THE UNIVERSITY OF TENNESSEE

Members Present

Matthew Murray (Chair), Mary Albrecht, Vincent Anfara, Ben Bates, Richard Bennett, Marianne Breinig, Tom Burman, James E. Diamond, David Dupper, Amy Elias, Paul Frymier, Nan Gaylord, Tom George, David Golden, Carolyn R. Hodges, George Hoemann, Stephen Kania, Barbara Klinkhammer, Jan Lee, Karen Levy, Sibyl Marshall, Sally McMillan, Michael Lane Morris, Stefanie Ohnesorg, Mary E. Papke, Masood Parang, Linda Phillips, Jelena Pjesivac-Grbovic, Susan Smith, Eddie Woodruff.

The Graduate Council meeting was called to order by Matthew Murray, Chair, on Thursday, February 01, 2007, at 3:00 p.m. in the 8th Floor Board Room of Andy Holt Tower.

1. Minutes of the Preceding Meeting

The minutes of the November 16, 2006 meeting were approved by Council.

2. Committee Reports

Credentials Committee

Tom Burman, Chair of the Credentials Committee, presented the report from the January 11, 2007 meeting. Council approved the committee recommendations on faculty approved to direct dissertations as presented (Attachment 1). Murray inquired if the committee discussed details regarding the request for change in the bylaws pertaining to the review of probationary tenure-track (but not yet tenured) faculty members for approval to direct dissertations. Burman reported that due to the high volume of applications received for approval to direct dissertations, the committee did not discuss this issue but will review it later.

Curriculum Committee

David Golden, Chair of the Curriculum Committee, presented the report from the January 18, 2007 meeting. Council approved the recommendations as presented (Attachment 2).

3. New Business

No new business was presented.

4. Administrative Reports and Announcements

Graduate Dean's Report

Murray welcomed Carolyn R. Hodges, Dean of the Graduate School, to Graduate Council for her first meeting as Dean. Hodges presented the following items:

- Hodges noted that she is very pleased with the University's administration decision to bring new development and structure to the Graduate School. This decision will involve enhancing existing programs and adding new ones to attract a more diverse and high quality graduate student population.

- The Graduate School will have a new office location later this year. The new location will be on the first floor of the Student Services Building.

- Hodges will be working closely with Robert Holub, Provost, to add new staff to the Graduate School. The Graduate School is searching for a new Thesis/Dissertation Consultant to replace Alan Hollis, who resigned in January.

- A review of computation of GPAs for international graduate applicants is being done. Previous practice has reported academic records in the manner that the international institutions listed them (Previous practice has not allowed reporting in SIS that accurately reflects the high level of achievement of many students.).

- Graduate recruitment will be overseen and coordinated by the Graduate School in cooperation with graduate programs.

- Hodges will focus on providing more funding resources for graduate students. She will work with Provost Holub on this initiative. Also, Hodges will work with Frank Harris, Associate Vice Chancellor for Research, to establish further fellowship funding for prospective students.

- Linda R. Painter, previous Interim Dean of the Graduate School, is in the process of completing the NRC Survey for the University of Tennessee graduate programs. She will share the final report with Graduate Council.

- The Graduate Coordinators'/Directors' Workshop will be held on Wednesday, February 21, 2007, from 1:30 – 3:30 p.m. in the Shiloh Room of the University Center.

- The competition for Graduate School Fellowships has been announced. The deadline for receipt of all applications is March 9 with announcement of fellowship recipients on March 28, 2007.

- The Graduate Hooding Ceremony will be held, Thursday, May 10, 2007, at 6:00 p.m. at the Knoxville Convention Center.

- Provost Holub and Dean Hodges will be looking at initiatives to develop new programs and joint programs with other institutions.

- The new Vice Provost for Academic Operations is responsible for academic program reviews. Hodges wants to ensure that the Graduate School is involved in those reviews.

- Hodges will be meeting with academic department heads and graduate coordinators/directors to discuss graduate education issues on campus and to learn more about the programs.

Murray asked Dean Hodges about the status of UTK graduate assistantships regarding stipend levels, comparisons across universities, and changes in the allocation of assistantships/waivers across programs and time. His concern is related to how funding issues may have affected graduate enrollment. Hodges responded that she and the campus administration will be reviewing this issue.

Graduate Deans' Group

Mary E. Papke, Chair, presented items that were discussed during the January 11, 2007 meeting. The group revisited the discussion of the definition of Graduate Program Coordinator/Director. Based on that discussion, Papke will present a revised definition for further deliberation. The Graduate Deans' Group will meet with Provost Holub during the April 5, 2007 meeting. The status on the report on recommendations concerning post doctoral appointments was discussed. The report had been sent to the Chancellor's Office by Anne Mayhew.

Graduate Student Senate

Eddie Woodruff, President of the Graduate Student Senate, reported the following items related to the group's activities:

- Graduate Student Senate website has been updated at http://web.utk.edu/~gss/ .
- Graduate Student Travel Awards were selected on January 19, 2007.
  - *175 applications were submitted with requests totaling $67,000;*
  - *75 applications totaling $15,300 were awarded;*
  - *Approximately $8,000 in funding will be available for the Summer 2007 Travel Award processes.*
- The 15th Annual Love Your Libraries Fun Run will be held Saturday, February 24, 2007, beginning at 8:30 a.m. Refer to the website for further information: http://web.utk.edu/~gss/fun_run.html .

Graduate Council Chair

Murray reported the following information items:

- The Faculty Executive Senate Committee discussed implementation of an admission policy granting preference to Tennessee residents.
- Provost Holub will be reviewing the curriculum submission processes and evaluating ways to streamline those.

5. Items from the floor

There were no items presented from the floor.

The next meeting of the Graduate Council will take place on March 8, 2007 at 3:00 p.m. in the 8th Floor Board Room of Andy Holt Tower.

With no further business, the meeting was adjourned at 4:30 p.m.

Respectfully submitted,

Tammy L. Barnhart
Secretary to the Graduate Council

ATTACHMENT 1
FACULTY APPROVED TO DIRECT DISSERTATIONS

INITIAL Approval of Tenure-Track Faculty without Tenure (Probationary)
Approved Until Tenure

Cooper, Matthew	Psychology
Jurat-Fuentes, Juan	Entomology & Plant Pathology
Moore, Todd	Psychology
Owens, Gina	Psychology
Szymanski, Dawn	Psychology

CONTINUING Approval of Faculty with Tenure
Approved for 10 Years until February 2017

Benson, Roberto	Materials Science & Engineering
Bhat, Gajanan	Materials Science & Engineering
Dahotre, Narendra	Materials Science & Engineering
Howes, Laura	English
Mee, Robert	Statistics, Operations & Management Science
Pedraza, Anthony	Materials Science & Engineering
Stillman, Robert	English

INITIAL/CONTINUING Approval of Non Tenure Faculty/Staff
Approved for 5 Years until February 2012

Chesler, Elissa	Life Sciences – Genome Science
Hettich, Robert	Life Sciences – Genome Science
Myles, Dean A. A.	Life Sciences – Genome Science
VanBerkel, Gary	Life Sciences – Genome Science

ATTACHMENT 2 - CURRICULUM

COLLEGE OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES

All changes effective Fall 2007

I. COURSE CHANGES

DEPARTMENT OF ANIMAL SCIENCE

(113) Animal Science

ADD SECONDARY CROSS-LISTED COURSES

536 Ecology of Grazing Land Systems (3) *(See Plant Sciences 536.)*

DEPARTMENT OF BIOSYSTEMS ENGINEERING AND SOIL SCIENCE

(196) Biosystems Engineering

ADD AND REQUEST APPROVAL FOR VARIABLE TITLE

562 Selected Topics in Natural Resource Engineering (3) Topics in engineering for the characterization, conservation, and protection of soil, water, and air resources in spite of human activities such as off-road vehicle use, agriculture, mining, construction and land development, or waste application.
Repeatability: May be repeated. Maximum 12 hours.

572 Selected Topics in Machinery, Control, and Instrumentation Systems (3) Topics in the engineering of machinery, sensors, and data collection and analysis systems, and the use of these systems in ways that enhance productivity, increase efficiency, boost economic return, and protect environmental resources.
Repeatability: May be repeated. Maximum 12 hours.

582 Selected Topics in Processing (3) Topics in the engineering of biological and physical processes and of biological systems, from the production of raw materials through to high-demand value-added products.
Repeatability: May be repeated. Maximum 12 hours.

DROP

541 Principles of Compost Engineering (3)
545 Monitoring Hydrologic Phenomena (3)
636 Geospatial Methods for Environmental Research (3)

DROP

550 Selected Topics (1-3)

REVISE TO ADD RECOMMENDED BACKGROUND

431 Bioprocess Engineering (3)
Recommended Background: Thermodynamics, heat and mass transfer.

(345) Environmental and Soil Sciences

REVISE TITLE

444 Environmental Soil Physics (3)

514 Advanced Soil Physics (3)

DEPARTMENT OF ENTOMOLOGY AND PLANT PATHOLOGY

(341) Entomology and Plant Pathology

ADD

555 Apterygote Insects (2) Comprehensive study of the five primitively wingless groups of hexapods, including evolution, biology, behavior, and taxonomy; methods of preservation, photomicrography, and videography; collection and field trips required.

613 Fungal Epidemiology and Disease Control (2) Quantitative epidemiology and propagule dispersal of fungal plant pathogens; disease assessment strategies and modes of action of fungicides.
Contact Hour Distribution: 2 hours and 2 labs weekly for 7 weeks.
Registration Restriction(s): Minimum student level – doctoral.

628 History of Phytopathology (1) Study of how plant diseases have impacted human history and of the people who pioneered the science of plant pathology.
Contact Hour Distribution: 3 hours for five weeks.

DROP

606 Advanced Topics in Bioactive Natural Products (1-3)

REVISE TITLE, DESCRIPTION, AND ADD REGISTRATION RESTRICTION

513 Fungal Epidemiology and Disease Control (2) Quantitative epidemiology and propagule dispersal of fungal plant pathogens; disease assessment strategies and modes of action of fungicides. *(Same as Plant Sciences 513.)*
Registration Restriction(s): Not open to PhD students.

REVISE TITLE

550 Molecular Epidemiology (3)

REVISE CREDIT HOURS

521 Plant Virology (2)

DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY

(390) Food Science and Technology

DROP

510 Instrumental Analysis of Food (3)

REVISE TO ADD CREDIT RESTRICTION

541 Food Engineering (3)
Credit Restriction: Students cannot receive credit for both 441 and 541.

DEPARTMENT OF FORESTRY, WILDLIFE AND FISHERIES

(398) Forestry, Wildlife and Fisheries

DROP

410 Wildlife Habitat Evaluation and Management (3)

REVISE CREDIT HOURS AND CREDIT RESTRICTION

520 Natural Resource Issues at International Level (3)
Credit Restriction: Students cannot earn credit for Forestry, Wildlife and Fisheries 420 and 520.

(993) Wildlife and Fisheries Science

ADD

533 Amphibian Ecology and Conservation (3) An in-depth examination of amphibian life-history strategies, community interactions, and hypothesized mechanisms of amphibian declines. Amphibian monitoring, conservation and management techniques also are covered.
Credit Restriction: Student cannot receive credit for both 433 and 533.
(DE) Prerequisite(s): Forestry 215 and Biology 250.
Registration Restriction: Minimum student level – graduate..

CLARIFY REPEATABILITY

515 Seminar in Avian Ecology and Management (1-2)
Repeatability: Not repeatable. May be taken once for 1-2 hours.

DEPARTMENT OF PLANT SCIENCES

(791) Plant Sciences

DROP

521 Flowering Physiology (1)
522 Drought Physiology (1)

ADD

537 Plant Nutrition (3) Effects of plant nutrition on biochemical and physiological processes in plants.
(DE) Prerequisite(s): Biochemistry and Cellular and Molecular Biology 321 and Environmental and Soil Sciences 210.

569 Teaching Practicum (1-3) Supervised experience in teaching. May involve preparation of lectures and teaching aids, preparation and supervision of laboratory exercises, evaluation of student performance, and for second-year graduate students, responsibility for course delivery.
Repeatability: May be repeated. Maximum 3 hours.
Registration Permission: Consent of instructor.

REVISE TITLE OF SECONDARY CROSS-LISTED COURSE

513 Fungal Epidemiology and Disease Control (2) (*See Entomology and Plant Pathology 513.)*

REVISE PRIMARY COURSE TO ADD CROSS-LISTING

536 Ecology of Grazing Land Systems (3) (*Same as Animal Science 536.)*

REVISE TITLE AND DESCRIPTION

532 Environmental Plant Ecophysiology (3) Physiological and ecological principles of plants and the relation of those principles to plant responses to the environment. Water relations, gas exchange, stress physiology, seed biology, plant competition, plant defense.

REVISE TITLE AND DESCRIPTION, ADD RECOMMENDED BACKGROUND, REMOVE (DE) PREREQUISITES

551 Quantitative Plant Genetics (3) Gene and genotype frequencies, genetic variance, correlation among relatives, estimation of response to selection.
Recommended Background: Courses in genetics and statistics.

ADD FOR GRADUATE CREDIT

421 Native Plants in the Landscape (3)

430 Greenhouse Management (3)

REVISE CREDIT HOURS

446 Horticultural Therapy (3)

480 Advanced Landscape Design (4)

REQUEST APPROVAL FOR VARIABLE TITLE

501 Special Topics in Plant Sciences
593 Problems in Plant Sciences

II. PROGRAM CHANGES

DEPARTMENT OF AGRICULTURAL ECONOMICS

REVISE AGRICULTURAL ECONOMICS MAJOR (MS)

On page 40 of the 2006-2007 *Graduate Catalog*, right column, Agribusiness concentration heading, revise next to last sentence to change 6 hours of internship to 3 hours of internship.

REVISE AGRICULTURAL ECONOMICS CONCENTRATION, NON-THESIS OPTION

On page 40 of the 2006-2007 *Graduate Catalog*, right column, Agricultural Economics concentration non-thesis option, revise next to last sentence: change 30 hours to 27 hours and change 6 hours to 9 hours.

DEPARTMENT OF ANIMAL SCIENCE

REVISE OPENING PARAGRAPH AND ADD ADMISSION TEXT

On page 41 of the 2006-2007 *Graduate Catalog*, delete first two opening paragraphs and replace with:

The Department of Animal Science offers graduate programs leading to the Master of Science and Doctor of Philosophy with a major in animal science. Areas of emphasis are animal physiology (ruminant and monogastric nutrition, reproduction and stress) and animal health and well-being (immunology, genetics, microbiology, and pre-harvest food safety) with orientation towards agriculturally important species. See the department's Web site for specific research programs. Additional information contact the graduate liaison.

Admission
For admission to the program, a student must have obtained a 3.0 grade point average on a 4.0 scale (or a 3.0 each term during the junior and senior years) in a completed undergraduate degree program in animal science or in a related area. Applicants to the PhD program normally should have completed a master's degree prior to beginning the doctoral program. In addition, applicants must submit

- Scores from the general section of the Graduate Record Exam.
- A completed animal science academic and personal information form highlighting educational and career goals and relevant work experience.
- Completed animal science rating forms submitted by at least three individuals familiar with the applicant's scholastic ability and professional potential.

Admission to the program will be contingent upon faculty evaluation of the applicant's undergraduate or graduate grade point average, Graduate Record Examination scores, rating forms, educational and career goals, relevant work experience, and scores from the Test of English as a Foreign Language (TOEFL), if applicable. PhD students must be accepted by a major professor, chosen by consulting with the department head and faculty, before being admitted. Prerequisite courses may be required if the student has insufficient undergraduate background. If the student has an unsatisfactory grade point average, acceptance may be on a probationary (non-degree) basis and a minimum of 9 hours of graduate coursework must be completed the first term with a minimum grade point average of 3.0 for admission to the program.

REVISE ANIMAL SCIENCE MAJOR (MS)

On page 41, second column, delete Admission heading and text. Under Requirements heading, delete current text and replace with

The program requires the writing of a thesis based on original research, a minimum of 24 hours of graduate coursework, plus at least 6 hours of thesis research. Coursework must include

- At least 14 hours in courses numbered at or above the 500 level.
- 1 hour of Agriculture and Natural Resources 512.
- At least 3 hours in statistics chosen from courses approved for use in the intercollegiate graduate statistics program (IGSP).
- All first- and second-year Master of Science students are required to enroll in Animal Science 596 each spring term.

The remainder of coursework will be selected jointly by the student and the major professor depending on the student's area of emphasis and professional objectives. Student's graduate committee will approve the student's coursework and research proposal, as well as conduct the final oral examination, which consists of a comprehensive oral examination and a defense of the thesis.

REVISE ANIMAL SCIENCE MAJOR (PHD)

On page 41 of the 2006-2007 *Graduate Catalog*, Requirements heading, delete current text and replace with

Requirements
The program requires a written dissertation based on original research, at least 48 hours of graduate coursework beyond the Bachelor of Science degree, plus at least 24 hours of doctoral research. Coursework must include the following

- At least 24 hours credit at the 500 and 600 level, of which a minimum of 6 hours must be at the 600 level.
- A minimum of 16 hours in related fields outside of animal science.
- A minimum of 1 hour of Agriculture and Natural Resources 512 in addition to that required at the Master of Science level.
- Animal Science 696 each spring term for first- and second-year doctoral students.
- At least 6 hours of statistics courses approved for the Intercollegiate Graduate Statistics Program (IGSP).

The student and major professor select the program of study depending on the student's area of emphasis and professional goals. The student's graduate committee approves the program of study and dissertation research proposal, as well as conducts the comprehensive written and oral examination and the dissertation defense examination.

DEPARTMENT OF BIOSYSTEMS ENGINEERING AND SOIL SCIENCE

BIOSYSTEMS ENGINEERING MAJOR (PHD)

√ DROP CONCENTRATIONS

Agricultural Electrical and Electronic Systems
Agricultural Power and Machinery
Agricultural Structures and Environment
Food and Process Engineering
Soil and Water Conservation Engineering

REVISE BIOSYSTEMS ENGINEERING MAJOR (MS) TO ADD NON-THESIS OPTION

On page 42 of the 2006-2007 *Graduate Catalog*, delete current text and replace with

The Master of Science degree, biosystems engineering major, has both thesis and non-thesis options. Students are required to choose between these options in their first semester of study, in consultation with their major professor. Once an option is selected, it may only be changed with written approval of both the major professor and department head.

Requirements
Thesis Option
Applicants accepted into the program must complete at least 30 hours to earn a degree. Of these 30 hours, 20 must be in courses numbered 500 or above (6 hours of thesis plus 14 hours of other courses). Biosystems Engineering 503 must be taken three times during the course of the program, the last of which must be in the student's final semester before graduation. Other specific requirements for the 30 hours are

	Hours Credit
Biosystems Engineering 503 (3 times – 1 hour), 519, 543, and other major subject coursework	12
[1]Coursework in computational methods	6
Program Electives	6
Thesis 500	6
	Total 30

[1]Mathematics, computer science, statistics, or any course containing appropriate computational components that may be approved by the department.

In addition to completing the 30 hours, master's students must pass a final oral examination covering the thesis, related areas, and graduate coursework.

Non-Thesis Option
A non-thesis option in biosystems engineering is available to qualified students. Applicants accepted into the program must complete at least 33 hours to earn a degree. Of these 33 hours, 22 must be in courses numbered above 500. Biosystems Engineering 503 must be taken three times during the course of the program, the last of which must be in the student's final semester before graduation. Other specific requirements for the 33 hours are listed below.

	Hours Credit
Biosystems Engineering 503 (3 times-1 hour), 519, 543 and other major subject coursework	12
[1]Coursework in computational methods	6
Program electives	6
Coursework in special emphasis area	6
Capstone Experience (project and report, typically 530)	3
	Total 33

[1]Mathematics, computer science, statistics, or any course containing appropriate computational components that may be approved by the department.

In addition to completing the 33 hours, non-thesis students must pass a comprehensive written final examination covering the graduate program, including the capstone experience. At the discretion of the candidate's committee, an oral examination may also be required.

The advisory committee approves the research problem. Satisfactory completion of this requirement requires a written, original research report that is acceptable to the student's committee.

REVISE ENVIRONMENTAL AND SOIL SCIENCES MAJOR (MS) – THESIS OPTION

On page 43 of the 2006-2007 *Graduate Catalog*, right column, thesis option, showcase footnote 2, revise to read

[2]Courses within the major (excluding 500-level courses numbered 503 and below) 9

REVISE PLANT, SOILS, AND INSECTS MAJOR (PHD) - ENVIRONMENTAL AND SOIL SCIENCES CONCENTRATION

On page 44 of the 2006-2007 *Graduate Catalog*, Requirements heading, revise 2nd sentence to remove the words "and at least half of the committee must hold teaching appointments." The sentence now ends after the word Council.

On page 44 of the 2006-2007 *Graduate Catalog*, Requirements heading, 2nd paragraph, 2nd sentence, delete the following parenthesis and text (numbered 503 or higher) from the middle of the sentence.

DEPARTMENT OF ENTOMOLOGY AND PLANT PATHOLOGY

REVISE PLANTS, SOILS, AND INSECTS MAJOR (PHD)

On page 46 of the 2006-2007 *Graduate Catalog*, Requirements heading, 1st paragraph, revise 2nd sentence to remove the words "and at least half of the committee must hold teaching appointments." The sentence now ends after the word Council.

DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY

REVISE FOOD SCIENCE AND TECHNOLOGY MAJOR (MS)

On page 47 of the 2006-2007 *Graduate Catalog*, Requirements heading, Thesis Option, 3rd bullet, remove last sentence (Completion of 510 or equivalent is also required.)

DEPARTMENT OF PLANT SCIENCES

On page 49 of the 2006-2007 *Graduate Catalog*, insert catalog text

MASTER OF LANDSCAPE ARCHITECTURE
LANDSCAPE ARCHITECTURE MAJOR

This program is pending approval from the Tennessee Higher Education Commission. Students will be admitted to the major should the program be approved.

The Master of Landscape Architecture is an intercollegiate program composed of faculty from the College of Architecture and Design, the College of Agricultural Sciences and Natural Resources, and related colleges and disciplines. Faculty in the College of Architecture and Design and the College of Agricultural Science and Natural Resources are responsible for the core curriculum. The first professional degree (MLA Track I) is largely designed to prepare students as critically engaged and well-trained practitioners. The post-professional degree (MLA Track II) provides opportunities for research-oriented studies located in subdisciplines as well as self-directed research in alternative areas of interest. (For a full program description, see Landscape Architecture in the College of Architecture and Design section of this catalog.)

REVISE PLANT SCIENCES MAJOR (MS)

On page 49 of the 2006-2007 *Graduate Catalog*, Admission heading, 2nd paragraph, remove next to last sentence and replace with:

Successful applicants will usually score above the 50th percentile on the verbal, quantitative and analytical writing sections of the Graduate Record Examination.

On page 49 of the 2006-2007 *Graduate Catalog*, Requirements heading, 2nd bullet, first sentence, delete course 510.

REVISE PLANTS, SOILS, AND INSECTS MAJOR (PHD)

On page 50 of the 2006-2007 *Graduate Catalog*, Requirements heading, 2nd paragraph, revise 2nd sentence to remove the words "and at least half of the committee must hold teaching appointments." The sentence now ends after the word Council.

On page 50 of the 2006-2007 *Graduate Catalog*, Requirements heading, 3rd paragraph, delete second and third sentences and replace with

A candidate for the doctoral degree must complete a minimum of 24 hours of graduate coursework beyond the master's degree. Candidates not having a master's degree must complete a minimum of 48 hours of graduate coursework beyond the baccalaureate degree.

COLLEGE OF ARCHITECTURE AND DESIGN

All changes effective Fall 2007

I. COURSE CHANGES

- ADD NEW ACADEMIC DISCIPLINE AND COURSES

(596) Landscape Architecture

500 Thesis (1-15)
Grading Restriction: P/NP only.
Repeatability: May be repeated.

503 Landscape Architecture: Histories and Theories I (3) Survey of landscape history and theory from pre-history to approximately 1500 in Europe, Asia, and the Americas. Examination of theories, land forms, settlement patterns, in cultural and historical contexts.
Registration Restriction(s): Master of Landscape Architecture – landscape architecture major.

504 Landscape Architecture: Histories and Theories II (3) Survey of landscape history and theory from approximately 1500 to the present in Europe, Asia, and the Americas. Examination of theories, land forms, settlement patterns, in cultural and historical contexts.
(DE) Prerequisite(s): 503.

511 A Cultural History of Regional Public Policy and the Land (3) Historical, cultural, and theoretical perspectives of Regional Public Entities (i.e., Tennessee Valley Authority, Department of Energy, National Park Service, U.S. Forest Service) and their policies and impacts on the land. Case studies and site visits.

512 Contemporary Landscape Architecture Design and Discourses (3) Case studies of existing and emerging trends in landscape design and theory.

513 Strategies and Case Studies in Landscape Stewardship and Restoration Ecology (3) Case studies of historical and emerging strategies and techniques of the preservation of various scales of landscapes.

514 Studies in Emerging Global Strategies of Practice (3) Case studies in varying scales and types of international professional landscape architecture practices.

515 Directed Readings in Landscape Architecture (3) Directed readings with faculty.
Registration Permission: Consent of program coordinator required.

520 Visualization/Representation II (3) Advanced exploration of drawing as a means of visual thinking and method of communication, addressing perceptual phenomenon. Includes further development of analog methodologies while focusing on digital techniques with specific relationships to large scale projects and portfolio production.
(DE) Prerequisite(s): Plant Sciences 380.

531 Advanced Landscape Architecture Construction (3) Documentation of landscape, hardscape, and architectural elements in the landscape with an emphasis on appropriate design and detailing for sustainability. Includes site engineering elements and principles.
(DE) Prerequisite(s): Plant Sciences 350.

540 Planting Design (3) Analysis of plant forms, function and composition. Problems faced in design of small scale areas with emphasis on orientation, arrangement and use.
(DE) Prerequisite(s): Plant Sciences 220.

541 Landscape/Site Design I (3) Introduction to basic contour mapping and cartographic practices. Engages cultural, historical, and conceptual issues. Techniques and design of natural terrain. Focus on rural (non-urban) settings. Physical and mechanical properties of soils, theory of compaction, strength of soils, analysis of homogeneous slopes.
Registration Restriction(s): Master of Landscape Architecture – landscape architecture major.

542 Landscape/Site Design II (3). Techniques, concepts, and practices of landscape and garden design in an urban (non-rural) setting. Engages cultural, historical, and conceptual issues.
(DE) Prerequisite(s): 541.

543 Landscape Architecture Design I (6) Fundamentals of landscape design exploring basic themes/issues of inhabitation, space-making and constructing cultural identities. Studio work focuses on a range of explorations from small- to medium-scale projects using a mixture of analog and digital media.
(DE) Prerequisite(s): 542.

544 Landscape Architecture Design II (6) Focus on large scale community and site planning and land use issues. Particular emphasis on both urban and rural development through sustainable design for both human health and natural environments. Exploration of topical/thematic issues using a mixture of analog and digital media.
(DE) Prerequisite(s): 541.

545 Landscape Architecture Design III (6) Advanced studio with urban design focus.
(DE) Prerequisite(s): 542.

560 Professional Practices (3) Management and organizational theories and practices for delivering professional design services: historical perspective of the profession in the United States; assessment of building and landscape industries and their influences on practice; analysis of basic management functions within professional firms, legal and ethical concerns/imperatives confronting contemporary practitioners, introduction to special obligations and privileges of design professionals.
(DE) Prerequisite(s): 542.

570 Capstone Studio (6) Advanced, thematically-based (non-thesis) studio.
(DE) Prerequisite(s): 543.

580 Thesis Preparation/Programming (3) Research, planning, and preparation of thesis document under supervision of candidate's thesis committee in anticipation of thesis design studio.
(DE) Prerequisite(s): 543.

593 Independent Study in Landscape Architecture (1-9) Independent study on an issue of mutual interest between the student and faculty member.
Repeatability: May be repeated. Maximum 15 hours.
Registration Permission(s): Consent of instructor and approval of graduate program in landscape architecture.

(133) Architecture

ADD

535 Presentation Design I (3) Basic techniques and understanding of graphic presentation design within the profession of architecture. Addresses fundamental design principles, page layout, image manipulation and typography, employing computer software applications. Conducted through lectures, assigned projects, assigned readings, labs, exams and/or critiques.
(DE) Prerequisite: 231.
Registration Permission: Consent of instructor.

536 Presentation Design II (3) Advanced techniques and understanding of graphic presentation design within the profession of architecture. Addresses document design, layout and binding, image manipulation and typography, employing computer software applications. Conducted through lectures, assigned projects, assigned readings, labs, exams and/or critiques.
(DE)Prerequisite: 535.
Registration Permission: Consent of instructor.

REVISE REPEATABILITY CLARIFICATION AND ADD REGISTRATION PERMISSION

591 Foreign Study (1-9)
Repeatability: May be repeated. Maximum 12 hours.
Registration Permission(s): Consent of instructor and approval of graduate program in architecture.

592 Off-Campus Study (1-9)
Repeatability: May be repeated. Maximum 12 hours.
Registration Permission(s): Consent of instructor and approval of graduate program in architecture.

593 Independent Study (1-9)
Repeatability: May be repeated. Maximum 15 hours.
Registration Permission(s): Consent of instructor and approval of graduate program in architecture.

REVISE TO ADD REGISTRATION RESTRICTION

521 Principles of Architectural Form (3)
Registration Restriction(s): Master of Architecture – architecture major.

II. PROGRAM CHANGES

REVISE COMPLETE CATALOG ENTRY FOR COLLEGE IN 2007/2008 GRADUATE CATALOG

On page 51 of the 2006/2007 *Graduate Catalog*, revise to

The College of Architecture and Design offers, along with professional undergraduate programs in architecture and interior design, a professional graduate program in architecture and a new intercollegiate graduate program in landscape architecture, the latter anticipating students beginning in 2008. All programs in architecture and interior design are fully accredited enabling graduates to pursue licensure throughout the United States. With the only professionally accredited architecture program in the state, the College of Architecture and Design has a strong commitment to the integration of teaching, research, creative activity and service.

Once fully approved by the University of Tennessee and the Tennessee Higher Education Commission, the college will seek accreditation for the new intercollegiate landscape architecture program. Students graduating from this program can anticipate receiving an accredited degree retroactively after accreditation has been granted through the Landscape Architectural Accreditation Board (LAAB).

The college offers graduate degrees in architecture and landscape architecture. Each degree program offers a first professional degree (required for licensure), and post-professional, research-focused options drawing upon the expertise of faculty across the college and the larger university community. The first professional degree programs are designed to accommodate students who come from a variety of academic backgrounds and interests. This includes students who have had little or no previous formal study in either field as well as students holding undergraduate non-professional (4+2) degrees in the disciplines. These students may receive advanced standing in the programs.

All programs in the College of Architecture and Design provide a design-focused education centered on the mission of the college to educate future design professionals. In addition to a high-quality, on campus education, the college offers a wide array of study abroad and off-campus opportunities.

The School of Architecture is proud of its long history and accomplishments and celebrated its 40th birthday in 2005. The college resides in an award-winning facility, providing studio space for every student, a fully equipped woodshop, and state of the art digital technology including laser cutters, 3-D digital modeling equipment, computer pools and an image center for printing and digital reproduction needs. The college has a long-standing tradition to use the state as a laboratory for applied research with a direct benefit for the citizens of Tennessee. Facilities for research, creative activity and service include the Nashville Civic Design Center in collaboration with Vanderbilt University, the Urban Program for Sustainable Design Education (UPSIDE), the Knoxville Downtown Studio and the Green Vision Studio.

The offices of the graduate programs and college administration are located at 224 Art and Architecture Building.

√ ADD MAJOR AND DEGREE
LANDSCAPE ARCHITECTURE MAJOR – MASTER OF LANDSCAPE ARCHITECTURE DEGREE

On page 51 of the 2006-2007 *Graduate Catalog* before entry of School of Architecture, add:

LANDSCAPE ARCHITECTURE PROGRAM

[Program Director/Coordinator and list of faculty members from the College of Architecture and Design, the College of Agricultural Sciences and Natural Resources, and other colleges as required will be provided at catalog proof time]

Master of Landscape Architecture
Landscape Architecture Major

(This program is pending approval from the Tennessee Higher Education Commission. Students will be admitted to the major should the program be approved.)

Landscape Architecture is an intercollegiate program composed of faculty from the College of Architecture and Design, the College of Agricultural Sciences and Natural Resources, and related colleges and disciplines. Faculty in the College of Architecture and Design and the College of Agricultural Science and Natural Resources are responsible for the core curriculum.

The landscape architecture major offers two tracks. Track 1 (first professional degree track) is largely designed to prepare students as critically engaged and well-trained practitioners. This track is for students seeking the first-professional degree who already hold a bachelor's degree or an advanced degree in another field. Track 1 offers two programs of study.

- A 3-year program for students who come from a variety of academic backgrounds and interests, including those with little or no previous formal study in landscape architecture.
- A 2-year program for applicants holding four-year degrees from pre-professional landscape architecture or landscape design programs.

Track 2 (post-professional degree track) is for students with an accredited first-professional degree who seek to develop an area of specialization. This track provides opportunities for research-oriented studies in subdisciplines, as well as self-directed research in alternative areas of interest.

Retention in the program is contingent upon evidence of satisfactory progress toward the degree. Individual student progress will be reviewed each semester by the program coordinator. Any questions regarding progress will be reviewed by the Program Coordination Committee.

Mission Statement
The core values of the Master of Landscape Architecture Program are based on a design-centered curriculum that promotes ethical imperatives, critical thinking, and sustainable practices. These values are expressed in the cultural, political, and regional realities of designed and naturally occurring landscapes and the responsibility of landscape stewardship. The program is committed to preparing students for leadership roles in the professional practice of landscape architecture, and in related career paths.

Admission
In addition to meeting the Graduate School's minimum requirements, the following specific admission requirements to the landscape architecture major must be met.

For MLA Track 1 applicants, a bachelor's degree with a 3.0 GPA from an accredited college or university is required. International applicants must have an equivalent four-year degree and 3.0 GPA. Candidates with a GPA less than 3.0 may be considered for conditional admission when evidence of exceptional promise is identified. The program requires an essay, three letters of recommendation and a portfolio illustrating evidence of visual creativity and/or graphic capabilities. A personal onsite interview is desirable but not mandatory. For applicants to the 2-year program with a bachelor's degree from a 4-year pre-professional landscape architecture or landscape design programs a portfolio showing prior design work is required.

For MLA Track 2 applicants, a Bachelor of Landscape Architecture degree from an LAAB accredited program or foreign equivalent is required. Candidates with a GPA less than 3.0 may be considered for conditional admission when evidence of exceptional promise is identified. Submission of a portfolio, essay, and three letters of recommendation are required. A personal onsite interview is desirable but not mandatory.

The general portion of the Graduate Record Examination is required of all applicants. Applicants should take the GRE at least one semester in advance of application for admission.

Requirements
Track 1 (3-year program)
Requires a minimum of 19 hours of undergraduate preparation and 84 hours of graduate coursework, taking approximately 3 years of full-time study.

Track 1 (2-year program)
Requires a minimum of 60 hours of graduate-level coursework.

Both programs require 6 hours of Landscape Architecture 570 or 500, the latter with a public presentation and oral defense of the thesis. Five directed electives must be chosen from an approved list of courses in the following categories – materials, techniques and technologies; history and theory/criticism; visualization/representation; and environmental stewardship.

No more than 3 directed electives may be in a single category. A minimum of 12 hours of directed electives in the discipline or open electives must be taken at the 500 level.

Track 2
Requires a minimum of 30 semester hours of graduate coursework and requires 6 hours of Thesis 500 with a public presentation and oral defense of the thesis.

SCHOOL OF ARCHITECTURE

REVISE COMPLETE CATALOG ENTRY FOR SCHOOL OF ARCHITECTURE IN 2007/2008 GRADUATE CATALOG

On page 52 of the 2006/2007 *Graduate Catalog*, revise to:

Master of Architecture
Architecture Major

The graduate program in architecture defines architecture broadly as the creation of human habitats. Architecture at Tennessee is more than the design of individual buildings. Rather, it is dedicated to the shaping of community in the fullest sense of the word. The curriculum reflects the program's recognition that architecture is fundamentally shaped by environmental and cultural forces. As such, the humanities, social sciences, arts, and applied sciences are all brought to bear on the discipline of architecture. It is through design that such issues can be thoughtfully explored and given physical

form. Thus, design plays a central role in this comprehensive and creative process. The college is committed to helping students obtain the requisite knowledge and skills needed to enter and fully participate in the profession of architecture. At the same time, it attempts to maintain a wide vision and critically reach beyond the profession without losing contact with the realities of everyday architectural practice. Designed to be challenging and provocative, the program allows students the opportunity to develop discernment and judgment, enabling them to find their own voices as designers who are accountable contributors to the built environment.

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards. Master's degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree, that when earned sequentially, constitute an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

The Master of Architecture program at the University of Tennessee received a full 6-year accreditation as a result of its last NAAB accreditation review.

The School of Architecture offers two tracks leading to the Master of Architecture degree. Track 1 is for students seeking the first-professional degree who already hold a bachelor's degree or an advanced degree in another field. Track 2 is for students with an accredited first-professional degree who seek to develop an area of specialization. Contact the school for additional information.

Admission
In addition to meeting the Graduate Council's minimum requirements, the following specific admission requirements to the Master of Architecture program must be met.

For Track 1 applicants, a bachelor's degree with a 3.0 GPA from an accredited college or university is required. International applicants must have an equivalent four-year degree and 3.0 GPA. Candidates with a GPA less than 3.0 may be considered for conditional admission when evidence of exceptional promise is identified. Undergraduate work must include at least 12 semester hours of humanities, a basic understanding of physical principles, systems and analytical procedures and an understanding of mathematical principles and analytical procedures, as well as a general understanding of the use of computers. The school requires an essay and three letters of recommendation. Submission of a portfolio illustrating evidence of visual creativity and/or graphic capabilities is highly recommended. A personal onsite interview is desirable but not mandatory. For those applicants from accredited 4+2 architecture programs, a portfolio is required in addition to the above requirements.

For Track 2 applicants, a Bachelor of Architecture degree from an NAAB accredited program or foreign equivalent is required. Candidates with a GPA less than 3.0 may be considered for conditional admission when evidence of exceptional promise is identified. Submission of a portfolio, an essay, and three letters of recommendation are also required. A personal onsite interview is desirable but not mandatory.

The general portion of the Graduate Record Examination is required of all applicants. Applicants should take the GRE at least one semester in advance of application for admission.

Requirements
Track 1 requires a minimum of 48 semester hours of undergraduate preparation and 60 semester hours of graduate coursework, taking approximately three and a half years of full-time study. A minimum of 4 hours of architectural electives or approved electives from another discipline must be taken at the 500 level or above.

Track 2 requires a minimum of 30 semester hours of graduate coursework.

Both tracks require 6 hours of Thesis 500 with a public presentation and oral defense of the thesis.

Retention in the program is contingent upon evidence of satisfactory progress toward the degree. Student's progress will be reviewed each semester by the graduate program head. Any questions regarding progress will be reviewed by the Graduate Program Advisory Committee.

COLLEGE OF ARTS AND SCIENCES

All changes effective Fall 2007

I. COURSE CHANGES

SCHOOL OF ART

(139) Art History

ADD NEW PRIMARY COURSE FOR GRADUATE CREDIT AND CROSS-LIST

470 African-American Art (3) Traces the artistic and social legacy of African-American art from the eighteenth century to the present day. Specifically, this class will focus on the ways in which artists used creativity to confront, deny, or complicate understandings of racial identity and racism. To this end we will look at a broad scope of artistic production including painting, sculpture, photography, multi-media, fiction writing, and video art. *(Same as Africana Studies 470.)*

DROP

471 History of North American Art (3)

REVISE TITLE AND DESCRIPTION

473 19th-Century American Art (3) Examines painting, sculpture, and print culture from the Revolutionary War to the turn of the 20th century.

DEPARTMENT OF AUDIOLOGY AND SPEECH PATHOLOGY

(160) Audiology and Speech Pathology

ADD

573 Pediatric Audiology for Education Professionals (3) Basic principles in the identification and management of hearing loss in infants and children; social and psychological concomitants of auditory disorder; genetic hearing loss and other high-risk types of impairment related to hearing; educational alternatives and state and federal guidelines.
Credit Restriction: Students with credit in 574 cannot receive credit for 573.
(DE) Prerequisite(s): 473.

REVISE TITLE AND DESCRIPTION, ADD PREREQUISITE, REGISTRATION RESTRICTION, AND COMMENT

574 Pediatric Audiology for Audiology Majors (3) Theoretical and practical considerations in evaluation and treatment of hearing loss in infants and children. Audiological intervention in case management of hearing-impaired child; amplification, educational alternatives, and state and federal guidelines.
Credit Restriction: Students with credit in 573 may also receive credit for 574.
(DE) Prerequisite(s): 507, 546, and 576.
Registration Restriction(s): Audiology major.

REVISE PREREQUISITES

626 Advanced Seminar in Neurologically-based Communication Disorders (3)
(DE) Prerequisite(s): 518 and 526.

DEPARTMENT OF BIOCHEMISTRY AND CELLULAR AND MOLECULAR BIOLOGY

(188) Biochemistry and Cellular and Molecular Biology

ADD

510 Computational Structural Biochemistry (1) Introduction to computational tools, internet resources and databases for biological research to analyze and model protein structures and to study protein-ligand interactions.
(DE) Corequisite(s): 511.
Registration Permission: Consent of instructor.

REVISE PREREQUISITE AND ADD RECOMMENDED BACKGROUND

511 Advanced Protein Chemistry and Cellular Biology (3)
(DE) Corequisite(s): 510.
Recommended Background: Prior knowledge of cell biology and biochemistry.

DEPARTMENT OF CLASSICS

(257) Classics

REVISE CREDIT HOURS

593 Independent Study (1-6)

DEPARTMENT OF COMPUTER SCIENCE

(266) Computer Science

REVISE TITLE OF SECONDARY COURSE

571 Numerical Mathematics I (3) *(See Mathematics 571.)*

572 Numerical Mathematics II (3) *(See Mathematics 572.)*

DEPARTMENT OF EARTH AND PLANETARY SCIENCES

(424) Geology

ADD NEW COURSE FOR GRADUATE CREDIT

473 Principles of Near-Surface Geophysics (3) Basics of several standard near-surface geophysics techniques (for example, seismic reflection, seismic refraction, surface wave and GPR, electrical resistivity, magnetics, and EM), using state-of-the-art field equipment to develop the skills necessary to process and interpret data. Includes a significant field component.
Recommended Background: Introductory calculus.

525 Data Analysis for Geoscientists (3) Overview of sampling schemes, data analysis, and statistical methods as applicable to earth sciences.
Recommended Background: Introductory geology and introductory calculus.

695 Seminar in Planetary Sciences (3)
Repeatability: May be repeated. Maximum 9 hours.
Registration Permission: Consent of instructor.

DROP SECONDARY CROSS LISTED COURSE

556 Ice-Age Environments and Global Climate Changes (3) *(See Ecology and Evolutionary Biology 556.)*

557 Quaternary Ecology (3) *(See Ecology and Evolutionary Biology 557.)*

REVISE RECOMMENDED BACKGROUND

485 Principles of Hydrogeology (3) *(Same as Civil Engineering 485.)*
Recommended Background: Introductory calculus, physics, and geology.

DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY

(278) Ecology and Evolutionary Biology

REVISE REPEATABILITY AND ADD CREDIT RESTRICTION

503 Ecology and Evolutionary Biology Seminar (1)
Repeatability: May be repeated. Maximum 16 hours.
Credit Restriction: Only 4 hours can be applied towards a graduate degree in ecology and evolutionary biology.

REVISE PRIMARY COURSE TO DROP CROSS LISTING

556 Ice-Age Environments and Global Climate Change (3)

557 Quaternary Ecology (3)

REVISE TITLE OF SECONDARY CROSS LISTED COURSE

581 Mathematical Ecology I (3) *(See Mathematics 581.)*

582 Mathematical Ecology II (3) *(See Mathematics 582.)*

681 Advanced Mathematical Ecology I (3) *(See Mathematics 681.)*

682 Advanced Mathematical Ecology II (3) *(See Mathematics 682.)*

DEPARTMENT OF ENGLISH

(339) English

ADD NEW COURSES FOR GRADUATE CREDIT

403 Introduction to Middle English (3) Survey of the language and literature of England from the 12th through the 15th centuries. Reading of prose works and shorter poetry will be done in Middle English with special attention paid to grammar, style, dialect, and language change. The class will explore the culture of medieval England through critical essays, histories, and supplementary texts in translation.

459 Contemporary Poetry (3) Formal, cultural, and thematic movements in poetry published since 1950. Includes such writers as Lowell, Bishop, Brooks, Ginsberg, Plath, Larkin, Ashbery, Heaney, Baraka, and Walcott.

REQUEST APPROVAL FOR VARIABLE TITLE

582 Special Topics in Writing (1-3)

REVISE DESCRIPTION OF PRIMARY COURSE

401 Medieval Literature (3) Reading and analysis of a selection of literary works from the Old and Middle English period, as well as some continental texts; most will be read in modern English translation, and no previous knowledge of Middle English is required. *(Same as Medieval Studies 405.)*

REVISE DESCRIPTION

432 American Romanticism and Transcendentalism (3) Prose and poetry of the American Renaissance from 1830 to the end of the Civil War. Includes writers such as Cooper, Emerson, Fuller, Poe, Thoreau, Hawthorne, Melville, Douglass, Jacobs, Whitman, and Dickinson.

433 American Realism and Naturalism (3) Literature from the time of the Civil War to World War I. Includes writers such as Alcott, Twain, Howells, James, Jewett, Harper, Crane, Norris, and Wharton.

435 American Novel before 1900 (3) Traces the development of the American novel from the late 18th to the late 19th centuries. Includes such writers as Rowson, Brown, Cooper, Hawthorne, Melville, Stowe, James, Twain, and Dreiser.

451 Modern British and American Poetry (3) Formal, cultural, and thematic movements in 20th-century British and American poetry published before 1950. Includes such writers as Yeats, Frost, Eliot, Pound, Williams, Moore, Stevens, Stein, Hughes, and Auden.

453 Contemporary Drama (3) Survey of British, American, and international drama since World War II. Includes such playwrights as Williams, Miller, Beckett, Dürrenmatt, Stoppard, Churchill, Shepard, Mamet, Shange, Wilson, Friel, Maponya, Highway, and Kushner.

REVISE TITLE AND DESCRIPTION OF PRIMARY COURSE

452 Modern Drama (3) Survey of British, American, and international drama from 1880 to the end of World War II. Includes such playwrights as Ibsen, Chekhov, Shaw, Synge, O'Neill, Glaspell, Treadwell, Hughes, Pirandello, Brecht, and Wilder. *(Same as Comparative Literature 452.)*

REVISE TITLE, DESCRIPTION AND DELETE REPEATABILITY

456 Contemporary Fiction/Narrative (3) Formal, literary-historical, and thematic movements in post-World War II British and American fiction and international fiction in translation. The course will focus on postmodern novels and short stories written after 1945, but readings may include some newly influential narrative forms such as the graphic novel, hypertext and digital fiction and the nonfiction novel.

REVISE DESCRIPTION, DELETE PREREQUISITE, ADD RECOMMENDED BACKGROUND OF PRIMARY COURSE

471 Sociolinguistics (3) Language in relation to societies. Theoretical and empirical study of language variation in individuals (style-shifting) and among social, cultural, and national/international groups. *(Same as Linguistics 471.)*
Recommended Background: 371 or 372 or Linguistics 200 or consent of instructor.

REVISE DESCRIPTION, DELETE PREREQUISITE, ADD RECOMMENDED BACKGROUND OF PRIMARY COURSE

496 The Rhetoric of Legal Discourse (3) Nature of legal language and written discourse types (opinions, memoranda, briefs). Introduction to legal research resources and techniques. Issue identification and argumentative techniques. Students will write position papers, memoranda, and briefs. No prior legal knowledge necessary. (*Same as Legal Studies 496.)*
Recommended Background: 355 or consent of instructor.

DEPARTMENT OF GEOGRAPHY

(415) Geography

REVISE REPEATABILITY AND ADD CREDIT RESTRICTION

501 Colloquium in Geography (1)
Repeatability: May be repeated. Maximum 10 hours.
Credit Restriction: A maximum of 4 hours may be applied toward the MS. A maximum of 4 hours may be applied toward the PhD.

INTERDISCIPLINARY PROGRAMS

(023) Africana Studies

ADD AND CROSS LIST SECONDARY COURSE

470 African-American Art (3) *(See Art History 470.)*

(251) Cinema Studies

ADD AND CROSS LIST SECONDARY COURSE

422 Topics in Italian Cinema (3) *(See Italian 422.)*

DROP SECONDARY CROSS LISTED COURSE

421 Topics in Italian Literature and Cinema (3) *(See Italian 421.)*

(260) Comparative Literature

REVISE TITLE OF SECONDARY CROSS LISTED COURSE

452 Modern Drama (3) *(See English 452.)*

(600) Latin American Studies

ADD AND CROSS LIST SECONDARY COURSE

430 Contemporary Brazilian Studies (3) *(See Portuguese 430.)*

DROP SECONDARY CROSS LISTED COURSE

431 Topics in the Literature and Language of Portuguese-speaking World (3) *(See Portuguese 431.)*

REVISE TITLE OF SECONDARY CROSS LISTED COURSE

432 Topics in the Literature and Culture of the Portuguese-speaking World (3) *(See Portuguese 432.)*

(617) Legal Studies

REVISE TITLE OF SECONDARY CROSS LISTED COURSE

442 Administrative Law and Regulatory Policymaking (3) *(See Political Science 442.)*

DEPARTMENT OF MATHEMATICS

(641) Mathematics

ADD NEW COURSES FOR GRADUATE CREDIT

462 Differential Geometry (3) Classical differential geometry of curves and surfaces: Frenet frames, first and second fundamental forms, Gauss curvature and mean curvature, geodesics and parallel transport, the Gauss-Bonet theorem, geometry of the hyperbolic plane.
Recommended Background: Multivariable calculus (241 or 247).

ADD

576 Linear and Nonlinear Programming (3) Linear programming, the simplex and interior methods. Integer, convex, stochastic and other topics in nonlinear programming. Applications to real world problems.
Recommended Background: Courses in numerical algorithms, linear algebra and advanced calculus.

ADD AND REQUEST APPROVAL FOR VARIABLE TITLE

645 Advanced Analysis I (3) Selected topics in real, complex, or discrete analysis.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 545 and 546.

646 Advanced Analysis II (3) Continuation of 645.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 645.

DROP

548 Applied Linear Analysis (3)
553 Linear Programming (3)
554 Non-linear Programming (3)

REQUEST APPROVAL FOR VARIABLE TITLE

529 Seminar in Stochastics (1-3)

REVISE TO DELETE PREREQUISITE AND ADD RECOMMENDED BACKGROUND

411 Mathematical Modeling (3)
Recommended Background: Courses in differential equations and linear algebra.

471 Numerical Analysis (3)
Recommended Background: Course in basic numerical methods.

475 Industrial Mathematics (3)
Recommended Background: Course in differential equations and familiarity with an operating system and a programming language.

575 Matrix Theory and Techniques in Numerical Analysis (3)
Recommended Background: Courses in linear algebra and numerical analysis.

578 Numerical Methods for Partial Differential Equations (3)
Recommended Background: A course in partial differential equations or 512 or 515, and familiarity with an operating system and a programming language.

585 Optimal Control Theory (3)
Recommended Background: One year of advanced calculus and undergraduate differential equations.

REVISE (DE) PREREQUISITE

421 Combinatorics (3)
(DE) Prerequisite(s): 323.

445 Advanced Calculus I (3)
(DE) Prerequisite(s): 241 or 247 and 300.

447 Honors: Advanced Calculus I (3)
(DE) Prerequisite(s): 341.

455 Abstract Algebra I (3)
(DE) Prerequisite(s): 251 or 257 and 300.

457 Honors: Abstract Algebra I (3)
(DE) Prerequisite(s): 351.

460 Geometry (3)
(DE) Prerequisite(s): 300.

461 Topology (3)
(DE) Prerequisite(s): 241 or 247 and 300.

583 Mathematical Evolutionary Theory (3)
(DE) Prerequisite(s): 431 and 453.

REVISE TITLE, DESCRIPTION, AND PREREQUISITE

423 Probability (3) Axiomatic probability, univariate and multivariate distributions, conditional distributions and expectations, moment generating functions, laws of large numbers and central limit theorem.
(DE) Prerequisite(s): 241 and 323.

514 Mathematical Principles of Fluid Mechanics II (3) Continuation of 513.
(DE) Prerequisite(s): 513.

516 Analytical Applied Mathematics II (3) Continuation of 515.
(DE) Prerequisite(s): 515.

524 Probability II (3) Continuation of 523. Law of large numbers, central limit theorem, conditional expectation, martingales. Other topics as selected by instructor.
(DE) Prerequisite(s): 523.

526 Statistics II (3) Continuation of 525. Estimation and tests in general linear models; non-parametric models, rank methods for comparison, robust tests. Other topics as selected by instructor.
(DE) Prerequisite(s): 525.

532 Ordinary Differential Equations II (3) Continuation of 531. The nonlinear theory of differential equations including Liapunov stability, critical point analysis, and Poincare-Bendixson theory.
(DE) Prerequisite(s): 531.

536 Partial Differential Equations II (3) Continuation of 535. Properties and representation formulas for elliptic, parabolic and hyperbolic partial differential equations.
(DE) Prerequisite(s): 535.

538 Mathematical Principles of Continuum Mechanics II (3) Continuation of 537.
(DE) Prerequisite(s): 537.

546 Complex Analysis (3) Holomorphic functions, Cauchy's theorem, Maximum Modulus theorem, Schwarz's lemma, normal families, Riemann mapping theorem.
(DE) Prerequisite(s): 545.

556 Number Theory II (3) Continuation of 555.
(DE) Prerequisite(s): 555.

568 Riemannian Geometry II (3) Continuation of 567.
(DE) Prerequisite(s): 567.

REVISE TITLE AND DESCRIPTION

424 Stochastic Processes (3) Markov chains, Poisson processes and Brownian motion. Other topics as selected by instructor.

REVISE DESCRIPTION AND PREREQUISITE

425 Statistics (3) Standard statistical distributions, independence of mean and variance for a Gaussian sample, basic limit theorems; point and interval estimation, tests of statistical hypotheses, Neyman-Pearson theorem; likelihood ratio and other parametric and nonparametric tests.
(DE) Prerequisite(s): 423.

446 Advanced Calculus II (3) Continuation of 445.
(DE) Prerequisite(s): 445.

448 Honors: Advanced Calculus II (3) Continuation of 447.
(DE) Prerequisite(s): 447.

456 Abstract Algebra II (3) Continuation of 455.
(DE)Prerequisite(s): 455.

458 Honors: Abstract Algebra II (3) Continuation of 457.
(DE) Prerequisite(s): 457.

547 Applied Linear Analysis (3) Banach and Hilbert spaces, linear operators and spectral theory, Sobolev spaces, applications.
(DE) Prerequisites: 545.

REVISE TITLE

443 Complex Variables (3)

521 Enumerative Combinatorics I (3)

569 Seminar in Topology and Geometry (1-3)

REVISE TITLE AND REQUEST APPROVAL FOR VARIABLE TITLE

681 Advanced Mathematical Ecology I (3)

REVISE RECOMMENDED BACKGROUND AND DELETE PREREQUISITE

472 Numerical Algebra (3)
Recommended Background: Course in basic numerical methods and linear algebra.

574 Finite Element Methods (3)
Recommended Background: Courses in partial differential equations, linear algebra and numerical analysis.

REVISE (DE) COREQUISITE

510 Applied Mathematics Laboratory (1)
(DE) Corequisite(s): 511.

REVISE TITLE, DESCRIPTION; DELETE (DE) PREREQUISITE AND COREQUISITE; ADD RECOMMENDED BACKGROUND

511 Methods in Applied Mathematics I (3) Fundamentals and techniques associated with discrete models of physical, engineering and biological systems: difference equations, networks and graphs, optimization, and other topics.
Recommended Background: Courses in advanced calculus and linear algebra.

REVISE TITLE, DESCRIPTION; DELETE (DE) COREQUISITES; REVISE (DE) PREREQUISITES

512 Methods in Applied Mathematics II (3) Fundamentals and techniques associated with continuous models of physical, engineering, and biological systems: development, solution and qualitative analysis of ordinary and partial differential equations, and calculus of variations.
(DE) Prerequisite(s): 511.

REVISE TITLE, DELETE PREREQUISITE, ADD RECOMMENDED BACKGROUND

513 Mathematical Principles of Fluid Mechanics I (3)
Recommended Background: Advanced courses in ordinary and partial differential equations and advanced calculus.

515 Analytical Applied Mathematics I (3)
Recommended Background: Courses in advanced calculus, linear algebra, and either advanced differential equations or 512.

537 Mathematical Principles of Continuum Mechanics I (3)
Recommended Background: Courses in advanced calculus and advanced differential equations.

555 Number Theory I (3)
Recommended Background: One year of undergraduate abstract algebra.

REVISE TITLE, DESCRIPTION, AND ADD PREREQUISITE

522 Enumerative Combinatorics II (3) Continuation of 521.
(DE) Prerequisite(s): 521.

562 Topology II (3) Continuation of 561. Fundamental group and covering spaces.
(DE) Prerequisite(s): 561.

REVISE TITLE, DESCRIPTION, DELETE PREREQUISITE, ADD RECOMMENDED BACKGROUND

523 Probability I (3) Probability spaces and random variables, expectation, characteristic functions, convergence of random variables.
Recommended Background: One year of advanced calculus and 323.

531 Ordinary Differential Equations1 (3) Existence, uniqueness, extendibility, and dependence on parameters for solutions of differential equations. The theory of linear systems of differential equations including boundary value problems and series methods.
Recommended Background: One year of advanced calculus and undergraduate differential equations.

535 Partial Differential Equations I (3) First order partial differential equations, classification of second order partial differential equations, properties of elliptic, parabolic and hyperbolic partial differential equations.
Recommended Background: One year of advanced calculus.

545 Real Analysis (3) Measure theory, Lebesgue integration, Hölder and Minkowski inequalities, Radon-Nikodym theorem, Fubini's theorem.
Recommended Background: One year of advanced calculus.

567 Riemannian Geometry I (3) Riemannian and Lorentzian manifolds. Variations of arc length, Jacobi fields, comparison theorems. Constant curvature spaces. Curvature and topology of manifolds.
Recommended Background: One year of advanced calculus.

REVISE TITLE, DESCRIPTION, RECOMMENDED BACKGROUND, DELETE PREREQUISITE

525 Statistics I (3) Formulation of statistical models, sufficiency; methods of estimation and optimal theory, asymptotic efficiency; the confidence procedures and hypothesis testing, uniformly most powerful tests; Bayesian statistics.
Recommended Background: One year of advanced calculus and 425.

REVISE DESCRIPTION, DELETE PREREQUISITE, ADD RECOMMENDED BACKGROUND AND REQUEST APPROVAL FOR VARIABLE TITLE

527 Stochastic Modeling (3) Variable topics in probability applied to real world situations. Topics may include queuing theory, branching processes, Monte Carlo simulation, stochastic finance and other topics as selected by instructor.
Recommended Background: One year of advanced calculus and one year of undergraduate probability or mathematical statistics.

REVISE DESCRIPTION, DELETE PREREQUISITE, ADD RECOMMENDED BACKGROUND

534 Calculus of Variations (3) Necessary and sufficient conditions for weak and strong extrema in one-dimensional variation problems; Lagrangian mechanics. Multiple integrals. Basic elements of direct methods.
Recommended Background: At least one senior-level course in differential equations or advanced calculus. Mathematical maturity.

577 Optimization (3) Mathematical foundations of constrained and unconstrained optimization. Lagrange multipliers, the Farkas lemma, the Kuhn-Tucker-Karush theorem. Analysis of major algorithms and applications to real world problems.
Recommended Background: Courses in numerical algorithms, linear algebra and advanced calculus.

REVISE TO DELETE REGISTRATION PERMISSION

539 Seminar in Differential Equations (1-3)

559 Seminar in Algebra (1-3)

REVISE TITLE, DESCRIPTION, DELETE PREREQUISITE AND COMMENT, ADD RECOMMENDED BACKGROUND

551 Modern Algebra I (3) Groups and rings.
Recommended Background: One year of undergraduate abstract algebra.

REVISE TITLE, DESCRIPTION, PREREQUISITE, DELETE COMMENT

552 Modern Algebra II (3) Continuation of 551; modules, fields and Galois theory.
(DE) Prerequisite(s): 551.

REVISE TITLE, DESCRIPTION, ADD RECOMMENDED BACKGROUND

561 Topology I (3) Topological spaces and continuous functions, separation axioms, product and quotient topologies, connectedness, compactness, complete metric spaces.
Recommended Background: One year of advanced calculus.

REVISE TITLE, DESCRIPTION, DELETE PREREQUISITE, ADD RECOMMENDED BACKGROUND OF PRIMARY COURSE

571 Numerical Mathematics I (3) Direct and iterative methods for linear systems. The algebraic eigenvalue problem and the singular decomposition theorem. Newton and quasi-Newton methods for systems of nonlinear equations. *(Same as Computer Science 571.)*
Recommended Background: Courses in advanced calculus and basic numerical analysis.

REVISE TITLE, DESCRIPTION, AND PREREQUISITE OF PRIMARY COURSE

572 Numerical Mathematics II (3) Numerical techniques for initial value problems of ordinary differential equations. Two-point boundary value problems. Finite difference and finite element methods for selected partial differential equations. Fast Poisson solvers. *(Same as Computer Science 572.)*
(DE) Prerequisite(s): 571.

582 Mathematical Ecology II (3) Continuation of 581. (*Same as Ecology and Evolutionary Biology 582.)*
(DE) Prerequisite(s): 581.

REVISE TITLE, DESCRIPTION, AND PREREQUISITE OF PRIMARY COURSE AND REQUEST APPROVAL FOR VARIABLE TITLE

682 Advanced Mathematical Ecology II (3) Continuation of 681. *(Same as Ecology and Evolutionary Biology 682.)*
(DE) Prerequisite(s): 681.

REVISE TITLE AND PREREQUISITE

581 Mathematical Ecology I (3)
(DE) Prerequisite(s): 431 and 453.

REVISE TITLE, DESCRIPTION, AND PREREQUISITES; ADD REPEATABILITY

617 Geometry of Groups (3) Geometry of Lie groups, symmetric spaces and discrete groups. Topics vary.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 561 and 562 or 567 and 568.

REVISE TITLE, DESCRIPTION, REPEATABILITY, AND PREREQUISITE

642 Functional Analysis II (3) Continuation of 641.
Repeatability: May be repeated. Maximum 6 hours.
(DE) Prerequisite(s): 641.

664 Algebraic Topology II (3) Continuation of 663.
Repeatability: May be repeated. Maximum 9 hours.
(DE) Prerequisite(s): 663.

REVISE TITLE, DESCRIPTION, REPEATABILITY, PREREQUISITE AND REQUEST APPROVAL FOR VARIABLE TITLE

623 Advanced Probability I (3) Selected topics in modern theory of probability and stochastic processes.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 523 and 524.

624 Advanced Probability II (3) Continuation of 623.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 623.

651 Advanced Modern Algebra I (3) Selected topics in algebra, algebraic geometry, or number theory.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 551 and 552.

652 Advanced Modern Algebra II (3) Continuation of 651.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 651.

667 Modern Geometry I (3) Selected topics in Riemannian geometry and geometric analysis.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 561 and 562 or 567 and 568.

668 Modern Geometry II (3) Continuation of 667.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 667.

REVISE REPEATABILITY AND REQUEST APPROVAL FOR VARIABLE TITLE

629 Seminar in Combinatorics (1-3)
Repeatability: May be repeated. Maximum 12 hours.

REVISE TITLE, REPEATABILITY, PREREQUISITE, DELETE REGISTRATION PERMISSION AND REQUEST APPROVAL FOR VARIABLE TITLE

635 Advanced Partial Differential Equations I (3)
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 535 and 536.

REVISE TITLE, DESCRIPTION, REPEATABILITY, PREREQUISITE, DELETE REGISTRATION PERMISSION AND REQUEST APPROVAL FOR VARIABLE TITLE

636 Advanced Partial Differential Equations II (3) Continuation of 635.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 635.

REVISE TITLE, REPEATABILITY, AND PREREQUISITES; ADD COREQUISITES

641 Functional Analysis I (3)
Repeatability: May be repeated. Maximum 6 hours.
(DE) Prerequisite(s): 545.
(DE) Corequisite(s): 546 or 443.

REVISE REPEATABILITY

649 Seminar in Analysis (1-3)
Repeatability: May be repeated. Maximum 12 hours.

679 Seminar in Numerical Mathematics (1-3)
Repeatability: May be repeated. Maximum 12 hours.

REVISE REPEATABILITY AND DELETE REGISTRATION PERMISSION

659 Seminar in Algebra (1-3)
Repeatability: May be repeated. Maximum 12 hours.

REVISE TITLE, DESCRIPTION, REPEATABILITY, ADD PREREQUISITE AND REQUEST APPROVAL FOR VARIABLE TITLE

661 Modern Topology I (3) Selected topics in topology.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 561 and 562.

662 Modern Topology II (3) Continuation of 661.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 661.

REVISE TITLE, REPEATABILITY, PREREQUISITE, AND ADD RECOMMENDED BACKGROUND

663 Algebraic Topology I (3)
Repeatability: May be repeated. Maximum 9 hours.
(DE) Prerequisite(s): 561 and 562.
Recommended Background: One year of abstract algebra.

REVISE TITLE, CREDIT HOURS, AND REPEATABILITY

669 Seminar in Topology and Geometry (1-3)
Repeatability: May be repeated. Maximum 12 hours.

REVISE REPEATABILITY AND PREREQUISITE; AND REQUEST APPROVAL FOR VARIABLE TITLE

673 Advanced Topics in Numerical Partial Differential Equations (3)
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 571 and 572.

DEPARTMENT OF MICROBIOLOGY

(684) Microbiology

ADD

520 Microbial Pathogenesis (3) Broad study of host-pathogen relationships including the biochemical, cellular, genetic, genomic and evolutionary factors which play a role in microbial pathogenesis.
Credit Restriction: Students may not receive credit for both 420 and 520.

609 Journal Club in Microbial Genomics (1) Readings and discussions based on current literature.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 18 hours.

DROP FOR GRADUATE CREDIT

420 Medical Microbiology (3)

REVISE TITLE, DESCRIPTION, (DE) PREREQUISITE AND ADD (DE) COREQUISITE

410 Microbial Physiology (3) Examination of concepts in microbial physiology and the structure and function of microbial cells.
(DE) Prerequisite(s): 310.
(DE) Corequisite(s): Biochemistry and Cellular and Molecular Biology 401.

REVISE TITLE AND DESCRIPTION

411 Microbial Genetics (3) Mechanisms of gene transfer, gene regulation, and genetic analysis in bacteria and single-celled fungi (yeasts).

DEPARTMENT OF MODERN FOREIGN LANGUAGES AND LITERATURES

(584) Italian

ADD

411 Aspects of Modern Literature and Culture (3) Representative works of modern literature and culture.

412 Advanced Literary Reading and Conversation (3) Representative works of contemporary literature and culture.

ADD PRIMARY COURSE AND CROSS LIST

422 Topics in Italian Cinema (3) Examination of Italian cinema from 1930 to the present focusing on feature films, documentaries and, depending on the topic of the course, on literary works in light of political, cultural, and social contexts. Films are shown in Italian with English subtitles. *(Same as Cinema Studies 422.)*

DROP

404 The Modern Italian Short Story (3)

406 The Modern Italian Novel (3)

DROP PRIMARY CROSS LISTED COURSE

421 Topics in Italian Literature and Cinema (3) *(Same as Cinema Studies 421.)*

Present course (411 Italian)	Equivalent course fall 2007 (411) Italian
401	411
406	412
421	422

(811) Portuguese

ADD PRIMARY COURSE AND CROSS LIST

430 Contemporary Brazilian Studies (3) Current Brazilian cultural, political and racial issues placed in a historical perspective with a comparative emphasis. Topics may vary. *(Same as Latin American Studies 430.)*
Repeatability: May be repeated. Maximum 12 hours.
Comment(s): Open to non-majors. Majors will write papers in Portuguese.

DROP

431 Topics in the Literature and Language of the Portuguese-speaking World (3)

REVISE TITLE AND DESCRIPTION OF PRIMARY COURSE

432 Topics in the Literature and Culture of the Portuguese-speaking World (3) Examination of the socio-political environment, literary works, and other important cultural practices of the Portuguese-speaking world. Topics may vary. *(Same as Latin American Studies 432.)*

SCHOOL OF MUSIC

(710) Music Instrumental

ADD

560 Orchestral Repertoire (1) Intensive weekly master class focused on the performance of standard orchestral repertoire used in most orchestral auditions.
Repeatability: May be repeated. Maximum 6 hours.
Registration Permission: Consent of instructor.

DEPARTMENT OF PHILOSOPHY

(745) Philosophy

REVISE REPEATABILITY

440 Contemporary Ethical Theory (3)
Repeatability: May be repeated if topic differs. Maximum 6 hours.

593 Independent Study (1-15)
Repeatability: May be repeated. Maximum 30 hours.

DEPARTMENT OF POLITICAL SCIENCE

(801) Political Science

ADD

536 Campaigns, Elections, and Voting Behavior (3) Surveys theory and research of American campaigns and elections, with an emphasis on presidential and congressional contests.

641 Special Topics in Courts and Judicial Processes (3) Intensive examination of research literature dealing with particular aspects of judicial decision making.

DROP

640 Special Topics in U.S. Constitutional Law (3)

REVISE TITLE AND DESCRIPTION OF PRIMARY CROSS LISTED COURSE

442 Administrative Law and Regulatory Policymaking (3) Legal and political dimensions of rulemaking, enforcement and adjudication by executive agencies. *(Same as Legal Studies 442.)*

REVISE TITLE AND DESCRIPTION

535 Public Opinion and Political Socialization (3) Explores the meaning and measurement of public opinion and contemporary research on the topic; including questions of rationality, tolerance, and party identification.

540 Courts and Judicial Processes (3) Examination of published research dealing with judicial behavior, judicial policymaking, and courts and political actors.

REVISE CREDIT HOURS AND ADD REPEATABILITY

590 Practicum in Planning (3-6)
Repeatability: May be repeated. Maximum 6 hours.

DEPARTMENT OF PSYCHOLOGY

(830) Psychology

ADD

525 Psychopharmacology (3) Effects of psychoactive drugs on mood and behavior, emphasizing the mechanisms of drug action on neurotransmitter systems. Topics include the relationship between behavior and endogenous neurochemical activity, therapeutic agents used to treat mental disorders, and drugs of abuse.
(DE) Prerequisite(s): 461.
Recommended Background: Physiological psychology or neuropsychology course.

579 Practicum in Individual Assessment, Counseling (3) Basic application of individually-administered, standardized assessment instruments: administration, scoring, and integrated interpretation. Supervision in adult evaluation, and referral/treatment planning. Instruments include WAIS; Stanford-Binet; MMPI, PAI, MCMI.
(DE) Prerequisite(s): 667 and 668.
Recommended Background: Formal tests and measurement or equivalent course.

668 Assessment in Counseling Psychology II (3) Advanced use and interpretation of measures commonly used in the practice of counseling psychology, including measures of cognitive ability, psychopathology, and personality.
(DE) Prerequisite(s): 667.

DROP

572 Individual Cognitive Assessment in Counseling (3)

REVISE TITLE, DESCRIPTION, PREREQUISITE, ADD REPEATABILITY

661 Seminar in Neuropsychology (3) Theory, research, and evaluation of neural bases of brain/behavior relationships, common syndromes and their behavioral and cognitive manifestations (e.g., neurodevelopmental syndromes, lifespan issues, etc.).
(DE) Prerequisite(s): 461 and 534.
Repeatability: May be repeated. Maximum 12 hours.

REVISE TITLE, DESCRIPTION, AND PREREQUISITE

667 Assessment in Counseling Psychology I (3) Use and interpretation of measures commonly used in the practice of counseling psychology, including measures of cognitive ability, vocational, and personality assessment.
(DE) Prerequisite(s): 445 and Counselor Education 525.

REVISE DESCRIPTION, PREREQUISITE, ADD RECOMMENDED BACKGROUND

672 Psychological Dysfunction (3) Classification methods in psychopathology and use of the DSM for differential diagnosis and treatment options appropriate for counseling psychology and other mental health professionals.
(DE) Prerequisite(s): 431.
Recommended Background: Courses in abnormal psychology and personality theories.

REVISE REPEATABILITY

673 Laboratory in Psychotherapy (2)
Repeatability: May be repeated. Maximum 60 hours.

695 Field Placement in Clinical Psychology (3)
Repeatability: May be repeated. Maximum 60 hours.

II. PROGRAM CHANGES

DEPARTMENT OF AUDIOLOGY AND SPEECH PATHOLOGY

REVISE CATALOG TEXT, MASTER OF ARTS, AUDIOLOGY MAJOR

On page 57 of the 2006-2007 *Graduate Catalog*, 2nd column, Master of Arts, Audiology Major, delete 2nd paragraph and replace with

A student must be in good standing within the AuD or PhD program and must have completed a minimum of 42 credits of academic coursework at the 500 or 600 levels (not including Audiology and Speech Pathology 512 or Audiology and Speech Pathology 515) and must pass a qualifying examination or equivalent.

DEPARTMENT OF CHEMISTRY

REVISE ADMISSION PARAGRAPH

On page 60 of the 2006-2007 *Graduate Catalog*, left column, 1st paragraph, admission heading, delete current paragraph and replace with

Admission to the graduate program is decided on a case-by-case basis, taking into consideration an applicant's undergraduate record (traditionally including courses in general, analytical, inorganic, organic, and physical chemistry), performance on the general Graduate Record Examination (required), and supporting information such as references from previous faculty and research mentors, co-authorship of research presentations or papers, and awards. Recommendation for a student's initial course of study in graduate school is based on the desired specialization, previous training and experience, and performance on departmental diagnostic exams administered following arrival in the department.

ADD CATALOG TEXT FOR INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATIONAL SCIENCE

On page 60 of the 2006-2007 *Graduate Catalog*, at end of chemistry program, add the following text for the new minor.

INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATIONAL SCIENCE
The Department of Chemistry participates in the intercollegiate graduate minor in computational science (IGMCS) program. Any student pursuing a master's or PhD with a major in chemistry can receive a minor in computational science by completing the appropriate IGMCS requirements. For further information, see the description of the IGMCS listed under the Department of Computer Science. The Department of Chemistry also contributes courses to the IGMCS program curriculum.

DEPARTMENT OF COMPUTER SCIENCE

ADD CATALOG TEXT FOR INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATIONAL SCIENCE

On page 61 of the 2006-2007 *Graduate Catalog*, after the computer science minor, add the following text.

INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATION SCIENCE
The Department of Computer Science participates in the intercollegiate graduate minor in computational science (IGMCS) program. Any student pursuing a master's or PhD with a major in computer science can receive a minor in computational science by completing the appropriate IGMCS requirements. For further information, see the description of the IGMCS below. The Department of Computer Science also contributes courses to the IGMCS program curriculum.

DEPARTMENT OF EARTH AND PLANETARY SCIENCES

REVISE GEOLOGY MAJOR (MS)

On page 62 of the 2006-2007 *Graduate Catalog*, left column, requirements section, 3rd bullet, item number 1, delete course 475 from the list of courses.

DEPARTMENT OF ENGLISH

REVISE ENGLISH MAJOR (PHD)

On page 65 of the 2006-2007 G*raduate Catalog*, right column, examinations heading,
First bullet – delete current text and replace with

- A first-year review conducted at the end of the first year of PhD coursework.

Second bullet – Delete the third word "written" from the first sentence.

DEPARTMENT OF GEOGRAPHY

ADD CATALOG TEXT FOR INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATIONAL SCIENCE

On page 66 of the 2006-2007 *Graduate Catalog*, at end of geography program, add the following.

The Department of Geography participates in the intercollegiate graduate minor in computational science (IGMCS) program. Any student pursuing a master's or PhD with a major in Geography can receive a minor in computational science by completing the appropriate IGMCS requirements. For further information, see the description of the IGMCS listed under the Department of Computer Science. The Department of Geography also contributes courses to the IGMCS program curriculum.

INTERDISCIPLINARY PROGRAMS

WOMEN'S STUDIES

REVISE REQUIREMENTS FOR GRADUATE CERTIFICATE IN WOMEN'S STUDIES

On page 69 of the 2006-2007 *Graduate Catalog*, requirements heading, 2nd bullet, delete courses listed on last line and replace with
Women's Studies 400, 410, 422, 425, 434, 469, 510, 543, 548, 593, 609.

LIFE SCIENCES

ADD CATALOG TEXT FOR INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATIONAL SCIENCE

On page 69 of the 2006-2007 G*raduate Catalog*, at end of genome science and technology concentration, add

INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATIONAL SCIENCE
The Graduate School of Genome Science and Technology participates in the intercollegiate graduate minor in computational science (IGMCS) program. Any student pursuing a PhD with a major in Life Sciences (genone science and technology concentration) can receive a Minor in Computational Science by completing the appropriate IGMCS requirements. For further information see the description of the IGMCS listed under the Department of Computer Science. The Graduate School in Genome Science and Technology also contributes courses to the IGMCS program curriculum.

DEPARTMENT OF MATHEMATICS

REVISE REQUIREMENTS FOR MATHEMATICS MAJOR (MS) – APPLIED MATHEMATICS CONCENTRATION

On page 71 of the 2006-2007 *Graduate Catalog*, left column, requirements heading, 3rd bullet, delete second and third sentences and replace with

Foundations of Applied Mathematics – 511, 515, 516. Optimization – 576, 577, 585.

REVISE REQUIREMENTS FOR MATHEMATICS MAJOR (MS) – STANDARD PROGRAM

On page 71 of the 2006-2007 *Graduate Catalog*, standard program heading, 2nd paragraph, revise list of courses for the analysis section and the computational and applied mathematics section to

analysis (545-546, 545-547), computational and applied mathematics (571-572, 574, 575, 576, 577, 578)

REVISE REQUIREMENTS FOR MATHEMATICS MAJOR (MS) – MATHEMATICAL ECOLOGY/EVOLUTION CONCENTRATIONON

On page 71 of the 2006-2007 G*raduate Catalog*, right column, 2nd paragraph, revise list of courses for the analysis section and the computational and applied mathematics section to

analysis (545-546, 545-547), computational and applied mathematics (571-572, 574, 575, 576, 577, 578)

ADD CATALOG TEXT FOR INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATIONAL SCIENCE

On page 71 of the 2006-2007 *Graduate Catalog*, at end of mathematics program section, add the following.

INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATIONAL SCIENCE
The Department of Mathematics participates in the intercollegiate graduate minor in computational science (IGMCS) program. Any student pursuing a master's or PhD with a major in Mathematics can receive a minor in computational science by completing the appropriate IGMCS requirements. For further information, see the description of the IGMCS listed under the Department of Computer Science. The Department of Mathematics also contributes courses to the IGMCS program curriculum.

DEPARTMENT OF PHYSICS AND ASTRONOMY

ADD CATALOG TEXT FOR INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATIONAL SCIENCE

On page 78 of the 2006-2007 *Graduate Catalog*, at the end of the physics program section, add the following.

INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATIONAL SCIENCE
The Department of Physics and Astronomy participates in the intercollegiate graduate minor in computational science (IGMCS) program. Any student pursuing a master's or PhD with a major in Physics can receive a minor in computational science by completing the appropriate IGMCS requirements. For further information, see the description of the IGMCS listed under the Department of Computer Science. The Department of Physics also contributes courses to the IGMCS program curriculum.

DEPARTMENT OF POLITICAL SCIENCE

√ ADD POLITICAL SCIENCE CONCENTRATION TO THE PLANNING MAJOR (MSP)

On page 80 of the 2006-2007 *Graduate Catalog*, right column, requirements heading, 2nd bullet, add the new concentration Political Science to the list.

DEPARTMENT OF PSYCHOLOGY

REVISE REQUIREMENTS FOR PSYCHOLOGY MAJOR (PHD) – CLINICAL PSYCHOLOGY CONCENTRATION

On page 82 of the 2006-2007 *Graduate Catalog*, right column, Number 11, delete "18 hours" from the end of the sentence. The period now comes after (695).

COLLEGE OF BUSINESS ADMINISTRATION

All changes effective Fall 2007

I. COURSE CHANGES

COLLEGE OF BUSINESS ADMINISTRATION

(205) Business Administration

DROP

524 Business Core for Master of Accountancy IV (3)

REVISE COMMENT(S)

501 MBA Career Development (1)
Comment(s): Enrollment is limited to students admitted to the MBA Program or by consent of the Director of the MBA Program.

593 Directed Independent Study (3)
Comment(s): Available only by prearrangement with supervising faculty member. May require approval of Director of the MBA program.

REVISE DESCRIPTIONS

521 Business Core for Master of Accountancy I (3) Topics in business having relevance to Master of Accountancy students. Topics vary to reflect current needs of the accounting profession. Sequence (521-522-523) culminates with a business simulation.

522 Business Core for Master of Accountancy II (3) Topics in business having relevance to Master of Accountancy students. Topics vary to reflect current needs of the accounting profession. Sequence (521-522-523) culminates with a business simulation.

523 Business Core for Master of Accountancy III (3) Topics in business having relevance to Master of Accountancy students. Topics vary to reflect current needs of the accounting profession. Sequence (521-522-523) culminates with a business simulation.

REVISE PREREQUISITE(S) AND ADD REGISTRATION PERMISSION

512 MBA Core II (15)
(DE) Prerequisite(s): 511.
Registration Permission: Prerequisite(s) or consent of Director of the MBA Program required.

513 MBA Core III (9)
(DE) Prerequisite(s): 511 and 512.
Registration Permission: Prerequisite(s) or consent of Director of the MBA Program required.

514 Integrated Business Simulation (1)
(DE) Prerequisite(s): 511, 512, and 513.
Registration Permission: Prerequisites or consent of Director of the MBA Program required.

DEPARTMENT OF ACCOUNTING AND INFORMATION MANAGEMENT

(009) Accounting

ADD

530 Tax Research, Accounting Practice, and Procedures (3) Methods of researching tax issues within the federal tax system with emphasis on Internet-based research tools. Tax accounting periods and methods. Tax procedures for dealing with the Internal Revenue Service. Tax practice standards and ethical concerns.
Comment(s): Master of Accountancy admission or consent of instructor required.

DROP

534 Family Tax Planning (3)

REVISE TITLE, DESCRIPTION AND DROP (DE) PREREQUISITE(S

521 Governmental, Not for Profit, and Management Accounting (3) Accounting principles and reporting models for governmental and not for profit organizations. Uses of management accounting information in decision making and performance evaluation.

REVISE TITLE AND DESCRIPTION

531 Tax Strategy and Entity Taxation (3) Introduction to tax research. Current issues in tax strategy and planning including investment models, implicit taxes, organizational form, and other selected topics. Income taxation of business entity operations including financial statement implications of income taxes.

REVISE TO CLARIFY REPETITION

621 Accounting Colloquium (1)
Repeatability: May be repeated. Maximum 4 hours.

622 Accounting Colloquium (1)
Repeatability: May be repeated. Maximum 4 hours.

DEPARTMENT OF STATISTICS, OPERATIONS AND MANAGEMENT SCIENCE

(962) Statistics

ADD

560 Introduction to Mathematical Statistics (3) Probability, probability distributions, simulation of random variables, sampling distributions, central limit theorem, testing of hypotheses, confidence intervals, maximum likelihood methods, Bayesian methods.
Credit Restriction: Not for credit for MS with a major in statistics or management science.
(DE) Prerequisite(s): Mathematics 241.
Comment(s): A course equivalent to Mathematics 241 also is acceptable.

REVISE TITLE, DESCRIPTION, AND ADD REGISTRATION PERMISSION

563 Statistical Inference I (3) Basic probability and probability models; random variables and distributional models; kernel density estimation; cubic splines; likelihood inference and maximum likelihood estimation and model fitting with information criteria; moment and moment generating functions; functions of random variables; goodness of fit tests and quantile modeling of distributions.
Registration Permission: Prerequisite(s) or consent of instructor required.

REVISE TITLE AND DESCRIPTION

564 Statistical Inference II (3) Sampling distributions; point and interval estimation; fixed width entropy confidence intervals; likelihood theory; Fisher information and its inverse; large sample, deviance, and bootstrap confidence intervals; Bayesian estimation and hypothesis testing; information approach to hypothesis testing; uniformly most powerful and likelihood ratio tests, theory of linear models, estimation, model building and inference.

II. PROGRAM CHANGES

REVISE BUSINESS ADMINISTRATION MAJOR, FULL-TIME MBA, REQUIREMENTS

On page 89 of the 2006-2007 *Graduate Catalog*, left column, top of page, Secondary Concentration – Innovation and Entrepreneurship heading, last line of paragraph, delete “Finance 551” from the sentence.

√ DROP MBA EXECUTIVE TRACK

√ ADD MBA PROGRAMS FOR WORKING PROFESSIONALS TRACK

On page 87 of the 2006-2007 *Graduate Catalog* under Master of Business Administration/Business Administration Major, make the following changes

Change the first paragraph to

> Two tracks are available for the MBA – the regular, full-time program and MBA programs for working professionals.

Change the third paragraph to

> For students who wish to continue working full-time while they earn their MBA degree, there are four programs for working professionals. In these programs, students carry a full academic course load in addition to their full-time jobs. Each of these programs is designed to serve a different group of students. Descriptions of the MBA programs for working professionals follow the description of the regular, full-time program.

On page 88 change the third sentence of the first paragraph to

> For the MBA programs for working professionals, contact the Center for Executive Education, 708 Stokely Management Center, College of Business Administration, The University of Tennessee, Knoxville, Tennessee 37996-0575; Phone (865)974-5001.

On page 89 of the 2006-2007 *Graduate Catalog*, replace the Executive MBA Programs heading; the first sentence, first paragraph; the first sentence, third paragraph; and Transfer Credit sentence as follows

> **MBA PROGRAMS FOR WORKING PROFESSIONALS**
>
> Each of the four MBA programs for working professionals is designed to serve the needs of a different student group.
>
> The courses are functionally integrated, and the broad curriculum objectives are similar in each of the MBA programs for working professionals.
>
> **Transfer Credit**
> Because of the integrated nature of the course delivery for the MBA programs for working professionals, no credit hours may be transferred as substitutes for program curriculum.

√ DROP AEROSPACE EXECUTIVE MBA PROGRAM

√ ADD AEROSPACE AND DEFENSE MBA PROGRAM

The Aerospace and Defense MBA is provided for a national audience of professionals from defense and commercial aerospace organizations who have five years of work experience. The emphasis in this program is providing a solid grounding in the broad range of business functions. However, much of this coverage will be delivered within the context of the aerospace and defense industry. Beyond a basic grounding in business fundamentals, this program will offer advanced concepts especially relevant to managing complex value streams. Advanced coverage and emphasis will be given to value stream integration, lean manufacturing, and industrial statistics in particular. This mix of topical coverage is ideal for engineers and others with technical backgrounds that are transitioning into program management where business and leadership skills are critical.

The program starts each spring semester (January) and is completed in three consecutive semesters spread over twelve months. Classes are held during six residency periods, lasting from nine days each. Between residency periods, formal coursework continues with bi-weekly distance learning through live, internet cyber classes. Additional graded work includes a number of large-scale projects completed under faculty supervision, resulting in significant written reports and oral presentations.

Applications to this program are accepted for a spring entry only. The early application deadline is August 15, and the final application deadline is October 1 of each year. The GMAT may be waived for applicants with 5 or more years of professional work experience or a graduate degree.

The program will not be offered in those years in which the enrollment is insufficient.

Additional information on the Aerospace and Defense MBA can be found at www.emba.utk.edu

REVISE PHYSICIAN EXECUTIVE MBA PROGRAM

The Physician Executive MBA is provided for an international audience of physicians. The students for whom this program is designed have an MD, MBBS, or DO degree with five or more years of work experience. The curriculum objectives are the same as those for the Executive MBA, but in the Physician Executive MBA, many of the functional skills are taught in the context of the health care industry with specialized content related to the health care environment. The Physician Executive MBA is the right choice for physicians who want to have a voice in the health care industry, in their own careers, and are seeking a program that allows them to continue their practice while earning their MBA degree.

The Physician Executive MBA is three consecutive semesters completed in twelve months. The class meets in Knoxville for week-long residence periods in January, April, August and December. Between residence periods, live distance learning classes are held each Saturday morning, and there are asynchronous internet assignments.

Applications are accepted for January entry only. Applications are accepted through the year. The final application deadline is November 1. Applicants to the Physician Executive MBA are not required to take the GMAT.

Additional information on the Physician Executive MBA can be found at www.pemba.utk.edu

REVISE PROFESSIONAL MBA PROGRAM

The weekend Professional MBA is provided for fully employed professionals within commuting distance of the University of Tennessee, Knoxville and who have a minimum of five years of work experience. The emphasis in this program is to provide a good grounding in the quantitative and qualitative tools of various business functions and a good basis in strategic thinking. Learning is expanded through applying these tools within the student's own organization through a

structured project each semester. The Professional MBA is the right choice for individuals who wish to enhance their position within their organization by broadening their business knowledge beyond the functional area in which they are currently employed.

The Professional MBA program is three consecutive semesters completed in sixteen months. Classes meet approximately three Saturdays per month and via live, distance learning classes on periodic Tuesday evenings. The program begins in August with an intensive week of classes; then continues with the weekend format. The final fall semester culminates with a week long marketplace simulation. The GMAT may be waived for applicants with 10 or more years of professional work experience or a graduate degree.

Additional information on the Professional MBA program can be found at www.emba.utk.edu

√ DROP SENIOR EXECUTIVE MBA PROGRAM

√ ADD EXECUTIVE MBA PROGRAM

The Executive MBA is provided for a national audience of managers holding middle- and upper-level positions in organizations that support their attainment of an MBA degree. The students for whom this program is designed have ten or more years of work experience and are currently in management positions. Typical students bring a greater knowledge of business fundamentals than is true of other MBA programs. The Executive MBA places considerable emphasis on global business and on individual skills of leadership. The program also has a heavy emphasis on strategic thinking and leading-edge management concepts. The Executive MBA is the right choice for individuals who are in positions of broad responsibility or who have been designated to fulfill such roles within their organizations in the future.

The Executive MBA is three consecutive semesters completed in twelve months. The class meets in Knoxville for 14-day residence periods once per quarter starting in January and ending in December. The spring residence period is a global business seminar and is held in South America, Asia or Europe. Off-campus work includes distance-learning classes and requires substantial and regular contact with faculty and other participants. The project work in the Executive MBA is a large-scale management project running throughout the year. Students work with managers in their own organizations to choose a project of significant scale and scope. Each project has a faculty advisor.

Applications are accepted for January entry only. The early application deadline is June 1, and the final application deadline is September 15. The GMAT may be waived depending on work experience. Students will receive materials for study in mid-November preceding the January start date.

Additional information on the Executive MBA can be found at www.emba.utk.edu

REVISE DUAL MS-MBA PROGRAM (SPORTS MANAGEMENT)

On page 92 of the 2006-2007 *Graduate Catalog*, revise the showcase as follows:

Dual MS-MBA
August – First Year
Business Administration 511 3

Fall – First Year
Business Administration 501 1
Business Administration 512 15

Spring – First Year
Business Administration 513 9
MBA Elective Recommend: Marketing 520 3
Sport Management 554 3

Summer
Sport Management 511 ..... 3*
Sport Management 535 3

Fall – Second Year
Sport Management 532 3
Sport Studies 542 3
Sport Management Elective.....3
Sport Management, Sport Studies, or Recreation & Leisure Studies Elective 3

Spring – Second Year
Sport Management 595 6
Sport Management 501 3
Total 61

* Can also be taken in the fall with an elective being taken in the summer.

DEPARTMENT OF ACCOUNTING AND INFORMATION MANAGEMENT

REVISE REQUIREMENTS, MASTER OF ACCOUNTANCY, ACCOUNTING MAJOR

On page 94, right column, of the 2006-2007 *Graduate Catalog*, revise the 1st and 2nd bullet and concentration sections to

Business Core (9 hours) Business Administration 521, 522, 523.
Concentration (21 hours).

Two concentrations are available.

Audit and Controls
Accounting 507, 518, 519, 521, 531; Information Management 541, 543.

Taxation
Accounting 507, 521, 531, 532, 533, 534, 539.

REVISE ACCOUNTING MAJOR (MACC) OTHER REQUIREMENTS HEADING

On page 94, right column, of the 2006-2007 Graduate Catalog, revise the first sentence under Other Requirements to

To qualify for the degree, a student must maintain a B average (3.0) or above in the 30 semester hours comprising the Master of Accountancy program.

DEPARTMENT OF MARKETING AND LOGISTICS

REVISE DOCTOR OF PHILOSOPHY, BUSINESS ADMINISTRATION MAJOR, MARKETING CONCENTRATION

On page 98, right column, of the 2006-2007 *Graduate Catalog,* after the sentence in the Marketing concentration add

The logistics concentration and marketing concentration are research-oriented doctoral programs of instruction that provide perspectives and skills necessary for academic career pursuit in the fields of marketing and logistics respectively. Students pursuing these programs will take a minimum of 42 hours of coursework (beyond that required for an MBA) that covers concepts and issues in marketing or logistics (depending on the concentration), a support field of study, and both quantitative and qualitative scholastic research methods. Upon completion of the coursework comprehensive exams, each candidate conducts dissertation research on a unique topic in marketing or logistics that adds to the knowledge base of the discipline. Successful completion and defense of the dissertation qualifies the candidate to pursue academic opportunities at research-oriented universities or an industry career.

DEPARTMENT OF STATISTICS, OPERATIONS AND MANAGEMENT SCIENCE

REVISE MASTER OF SCIENCE, MANAGEMENT SCIENCE MAJOR

On page 99, of the 2006-2007 *Graduate Catalog*, right column, Requirements Heading, Footnote 1, delete Management 541 and replace with course Operations and Management Science 541.

COLLEGE OF COMMUNICATION AND INFORMATION

All changes effective Fall 2007

I. COURSE CHANGES

(248) Communication and Information

ADD

643 Qualitative Research (3) Theory and application of qualitative research methods to communication and information research. Theoretical considerations underlying symbolic interactionism as translated into research strategies of participant observation, life history, interviewing, archival analysis, and case studies.
(DE) Prerequisite: 615.
Registration Permission: Consent of instructor.

644 Quantitative Research (3) Discussion of issues and best practices in quantitative research, including measurement, sampling, and research design strategies. Focus on techniques and uses of survey, content analysis, and experimental designs, and secondary analysis. Assessment of reliability and validity. Use of data analysis for hypothesis testing and inference.
(DE) Prerequisites: 610.
Registration Permission: Consent of instructor.

651 Contemporary Issues in Science, Technology, Engineering, and Medical Communication and Information (3) Integrative approach to the role of communication and information in the study of STEM topics.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 610 and 615.
Registration Permission: Consent of instructor.

653 Contemporary Issues in Law, Policy, and Ethics in Communication and Information (3) Integrative approach to law, policy, and ethics in communication and information topics.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 610 and 615.
Registration Permission: Consent of instructor.

654 Contemporary Issues in Management of Communication and Information within Organizations (3) Integrative approach to the role of communication and information in organizational management.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 610 and 615.
Registration Permission: Consent of instructor.

655 Contemporary Issues in International and Intercultural Communication and Information (3) Integrative approach to international and intercultural communication and information topics.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 610 and 615.
Registration Permission: Consent of instructor.

697 Independent Study (3) Directed research in a topic of mutual interest.
Repeatability: May be repeated. Maximum 6 hours.
Registration Permission: Consent of instructor.

REVISE COURSE TITLE AND DESCRIPTION

620 Communication and Information Professional Development Seminar (1-3) Seminar examining the role and scope of communication and information teaching, research and other professional development topics.

SCHOOL OF ADVERTISING AND PUBLIC RELATIONS

(012) Advertising

REVISE TO ADD REPEATABILITY

590 Project (3)
Repeatability: May be repeated. Maximum 6 hours.

(841) Public Relations

REVISE TO ADD REPEATABILITY

590 Project (3)
Repeatability: May be repeated. Maximum 6 hours.

SCHOOL OF COMMUNICATION STUDIES

(250) Communication Studies

ADD

542 Communication and Ethnography (3) Theory and application of qualitative approaches to communication research. Emphasis is on ethnographic methods to obtain in-depth information about behaviors and beliefs of people in natural settings. Use of methods: structured interviews using heuristic elicitation methodology, participant/observation and case studies.

REVISE TO ADD REPEATABILITY

590 Project (3)
Repeatability: May be repeated. Maximum 6 hours.

SCHOOL OF INFORMATION SCIENCES

(560) Information Sciences

ADD

680 Information Science Theory (3) Intensive study of theories of information including the definitions of information, information sciences, and information technology. Focus on the intersection of theory and information representation, retrieval, and transfer; theories of human behavior, organizational behavior and information; standards and technologies for information processing and distribution, bibliometrics and infometrics; exploration of relationships with theories of other disciplines.

DROP

580 Information Science Theory (3)

Current Course	Equivalent Course Fall 2007
IS 580 Information Science Theory (3)	IS 680 Information Science Theory (3)

SCHOOL OF JOURNALISM AND ELECTRONIC MEDIA

(592) JOURNALISM AND ELECTRONIC MEDIA

ADD

556 Seminar in Mass Media Health Communication (3) Methods, problems, theories, and issues of communication in health field. Media's reporting of health issues. Setting of media's health agenda; strategic uses of media in social marketing efforts; public communication of complex social/medical issues. Discussion of relevant communication theories including uses and gratifications, reasoned action, health belief model, social cognitive and framing.

DROP

554 Seminar in Mass Media and Health and Risk (3)

Current Course	Equivalent Course Fall 2007
JEM 554 Seminar in Mass Media and Health and Risk (3)	JEM 556 Seminar in Mass Media Health Communication (3)

REVISE COURSE TITLE AND DESCRIPTION

555 Seminar in the Technology and the Economics of Media and Information Systems (3) Examines how economics and technology shape development and operations of media and information systems. Focus on industry structures, market definitions, and impacts of emerging competition. Implications of emerging technologies on costs, market definitions, and supply and demand characteristics. Discussion of emerging/new media and implications on existing systems. Comparison of traditional and emerging industries, markets, and models.

REVISE TO ADD REPEATABILITY

590 Project (3)
Repeatability: May be repeated. Maximum 6 hours.

597 Independent Study (3)
Repeatability: May be repeated. Maximum 6 hours.

II. PROGRAM CHANGES

REVISE ADMISSION REQUIREMENTS, COMMUNICATION AND INFORMATION MAJOR (MS)

On page 104 of the 2006-2007 *Graduate Catalog*, left column, Admission heading, replace current text with the following

A bachelor's degree is required for entry into the master's program. Students lacking academic or professional experience may be required to take prerequisite courses.

The following are normally minimal requirements for admission to full potential candidate status.

- A 3.0 (4.0 system) grade point average in undergraduate studies.
- At or above the fiftieth percentile in verbal, quantitative and analytical aptitude on the Graduate Record Examination.
- Recommendation letters from at least three former teachers or professional colleagues.
- A statement of the applicant's goals and reasons for pursuing the degree. Professional experience in some field of communication and/or information is a highly desirable criterion for admission.
- For students whose native language is not English and who have not earned an earlier degree at an American college or university, the Test of English as a Foreign Language is required. Students should show mastery of the English language.

SCHOOL OF INFORMATION SCIENCES

REVISE INITIAL ENDORSEMENT FOR NON-LICENSED TEACHERS WITH NO MASTER'S DEGREE IN LIBRARY OR INFORMATION SCIENCES

On page 106 of the 2006-2007 *Graduate Catalog*, left column, bottom of page, revise to

Initial Endorsement for Non-Licensed Teachers with no Master's Degree in Library or Information Sciences

For those students who do not have the master's degree, the requirements for initial endorsement include the three required courses plus 551, 567, 571, 572, 573, 585, 595 and 2 electives (upon approval of faculty advisor). In addition, students must complete two corequisite courses from the College of Education, Health, and Human Sciences (6 credit hours) that do not count toward the master's degree requirements. Students pursuing the initial endorsement must follow the non-thesis option. Upon completion of the requirements, students earn a master's degree in information sciences and a Tennessee State Department of Education license as a School Library Information Specialist.

REVISE INITIAL ENDORSEMENT FOR NON-LICENSED TEACHERS WITH A MASTER'S DEGREE IN LIBRARY OR INFORMATION SCIENCES

On page 106 of the 2006-2007 *Graduate Catalog*, right column, top of page, revise to

Initial Endorsement for Non-Licensed Teachers with a Master's Degree in Library or Information Sciences

For those students who hold an ALA-accredited master's degree and have approval of the faculty advisor, the requirements are a maximum of 24 hours within the school's program, including the required Information Sciences 595. In addition, students must complete two corequisite courses from the College of Education, Health, and Human Sciences (6 credit hours) beyond the required 24 hours. Upon completion of the requirements, students earn a Tennessee State Department of Education license as a School Library Information Specialist.

COLLEGE OF EDUCATION, HEALTH, AND HUMAN SCIENCES

All changes effective Fall 2007 unless otherwise indicated *

I. COURSE CHANGES

DEPARTMENT OF CHILD AND FAMILY STUDIES

(245) Child and Family Studies

DROP

545 Family Resource Management and Instruction (3)
560 Human Sexuality (3)
634 Advanced Survey of Family Theory and Research (3)
691 Analytic Reasoning (3)

REVISE REPEATABILITY

502 Registration for Use of Facilities (1-15)
Repeatability: May be repeated. Maximum 24 hours.

REVISE TITLE, DESCRIPTION, AND ADD CREDIT RESTRICTION

580 Special Topics in Child and Family Studies (1-3) Research, theory and current issues in child development, family studies, or early learning. Topics vary.
Credit Restriction: Maximum 3 hours may be applied to child and family studies specialization electives for the master's degree.

581 Directed Study in Child and Family Studies (1-3) Individual learning experiences in specific topics in child development, family studies, or early learning.
Credit Restriction: May not be applied to child and family studies specialization electives for the master's degree.

610 Advanced Special Topics in Child and Family Studies (1-3) Advanced, in-depth study in child development, family studies, or early learning. Topics vary.
Credit Restriction: Maximum 3 hours may be applied to child and family studies specialization electives for the master's degree.

620 Advanced Directed Study in Child and Family Studies (1-3) Advanced, in-depth individualized learning experiences in specific topics in family studies, child development, or early learning.
Credit Restriction: May not be applied to child and family studies specialization electives for the master's degree.

REVISE TITLE, DESCRIPTION, (DE) PREREQUISITE, ADD REPEATABILITY AND REGISTRATION PERMISSION

640 Seminar in Child Development, Family Studies, and Early Learning (3) Recent theoretical and empirical developments in the field. Topics vary.
Repeatability: May be repeated if topic differs. Maximum 9 hours.
(DE) Prerequisites: 510, 511, 550 and 570.
Registration Permission: Consent of instructor.

REVISE TITLE, DESCRIPTION, (DE) PREREQUISITES, ADD REPEATABILITY, RECOMMENDED BACKGROUND, AND REGISTRATION PERMISSION

670 Issues in Study Design and Data Analysis (3) Applications in analysis of social science data, including study design, sampling, measurement, data collection, evaluation, management, and analysis.
(DE) Prerequisites: 510, 511, 550, and 570.
Repeatability: May be repeated if topic differs. Maximum 9 hours.
Recommended Background: Completion of graduate level statistics sequence.
Registration Permission: Consent of instructor.

REVISE CREDIT HOURS AND DESCRIPTION

563 Family Life Education Programs (4) Programs in family life education, including human sexuality, family resource management, and parenthood education.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING

(255) Counselor Education

ADD

680 Advanced Theory and Practice of Career Counseling (3) Extensive study of the current status of career development and of career counseling theory, research, and practice.
(DE) Prerequisite(s): 552.

DROP

553 Career and Educational Information Systems and Resources (3)

REVISE (DE) PREREQUISITE(S) OF PRIMARY COURSE

555 Practicum in Counseling (3) Supervised practice and application of counseling skills with individual clients. *(Same as Psychology 569.)*
(DE) Prerequisite(s): 480, 551, 550 or 556, and 554.

(310) Educational Psychology

ADD

506 Modes of Inquiry (3) Exploration of the nature of scholarly inquiry with emphasis on different approaches to research in education and ways to help students make decisions about how they plan to engage in the community of scholars.

581 Student Assessment (3) Processes for assessing and reporting student progress; interpretation and use of available assessment data. Methods of assessment other than tests and measurements: portfolios, performance tasks, exhibitions.

582 Educational Research Fundamentals (3) Fundamentals of research methodology applicable to curriculum, instruction, and other areas of educational inquiry. Critical reading of research and development of skills needed for proposal development.

583 Survey Research (3) Introduction to survey (descriptive) research. Survey design and application focused on educational problems. Critical reading of research, methodological development in descriptive and survey areas.

651 Seminar in Assessment and Evaluation (3) Trends and issues in student/client assessment, personnel evaluation, and program evaluation; and examination of current state, regional, and national assessment and evaluation projects.
Registration Permission: Consent of instructor.

652 Application of Evaluation and Assessment: Principles and Procedures (3) Systems designs, instruments, procedures, reporting formats used in personnel and program evaluation and student assessment; analysis, synthesis, and interpretation of data sets.
(DE) Prerequisite(s): 630.

653 Designing and Implementing Personnel Evaluation Systems (3) Models and methods of assessing performance of P-12 educators and other professionals. Critique of systems currently in use and design of evaluation systems.

654 Designing Project Evaluations: Theory and Application (3) Evaluation trends and issues. Theoretical frameworks to design evaluation studies for various educational programs.

670 Internship in Evaluation (1-3) Experiences in educational evaluation applied to instructional improvement.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 9 hours.
Recommended Background: Program prerequisites.
Registration Permission: Consent of instructor.

ADD PRIMARY COURSE AND CROSS LIST

533 Program Evaluation in Education (3) Issues and practices in planning and conducting program and curriculum evaluation in a variety of settings. Fundamentals of design, measurement, philosophy, ethics, and underlying values; proper role and use of evaluation in educational organizations. *(Same as Educational Administration 533; Higher Education Administration 533.)*
Registration Permission: Consent of instructor.

(461) Higher Education Administration

ADD SECONDARY CROSS LISTED COURSE

533 Program Evaluation in Education (3) *(See Educational Psychology 533)*.

APPROVAL FOR NON-STANDARD FORMAT COURSE

695 Special Topics: (3)
Projected Dates for Session: 8:00 A.M. – 4:00 P.M. Five Saturdays in Jan, Feb, Mar, Apr, May
Total Number of Weeks: Five Weeks
Total Number of Contact Hours: 2250 Contact Minutes (45 Contact Hours)
Description of Course: This is a culminating seminar for doctoral students in Higher Education Administration. The seminar is designed as an opportunity for the student to develop perspective on some of the major strategic issues and questions in the international social, economic, political and cultural environment in which higher education serves. The seminar will require extensive reading and written reflections.
Instructor: Grady Bogue.
***Effective Term: Spring 2007.**

(852) Rehabilitation Counseling

ADD

544 Cognitive Disabilities, Rehabilitation and Employment (3) Study of cognitive disabilities such as brain trauma, developmental disabilities, substance abuse, and mental illness. Disabilities will be discussed in the context of medical and psychiatric and diagnostic characteristics, functional effects, and rehabilitation and employment implications.

DROP

592 Assistive Technology (3)

REVISE TITLE AND DESCRIPTION

538 Current Issues in Rehabilitation Counseling (3) An examination of current issues in rehabilitation counseling. Topics will include use of technology, professional issues in the public, private-not-for-profit and proprietary rehabilitation systems, ethical and professional behavior issues, and other topics selected by the instructor.

541 Psychosocial and Multicultural Aspects of Disability (3) Psychological impact of disability on person and family. Reaction to loss, coping with disability, and societal rehabilitation. Disability as a cultural phenomenon. Impact of cultural differences on reaction and adjustment to disability. Cross cultural effects upon the rehabilitation counseling process and therapeutic relationship.

543 Physical Disabilities, Rehabilitation, and Employment (3) Etiology and clinical symptoms related to physically disabling conditions. Discussion of various body systems and common disorders and diseases. Emphasis on diagnosis, treatment, and functional and employment implications of physical disabilities. Skills necessary to communicate medical information to lay persons and understand the reports of medical professionals.

REVISE CREDIT HOURS, DESCRIPTION, AND ADD REPEATABILITY

549 Internship in Rehabilitation Counseling (3-6) Supervised practice in rehabilitation and counseling. 600 clock hours required for graduation.
Repeatability: May be repeated. Maximum 9 hours.

DEPARTMENT OF EXERCISE, SPORT, AND LEISURE STUDIES

(347) Exercise Science

REVISE DESCRIPTION

501 Special Project (3) Culminating experience for non-thesis major.

(853) Recreation and Leisure Studies

REVISE TITLE AND DESCRIPTION

540 Fiscal Policies for Recreation and Leisure Services Organizations (3) Application of fiscal policies and procedures to operation of recreation, leisure services, and sport related organizations. Organizational fiscal policy, finance, performance based budgeting, revenue generating strategies, cash and inventory control, commercial/public cooperative ventures, development of logic models, fundraising and development, and strategies for seeking grants and contracts.

541 Management Strategies for Recreation and Leisure Services Organizations (3) A survey of advanced management theory, concepts, and strategies for contemporary recreation, leisure services, and sport organizations. Topics covered in the course include: strategic management and leadership, benefits based management, benchmarking and performance measurement, high performance organizations (HPO), transforming the culture of organizations, the pursuit of excellence, strategic staffing, risk management, development of partnerships and alliances, research and evaluation as strategic functions of managerial leadership.

(957) Sport Management

REVISE TO ADD REGISTRATION RESTRICTIONS

500 Thesis (1-15)
Registration Restriction(s): Master of Science – sport management major.

501 Special Project (3)
Registration Restriction(s): Master of Science – sport management major.

502 Registration for Use of Facilities (1-15)
Registration Restriction(s): Master of Science – sport management major.

511 Administration/Supervision in Sport (3)
Registration Restriction(s): Master of Science – sport management major.

512 Application of Legal Concepts to Sport Settings (3)
Registration Restriction(s): Master of Science – sport management major.

530 Sport and Media Issues (3)
Registration Restriction(s): Master of Science – sport management major.

532 Research Techniques in Sport (3)
Registration Restriction(s): Master of Science – sport management major.

535 Ethics in Sport Management (3)
Registration Restriction(s): Master of Science – sport management major.

544 Theories of Leadership and Leader Behavior in Sport (3)
Registration Restriction(s): Master of Science – sport management major.

554 Readings in Sport Management (3)
Registration Restriction(s): Master of Science – sport management major.

555 Evaluation Techniques for Sport Managers (3)
Registration Restriction(s): Master of Science – sport management major.

560 Sport Governance (3)
Registration Restriction(s): Master of Science – sport management major.

570 Event Management (3)
Registration Restriction(s): Master of Science – sport management major.

580 Special Topics (1-3)
Registration Restriction(s): Master of Science – sport management major.

590 Practicum (3)
Registration Restriction(s): Master of Science – sport management major.

593 Independent Study (1-3)
Registration Restriction(s): Master of Science – sport management major.

595 Internship (3)
Registration Restriction(s): Master of Science – sport management major.

DROP FOR GRADUATE CREDIT

440 Sport Marketing (3)

(959) Sport Studies

ADD

490 Psychology of Coaching (3) Major topics and theories dealing with the social-psychological factors affecting the performance of athletes and teams, with practical suggestions for enhancing the effectiveness of teachers and coaches.

DEPARTMENT OF INSTRUCTIONAL TECHNOLOGY, HEALTH, AND CULTURAL STUDIES

(FORMERLY DEPARTMENT OF INSTRUCTIONAL TECHNOLOGY, HEALTH, AND EDUCATIONAL STUDIES)

- DROP ACADEMIC DISCIPLINE AND ALL COURSES

(256) Curriculum, Educational Research, & Evaluation

520 Techniques of Research in Education (3)
532 Instructional Research: Analysis and Application (3)
534 Program Evaluation in Education (3)
552 School Law for Educators (3)
558 Curriculum Planning and Development (3)
560 Student Assessment (3)
580 Techniques for Research in Curriculum and Instruction (3)
588 Instructional Theory and Design (3)
604 Seminar in Curriculum and Instruction (1)
623 Using Research for Curriculum Improvement (3)
630 Seminar in Assessment and Evaluation (3)
631 Application of Assessment/Evaluation (3)
672 Interpretation and Application of Curriculum and Instruction Research (3)
674 Designing and Implementing Personnel Assessments (3)
675 Curriculum Evaluation: Theory and Application (3)
676 Curriculum Theory (3)

(271) Cultural Studies in Education

ADD

504 Teachers, School, and Society (3) Critical interdisciplinary examination of selected policies and assumptions about education in America with a focus on teachers, students, and the relationship between schools and the broader society.

- DROP ACADEMIC DISCIPLINE AND ALL COURSES

(570) Instructional Technology and Educational Studies

500 Thesis (1-15)
502 Registration for Use of Facilities (1-15)
503 Problems in Lieu of Thesis (2-3)
518 Educational Specialist Research and Thesis (3)
593 Independent Study (1-3)
594 Supervised Readings (1-3)
595 Special Topics (1-3)
600 Doctoral Research and Dissertation (3-15)
601 Foundations of Research, Scholarship & Doctoral Study (3)
689 Internship (1-3)
693 Independent Study (1-3)
694 Supervised Reading (1-3)
695 Special Topics (1-3)

- ADD ACADEMIC DISCIPLINE AND ALL COURSES

(572) Instructional Technology, Health, and Cultural Studies

500 Thesis (1-15)
Grading Restriction: P/NP only.
Repeatability: May be repeated.

502 Registration for Use of Facilities (1-15) Required for the student not otherwise registered during any semester when student uses university facilities and/or faculty time before degree is completed.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated.
Credit Restriction: May not be used toward degree requirements.

503 Problems in Lieu of Thesis (2-3)
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 9 hours.

518 Educational Specialist Research and Thesis (3)
Grading Restriction: P/NP only.
Repeatability: May be repeated. Maximum 12 hours.

593 Independent Study (1-3)
Grading: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 12 hours.

594 Supervised Readings (1-3)
Grading: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 12 hours.

595 Special Topics (1-3)
Grading Restriction(s): Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 12 hours.

600 Doctoral Research and Dissertation (3-15)
Grading Restriction: P/NP only.
Repeatability: May be repeated.

601 Foundations of Research, Scholarship & Doctoral Study (3) Introduction to PhD program concentrations in ITES: research requirements, meaning of scholarship in academe and issues/problems in education.
Comment(s): Admission to a PhD program in ITHCS required.

689 Internship (1-3) Experiences in application of principles and practices of curriculum development and instructional improvement.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 9 hours.
Registration Permission: Consent of instructor.

693 Independent Study (1-3)
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 9 hours.

694 Supervised Readings (1-3)
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 9 hours.

695 Special Topics (1-3)
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 9 hours.

CURRENT COURSE **(256) Curriculum, Educational Research, and Evaluation** **(570) Instructional Technology and Educational Studies**	**EQUIVALENT COURSE FALL 2007** **(310) Educational Psychology** **(572) Instructional Technology, Health, and Cultural Studies** **(978) Theory and Practice in Teacher Education**
CREV 534 Primary Course (Same as EA 534; HE 534)	EP 533 Primary Course (Same as EA 533; HE 533)
CREV 560	EP 581
CREV 580	EP 582
CREV 623	EP 583
CREV 630	EP 651
CREV 631	EP 652
CREV 674	EP 653
CREV 675	EP 654
CREV 558	TPTE 558
CREV 588	TPTE 588
CREV 676	TPTE 676
ITES 689	EP 670
ITES 500	ITHCS 500
ITES 502	ITHCS 502
ITES 503	ITHCS 503
ITES 518	ITHCS 518
ITES 593	ITHCS 593
ITES 594	ITHCS 594
ITES 595	ITHCS 595
ITES 600	ITHCS 600
ITES 601	ITHCS 601

ITES 689	ITHCS 689
ITES 693	ITHCS 693
ITES 694	ITHCS 694
ITES 695	ITHCS 695

DEPARTMENT OF NUTRITION

(726) Nutrition

CLARIFY REPEATABILITY

540 Seminar in Nutrition (1)
Repeatability: May be repeated. Maximum 6 hours.

547 Field Experience (3-9)
Repeatability: May be repeated. Maximum 20 hours.

602 Advanced Topics in Nutrition Science (1-3)
Repeatability: May be repeated. Maximum 12 hours.

DEPARTMENT OF RETAIL, HOSPITALITY, AND TOURISM MANAGEMENT

(514) Hotel, Restaurant, and Tourism

CLARIFY REPEATABILITY

534 Special Topics in Foodservice and Lodging Administration (1-3)
Repeatability: May be repeated. Maximum 6 hours.

537 Seminar in Food Service and Lodging Administration (1)
Repeatability: May be repeated. Maximum 3 hours.

547 Field Experience (3-9)
Repeatability: May be repeated. Maximum 9 hours.

(865) Retail, and Consumer Sciences

CLARIFY REPEATABILITY

590 Research Seminar (1)
Repeatability: May be repeated. Maximum 2 hours.

DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

(293) Educational Administration

ADD

608 Development of and Current Issues in Educational Administration (3) Introduction to the area of educational administration. Focusing on the development of educational administration, school leadership preparation programs as well as current reforms, issues and indictments.

ADD SECONDARY COURSE AND CROSS LIST

533 Program Evaluation in Education (3) *(See Educational Psychology 533.)*

(978) Theory and Practice in Teacher Education

ADD

519 Curriculum for School Leaders (3) This course is designed to equip aspiring school leaders with practical and theoretical knowledge of various curriculum models that might be used to foster instructional leadership and enhance school improvement initiatives. Seminars, lectures, and inquiry-based approaches will be used.

549 Secondary School Curriculum (3) Focus of this course is curriculum and instructional design for secondary school. Characteristics of students, curriculum designs, instructional patterns, and organization and structure of secondary schools will be studied.

558 Curriculum Planning and Development (3) Focuses on foundations and principles of curriculum planning and development, historical analysis of curriculum theory, principles of planning and development, and classroom applications for improved learning.

588 Instructional Theory and Design (3) Focuses on the relationship of curriculum to instruction; examination of instructional and related learning theories; instructional models and teaching styles.

676 Curriculum Theory (3) The focus is on influential curriculum theories and approaches, implications for structure and design of educational programs, the nature and function of theory, and theory building activities.
(RE) Prerequisite(s) 558.

REVISE REPEATABILITY AND ADD CREDIT RESTRICTION

595 Special Topics (1-3)
Repeatability: May be repeated. Maximum 24 hours.
Credit Restriction: Only 12 hours can be used to meet degree requirements.

II. PROGRAM CHANGES

DEPARTMENT OF CHILD AND FAMILY STUDIES

√ DROP CONCENTRATIONS, CHILD AND FAMILY STUDIES MAJOR (MS)
CHILD AND FAMILY STUDIES CONCENTRATION
EARLY CHILDHOOD EDUCATION CONCENTRATION

√ ADD NEW CONCENTRATIONS, CHILD AND FAMILY STUDIES MAJOR (MS)
GENERAL-EMPHASIS CONCENTRATION
TEACHER-LICENSURE (PREK-3) CONCENTRATION

REVISE DESCRIPTION, CHILD AND FAMILY STUDIES MAJOR (MS)

On page 111 of the 2006-2007 *Graduate Catalog*, left column, Master of Science Heading, Child and Family Studies Major, revise the description beginning with the fourth sentence

Students choose to concentrate either in general-emphasis, leading to doctoral study or careers in community agencies serving children and families, or teacher-licensure (PreK-3), leading to an educator career in early childhood or school settings. The teacher-licensure (PreK-3) concentration is ordinarily restricted to students currently enrolled in the undergraduate teacher-licensure program at the University of Tennessee, Knoxville.

On page 111 of the 2006-2007 *Graduate Catalog*, insert headings and requirements for the new concentrations

GENERAL-EMPHASIS CONCENTRATION
Requirements
The general-emphasis concentration requires a minimum of 36 hours of coursework – 12 hours in foundation coursework and 24 hours in specialization. The specialization credit hours are selected with guidance of the student's master's committee. Students seeking the MS with a major in child and family studies (general-emphasis concentration) must select a master's committee chair and file a plan of study with the department head after 12 hours of graduate credit.

TEACHER-LICENSURE (PREK-3) CONCENTRATION
Requirements
The teacher-licensure (PreK-3) concentration is designed for students seeking a MS along with initial teacher licensure in early childhood education (PreK through Grade 3). At the University of Tennessee, Knoxville, students interested in the MS with a major in child and family studies [teacher-licensure (PreK-3) concentration] must apply for admission to graduate study through the procedures outlined above. Application for admission to teacher licensure (PreK-3) is a part of the application process to the graduate program and is described in the *Undergraduate Catalog*. Admission to the teacher-licensure (PreK-3) is concurrent with admission to the child and family studies master's program. The teacher-licensure (PreK-3) concentration requires 36 hours of coursework and a written comprehensive exam.

	Hours Credit
[1]Child and Family Studies Foundation Courses	9
[2]Childhood Education Core (includes licensure)	24
[3]Childhood Education Specialization Elective	3
	Total 36

[1]Child and Family Studies 510, 511, 550.
[2]Child and Family Studies 512 (3), 569 (3) 574 (2), 575 (12), 591 (4). Students complete an action research project in Child and Family Studies 569.
[3]Elected from a list of courses with prior committee approval.

√ DROP HUMAN ECOLOGY MAJOR (PHD) – CHILD AND FAMILY STUDIES CONCENTRATION

√ ADD HEALTH AND HUMAN SCIENCES MAJOR (PHD) – CHILD AND FAMILY STUDIES CONCENTRATION

On page 111 of the 2006-2007 *Graduate Catalog*, right column, bottom of page, delete requirements for the human ecology major (PhD) and replace with requirements for the health and human sciences major (PhD)

DOCTOR OF PHILOSOPHY
HEALTH AND HUMAN SCIENCES MAJOR
CHILD AND FAMILY STUDIES CONCENTRATION

The department supports a doctoral program leading to a PhD with a major in health and human sciences. Two themes are highlighted – the integration of human development and family studies and concentration in a selected area of study. A doctoral program that is concurrently specialized and integrative in nature reflects the complexity of the disciplinary subject matter, provides a broader context to formulate theoretical questions, and broadens the empirical literature for addressing these questions. The PhD is primarily a research degree. A core component of the program focuses on the development of expertise in research methods and statistics so that graduate students are capable of advancing knowledge in their field of study.

Requirements
• Completion of the foundation courses in the master's program – 510, 511, 550, and 570.
• Completion of 640.
• Minimum of 18 hours of additional coursework in child and family studies.
• Statistics 538 or Social Work 660.
• 3 hours of advanced statistics.
• 6 hours of supervised research practica, Child and Family Studies 680 and 681.
• 3 hours of either Child and Family Studies 633 or 660 and 3 hours from Child and Family Studies 633, 650, 660, or 670, for a total of 6 hours of doctoral-level child and family studies research methods.
• Minimum 3 hours in specialized research methods.
• Completion of 2 hours of Child and Family Studies 572.
• Minimum of 6 hours in a cognate area.
• Minimum of 24 hours of 600.
• Minimum of 92 hours beyond the bachelor's degree.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING

REVISE REQUIREMENTS FOR COUNSELING MAJOR (MS) – MENTAL HEALTH COUNSELING CONCENTRATION

On page 115, of the 2006-2007 *Graduate Catalog*, left column revise Year 1 and 2 requirements as follows

Year 1	**Hours Credit**
Counselor Education 431, 480, 525, 551, 554, 555, 556	21
Educational Psychology 550	3
Psychology 512 or Educational Psychology 510	3
Counselor Education 500 or electives	3
	Year 1 Total 30

Year 2	
Counselor Education 521, 535, 552	9
Counselor Education 559	9
Counselor Education 570	3
Psychology 573 or Social Work 524	3
Counselor Education 500 or electives	6
	Year 2 Total 30
	Total program hours 60

REVISE REQUIREMENTS FOR COUNSELING MAJOR (MS) – SCHOOL COUNSELING CONCENTRATION

On page 116 of 2006-2007 *Graduate Catalog*, left column, revise Year 1 and 2 requirements as follows:

Year 1	**Hours Credit**
Counselor Education 431, 480, 525, 550, 551, 552, 554	21
Educational Psychology 550	3
Elective	3
	Year 1 Total 27

Year 2

Counselor Education 555	3
Counselor Education 558	6
Counselor Education 561, 570	6
Educational Psychology 510	3
*Special Education 470	3
Year 2 Total	**21**
Total program hours	**48**

* Individuals with teaching license can substitute an elective for this course.

√ DROP EDUCATIONAL PSYCHOLOGY CONCENTRATION (EDUCATION MAJOR) PHD

On page 112 of the 2006-2007 *Graduate Catalog* right column, top of page, delete the Educational Psychology Concentration from the Education major listing (PhD).

√ ADD EDUCATIONAL PSYCHOLOGY AND RESEARCH CONCENTRATION (EDUCATION MAJOR) PHD AND ADD SPECIALIZATION: EVALUATION AND ASSESSMENT

On page 112 of the 2006-2007 *Graduate Catalog*, right column, top of page, revise as follows:

Educational Psychology and Research Concentration
(specializations in adult education; applied educational psychology; collaborative learning; and evaluation and assessment)

REVISE HEADING AND CATALOG TEXT TO REFLECT NEW CONCENTRATION AND SPECIALIZATION

On page 112 of the 2006-2007 *Graduate Catalog*, right column, top of page, delete current heading Educational Psychology and program description and replace with the following:

EDUCATIONAL PSYCHOLOGY AND RESEARCH
Educational psychology and research offers individuals a choice of two concentrations at the master's level and four PhD specializations. These options meet the needs of students with varying interests within the broad field of educational psychology. The areas of adult education, applied educational psychology, collaborative learning, and evaluation and assessment are linked by a common interest in human development, teaching and learning, and methods of inquiry. Educational psychology prepares students with diverse backgrounds for leadership roles in education across the life span and in facilitation of improved professional practices. Together, a community of learners is created and students and faculty members regularly share with and learn from one another through collaborative scholarship. Graduates are employed in such areas as higher education, K-12 education, business and industry, nonprofit, and community service agencies.

REVISE CATALOG TEXT TO ADD DESCRIPTION OF EVALUATION AND ASSESSMENT SPECIALIZATION

On page 113 of the 2006-2007 *Graduate Catalog*, left column, top of the page before the Masters of Science Heading and after the ending of Collaborative Learning, add the following description for the Evaluation and Assessment Specialization

Evaluation and Assessment
The evaluation and assessment specialization is designed for students interested in pursuing careers as evaluators of learning needs and outcomes in educational settings. The program encompasses the evaluation requirements and needs of diverse educational settings across the P-16 continuum, as well as educational endeavors conducted under the auspices of private, profit and non-profit organizations. The specialization includes coursework in program (and project) evaluation, classroom assessment, and personnel evaluation systems. This specialization combines elements of evaluation theory, evaluation and assessment methods, and hands-on applications to provide students with relevant knowledge and skills for engaging in research and/or the practice of educational evaluation.

ADD EVALUATION AND ASSESSMENT SPECIALIZATION SHOWCASE

On page 115, of the 2006-2007 *Graduate Catalog*, left column, top of page before Counseling Heading, insert as follows

Evaluation and Assessment Specialization
Requirements
The PhD specialization in evaluation and assessment involves a minimum of 82 hours of study beyond the master's degree distributed among the following categories:

	Hours Credit
[1]Concentration Core	10
[2]Specialization	21
[3] Research	15
[4] Electives	6-12
[5] Cognate	6

[6] Dissertation..... 24
Total 82 - 88

[1] The departmental core consists of the following courses: EP 507, 513, 525, and 601. In addition, all students take EP 506 as part of the research requirement.
[2] This specialization consists of the following Educational Psychology courses: EP 533, EP 581, EP 651, EP 652, EP 653, EP 654, and EP 670.
[3] A departmental course introducing quantitative and qualitative methods is required for all students as a part of the minimum 15 hours of research. In addition to a mix of both qualitative and/or quantitative methodologies, at least six hours of statistics are strongly encouraged.
[4] Students are to explore other fields related to their areas of interest. The courses may include curriculum, instructional technology, educational administration/higher education or others courses within and beyond education.
[5] At least 6 hours must be taken in a cognate area outside the program.
[6] All students will enroll in a minimum of 24 hours of dissertation. Further details are described elsewhere in the catalog.

REVISE THE DESCRIPTION AND REQUIREMENTS FOR COUNSELING MAJOR (MS) REHABILITATION COUNSELING CONCENTRATION

On page 115, of the 2006-2007 *Graduate Catalog*, right column, top of page, delete current text and replace with

The purpose of rehabilitation training programs is to ensure that skilled personnel are available to serve the rehabilitation needs of individuals with disabilities assisted through vocational rehabilitation (VR), supported employment, and independent living programs. The University of Tennessee, Knoxville, graduate concentration in rehabilitation counseling is designed to prepare students for professional careers as clinicians in the field of rehabilitation counseling. The rehabilitation counseling concentration is service-oriented and includes practica and internship experiences. The program is fully accredited by the Council on Rehabilitation Education, Inc. (CORE).

Students may complete the 48 hour program in four academic semesters (two fall terms, one spring term, and one summer term). Students may be admitted to the program either full- or part-time. Full-time students admitted to the program follow a sequence of courses that facilitates degree completion in 16 months. The first (fall) and third (summer) semesters are didactic in nature, but the second semester adds an experiential component under Rehabilitation Counseling 547. The final (second fall) semester is experiential, with students working full-time to fulfill the 600-hour requirement of Rehabilitation Counseling 549. The internship is considered the culminating experience to the program and students must complete internship in the final term of study prior to graduation. Upon completion of the 48-hour program students are eligible to participate in the Certified Rehabilitation Counselor (CRC) examination, administered by the Commission on Rehabilitation Counselor Certification (CRCC). Upon successful completion of this examination students earn the credential of Certified Rehabilitation Counselor (CRC). Students are also required to demonstrate satisfactory performance through written comprehensive examination as a requirement for graduation.

Students also have the option of completing a 60-hour psychosocial rehabilitation track. This track is intended for students who have career goals that include working with individuals with disabilities in hospital settings, proprietary rehabilitation, community rehabilitation programs, and other such settings. Students wishing to practice in mental health agencies or similar settings should consider the mental health counseling track. Students in both 48 and 60 hour tracks are required to demonstrate satisfactory performance in a written comprehensive examination as a requirement for graduation. Contact Dr. Patrick Dunn for details (865) 974-8013 or by email at pdunn4@utk.edu.

Requirements
For students pursing the 48-hour program of study the following course sequence is recommended. All courses are three-credit hours, except where indicated:

Fall 1
Counselor Education 551
Rehabilitation Counseling 530, 538, 543, 545
Spring 1
Educational Psychology 550
Rehabilitation Counseling 532, 537, 544, 547
Summer 1
Counselor Education 554
Rehabilitation Counseling 533, 541
Fall 2
Counselor Education 552
Rehabilitation Counseling 549 (6 credit hours)

Students pursuing the 60-hour psychosocial rehabilitation track are required to complete the following courses in addition to those indicated above:
Counselor Education 525,
Elective (Approved by Academic Advisor)
Educational Psychology 510 or Psychology 512
Rehabilitation Counseling 549 (3 additional credit hours)

The additional three hours of internship in the psychosocial track must be completed in a rehabilitation setting serving individuals with cognitive, emotional or psychiatric disorders.

Students are admitted to rehabilitation counseling courses upon program admission only. All rehabilitation counseling courses, with the exception of Rehabilitation Counseling 549, are offered only one semester per year. Students who are admitted to the program must meet with an advisor each semester to plan their studies.

Program Contacts
Patrick L. Dunn, Ph.D., CRC, Program Coordinator, pdunn4@utk.edu

REVISE PROGRAM DESCRIPTION AND REQUIREMENTS FOR SCHOOL PSYCHOLOGY MAJOR – EDS AND PHD

On pages 117 and 118 of the 2006-2007 *Graduate Catalog*, remove all current School Psychology text and requirements and replace with the following.

SCHOOL PSYCHOLOGY

http://web.utk.edu/~edpsych/school_psychology/
The school psychology programs are based on a data-based decision-making model and offer advanced training in psychological, educational, and professional foundations including training in assessment, research, consultation, and intervention. Two degree programs are offered – the Specialist in Education (EdS) and the Doctor of Philosophy (PhD). The school psychology programs are designed to meet accreditation requirements of relevant bodies including the American Psychological Association (APA), the National Association of School Psychologists (NASP), the National Council for Accreditation of Teacher Education (NCATE), and the Tennessee Department of Education. Information about current accreditation status can be obtained from the web site. Admission occurs once a year and materials are due by January 15.

SPECIALIST IN EDUCATION
SCHOOL PSYCHOLOGY MAJOR

Every EdS school psychology student is expected to meet the University of Tennessee school psychology training program's knowledge and skill requirements. Opportunities for students to meet these requirements will occur in the classroom and during field experiences. The school psychology faculty, along with current and previous students, practicum and internship supervisors, and various other groups who help ensure quality control within our training programs, have contributed to the development of our curricula. Various accrediting and curricula oversight agencies (i.e., NASP, SDE-Tennessee) have their own specific goals and objectives. The *School Psychology Handbook*, published by the Educational Psychology and Counseling Department, describes how the University of Tennessee EdS school psychology training program attempts to meet the goals and objectives of these various training groups. The University of Tennessee, Knoxville, EdS program is designed to provide graded, sequential, and hierarchical training across the following areas.

- Professional school psychology.
- Consultation and intervention.
- Assessment.
- Research and statistics.
- Psychoeducational core.
- Field experience and professional practice.

Requirements
The program typically requires four years to complete and requires a minimum of 79 graduate hours, which includes course work, field experiences, and an internship completed in the final academic year. The internship requires 1200-1500 clock hours with a minimum of 600 clock hours in school settings. A comprehensive description of requirements and our recommended sequence of course and field experience work are provided in the *School Psychology Handbook*.

DOCTOR OF PHILOSOPHY
EDUCATION MAJOR
SCHOOL PSYCHOLOGY CONCENTRATION

Every PhD school psychology student is expected to meet the University of Tennessee school psychology training program's knowledge and skill requirements. Opportunities for students to meet these requirements will occur in the classroom and during field experiences. The school psychology faculty, along with current and previous students, practicum and internship supervisors, and various other groups who help ensure quality control within our training programs, have contributed to the development of our curricula. Various accrediting and curricula oversight agencies (i.e., APA, NASP, SDE-Tennessee) have their own specific goals and objectives. *The School Psychology Handbook*, published by the Educational Psychology and Counseling Department describes how the University of Tennessee school psychology training program attempts to meet the goals and objectives of these various training groups.

The University of Tennessee PhD program is designed to provide graded, sequential, and hierarchical training across the following areas.

- Professional school psychology.
- Consultation and intervention.
- Assessment.
- Research and statistics.
- Psychoeducational core.
- Field experience and professional practice.

Requirements
The program typically requires five years to complete and requires a minimum of 113 total hours. Students must complete 24 hours of dissertation work and a minimum of 89 graduate course hours, which includes course work, field experiences, and an internship completed in the final academic year. The internship requires 2000 clock hours with a minimum of 600 clock hours in school settings. A comprehensive description of requirements and our recommended sequence of course and field experience work are provided in the *School Psychology Handbook*.

DEPARTMENT OF EXERCISE, SPORT, AND LEISURE STUDIES

REVISE REQUIREMENTS FOR EXERCISE SCIENCE MAJOR (MS) – EXERCISE PHYSIOLOGY CONCENTRATION

On page 119, of the 2006-2007 *Graduate Catalog*, right column, bottom of page, revise the last sentence to

Electives approved by advisor from Exercise Science, Nursing, Nutrition, or Sport Studies.

REVISE REQUIREMENTS TO EXERCISE SCIENCE MAJOR, (MS) – BIOMECHANICS/SPORTS MEDICINE CONCENTRATION

On page 119, of the 2006-2007 *Graduate Catalog*, right column, bottom of page, first bullet revise to

REQUIREMENTS
Exercise Science 508, 513, 531, 533, 633, 601 (1hour seminar, 2 enrollments) 635

√ MOVE GERONTOLOGY MINOR
FROM – DEPARTMENT OF INSTRUCTIONAL TECHNOLOGY, HEALTH, AND CULTURAL STUDIES
TO – DEPARTMENT OF EXERCISE, SPORT, AND LEISURE STUDIES

GERONTOLOGY
Intercollegiate/Interdisciplinary
Gerontology Minor

An intercollegiate/interdisciplinary minor in gerontology gives the graduate student an opportunity for combining the knowledge and experience about aging in American society with his/her own major concentration. Core courses and a practicum are offered by the College of Nursing, College of Social Work and selected departments within the College of Education, Health, and Human Sciences.

REQUIREMENTS
Prior to earning more than one-half the total hours required for this minor, students must complete a Declaration of a Gerontology Minor form found in the advising offices in each of the participating colleges, and in the office of the current Gerontology Coordinator identified by the interdisciplinary Gerontology Colloquy.

Core Experience
Students must complete a core experience of 12 semester hours. This requires one 3-hour course in each of the primary disciplines (health science, social science, behavioral science) as identified on the Declaration of a Gerontology Minor form.

Coursework (9 hours). A variety of coursework may be taken toward satisfaction of this requirement. Courses which are offered include Health 406, 465; Health/Public Health 650; Nutrition 518; Public Health 523; Social Work 566; Educational Psychology 504, 522, 525, 528; and other courses approved by the interdisciplinary gerontology colloquy member coordinating the minor.

Applied Practicum (3 hours). Students should register under practicum experiences in the home department of the supervising faculty.

Graduate Committee
At least one faculty member from the interdisciplinary Gerontology Colloquy who is qualified to work with graduate students, must serve on the graduate committee of each student who declares a gerontology minor.

Admission to Candidacy
When application is made for admission to candidacy, indication of the minor must be noted on the Admission to Candidacy form.

√ MOVE GRADUATE CERTIFICATE IN GERONTOLOGY
FROM – DEPARTMENT OF INSTRUCTIONAL TECHNOLOGY, HEALTH, AND EDUCATIONAL STUDIES TO – DEPARTMENT OF EXERCISE, SPORT, AND LEISURE STUDIES

GRADUATE CERTIFICATE IN GERONTOLOGY
The graduate certificate in gerontology is intended for pre and in-service workers in gerontology. The program of study follows the guidelines of the Association of Gerontology in Higher Education and is offered under the purview of the University's Gerontology Colloquy.

The completed "Request for Change of Graduate Program" and the completed "Post-Bac/Graduate Certificate Admission Application" must be submitted and signed off by the Colloquy representatives. Contact one of the three college representatives (Education, Health, and Human Sciences; Nursing; or Social Work) for assistance.

REQUIREMENTS

	Hours Credit
Nine (9) hours covering the focus areas of the interdisciplinary field of gerontology	
[1]Physical	3
Social – Social Work 566	3
Behavioral – Educational Psychology 523	3
Internship or practicum	6
[2]Electives	6

[1] Select one from Health/Public Health 650; Nutrition 518; other courses approved by the interdisciplinary gerontology colloquy member coordinating the gerontology minors and the certificate program.
[2] At least 6 hours from Educational Psychology 504; Exercise Science/Public Health 635; Health 406, 570, Health 585 (cross-listed with several disciplines; may be repeated, 3 hours maximum); Public Health 523; Nursing 400; Social Work 540; other courses as approved by the interdisciplinary gerontology colloquy member coordinating the gerontology minor and the certificate program.

REVISE TO ADD INFORMATIONAL TEXT TO RECREATION AND LEISURE STUDIES MAJOR (MS)

On page 120, of the 2006-2007 *Graduate Catalog*, left column, after Heading Master of Science, Recreation and Leisure Studies Major add the following informational and program text

RECREATION AND LEISURE STUDIES
The recreation and leisure studies program at the University of Tennessee is one of 100 programs in the nation and one of two undergraduate programs in the state of Tennessee that is accredited. Graduation from an accredited program or from an institution where there is an association with an accredited program may potentially increase opportunities for our graduates. One of the unique features of the program is a heavy emphasis on an experiential education approach to academic preparation. Students graduating from this program will gain a tremendous amount of practical experience to accompany their academic degree.

Professional Certification
Students enrolled in the recreation and leisure studies program are urged to prepare for and take the professional certification examinations offered by the National Recreation and Park Association and The National Council For Therapeutic Recreation. In light of the fact that many public, quasi-public and non-profit recreation and leisure services employers are mandating professional certification as a condition of employment, obtaining certification is a must. Courses in the RLS degree program prepare the student to do so. The primary purpose of certification is to ensure that personnel employed in recreation, therapeutic recreation and leisure services meet high standards of performance. Practice exams and study sessions provide students with ample opportunities to successfully pass the certification examination. Our graduates are eligible to take the Associate Park and Recreation Professional (APRP), Certified Park and Recreation Professional (CPRP) and the National Council For Therapeutic Recreation (NCTRC) exams.

Curriculum Accreditation
Accreditation is a status granted to an institution or a program that meets or exceeds stated criteria of educational quality. In the United States, accreditation of professional preparation curricula is conferred by non-governmental bodies, which are often closely associated with professional associations in the field. The NRPA/AAPAR Council on Accreditation, sponsored by the NRPA and the American Association for Physical Activity and Recreation (AAPAR), is such a body. The NRPA/AAPAR Council on Accreditation is a member of both the Council on Higher Education (CHEA) and the Association of Specialized and Professional Accreditors (ASPA) and continues to be recognized, now by CHEA.

Graduate Assistantships
Graduate Assistantships are available to qualified candidates. Students should contact directly the area in which they are pursuing an assistantship. A limited number of graduate assistantship are available in the Physical Education Activity Program for students who qualify. Please contact Margy Wirtz at mwirtz@utk.edu for more information. Assistantships may also be available for qualified candidates in the recreation and leisure studies program, in recreation sports on campus and in men's and women's athletics.

Admission
Applications to the program are taken on a year round basis. A minimum grade point average of 3.0 on a 4.0 scale or a 3.0 GPA during the senior year of undergraduate study is required for admission. Applicants must first be admitted to the University of Tennessee as a graduate student, and then be admitted to the recreation and leisure studies graduate program. Applicants must submit all college transcripts, a university application, a Department of Exercise, Sport, and Leisure Studies application, three rating forms and a writing sample.

Recreation and Leisure Studies Administration Concentration
The professional discipline that comprises recreation and leisure studies prepares students for management and leadership positions in many public and private recreation and leisure related enterprises. The core curriculum provides an understanding of the role and impact of leisure in achieving and sustaining socio-economic growth and political order in an increasingly culturally diverse society. Leisure is central to balancing physical and mental health and sustaining economic growth. Some sectors of the leisure industry have outperformed the market as a whole and are positioned to flourish as the economy becomes more leisure service-oriented.

Therapeutic Recreation Concentration
The therapeutic recreation concentration prepares students for employment in management and leadership positions with agencies that deliver health care services. Students are successful in gaining employment in physical rehabilitation hospitals, children's programs, drug and alcohol rehabilitation and treatment centers, programs serving individuals with developmental disabilities, long-term care and assisted living facilities, and in community, outdoor and school-based therapeutic recreation programs. Graduates of the program fulfill the requirements for national certification by the National Council for Therapeutic Recreation Certification (NCTRC) and have been successful in completing the national exam.

REVISE REQUIREMENTS FOR RECREATION AND LEISURE STUDIES MAJOR (MS)

On page 120, of the 2006-2007 *Graduate Catalog*, left column, Recreation and Leisure Studies Major, revise showcases as follows

Line number 1 under the Recreation and Leisure Administration Concentration (Thesis Option)
Recreation and Leisure Studies 415, 511, 515, 540, 541.....15

Line 1 under the Recreation and Leisure Administration Concentration (Non-Thesis Option)
Recreation and Leisure Studies 415, 511, 515, 540, 541.....15

Line 1 under the Therapeutic Recreation Concentration (Thesis Option)
Recreation and Leisure Studies 511, 515, 520, 521, 522.....15

Line 1 under the Therapeutic Recreation Concentration (Non-Thesis Option)
Recreation and Leisure Studies 511, 515, 520, 521, 522.....15

REVISE REQUIREMENTS FOR THE SPORT MANAGEMENT CONCENTRATION (DUAL MS-MBA)

On page 121, of the 2006-2007 *Graduate Catalog*, left column, Sport Management Concentration (MS-MBA), revise showcases as follows

First Year
August
Business Administration 511 3

Fall
Business Administration 501 1
Business Administration 512 15

Spring
Business Administration 513 9
MBA Elective Recommend: Marketing 520 3
Sport Management 554 3

Summer
Sport Management 511 ..... 3*
Sport Management 535 3

Second Year
Fall
Sport Management 532 3
Sport Studies 542 3
Sport Management Elective.....3
Sport Management, Sport Studies, or Recreation and Leisure Studies Elective...3

Spring
Sport Management 595 6
Sport Management 501 3
Total 61

* Can also be taken in the fall with an elective being taken in the summer

√ DEPARTMENT OF INSTRUCTIONAL TECHNOLOGY, HEALTH, AND CULTURAL STUDIES

(FORMERLY DEPARTMENT OF INSTRUCTIONAL TECHNOLOGY, HEALTH, AND EDUCATIONAL STUDIES)

√ MOVE GERONTOLOGY MINOR AND GRADUATE CERTIFICATE IN GERONTOLOGY
FROM – DEPARTMENT OF INSTRUCTIONAL TECHNOLOGY, HEALTH, AND CULTURAL STUDIES
TO – DEPARTMENT OF EXERCISE, SPORT, AND LEISURE STUDIES

√ DROP HUMAN ECOLOGY MAJOR (PHD) – COMMUNITY HEALTH CONCENTRATION

√ ADD HEALTH AND HUMAN SCIENCES MAJOR (PHD) – COMMUNITY HEALTH CONCENTRATION

On page 123 of the 2006-2007 *Graduate Catalog*, left column, delete current text and replace as follows

DOCTOR OF PHILOSOPHY
HEALTH AND HUMAN SCIENCES
COMMUNITY HEALTH CONCENTRATION

Requirements

	Hours Credit
[1]Research and Foundations	12
[2]Community Health Specialization	30
[3]Supporting Specialization (Public Health, Safety, or Gerontology)	12
[4]Cognate	6
Dissertation (Health 600)	24
Total 84	

[1] Health 590; Statistics 531, 532 or a two-course 500-level statistics sequence approved by doctoral chair. Three hours of natural or behavioral sciences approved by doctoral chair.
[2] Health 610, 620, 530, 540, 655, 660, and Public Health 550 (required) and 9 additional hours of graduate health electives. A list of recommended health electives for the community health doctoral program is available in the program office.
[3] A block of 12 hours must be taken from one of the following areas: public health, safety/emergency management, or gerontology.
[4] Courses must be approved by cognate professor outside the department.

NOTE: To meet program requirements, students must select courses in consultation with a program advisor. Program totals are minimums and some students may be required to complete additional coursework to overcome background deficiencies or to increase skill in an area of identified specialization.

PUBLIC HEALTH

√ DROP GERONTOLOGY CONCENTRATION (PUBLIC HEALTH MAJOR – MPH)

REVISE MASTER OF PUBLIC HEALTH REQUIREMENTS

MASTER OF PUBLIC HEALTH
PUBLIC HEALTH MAJOR

Requirements

	Hours Credit
[1]Public Health Foundation	17
[2]Concentration of Study (Community Health Education, Health Planning and Administration, or Veterinary Public Health)	10
[3]Electives	9
[4]Internship	6
Total 42	

[1] Public Health Foundation courses: Public Health 509 (2 hrs.) 510, 520, 530, 540, 555.
[2] Community Health Education: Public Health 550, 552, 590. Health Planning and Administration: Public Health 521, 525, 560. Veterinary Public Health: Public Health 550, Veterinary Medicine 837, Comparative and Experimental Medicine 501.

[3] Listings of electives specific for each concentration are available in MPH program office.
[4] Internship: Public Health 587, 588 (field practice with an affiliated health agency or completion of a master's essay). Written guidelines stipulating eligibility criteria and expectations are available.

NOTE: To meet program requirements, students must select courses in consultation with an assigned program advisor. Program totals are minimums and some students may be required to complete additional coursework to overcome background deficiencies.

√ INSTRUCTIONAL TECHNOLOGY AND CULTURAL STUDIES

REVISE MS AND EDS MAJOR TO REFLECT THE NAME CHANGE TO INSTRUCTIONAL TECHNOLOGY AND CULTURAL STUDIES

√ DROP INSTRUCTIONAL TECHNOLOGY AND EDUCATIONAL STUDIES MAJOR (MS) AND CONCENTRATIONS
CULTURAL STUDIES OF EDUCATIONAL FOUNDATIONS CONCENTRATION
CURRICULUM CONCENTRATION
INSTRUCTIONAL TECHNOLOGY CONCENTRATION

√ ADD INSTRUCTIONAL TECHNOLOGY AND CULTURAL STUDIES MAJOR (MS) AND CONCENTRATIONS
CULTURAL STUDIES OF EDUCATIONAL FOUNDATIONS CONCENTRATION
INSTRUCTIONAL TECHNOLOGY CONCENTRATION

INSTRUCTIONAL TECHNOLOGY AND CULTURAL STUDIES
MASTER OF SCIENCE
INSTRUCTIONAL TECHNOLOGY AND CULTURAL STUDIES MAJOR

Requirements

Cultural Studies of Educational Foundations Concentration

	Hours Credit
[1]Concentration	14
[2]Specialization (choose one)	9
[3]Research	6
[4]Thesis or Problems in Lieu of Thesis	6
	Total 35

[1] Cultural Studies in Education 590 (2), 591, 592. Select two from Cultural Studies in Education 511, 539, 544, 545, 549, or 550.
[2] Select three courses in one of the following areas – Philosophy of Education (Cultural Studies in Education 526, 539, 544, 548, 608, or 609); Sociology of Education (Cultural Studies in Education 545, 549); History of Education (Cultural Studies in Education 511, 539, 609, or 625).
[3] Select two courses from Cultural Studies in Education 526, 560, 561, 625, or 660.
[4] Instructional Technology and Educational Studies 500 or Instructional Technology and Educational Studies 503.

NOTE: To meet program requirements, students must select courses in consultation with a program advisor. Program totals are minimums and some students may be required to complete additional coursework to overcome background deficiencies.

Instructional Technology Concentration (Thesis Option)

	Hours Credit
[1]Core	6
[2]Concentration	12
Electives	6
[3]Research	3
Instructional Technology. Health, and Cultural Studies 500 (Thesis)	6
	Total 33

[1]Select two courses in educational issues and/or theory (e.g., Theory and Practice in Teacher Education 517; Cultural Studies 511, 550; Ed Psychology 515, 516).
[2]Instructional Technology 521, 570, 573, 575.
[3]Research Elective.

NOTE: To meet program requirements, students must select courses in consultation with a program advisor. Program totals are minimums and some students may be required to complete additional coursework to overcome background deficiencies.

Instructional Technology Concentration (Non-Thesis Option)

	Hours Credit
[1]Core	6
[2]Concentration	12
Electives	12
[3]Research	3
	Total 33

[1]Select two courses in educational issues and/or theory, (e.g., Theory and Practice in Teacher Education 517; Cultural Studies 511, 550; Ed Psychology 515, 516).
[2]Instructional Technology 521, 570, 573, 575.
[3]Research Elective.

NOTE: To meet program requirements, students must select courses in consultation with a program advisor. Program totals are minimums and some students may be required to complete additional coursework to overcome background deficiencies.

√ DROP INSTRUCTIONAL TECHNOLOGY AND EDUCATIONAL STUDIES MAJOR (EDS) AND CONCENTRATIONS
CURRICULUM CONCENTRATION
INSTRUCTIONAL TECHNOLOGY CONCENTRATION

√ ADD INSTRUCTIONAL TECHNOLOGY AND CULTURAL STUDIES MAJOR (EDS)

SPECIALIST IN EDUCATION
INSTRUCTIONAL TECHNOLOGY AND CULTURAL STUDIES MAJOR

Thesis/Non-Thesis

	Hours Credit
[1]Program Prerequisites	
[2]Concentration	15
[3]Electives	9
[4]Research (maximum 3 hours per semester)	6
	Total 30

[1]Must hold master's degree in education or related field.
[2]A student without prior coursework in IT must take 521, 570, 573, 575 and one elective (3 hours).
[3]Two courses (6 hours) must be taken outside the IT program area.
[4]Thesis students must take Instructional Technology, Health, and Cultural Studies 518; Problems students must take Instructional Technology, Health, and Cultural Studies 503; Non-thesis students must take research electives (6 hours).

NOTE: To meet program requirements, students must select all courses in consultation with a program advisor. Program totals are minimums and some students may be required to complete additional coursework to overcome background deficiencies.

REVISE EDUCATION MAJOR (PHD) CULTURAL STUDIES OF EDUCATIONAL FOUNDATIONS CONCENTRATION

On page 125 of the 2006-2007 *Graduate Catalog*, right column, middle of page, revise footnote 2 requirements as follows

DOCTOR OF PHILOSOPHY
EDUCATION MAJOR

REQUIREMENTS
Cultural Studies of Educational Foundations Concentration

[2] Instructional Technology and two courses in educational theory (e.g., Ed Psychology 510, 523, Theory and Practice in Teacher Education 517, 617, 640). (3). Select one course in each of the following areas – Cultural Studies in Education 607; Instructional Technology 521, 679, or advisor approved substitute.

√ DROP CONCENTRATION – CURRICULUM, EDUCATIONAL RESEARCH, AND EVALUATION - EDUCATION MAJOR (PHD)

On page 126 of the 2005-2006 *Graduate Catalog*, left column, top of page, delete text for the concentration Curriculum, Educational Research, and Evaluation Concentration.

REVISE EDUCATION MAJOR (PHD) INSTRUCTIONAL TECHNOLOGY CONCENTRATION

On page 126 of the 2006-2007 *Graduate Catalog*, left column, middle of page, revise showcase as follows

Instructional Technology Concentration

	Hours Credit
[1]Core	9
[2]Concentration	18
[3]Cognate	9
[4]Electives	6
[5]Research	15
Dissertation (Instructional Technology, Health, and Cultural Studies 600)	24
	Total 81

[1]Instructional Technology, Health, and Cultural Studies 679 (3 hours). Select two courses (6 hours) from Educational Issues (Cultural Studies in Education 550, 592, or others); Learning Theory (Educational Psychology 515, 516, 525, 529, 572 or others).
[2]Instructional Technology 678 (3 hours); other instructional technology electives (15 hours). Three of these elective courses must be numbered at the 600-level.
[3]Three related courses from an area outside the field of instructional technology (9 hours).
[4]Two open-electives from areas that support the concentration (6 hours).
[5]Five courses in research methods (15 hours): two courses in statistical analysis (Educational Psychology 577, 677 or others), one course in quantitative research methods (Educational Psychology 577 or others), one course in qualitative research methods (Cultural Studies in Education 560, 561 or others), and one research design elective (Educational Psychology 505, 550 or others).

NOTE: To meet program requirements, students must select courses in consultation with a program advisor. Program totals are minimums and some students may be required to complete additional coursework to overcome background deficiencies.

SAFETY

REVISE SAFETY MAJOR (MS) EMERGENCY MANAGEMENT CONCENTRATION (THESIS AND NON-THESIS OPTIONS)

On page 126 of the 2006-2007 *Graduate Catalog*, right column, top of page, revise footnote #2 as follows

Emergency Management Concentration (Thesis Option)

[2] Safety 560, 537, Political Science 539 or Political Science 550.

Emergency Management Concentration (Non-Thesis Option)

[2] Safety 560, 537, Political Science 539 or Political Science 550, and Safety 601 or 593.

DEPARTMENT OF NUTRITION

REVISE ADMISSION REQUIREMENTS

On Page 127 of the 2006-2007 *Graduate Catalog*, Admission Heading, second paragraph, delete the next to last sentence to remove the requirement of a master's degree in order to be admitted to the Ph.D. program.

√ DROP HUMAN ECOLOGY MAJOR (PHD) – NUTRITION SCIENCE CONCENTRATION

√ ADD HEALTH AND HUMAN SCIENCES MAJOR (PHD) – NUTRITION SCIENCE CONCENTRATION

NUTRITION SCIENCE CONCENTRATION

The PhD enables students to study the science of nutrition from the cellular/molecular level to the application of nutrition principles by people in a changing environment.

The doctoral program emphasizes cellular/molecular nutrition, human nutrition, nutritional epidemiology, and experimental nutrition. Cognate areas may include anthropology, biochemistry, chemistry, communications, education, food technology, human development, physiology, public health, sociology, statistics, and/or toxicology.

Requirements
- 16 hours in nutrition including 4 hours at the 600 level (exclusive of dissertation).
- Nutrition 511, 512, 541, and 2 hours from either 542-544.
- 4 hours of Nutrition 540, attendance required every semester.
- 6 hours of statistics.

• 6 hours in a cognate area.
• 9 hours at the 600 level.
• Students without college teaching experience are required to take the fall semester teaching seminar for GTAs.

REVISE REQUIREMENTS NUTRITION MAJOR, (MS) NON-THESIS OPTION AND (PHD)

On page 127 of the 2006-2007 *Graduate Catalog*, under Non-Thesis Option, first bullet, delete "2 hours from 542."

On Page 128 of the 2006-2007 *Graduate Catalog*, Human Ecology Major (PhD) revise 2nd bullet to read as follows

Nutrition 511, 512, 541, and 544. (Delete course 542).

DEPARTMENT OF RETAIL, HOSPITALITY, AND TOURISM MANAGEMENT

√ DROP HUMAN ECOLOGY MAJOR (PHD) AND CONCENTRATIONS
HOSPITALITY AND TOURISM MANAGEMENT CONCENTRATION
RETAIL AND CONSUMER SCIENCES CONCENTRATION

√ ADD HEALTH AND HUMAN SCIENCES MAJOR (PHD) AND CONCENTRATIONS
HOSPITALITY AND TOURISM MANAGEMENT CONCENTRATION
RETAIL AND CONSUMER SCIENCES CONCENTRATION

Requirements
The requirements for the doctoral degree are listed below by concentration.

Hospitality and Tourism Management Concentration

	Hours Credit
[1]Required Courses	15
[2]Research Methods	5
[3]Statistics	9
[4]Cognate Area	9
[5]Instructional Methods	3
Electives	21
Dissertation	24
	Total 86

[1] Hotel, Restaurant, and Tourism 614, 615, 547, 523, 524.
[2] Hotel, Restaurant, and Tourism 537, Retail and Consumer Sciences 616.
[3] Statistics 537, 538, 579.
[4] Cognate hours must include at least 3 hours at the 600 level.
[5] Graduate-level courses that will help develop students' instructional capabilities.

Retail and Consumer Sciences Concentration

	Hours Credit
[1]Required Courses	12
[2]Research Methods	5
[3]Statistics	12
[4]Cognate Area	9
[5]Instructional Methods	3
Electives	21
Dissertation	24
	Total 86

[1] Retail and Consumer Sciences 614, 615, 625, 641.
[2] Retail and Consumer Sciences 590, 616.
[3] Statistics 537, 538, 579, elective.
[4] Cognate hours must include at least 3 hours at the 600 level.
[5] Graduate-level courses that will help develop students' instructional capabilities.

DEPARTMENT OF THEORY & PRACTICE IN TEACHER EDUCATION

REVISE REQUIREMENTS, TEACHER EDUCATION MAJOR, (MS), TRACK 1

On page 132 of the 2006-2007 *Graduate Catalog*, left column, revise 1st bullet under Requirements Heading to

- Completion of a prescribed set of courses: Core Area (9 hours minimum) Theory and Practice in Teacher Education 517, approved research course, Instructional Technology 521, 573, or approved Instructional Technology course.

REVISE TEACHER EDUCATION MAJOR, ART EDUCATION CONCENTRATION, TRACK 1, THESIS OPTION

On page 132 of the 2006-2007 *Graduate Catalog*, right column, revise Footnote 1 to

[1] Theory and Practice in Teacher Education 517, Educational Psychology 577, or other approved research design course.

REVISE TEACHER EDUCATION MAJOR, ART EDUCATION CONCENTRATION, TRACK 1, NON-THESIS OPTION

On page 132 of the 2006-2007 *Graduate Catalog*, right column, revise Footnote 1 to

[1] Theory and Practice in Teacher Education 517; Educational Administration 516; Educational Psychology 550, 582, or other committee approved research design.

REVISE REQUIREMENTS CONTENT FIELDS TEACHING TRACT 1

On page 132 of the 2006-2007 *Graduate Catalog*, right column, middle of page, revise paragraph with asterisk to

* Theory and Practice in Teacher Education 517; Educational Psychology 550, 582, Educational Administration 516, or other approved research course; Instructional Technology 521, 573 or other approved Instructional Technology course.

REVISE TO ADD THESIS AND NON-THESIS OPTIONS TO EARLY CHILDHOOD SPECIAL EDUCATION CONCENTRATION TRACK 1, TEACHER EDUCATION MAJOR (MS)

On page 132 in the 2006-2007 *Graduate Catalog*, right column, revise to add thesis and non-thesis options

Thesis Option

	Hours Credit
Audiology and Speech Pathology 563	3
Special Education 554	3
Elementary Education 566	3
Elementary Education 567	3
Special Education 568	3
Special Education 504	6
Child and Family Studies 530	3
Educational Psychology 577 (other approved research design class may be substituted)	3
Theory and Practice in Teacher Education 500	6
	Total 33

Non-Thesis Option

	Hours Credit
Audiology and Speech Pathology 563	3
Special Education 554	3
Elementary Education 566	3
Elementary Education 567	3
Special Education 568	3
Special Education 504	3
Educational Psychology 550, 582, or Educational Administration 516 (other approved research design class may be substituted)	3
Electives Advisor approval required)	9
	Total 36

REVISE ELEMENTARY EDUCATION CONCENTRATION TRACK 1, TEACHER EDUCATION MAJOR (MS)

On page 133 of the 2006-2007 *Graduate Catalog*, left column, revise Footnote #1 for thesis and non-thesis option to:

Thesis Option

[1]-Educational Psychology 577 or other approved research design course; Theory and Practice in Teacher Education 517; 3 hours determined by student and advisor.

Non-Thesis Option

1 Educational Psychology 550, 582, Educational Administration 516, or other approved research design course; Theory and Practice in Teacher Education 517; 6 hours determined by student and advisor.

REVISE READING EDUCATION CONCENTRATION TRACK 1, TEACHER EDUCATION MAJOR (MS)

On page 133 of the 2006-2007 *Graduate Catalog*, left column, revise Footnote #1 for thesis and non-thesis option to:

Thesis Option

[1] Educational Psychology 577 or other approved research design course; Theory and Practice in Teacher Education 517; 3 hours determined by student and advisor.

Non-Thesis Option

[1] Educational Psychology 550, 582, Educational Administration 516, or other approved research design course; Theory and Practice in Teacher Education 517; 6 hours determined by student and advisor.

REVISE SCIENCE EDUCATION CONCENTRATION (INFORMAL EDUCATION) CONCENTRATION TRACK 1

On page 133 of the 2006-2007 *Graduate Catalog*, right column, revise Footnote #1 for thesis and non-thesis option to

Thesis Option

[1] Educational Psychology 577 or other approved research design course; Theory and Practice in Teacher Education 517; 3 hours determined by student and advisor.

Non-Thesis Option

[1] Educational Psychology 550, 582, Educational Administration 516, or other approved research design course; Theory and Practice in Teacher Education 517; 6 hours determined by student and advisor.

REVISE TRACK 2: INITIAL LICENSURE PROGRAMS, TEACHER EDUCATION MAJOR (MS)

On page 134 of the 2006-2007 *Graduate Catalog*, left column, Requirements Heading, Secondary Teaching Heading revise sentence to

> Theory and Practice in Teacher Education 517; 549 or 558, or 588, or an elective in the history of sociology or philosophy of education; 6 hours of specialty area electives (see faculty advisor).

REVISE EDUCATION MAJOR (PHD)

On page 135 in the 2006-2007 *Graduate Catalog*, revise Footnote #1, as follows

[1]Must include Theory and Practice in Teacher Education 640 (3) or Educational Administration 615 (3).

COLLEGE OF ENGINEERING

All changes effective Fall 2007

I. COURSE CHANGES

DEPARTMENT OF CHEMICAL ENGINEERING

(226) Chemical Engineering

ADD

632 Nonequilibrium Thermodynamics (3) Unified treatment of nonequilibrium thermodynamics from the perspective of a general mathematical framework, applicable at all levels of system description from microscopic to macroscopic. Statistical and continuum mechanical descriptions of irreversible thermodynamic systems, with applications to complex fluids, are emphasized.
(DE) Prerequisite(s): 531 and 532.

633 Multiscale Materials Modeling (3) Development of multiscale simulation strategies for engineering of advanced micro-and-nano structured materials via integration of essential information from different scales, i.e., molecular, mesoscopic and continuum.
(DE) Prerequisite(s): 505, 531, and 547.
Registration Permission: Consent of instructor.

652 Sustainable Energy Production (3) Emerging technologies in energy capture, including photovoltaic cells and bio-based fuels and in energy production, including fuel cells. Study of fundamental mechanisms. Comparative analysis of the alternatives, including current technical barriers to commercialization.
(DE) Prerequisite(s): 505.

662 Chaos and Engineering Applications (3) Chaos and nonlinear dynamics analysis of time series for understanding, development, design and control of complex engineering systems; systems with continuous multi-scale temporal and spatial variations; review of standard analysis techniques; applications to bubble formation, distillation, fluidization, combustion, fermentation, patterns (nonwoven fabrics, nanotubes), molecular-self organization, cardiac control, and bioinformatics.
(DE) Prerequisite(s): 505.
Recommended Background: Programming.

671 Advanced Biomolecular Engineering (3) Current science and technology at the interface of engineering and biology, focusing at the molecular level. Topics include enzyme-based sensors, molecular-level engineering for bio-based energy production, genetic engineering for protein expression in non-native hosts, modeling of metabolic networks and gene expression.
(DE) Prerequisite(s): 575.
Recommended Background: Working knowledge of undergraduate level biochemistry and cellular biology; graduate chemical engineering core coursework.
Registration Permission: Consent of instructor.

672 Computational Bioinformatics (3) Modeling and analysis of DNA/RNA and protein sequences. Topics include STR and SNP DNA measurement data for human identification; dynamic programming; distance measures, clusters, and link analysis and discovery; clustering algorithms; data mining using SVD method; dynamic indexing of data collections using clustering; probability theory; Bayesian and maximum likelihood estimation; entropy as a measure of information content and inductive inference; parallel computation. Applications to biological molecules will be studied.
(DE) Prerequisite(s): Statistics 505 and 507.
Recommended Background: Programming skills.

REVISE DESCRIPTION

631 Advanced Topics in Statistical Thermodynamics and Molecular Dynamics (3) Statistical thermodynamics, molecular based computer simulations, Monte Carlo and molecular dynamics calculations; applications to complex materials and energy-relevant and biological systems.

REVISE DESCRIPTION AND PREREQUISITES

647 Advanced Transport Phenomena (3) Derivation and solution of coupled mass, momentum and energy evolution equations; application to complex materials and energy-relevant and biological systems.
(DE) Prerequisite(s): 547 and 548.

REVISE TO ADD DESCRIPTION AND (DE) PREREQUISITE

661 Advanced Topics in Process Dynamics and Control (3) Multiloop and multivariable control, model predictive control, process identification and monitoring, plantwide control, etc.
Repeatability: May be repeated. Maximum 6 hours.
(DE) Prerequisite(s): 505.

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

(254) Civil Engineering

REPEATABILITY CLARIFICATION

539 Geotechnical Seminar (1)
Repeatability: May be repeated. Maximum 10 hours.

595 Special Topics (1-4)
Repeatability: May be repeated. Maximum 9 hours.

691 Special Topics in Civil Engineering (3)
Repeatability: May be repeated. Maximum 6 hours.

(344) Environmental Engineering

REPEATABILITY CLARIFICATION

595 Special Topics (1-4)
Repeatability: May be repeated. Maximum 9 hours.

691 Special Topics in Environmental Engineering (3)
Repeatability: May be repeated. Maximum 6 hours.

DROP SECONDARY CROSS-LISTED COURSE

545 Monitoring Hydrologic Phenomena (3) *(See Biosystems Engineering 545.)*

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

(319) Electrical and Computer Engineering

ADD

517 Reinforcement Learning in Artificial Intelligence (3) Principles and methods for reinforcement learning and sequential stochastic control; Markov decision problems; dynamic programming; temporal difference learning; design considerations for hardware and software.
Registration Permission: Consent of instructor.

533 Advanced MOS Concepts and VLSI Design (3) Physics of MOS capacitors and transistors, derivation of V-I relation expressing subthreshold, threshold, and saturation region behavior; short-channel effects in scaled-down transistors; scaling laws; VLSI fabrication technologies; silicon-on-insulator technology; design and layout of digital integrated circuits. Includes laboratory assignments emphasizing computer aids in VLSI design; schematic capture, circuit simulation, and layout of custom integrated circuits.
Registration Permission: Consent of instructor.

DEPARTMENT OF MECHANICAL, AEROSPACE, AND BIOMEDICAL ENGINEERING

(018) Aerospace Engineering

REPEATABILITY CLARIFICATION

494 Selected Topics in Aerospace Engineering (1-4)
Repeatability: Not repeatable. May be taken once for 1 - 4 hours.

495 Selected Topics in Aerospace Engineering (1-4)
Repeatability: Not repeatable. May be taken once for 1 - 4 hours

595 Seminar (1)
Repeatability: May be repeated. Maximum 20 hours.

(192) Biomedical Engineering

ADD

538 Ultrasonic Methods and Bioinstrumentation (3) Basic ultrasound principles including wave equation, impedance, acoustic properties of biological tissues, etc. Transducers, beam patterns, resolution, and diagnostic imaging configurations for static and dynamic real-time imaging principles. Doppler physics, Doppler spectral analysis, image quality, image artifacts, clinical safety and measurement techniques, and quality control.
Registration Permission: Consent of instructor.

548 Optimization Techniques in Biomedical Engineering (3) Current techniques in optimization. Emphasis on applying optimization techniques to problems in biomedical imaging.
Registration Permission: Consent of instructor.

574 Multidimensional Medical Image Analysis (3) Applied mathematical and physical principles for different medical imaging modalities, image formation, reconstruction, enhancement and filtering, representation and analysis, registration and camera calibration models, shape and texture, transforms, features extraction, segmentation, clustering, introduction to pattern recognition and classification based on non-parametric techniques, parametric techniques, and neural networks models, 2D matching, introduction to biometrics, application in medical image segmentation, classification, and computerized medical diagnosis of diseases.
(DE) Prerequisite(s): 572, and Electrical and Computer Engineering 472.

582 Micro-electromechanical Systems in Biomedical Engineering (3) Examines physical principles, design techniques, fabrication techniques, and testing technologies needed for the modern biomedical engineer working in the microfabrication field in miniaturized environments. This is a hands-on hardware and software course that includes some laboratory experiments and use of MEMS design software.
Registration Permission: Consent of instructor.

632 Biomechanics Design (3) Design of an implant, orthopaedic mechanical device, orthopaedic instrument or a rehabilitation device for a sponsoring orthopaedic company. The design project will include patent searches, literature searches and a final report.
(DE) Prerequisite(s): 531.

674 Neuro-Fuzzy Pattern Recognition in Medicine (3) Pattern recognition and computer vision fundamentals, human vision system, principles of image formation and human perception, camera models, sampling and quantization and image transforms. Applications of neuro-fuzzy l systems in medicine.
(DE) Prerequisite(s): 574.

682 Biological Applications of Micro and Nanoscale Systems (3) Emerging techniques in biological and biomedical research on the micro and nanoscale. Biomaterials, soft lithography, nanomedicine, microfluidic principles, sensor principles and microsensors, microactuators and drug delivery, polymerase chain reactions, and DNA microarrays.
(DE) Prerequisite(s): 582.

ADD REPEATABILITY AND REQUEST APPROVAL FOR VARIABLE TITLE

610 Advanced Topics in Biomedical Engineering (3)
Repeatability: May be repeated. Maximum 9 hours.

REVISE REPEATABILITY AND REQUEST APPROVAL FOR VARIABLE TITLE

599 Special Topics in Biomedical Engineering (1-3)
Repeatability: May be repeated. Maximum 12 hours.

REVISE REPEATABILITY

595 Seminar (1)
Repeatability: May be repeated. Maximum 20 hours.

(335) Engineering Science

REPEATABILITY CLARIFICATION

581 Special Topics in Engineering Mechanics (3)
Repeatability: May be repeated. Maximum 6 hours.

595 Seminar (1)
Repeatability: May be repeated. Maximum 20 hours.

657 Computational Mechanics Seminar (1)
Repeatability: May be repeated. Maximum 20 hours.

681 Advanced Topics in Engineering Mechanics (3)
Repeatability: May be repeated. Maximum 6 hours.

(650) Mechanical Engineering

ADD

530 Foundations of Nanomechanics (3) Fundamental aspects of small-scale mechanics and thermodynamics needed to understand properties and behavior of engineered nanoscale systems. Role of nanomechanics in the contemporary nanotechnology research. Essential practical tools used by engineers and researchers for the analysis and characterization of nanostructures, nanocomposite materials, and complex multiscale phenomena in solids and liquids. *(DE) Prerequisite(s): 321 and 331.*

591 Advanced Engineering Analysis (3) Development of weighted residual methods solving for differential, integral and partial differential equations in engineering. Brief introduction to integral equations, asymptotics, functional analysis, orthogonal polynomials and ill-posed problems associated with inverse analysis. *(DE) Prerequisite(s): 391 and Mathematics 231.*

REPEATABILITY CLARIFICATION

590 Selected Engineering Problems (2-6)
Repeatability: May be repeated. Maximum 6 hours.

595 Seminar (1)
Repeatability: May be repeated. Maximum 20 hours.

REVISE TITLE

547 Modern Linear Controls (3)

REVISE TITLE AND DESCRIPTION

621 Advanced Topics in Mechanical Systems (3) Advanced theory and applications in control systems, dynamics, mechanics, strength of materials and vibrations.

II. PROGRAM CHANGES

REVISE REQUIREMENTS, RELIABILITY AND MAINTAINABILITY MAJOR (MS)

On page G929 of the October 5, 2006, Graduate Council Minutes revise the core course requirements as follows

Delete: Statistics 563 or Mathematics 423
Add: Statistics 560

√ ADD CONCENTRATIONS TO THE RELIABILITY AND MAINTAINABILITY MAJOR (MS)

Aerospace Engineering
Biomedical Engineering
Chemical Engineering
Computer Engineering
Electrical Engineering
Industrial Engineering
Mechanical Engineering
Nuclear Engineering

ADD APPLICATION PROCESS CATALOG TEXT TO THE RELIABILITY AND MAINTAINABILITY MAJOR (MS)

Application Process
Individuals seeking admission to the Master of Science program with a major in reliability and maintainability engineering must first be admissible to the University of Tennessee, Knoxville, and then admitted to a department offering a concentration within the MS with a major in reliability and maintainability engineering.

√ ADD INTERDEPARTMENTAL GRADUATE CERTIFICATE IN RELIABILITY AND MAINTAINABILITY ENGINEERING

GRADUATE CERTIFICATE IN RELIABILITY AND MAINTAINABILITY ENGINEERING

The College of Engineering offers a graduate certificate in reliability and maintainability engineering. The program is designed primarily for part-time students in that all of the courses are available through distance education (see http://www.any-where.tennessee.edu/ne/default.htm). The 12-hour certificate is earned by completing 483 and 484, which are cross-listed among all participating departments in the College of Engineering, plus two elective courses selected from a list of courses provided by the participating departments – Chemical Engineering, Industrial and Information Engineering, Mechanical, Aerospace, and Biomedical Engineering, and Nuclear Engineering. Currently, the available elective courses are Chemical Engineering 561, Industrial and Information Engineering 516 and 591, Mechanical Engineering 534 and 599, and Nuclear Engineering 579 and 585. The selection of elective courses is

determined through an advising conference with each individual student, and is based on the student's personal interests, academic background, and work experience. Applicants must meet the minimum criteria established by the Graduate Council.

DEPARTMENT OF CHEMICAL ENGINEERING

INSERT CATALOG TEXT FOR THE INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATIONAL SCIENCE (IGMCS)

On page 139 of the 2006-2007 *Graduate Catalog*, before Department of Civil and Environmental Engineering add

INTERCOLLEGIATE GRADUATE MINOR IN COMPUTATIONAL SCIENCE (IGMCS)

The Department of Chemical Engineering participates in the intercollegiate graduate minor in computational science (IGMCS) program. Any student pursuing a Master's or PhD with a major in chemical engineering can receive a minor in computational science by completing the appropriate IGMCS requirements. For further information see the description of the IGMCS listed under the Department of Computer Science. The Department of Chemical Engineering also contributes courses to the IGMCS program curriculum.

REVISE NON-THESIS OPTION FOR CHEMICAL ENGINEERING MAJOR (MS)

On page 138 of the 2006-2007 *Graduate Catalog*, revise to

Non-Thesis Option
Any candidate may apply for a non-thesis option. Upon acceptance, a supervisory committee of three will be appointed. At least two members of the committee will be from the faculty in the department. The requirements for completion of the non-thesis option are:

- Completion of a total of 30 hours of graduate coursework. At least 18 of those hours must be in the department.
- Satisfactory completion of a culminating experience Chemical Engineering 580 (Critical Review) as this course shall include a comprehensive exam administered by the faculty committee.

√ DROP GRADUATE CERTIFICATE IN MAINTENANCE AND RELIABILITY ENGINEERING

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

REVISE ADMISSION REQUIREMENTS, CIVIL ENGINEERING MAJOR (MS)

On page139 of the 2006-2007 *Graduate Catalog*, add the following sentence after the first sentence of the program description

It is required that all applicants to the degree program submit scores from the General Graduate Record Examination (GRE).

REVISE ADMISSION REQUIREMENTS, CIVIL ENGINEERING MAJOR (PHD)

DOCTOR OF PHILOSOPHY
CIVIL ENGINEERING MAJOR

On page140 of the 2006-2007 *Graduate Catalog*, add the following sentence after the first sentence of the program description:

It is required that all applicants to the degree program submit scores from the General Graduate Record Examination (GRE).

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

REVISE TO REMOVE INFORMATIONAL ITEM (FROM COURSES OF INSTRUCTION SECTION) FOR ELECTRICAL ENGINEERING AND COMPUTER ENGINEERING

On page 218 of the 2006-2007 *Graduate Catalog*, under "Electrical and Computer Engineering (319)", delete the following paragraph: Courses required in the electrical engineering undergraduate curriculum cannot be used in either the MS or PhD programs. No 400-level course may be used toward a graduate degree in electrical engineering except when required by the program.

ADD ASTERISK AND FOOTNOTE TO CLARIFY 500-LEVEL REQUIREMENTS – COMPUTER ENGINEERING MAJOR, ELECTRICAL ENGINEERING MAJOR (PHD)

On page 142 of the 2006-2007 *Graduate Catalog*, Number 1, item a and item b, add an asterisk after the text "400-level." Then add footnote to clarify asterisk (as seen on page 141 for the Master of Science).
* NOTE: At least two thirds of the minimum required hours must be taken in courses numbered at or above the 500 level."

REVISE REQUIREMENTS FOR ELECTRICAL ENGINEERING AND COMPUTER ENGINEERING MAJORS (PHD)

On page 142 of the 2006-2007 *Graduate Catalog*, insert the following text into line-item #1 immediately following the sentence "For students holding only a BS, a minimum of 48 course hours is required."

Exceptional PhD students may request that course hour requirements of 48 hours beyond the BS degree be reduced to a lesser number, but not less than 39 hours beyond the BS. Request for this reduction is to be initiated by the student's PhD dissertation committee. The student's major professor, with the concurrence of the dissertation committee, will prepare a curriculum plan showing exactly what courses will be taken and provide a justification as to why a reduced course hour requirement is appropriate. The request will be submitted to the Graduate Committee for approval. The Graduate Committee may approve/deny or modify the requested reduction. Any reduction in course hours granted will be contingent upon successful completion of all other PhD requirements under the supervision of the major professor and dissertation committee in place at the time of the request for reduction in course hour requirements. An approved reduction in course hour requirement will be automatically rescinded, unless reinstated by the Graduate Committee, if the student makes a subsequent change in the dissertation committee. The minimum dissertation hours required of students receiving approval for reduced course hours (normally 24) will be increased by exactly the amount of the reduction in required course hours.

DEPARTMENT OF INDUSTRIAL AND INFORMATION ENGINEERING

√ DROP GRADUATE CERTIFICATE IN MAINTENANCE AND RELIABILITY ENGINEERING

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

√ ADD CONCENTRATION TO THE MATERIALS SCIENCE AND ENGINEERING MAJOR (MS, PHD)

Nanomaterials

On page 144 of the 2006-2007 Graduate Catalog add Nanomaterials concentration to the List of Concentrations under the Materials Science and Engineering Major.

REVISE OPENING TEXT, MATERIALS SCIENCE AND ENGINEERING

On page 144 of the 2006-2007 *Graduate Catalog* revise the second paragraph. At the end of the sentence, remove period, add comma and insert text for nanoscience (as follows):

…mechanical and physical behaviors of materials, and nano-science and technology.

REVISE THESIS OPTION, MATERIALS SCIENCE AND ENGINEERING MAJOR (MS)
REVISE THESIS OPTION, POLYMER ENGINEERING MAJOR (MS)

On page 145 of the 2006-2007 *Graduate Catalog*, left column, 1st bullet, 2nd paragraph, revise thesis option as follows

> The materials science and engineering major must include 511, 512, 515, and 516 for the metallurgy concentration; 511, 512, 540, and 541 for the polymers concentration; 511, 512, 540, 552, and 553 for the textiles concentration; 511, 512, and two graduate specialization courses approved by the student's faculty committee for the materials concentration; and 511,512 and two courses from the approved nanomaterials specialization list for the nanomaterials concentration.
>
> The polymer engineering major must include 540, 541, 543, 546, 549, and 550 for the polymer processing and polymer science concentrations; and 540, 541 or 543, 549, 550, 552, and 553 for the textile science concentration; exceptions are given if similar material has been covered in prior coursework.

REVISE REQUIREMENTS, MATERIALS SCIENCE AND ENGINEERING MAJOR (PHD)
REVISE REQUIREMENTS, POLYMER ENGINEERING MAJOR (PHD)

On page 145-146 of the 2006-2007 *Graduate Catalog*, replace catalog text with the following.

After one year in residence and with the approval of the faculty, a student may proceed directly to the doctoral program without completion of a master's degree.

REQUIREMENTS
Departmental requirements for completion of the doctoral degree are as follows.

- Satisfactory performance on the applicable comprehensive examination.
- Active participation in graduate seminars conducted by the department.
- For students proceeding directly to the PhD from the baccalaureate degree, a minimum of 72 graduate hours is required.

- These hours must include 42 graduate course hours with at least 6 hours of 600-level courses and 30 hours of dissertation. Six hours of Materials Science and Engineering 503 or 504 may be counted toward degree requirements. At least 24 hours must be courses taught in the department. The materials science and engineering major and the polymer engineering major must include the courses required for the master's program. For students in the nanomaterials concentration at least 12 hours of coursework must be from the approved nanomaterials specialization list. In addition, for students in the textile science concentration of the polymer engineering major, the courses must include 541 and 543.
- For students having a thesis-based master's degree from UT in materials science and engineering or polymer engineering or a master's degree from another university in materials science and engineering, polymer engineering, or metallurgical engineering, a minimum of 48 graduate hours is required. These hours must include 18 hours of graduate coursework with at least 6 hours of 600-level courses and 30 hours of dissertation. Three hours of Materials Science and Engineering 503 or 504 may be counted toward degree requirements. For students in the nanomaterials concentration at least 12 hours of coursework must be from the approved nanomaterials specialization list. At least 12 hours must be courses in the department.
- For students having a non-thesis master's degree from UT in materials science and engineering or polymer engineering, a minimum of 48 graduate hours is required. These must include 15 hours of graduate coursework with at least 6 hours of 600-level courses and 33 hours of dissertation. For students in the nanomaterials concentration at least 12 hours of coursework must be from the approved nanomaterials specialization list. Three hours of Materials Science and Engineering 503 or 504 may be counted toward degree requirements. At least 12 hours must be courses in the department.

DEPARTMENT OF MECHANICAL, AEROSPACE, AND BIOMEDICAL ENGINEERING

√ DROP GRADUATE CERTIFICATE IN MAINTENANCE AND RELIABILITY ENGINEERING

DEPARTMENT OF NUCLEAR ENGINEERING

REVISE PROGRAM DESCRIPTION

Page 149, 2006-2007 *Graduate Catalog* right column, last paragraph, last line, remove from sentence
or fusion energy.

REVISE REQUIREMENTS, NUCLEAR ENGINEERING MAJOR (MS)

On page 150, 2006-2007 *Graduate Catalog*, left column, requirements heading, revise 2nd bullet to read

A minor consisting of 6 hours of elective courses in mathematics, statistics, or another field related to nuclear engineering.

On page 150, 2006-2007 *Graduate Catalog*, left column, requirements heading, 4th bullet, add a fourth option as follows

One of the following four options for a culminating experience.

Option 4 – nine hours of additional nuclear engineering course work and a comprehensive written exam on all coursework prepared by the student's graduate committee (i.e., no thesis or engineering practice project).

On page 150, 2006-2007 *Graduate Catalog*, left column, 1st paragraph after 4th bullet, revise as follows:

Options 1 and 2 result in a minimum total of 30 hours and Options 3 and 4 result in a minimum total of 33 hours.

REVISE REQUIREMENTS, NUCLEAR ENGINEERING MAJOR (PHD)

On page 151, 2006-2007 *Graduate Catalog*, right column, top of page, 1st bullet, revise to

> A minimum of 12 hours in mathematics, statistics or other courses related to nuclear engineering beyond nuclear engineering undergraduate requirements numbered 400 or above.

On page 151, 2006-2007 *Graduate Catalog*, right column, top of page, revise next to last paragraph to

The first part of the comprehensive examination is prepared by the nuclear engineering faculty and consists of 6 hours of written examination that is administered over a two-day period. All past written examinations are filed in the library and students are encouraged to review them. Students are invited to take the written examination after completing approximately 30 hours of graduate coursework. A student who fails the written examination must take and pass the examination the next time it is offered to remain in the PhD program. Registration for 600 is not permitted until the written examination is passed. The second part of the comprehensive examination is completed with the successful oral defense of a written dissertation proposal.

√ DROP GRADUATE CERTIFICATE IN MAINTENANCE AND RELIABILITY ENGINEERING

COLLEGE OF NURSING

All changes effective Fall 2007

I. COURSE CHANGES

(720) Nursing

ADD

592 Nursing Administration: Macroanalysis (2) Exploration, analysis, and application of selected organizational, management, and leadership theories and financial principles to delivery of homeland security nursing services. Structure, functions, organization, behaviors, and adaptive processes of health care organizations.
Registration Restriction: Master of Science of Nursing – nursing major.
(RE) Prerequisite(s): 510.
(RE) Corequisite(s): 533.
Comments: This course is for students in the Homeland Security Nursing management track only

538 Gerontological Nursing I (2) Advanced nursing practice for health promotion, health assessment, and maintenance of older adults. Application of theory and research to advanced practice nursing in a variety of settings.
(RE) Prerequisite(s): 504 and 505.
(DE) Prerequisite(s): 515.

539 Gerontological Nursing II (2): Continuation of 538. Emphasis on health restoration and management of advanced practice nursing care for older adult clients with complex health problems and their families. Application of theory and research to advanced practice nursing in a variety of settings.
(RE) Prerequisite(s): 538 and 501.
(DE) Prerequisite(s) or (DE) Corequisite(s): 582.

529 Clinical Practice: Adult and Older Adult (1-5) Clinical experience in the role of the adult or gerontological nurse practitioner, or adult or gerontological clinical nurse specialist in a variety of health care settings serving the adult and older adult populations.
Contact Hour Distribution: All practicum.
(RE) Prerequisite(s): 504 and 505.
(DE) Prerequisite(s): 515.
Repeatability: May be repeated. Maximum 18 hours.

512 Issues in Advanced Practice Nursing (1) Seminar provides a forum for collaborative deliberation on issues impacting the practice of advanced practice nursing and helps advanced practice nursing students transition to their independent practice roles.
Registration Restriction: Master of Science in Nursing – nursing major.

513 Advanced Practice Role Seminar (1) Seminar lays the foundation for the socialization of the advanced practice nurse in today's dynamic and challenging health care delivery environment.
Registration Restriction: Master of Science in Nursing – nursing major.

537 Global Issues in Health Care Delivery During Disaster (3) Examination of topics relevant to health care delivery and international humanitarian assistance in disaster, mass casualty events, and large population emergencies. Topics include ethics; international human rights; interface of culture, politics, and religion; psychological impact on survivors, aid workers, and health professionals; vulnerable populations.
(RE) Prerequisite(s): 532 and 533.
(DE) Prerequisite(s): 507 and 510.
Registration Restriction: Master of Science in Nursing – nursing major or consent of instructor.

REVISE CREDIT HOURS, DESCRIPTION, AND REMOVE CONTACT HOUR DISTRIBUTION

530 Adult Health Nursing I (2) Advanced nursing practice for health promotion, health assessment, and maintenance of adult clients. Application of theory and research to advanced practice nursing in a variety of settings.

531 Adult Health Nursing II (2) Continuation of 530. Emphasis on health restoration and management of advanced practice nursing care to adult clients with complex health problems and their families. Application of theory and research to advanced practice nursing in a variety of settings.

REPEATABILITY CLARIFICATION

544 Clinical Nurse Anesthesia Practicum/Seminar I (2-11)
Repeatability: May be repeated. Maximum 11 hours.

545 Clinical Nurse Anesthesia Practicum/Seminar II (2-11)
Repeatability: May be repeated. Maximum 11 hours.

546 Clinical Nurse Anesthesia Practicum/Seminar III (2-11)
Repeatability: May be repeated. Maximum 11 hours.

547 Clinical Nurse Anesthesia Practicum/Seminar IV (2-11)
Repeatability: May be repeated. Maximum 11 hours.

548 Clinical Nurse Anesthesia Practicum/Seminar V (2-11)
Repeatability: May be repeated. Maximum 11 hours.

549 Clinical Nurse Anesthesia Practicum/Seminar VI (2-11)
Repeatability: May be repeated. Maximum 11 hours.

565 Teaching Practicum (1-6)
Repeatability: May be repeated. Maximum 6 hours.

REVISE TO ADD REGISTRATION RESTRICTIONS

501 Nursing Research: Methods, Design, and Analysis (3)
Registration Restriction(s): Master of Science in Nursing –nursing major.

510 Theoretical Foundations of Nursing (3)
Registration Restriction(s): Master of Science in Nursing –nursing major.

515 Advanced Pathophysiology for Nursing Practice (3)
Registration Restriction(s): Master of Science in Nursing –nursing major.

527 Nursing of Women and Children: Clinical Experience in Children's Health (1-5)
Registration Restriction(s): Master of Science in Nursing –nursing major.

528 Well Child Care: Assessment of Growth, Development, and Behavior (2)
Registration Restriction(s): Master of Science in Nursing –nursing major.

550 Nursing of Women and Children I (2)
Registration Restriction(s): Master of Science in Nursing –nursing major.

551 Nursing of Women and Children II (2)
Registration Restriction(s): Master of Science in Nursing –nursing major.

552 Care of the Critically-Ill Neonate (2)
Registration Restriction(s): Master of Science in Nursing –nursing major.

553 Nursing Care of Women and Children: Clinical Experience in Women's Health (1-5)
Registration Restriction(s): Master of Science in Nursing –nursing major.

554 Care of the Well Woman and Minor Acute Illnesses (2)
Registration Restriction(s): Master of Science in Nursing –nursing major.

555 Care of the Pregnant Woman (2)
Registration Restriction(s): Master of Science in Nursing –nursing major.

556 Care of Complex Health Problems in Women (2)
Registration Restriction(s): Master of Science in Nursing –nursing major.

560 Mental Health Nursing I (6)
Registration Restriction(s): Master of Science in Nursing –nursing major.

561 Mental Health Nursing II (7)
Registration Restriction(s): Master of Science in Nursing –nursing major.

562 Acute Illnesses in Children (2)
Registration Restriction(s): Master of Science in Nursing –nursing major.

563 Care of the Child with a Chronic Condition (2)
Registration Restriction(s): Master of Science in Nursing –nursing major.

564 Nursing of Women and Children: Clinical Experience in Infant's Health (1-5)
Registration Restriction(s): Master of Science in Nursing –nursing major.

567 Embryology and Neonatal Pathophysiology for Advanced Neonatal Nursing Practice (3)
Registration Restriction(s): Master of Science in Nursing –nursing major.

568 Care of the Neonate (2)
Registration Restriction(s): Master of Science in Nursing –nursing major.

569 Care of the Ill Neonate (2)
Registration Restriction(s): Master of Science in Nursing –nursing major.

570 Family Nurse Practitioner I (6)
Registration Restriction(s): Master of Science in Nursing –nursing major.

571 Family Nurse Practitioner II (3)
Registration Restriction(s): Master of Science in Nursing –nursing major.

572 Family Nurse Practitioner II Clinical (2)
Registration Restriction(s): Master of Science in Nursing –nursing major.

573 Family Nurse Practitioner III (8)
Registration Restriction(s): Master of Science in Nursing –nursing major.

582 Scholarly Inquiry for Advanced Practice Nursing (3)
Registration Restriction(s): Master of Science in Nursing –nursing major.

583 Directed Clinical Practice (1-10)
Registration Restriction(s): Master of Science in Nursing –nursing major.

590 Nursing Administration: Macro-Analysis (6)
Registration Restriction(s): Master of Science in Nursing –nursing major.

591 Nursing Administration: Micro-Analysis (6)
Registration Restriction(s): Master of Science in Nursing –nursing major.

603 Nursing Research and Inquiry (3)
Registration Restriction(s): Doctor of Philosophy – nursing major.

605 Middle-Range Theoretical Formulations for Nursing Science Development (3)
Registration Restriction(s): Doctor of Philosophy – nursing major.

606 Nursing Research Seminar (3)
Registration Restriction(s): Doctor of Philosophy – nursing major.

608 Quantitative Nursing Research (3)
Registration Restriction(s): Doctor of Philosophy – nursing major.

609 Research Practicum (1-3)
Registration Restriction(s): Doctor of Philosophy – nursing major.

610 Nursing Science Seminar (2)
Registration Restriction(s): Doctor of Philosophy – nursing major.

612 Health and Nursing Policy/Planning (3)
Registration Restriction(s): Doctor of Philosophy – nursing major.

613 Nursing Leadership in Complex Systems (3)
Registration Restriction(s): Doctor of Philosophy – nursing major.

614 Nursing Preceptorship (1-3)
Registration Restriction(s): Doctor of Philosophy – nursing major.

REVISE TO ADD COMMENTS

505 Advanced Clinical Pharmacology (3)
Comment(s): Open to non-degree students.

511 Statistical Applications to Nursing Research (3)
Comment(s): Open to non-degree students.

II PROGRAM CHANGES

REVISE TEXT, NON DEGREE STATUS HEADING

On page 158 of the 2006-2007 *Graduate Catalog*, left column, bottom of page, Non-Degree Status Heading, revise to

Only 505 and 511 are open to students in Non-Degree Status. Students not yet accepted into the master's program must be advised by the Chair of the Master of Science in Nursing program prior to enrollment.

ADD BULLET AND TEXT TO SPECIAL REQUIREMENTS HEADING

On page 158 of the 2006-2007 *Graduate Catalog*, right column, top of page, Special Requirements Heading, revise to add new first bullet to read:

- Before enrollment in the master's program, each student must successfully complete a criminal background check.

REVISE TEXT, PROGRAM REQUIREMENTS HEADING

On page 158 of the 2006-2007 *Graduate Catalog*, right column, middle of page, Program Requirements Heading revise to

Delete introductory statement: All students must complete a minimum of 36 semester hours distributed as follows.

REVISE FOOTNOTE, PROGRAM REQUIREMENTS HEADING, (ADVANCED PRACTICE CORE 9 HOURS)

On page 158 of the 2006-2007 *Graduate Catalog*, right column, middle of page, Advanced Practice Core (9 hours) sub-heading revise footnote to read

- Not required for nursing administration concentration or Homeland Security (Management Track).

REVISE CONCENTRATIONS, PROGRAM REQUIREMENTS HEADING, CONCENTRATION SUB-HEADING

On page 158 of the 2006-2007 *Graduate Catalog*, right column, bottom of page, Concentration (choose one) sub-heading,

Revise Adult Health line as follows

529, 530, 531	Adult Health	13
529, 538-539	Adult Health: Gerontology	13

Revise Homeland Security line, as follows

532, 533, 534, 535, 536, 537	Homeland Security: Advanced Practice	31
532, 533, 534, 537	Homeland Security: Management	16

Revise Mental Health line, as follows

560-561-519	16 credits

REVISE ELECTIVES, PROGRAM REQUIREMENTS HEADING, ELECTIVES (9 HOURS) SUB-HEADING

On page 159 of the 2006-2007 *Graduate Catalog*, left column, top of page, Electives (9 hours) sub-heading,

Change to read:

Additional Course Requirements

Electives for nursing administration concentration	9
Electives for homeland security nursing: management track	3
Epidemiology for homeland security nursing: management and advanced practice tracks	3

REVISE SHOWCASE, PROGRAM REQUIREMENTS HEADING, ELECTIVES (9 HOURS) SUB-HEADING

On page 159 of the 2006-2007 *Graduate Catalog*, left column, middle of page, Electives (9 hours) sub-heading, on the 2nd Showcase, delete the last line (490 Specialty Preceptorship) and replace with

494 Alternative Preceptorship 4

REVISE SPECIAL POLICIES, PHD

On page 160 of the 2006-2007 *Graduate Catalog*, right column, middle of page, Special Policies Heading, on the PhD Program

New second bullet: Prior to enrollment in the PhD program, each student must successfully complete a criminal background check.

COLLEGE OF SOCIAL WORK

All changes effective Fall 2007

(905) Social Work

Make the following changes to the November 16, 2006 Graduate Council Minutes

Page G944

CHANGE CREDIT HOURS FROM 3 TO 2

510 Social Work and Social Welfare Policies and Programs (2)

CHANGE CREDIT HOURS FROM 3 TO 4

513 Lifespan and Neurophysiologic Development in a Cultural, Ecological, and Transactional Framework (4)

DELETE COURSES

511 Theoretical Frameworks for Social Work Practice (1)
536 Stress, Coping, and Adaptation (2)

CHANGE TITLE AND DESCRIPTION, ADD RECOMMENDED BACKGROUND, DELETE PREREQUISITE

520 Foundations of Evidence-Based Practice (1) Examines how to (1) convert information needs related to practice decisions into well-structured answerable questions; (2) efficiently locate the best evidence with which to answer such questions; (3) critically appraise such evidence; (4) apply results to practice and policy decisions; and (5) evaluate the effectiveness and efficiency of the application of such results to practice and policy decisions.
Recommended Background: Advanced Standing.

REVISE COURSE DESCRIPTION AND REVISE CREDIT HOURS FROM 3 TO 4

522 Introduction to Social Work Practice (4) Historic and contemporary contexts of social welfare. The profession's distinctive mission, history, values and ethical standards, and multiple roles with individuals, families, groups, organizations, and communities are examined using local to international comparisons. Theories are examined in the context of critical thinking and evidence-based practice. Defines generalist practice philosophy, methods, roles. Emphasizes skills (i.e., interpersonal communication, relationship building, power analyses, assertiveness, conflict management) that are essential to problem identification, assessment, and intervention with all client systems (individuals, groups, organizations, communities), and with other professionals and decision-makers. Uses local to international examples to translate theory and evidence-based knowledge into practice that is competent, ethical, culturally affirming, and empowering.

Page G945

REMOVE 511 AS A (DE) PREREQUISITE FROM THE FOLLOWING

537 Introduction to Psychopathology and Social Work Practice (2)

538 Advanced Social Work Practice w/At-Risk Populations (2)

REMOVE 511 AS A (DE) PREREQUISITE AND CHANGE COURSE CREDIT FROM 3 TO 2

539 Leadership Skills and Knowledge for Advanced Social Work Practice (2)

CHANGE COURSE DESCRIPTION AND CREDIT HOURS FROM 1 TO 3

542 Foundation Field Practice I (3) Instruction and supervision in generalist social work practice. This course includes a seminar and agency-based internship.

CHANGE COURSE DESCRIPTION, REPEATABILITY, AND CREDIT HOURS FROM 1-2 TO 2-3

544 Foundation Field Practice II (2-3) Instruction and supervision in generalist social work practice. This course includes a seminar and agency-based internship.
Repeatability: May be repeated only if a grade of S has been earned. Maximum 3 hours.

INTERCOLLEGIATE

All changes effective Fall 2007

I. COURSE CHANGES

(261) Comparative and Experimental Medicine-Veterinary Medicine

ADD

504 Descriptive and Applied Epidemiology (3) Principles of epidemiology as well as historic and modern applications to human and animal diseases. Host-agent relationships, measurement of disease frequency, disease monitoring and control in human and animal populations, field investigations, animal health economics and production.
Registration Permission: Consent of instructor.

DROP

608 Descriptive and Applied Epidemiology (3)

Reference Chart for Curriculum System Entry

Current Course CEM (261)	Equivalent course Fall 2007 CEM (261)
CEM 608	CEM 504

REVISE CREDIT HOURS AND ADD REPETITION

609 Mechanisms of Disease (3)
Repeatability: May be repeated. Maximum 6 hours.

II. PROGRAM CHANGES

REVISE REQUIREMENTS, COMPARATIVE AND EXPERIMENTAL MEDICINE MAJOR (MS)

On page 170 of the 2006-2007 *Graduate Catalog*, Requirements heading, revise the second sentence of the paragraph to

Comparative and Experimental Medicine 504 and 541 are required, as are 4 hours of 600-level graduate journal clubs.

REVISE REQUIREMENTS, COMPARATIVE AND EXPERIMENTAL MEDICINE MAJOR (PH.D.)

On page 171 of the 2006-2007 *Graduate Catalog*, Requirements heading, revise the first sentence of the second paragraph to

Comparative and Experimental Medicine 504 and 541 are required, as are 6 hours of 600-level graduate journal clubs.