph.D., 1970, Vanderbilt University. (1972-2007)

Burford, Anna M., Professor, Business Education, Marketing Education, and Office Management
B.S., 1964; M.A., 1967, Western Kentucky University; Ph.D., 1979, Ohio State University. (1981-2000)

Carlson, Keith, Professor, Psychology
B.A., 1964, Eureka College; M.S., 1968; Ed.D., 1970, Northern Illinois University. (1970-2003)

## Carson, Frances E., Associate Professor, Nursing

R.N., 1957, North Carolina Baptist Hospital School of Nursing; B.S.N.E., 1960, Florida State University; M.N., 1967, Emory University. (19892000)

Chandler, Clay M., Professor Emeritus, Biology
B.S., 1950, Bethel College; M.A., 1954, George Peabody College; Ph.D., 1965, Indiana University. (1970-92)

Clark, Roy W., Professor Emeritus, Chemistry
B.S., 1957, Middle Tennessee State College; M.S., 1959; Ph.D., 1965, Louisiana State University. (1963-96)

Cole, Janice D., Assistant Professor, Business Education, Marketing Education, and Office Management
B.S.B.A., 1976; M.S., 1982; Ph.D., 1996, University of Tennessee. (2001-2006)

Corlew, Robert E., Professor Emeritus, History; Vice President for Academic Affairs
B.S., 1945, Austin Peay State College; M.A., 1949, Vanderbilt University; Ph.D., 1954, University of Alabama. (1949-90)

Curry, Donald L., Professor, Biology; Vice Provost for Research and Dean, College of Graduate Studies
A.B., 1963, Sacramento State College; Ph.D., 1967, University of California, San Francisco. (1995-2003)

Davenport, Harold, Professor, Educational Leadership
B.S., 1957; M.A., 1959, Appalachian State; Ed.D., 1970, University of Tennessee. (1970-96)

Davidson, Phyllis M., Professor, Human Sciences; Interim Director, Professional Laboratory Experiences
B.S., 1964, Tennessee Technological University; M.A., 1970, Tennessee Technological University; Ph.D., 1985, University of Tennessee. (1995-2002)

Douthit, James C., Professor Emeritus, Management and Marketing B.S.B.A., 1958; M.B.A., 1959, University of Arkansas; D.B.A., 1973, Mississippi State University. (1964-96)

Drennan, Henry Dalton, Professor Emeritus, Business Education, Marketing Education, and Office Management
B.S., 1952; M.A., 1956; Ed.S., 1963, George Peabody College; Ed.D., 1969, University of Mississippi. (1961-97)

Dunne, Michael F., Professor Emeritus, English
B.A., 1964, Fordham University; M.A., 1966; Ph.D., 1969, Louisiana State University. (1969-2006)

Durham, Charles, Professor Emeritus, English
B.S., 1963, Middle Tennessee State College; M.A., 1964; Ph.D., 1969, Ohio University. (1966-98)

Essex, Frank W., Professor Emeritus, Political Science
A.B., 1966; M.A.T., 1967; Ph.D., 1978, Vanderbilt University. (196793).

Fullerton, Ralph O., Jr., Professor Emeritus, Geography and Geology; Department Chair
A.B., 1960, University of Kentucky; M.S., 1962; Ed.D., 1971, Indiana University. (1963-97)

Ginanni, Francis R., Professor Emeritus, English
A.B., 1960, San Jose State College; M.A., 1964, University of Virginia; Ph.D., 1970, Auburn University. (1964-94)

Gould, Richard H., Professor Emeritus, Engineering Technology and Industrial Studies; Department Chair
B.S., 1952; M.S., 1955, University of Mississippi; Ed.D., 1973, University of Tennessee, Knoxville. (1966-95)

## Grubbs, David, Professor Emeritus, Political Science

A.B., 1951, Maryville College; M.A., 1953, University of Tennessee; Ph.D., 1961, University of Pennsylvania. (1966-94)

## Harrison, Joyce S., Professor, Human Sciences

B.S., 1968, University of Tulsa; M.S., 1974; Ed.D., 1979, University of Tennessee; C.F.P., 1988. (1978-2004)

Hart, William S., Associate Professor, Management and Marketing B.S., 1953; M.S., 1957, Kansas State Teachers College; Ph.D., 1969, University of Florida. (1986-2003)

Harvin, Laurence, Professor, Music
B.M., 1964, University of Alabama; M.M., 1966, University of Oklahoma; D.M.A., 1972, Florida State University. (1966-99)

Heritage, Jeannette, Professor, Psychology
B.S., 1953, Auburn University; M.A., 1969, University of South Alabama; Ph.D., 1971, University of Southern Mississippi. (1971-2003)

Hodge, Harry F., Professor, Psychology
B.S., 1959; M.S., 1960, University of Tennessee, Knoxville; Ed.D., 1963, Auburn University. (1980-93)

Hooper, Ernest Walter, Professor Emeritus, History
B.S., 1942, Middle Tennessee State College; M.A., 1949; Ph.D., 1957, University of North Carolina. (1960-82)

Howard, Charles Edwin, Professor Emeritus, English
B.S., 1947, Troy State Teachers College; M.A., 1948, George Peabody

College; Ph.D., 1959, Vanderbilt University. (1951-84)

## Hull, Geoffrey P., Professor, Recording Industry

B.S., 1968, Georgia Institute of Technology; J.D., 1971, University of Virginia Law School; M.B.A., 1980, Middle Tennessee State University. (1977-2007)

Kawahito, Kiyoshi, Professor, Economics and Finance
B.S., 1963, Oklahoma City University; M.B.A., 1965; Ph.D., 1971, University of Maryland. (1971-2007)

Kyle, Reuben, Professor Emeritus, Economics and Finance
B.S., 1963, Georgia Institute of Technology; M.B.A., 1967, University of Alabama; Ph.D., 1972, University of Tennessee. (1972-2006)

McClellan, Powell, Professor, Health and Human Performance
B.S., 1962, Arkansas Polytechnic College; M.Ed., 1966; Ed.D., 1969, University of Arkansas. (1970-2006)

## Messier, Ronald, Professor Emeritus, History

B.A., 1966, University of Rhode Island; M.A., 1968; Ph.D., 1972, University of Michigan. (1972-2004)

Morris, Larry W., Professor, Psychology; Department Chair B.A., 1966, Arlington State College; Ph.D., 1969, Vanderbilt University. (1969-2003)

Mueller, Hans G., Professor Emeritus, Economics and Finance A.B., 1955, University of Washington; Ph.D., 1968, Vanderbilt University. (1961-93)

Naylor, Tom L., Professor Emeritus, Music
B.S., 1961, Bob Jones University; M.A., 1962, Appalachian State University; M.M., 1969; D.M., 1973, Indiana University. (1967-98)

Neal, James H., Professor Emeritus, History
B.S., 1958; M.A., 1963, University of Houston; Ph.D., 1971, Vanderbilt University. (1968-99)

Ordoubadian, Reza, Professor, English
B.A., 1954, Teheran University; Graduate Study, Duke University, Vanderbilt University; M.A., 1965; Ph.D., 1968, Auburn University. (1962-89)

Penny, Guy, Professor Emeritus, Health, Physical Education, Recreation, and Safety; Director, The Wellness Center
B.S., 1950; M.Ed., 1958, University of Mississippi; Ed.D., 1970, University of Southern Mississippi. (1970-93)

Penrod, William, Professor Emeritus, Psychology
B.A., 1951, Carson-Newman College; M.S., 1959, University of Miami; Ph.D., 1962, University of Florida. (1970-93)

Phillips, E. Ray, Professor, Mathematical Sciences; Associate Dean, College of Graduate Studies; Interim Dean, College of Basic and Applied Sciences
B.S., 1966, Middle Tennessee State University; M.A., 1968, University of Arkansas; Ph.D., 1971, Purdue University. (1990-2003)

Phillips, Robert E., Associate Professor, Aerospace
B.S., 1962; M.Ed., 1973, Middle Tennessee State University; FAA Airframe and Powerplant Certificate, 1982. (1982-2003)

Porter, T. Coy, Professor, Foreign Languages
B.A., 1944, Harding College; M.A., 1946; Ph.D., 1968, Vanderbilt University. (1964-85)

## Raper, Elmer, Professor, Education

A.B., 1946, University of Chattanooga; M.S., 1950; Ed.D., 1957, University of Tennessee. (1957-74)

Reeder, Ernestine N., Professor Emerita, Human Sciences; Department Chair
B.S., 1959, East Carolina College; M.S., 1962, University of Tennessee; Ed.S., 1972, George Peabody College; Ph.D., 1977, University of Tennessee. (1972-94)

Renn, Walter F., Professor Emeritus, History
B.S., 1958, University of Miami; M.A., 1967; Ph.D., 1970, Florida State University. (1992-2004)

Rogers, Walter B., Professor, Economics and Finance
B.S., 1951, Texas Technological University; M.S., 1953, University of Arizona; Ph.D., 1959, Oklahoma State University. (1981-99)

Rolater, Frederick S., Professor Emeritus, History
A.B., 1960, Wake Forest College; M.S., 1963; Ph.D., 1970, University of Southern California. (1967-2000)

Sakas, Joseph, Associate Professor, Youth Education and School Personnel Services
B.S., 1962; M.A., 1963, Austin Peay State University; Ed.D., 1967, George Peabody College. (1966-84)

Schukert, Michael A., Professor, Aerospace
B.A., 1963, University of Arizona; M.Ed., 1969, University of Florida; Ph.D., 1976, Ohio University. (1988-2000)

Scott, Dan, Professor Emeritus, Chemistry and Physics; Department Chair
B.S., 1950, Middle Tennessee State College; M.A., 1954; Ph.D., 1963, George Peabody College. (1955-92)

Self, Helen H., Assistant Professor, Elementary and Special Education B.A., 1949, University of Alabama; M.Ed., 1962, Auburn University; Ed.D., 1969, University of Alabama. (1972-81)

Sikes, Lewright, Professor Emeritus, History
A.B., 1966, Maryville College; M.A., 1968; Ph.D., 1973, University of Tennessee, Knoxville. (1969-96)

Smith, Patricia H. Grimes, Associate Professor, Educational Leadership B.A., 1959, Hunter College; M.Ed., 1972; M.Ed., 1974; Ed.S., 1976; Ed.D., 1982, Florida Atlantic University. (1998-2003)

Steward, James F., Professor Emeritus, Business Education, Marketing Education, and Office Management
B.S., 1969, Memphis State University; M.A., 1971, George Peabody College; Ed.D., 1982, Vanderbilt University. (1982-2000)

Strobel, Katherine B., Professor Emerita, Health, Physical Education, Recreation, and Safety
B.S., 1952, Delta State Teachers College; M.A., 1954, Texas State College for Women; Ph.D., 1986, Texas Women's University. (1971-96)

Terrell, R. Paul, Professor, Geography and Geology
B.S., 1937, Western Kentucky; M.A., 1941, George Peabody College; Ph.D., 1949, Clark University. (1969-80)

## Thweatt, Joe Mack, Professor Emeritus, Computer Science

B.A., 1961, David Lipscomb College; M.A., 1962, Middle Tennessee State College; Ed.S., 1986, Middle Tennessee State University; Ed.D., 1988, Tennessee State University. (1965-2006)

Todd, Fowler I., Professor Emeritus, Management and Marketing B.S., 1940, Murray State Teachers College; M.A., 1956, George Peabody College; Ph.D., 1965, University of Illinois. (1965-83)

## Trent, Sheri, Professor, Elementary and Special Education

B.S., 1972, Middle Tennessee State University; M.Ed., 1975, University of Mississippi; Ph.D., 1982, George Peabody College. (1989-2007)

VanDervort, Thomas R., Professor Emeritus, Political Science
A.B., 1960, University of Tennessee; M.A., 1962, Tufts University; Ph.D., 1967, University of Tennessee. (1963-98)

Vickrey, Thomas L., Professor, Mathematics and Statistics
B.S., 1952; M.A., 1960, University of Oklahoma; Ed.D., 1968, Oklahoma State University. (1969-90)

Wall, B.J., Associate Professor, Engineering Technology and Industrial Studies
B.S., 1956; M.S., 1973, University of Tennessee; P.E., 1974. (19802000)

Wasson, Woodrow, Professor, Sociology, Anthropology, and Social Work
A.B., 1939; M.A., 1940, Vanderbilt University; B.D., 1942; Ph.D., 1947, University of Chicago; M.L.S., 1967, George Peabody College. (1969-80)

## Wells, Marion R., Professor Emeritus, Biology

B.S., 1960; M.A., 1963, Memphis State University; Ph.D., 1971, Mississippi State University. (1964-2002)

## West, W. Beryl, Professor Emeritus, Psychology

B.S., 1953, West Texas State College; M.Div., 1956; Th.M., 1962, Southwestern Baptist Theological Seminary; M.Ed., 1965; Ed.D., 1969, North Texas State University. (1969-2006)


Whaley, Martha A., Professor, Health, Physical Education, Recreation, and Safety; Department Chair
B.S., 1957; M.A., 1962; Ed.D., 1967, University of Alabama. (19662003)

Wilcox, Sondra Elaine, Professor, Health, Physical Education, Recreation, and Safety
B.S., 1958, David Lipscomb College; M.A., 1963; Ed.S., 1968, George Peabody College; Ed.D., 1976, Boston University. (1963-2003)

Williams, John D., Professor, Elementary and Special Education
B.S., 1943; M.S., 1946, University of Tennessee; Ed.D., 1954, University of Tennessee, Knoxville; Postdoctoral Scholar, University of California, Los Angeles. (1964-91)

Wilson, Linda A., Professor Emerita, Chemistry
B.S., 1971; M.S., 1974; D.A., 1986, Middle Tennessee State University. (1981-2005)

Windham, William Thomas, Professor Emeritus, History; Department Chair
B.S., 1946, Illinois Institute of Technology; M.A., 1950; Ph.D., 1955, University of Alabama. (1955-89)

Wiser, C. Wymer, Professor Emeritus, Biology
B.S., 1945, Harding College; M.A., 1946, George Peabody College; Ph.D., 1956, Vanderbilt University. (1956-95)

Woods, Alvin Edwin, Professor Emeritus, Chemistry
B.S., 1956, Middle Tennessee State College; M.S., 1958; Ph.D., 1962, North Carolina State College. (1961-98)

Wyatt, Robert O., II, Professor, Journalism
B.A., 1968, University of the South; M.A., 1970; Ph.D., 1973, Northwestern University; M.S., 1977, University of Tennessee; M.T.S., 2003, Vanderbilt University. (1979-2006)

## Youree, Beverly W., Professor, Educational Leadership

B.A., 1969, Union University; M.L.S., 1970, George Peabody College; Ed.D., 1984, George Peabody College at Vanderbilt University. (1970-98)


[^0]:    Middle Tennessee State University is a member of the Tennessee Board of Regents system, the sixth largest system of higher education in the nation. The Tennessee Board of Regents is the governing board for this system, which comprises six universities, thirteen community colleges, and twenty-seven area technology centers. The TBR system enrolls more than 80 percent of all Tennessee students attending public institutions of higher education.

    Middle Tennessee State University, in its educational programs and activities involving students and employees, does not discriminate on the basis of race, color, national origin, sex, religion, or age. Furthermore, the University does not discriminate against veterans or individuals with disabilities.

[^1]:    * Offered only in alternate years.

[^2]:    Two of the following four courses
    PSY 5290 Wage and Salary Administration
    PSY 6360 Organizational Change and Development
    PSY 6365 Organizational Surveys and Employee Attitudes and Motivation
    PSY 6380 Work Group Effectiveness

[^3]:    *Note: This graduate program is NOT designed for students who have graduated from the MTSU Department of Recording Industry with a concentration in Production and Technology. Graduates of the MTSU program are encouraged to seek employment in the industry or to pursue a graduate program that offers experiences different from their undergraduate program.

