Thursday January 21, 2010	Graduate Curriculum Committee	2:00 p.m. Law Library Rare Books Room

REPORT

Present: Sibyl Marshall (Chair), Mary Albrecht, Vincent Anfara, Don Bruce, Catherine Cox, Don Cox, Harry Dahms, Mark DeKay, Tom George, Tom Heffernan, Carolyn Hodges, David Keffer, Rachel Kovak, Catherine Luther, Cheryl Norris, Masood Parang, Carole Ann Parker, Gregory Petty, Jeff Phillips, Fred Pierce, Leon Potgieter, Kay Reed, George Siopsis, Scott Wall, John Wachowicz, Tom Whitworth.

Sibyl Marshall called the meeting to order at 2:00 p.m. in the Rare Books Room of the Taylor Law Library. After presentations and discussion of the material, the committee members voted to approve the attached curricular changes:

College of Agricultural Sciences and Natural Resources

College of Architecture and Design

College of Arts and Sciences

College of Business Administration

College of Communication and Information

College of Education, Health, and Human Sciences

College of Engineering

College of Law

College of Nursing

College of Social Work

College of Veterinary Medicine (Addendum to the October meeting)

Intercollegiate – Comparative and Experimental Medicine

- ▲ Indicates majors/degrees/certificates that are being added/dropped.
- ● Indicates concentrations that are being added/dropped.
- ■ Indicates academic disciplines/departments being added/dropped.

The meeting adjourned at 5:05 p.m.

COLLEGE OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES

All changes effective Fall 2010

I. COURSE CHANGES

■ DROP DEPARTMENT - AGRICULTURAL AND EXTENSION EDUCATION

(042) (AGEE) AGRICULTURAL AND EXTENSION EDUCATION

■ DROP ACADEMIC DISCIPLINE AND ALL COURSES

440 Communication Techniques in Agriculture (3)
450 Agricultural Leadership Development (3)
500 Thesis (1-15)
501 Creative Component in Lieu of Thesis (3)
502 Registration for use of Facilities (3-15)
511 Extension History, Philosophy and Objectives (3)
521 Extension Program Planning and Evaluation (3)
522 Educational Technology in Agricultural and Extension Education (3)
524 Research Methodology (3)
525 Curriculum Development in Agricultural and Extension Education (3)
526 Agricultural Education for First-Year Teachers (2)
527 Adult Education Strategies for Teaching (3)
530 Special Topics in Agricultural and Extension Education (1-3)
532 Managing Organizations, Programs and Personnel (3)
592 Internship in Agricultural and Extension Education (1-3)
593 Special Problems in Agricultural and Extension Education (1-4)

SUPPORTING INFORMATION: Rationale: The program has undergone a multi-year review and revision of its mission and program direction. The discipline has evolved from the old traditional Agricultural and Extension Education major into a more contemporary Agricultural Leadership, Education and Communications major which meets the needs of today's agricultural industry. Impact on other Academic Units: The change will affect the course number and additional class offerings. Students will be required to take additional courses currently offered by other units. Financial impact: None.

■ ADD DEPARTMENT - AGRICULTURAL LEADERSHIP, EDUCATION AND COMMUNICATIONS (INTERDEPARTMENTAL UNIT) (NEW DEPARTMENT - 078/ALEC)

■ ADD NEW ACADEMIC DISCIPLINE AND COURSES

(078) (ALEC) AGRICULTURAL LEADERSHIP, EDUCATION AND COMMUNICATIONS

440 Communication Techniques in Agriculture (3) Elements of effective use of mass media in agriculture. Effective newspaper and magazine writing techniques and electronic media writing and presentation for agricultural audiences.
Recommended Background: Two semesters of English composition.
Registration Restriction(s): Junior standing or Graduate student.

500 Thesis (1-15)
Grading Restriction: P/NP only.

501 Creative Component in Lieu of Thesis (3) Capstone experience completed under the supervision of the student's major professor and masters' committee. Individual project involving a literature survey; development of teaching software; development of curriculum materials; development of a white paper; or other suitable project.
Grading Restriction: Satisfactory/No Credit only.
Registration Permission: Consent of Graduate Committee.
Comment(s): For Non-thesis majors only.

502 Registration for use of Facilities (3-15) 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 only.
Repeatability: May be repeated.
Credit Restriction: May not be used toward degree requirements.

510 Agricultural Leadership Development (3) Theories of leadership; Identification of styles, and roles of leadership; development of leadership techniques and skills required in working with organizations and youth groups, methods of resolving conflict, of communicating, of guiding and evaluating; ethical considerations for leaders.

512 Program Planning and Evaluation of Agricultural Leadership, Education and Communication Organizations (3) Historical and philosophical foundation of adult education in American agriculture, key figures, issues, legislative movement, organizations and programs. Theories and models of program development and evaluation and their use in planning, organizing, implementing and evaluating a program's content and learning activities; development and interaction of the work plan; and principles, techniques and instruments used to identify, gather and analyze information to evaluate programs.

520 Leadership Development in Organizations and Community Nonprofit (3) Application of concepts related to developing leaders for organizing and maintaining extension and community nonprofit organizations. The foundation of this course is grounded in traditional and contemporary leadership philosophies and practices, but emphasizes leadership in agricultural professions.

524 Research Methodology (3) Introductory course in social science research methods as they relate to research in agricultural and extension education. Issues studied include research design, reliability and validity in measurement, sampling procedures, logic of analysis, scaling and measurement, and selection and interpretation of appropriate inferential tests of significance.

525 Curriculum Development in Agricultural Leadership, Education and Communications (3) Models, principles and procedures for developing curricula in educational programs and scheduling learning activities used to implement these planned programs.

526 Agricultural Education for First-Year Teachers (3) Developing competencies needed by first-year teachers for planning, organizing and conducting program of vocational agriculture in local community. Group meetings in selected centers and visits by instructor.

528 Managing Communication through Effective Organizational Change (3) Provides a comprehensive overview of theories, models, and processes related to planned and unplanned changes affecting individuals, organizations, and communities. Attention will be directed toward the process and role communication in affecting drivers and resistors of change, processes necessary for effective change, and the role of leadership in planned change.

530 Special Topics in Agricultural and Extension Education (1-3) Current issues.
Repeatability: May be repeated. Maximum 9 hours.
Registration Permission: Consent of instructor.

592 Internship in Agricultural Leadership, Education and Communications (1-3) Practical field experience in a selected setting under the supervision of a local practitioner and departmental representative.
Grading Restriction: Satisfactory/No Credit only.
Repeatability: May be repeated. Maximum 3 hours.
Registration Permission: Consent of Instructor.

593 Special Problems in Agricultural Leadership, Education and Communications (1-4) Special research and/or special reports based on supervised independent study.
Repeatability: May be repeated. Maximum 6 hours.
Registration Permission: Consent of instructor.

Equivalency Table

Current Courses	Equivalent Courses – effective fall 2010
(042) (AGEE) Agricultural and Extension Education	**(078) (ALEC) Agricultural Leadership, Education and Communications**
AGEE 440	ALEC 440
AGEE 500	ALEC 500
AGEE 501	ALEC 501
AGEE 502	ALEC 502
AGEE 524	ALEC 524
AGEE 525	ALEC 525
AGEE 526	ALEC 526
AGEE 530	ALEC 530
AGEE 592	ALEC 592
AGEE 593	ALEC 593

INFORMATIONAL ITEM - DEPARTMENTAL NAME CHANGE

- FORMER DEPARTMENT (DROP) - AGRICULTURAL ECONOMICS (049/AECN)
- ADD DEPARTMENT - AGRICULTURAL AND RESOURCE ECONOMICS (045/AGRE)

From: Reed, S Kay (Kay)
Sent: Thursday, December 24, 2009 7:50 AM
To: Dipietro, Joseph A
Cc: Martin, Susan D; Beyl, Caula Ann; Albrecht, Mary Lewnes; Cuddy, Carolyn Babb; Hodges, Carolyn R; Cox, Catherine O
Subject: FW: request for Ag Econ name change

December 24, 2009

Dear Dr. DiPietro,

Thank you for the clarification and confirmation on Dr. Cheek's response regarding how to handle the name change for the academic department in the Graduate Council records and the Graduate Catalog. We will forward that information to the Graduate Council by way of the agenda for the January 21, 2010 Graduate Curriculum Committee meeting.

Kay Reed, Ph.D.
Assistant Dean
Graduate School
University of Tennessee, Knoxville
Knoxville, TN 37996-0211

MOVE ACADEMIC DISCIPLINE (047) AGRICULTURAL ECONOMICS AND ALL COURSES FROM DEPARTMENT OF AGRICULTURAL ECONOMICS TO DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS

(047) (AGEC) Agricultural Economics

ADD

640 Agricultural Production and Supply Analysis (3) Advanced topics in agricultural production economics and supply analysis with emphasis on optimization modeling, duality, flexible production systems, efficiency and nonparametric analysis, risk, contracting, incentive systems, cooperative efforts, and the roles of information, insurance and credit.
(RE) Prerequisites: Economics 511 and 512.

650 Agricultural Markets and Demand Analysis (3) Advanced theory and topics in market and price analysis; technical and pricing efficiency in agricultural markets; interregional and international competition; consumer demand.
(RE) Prerequisites: Economics 511 and 512.

REVISE TITLE AND DESCRIPTION

470 Policy Analysis for Environmental and Natural Resource Management (3) Application of a policy analysis framework to conflicts and issues associated with natural resource use and related environmental quality impacts. Design of institutional changes to improve economic efficiency and equity, with emphasis on the potential applicability of market-type and incentive-based policy mechanisms.

REVISE TO DROP (DE) PREREQUISITE AND ADD RECOMMENDED BACKGROUND

445 Economics of Biomass for Renewable Energy (3)
Recommended Background: Introductory economics course

REVISE TO ADD RECOMMENDED BACKGROUND

570 Advanced Natural Resources Economics (3)
Recommended Background: Calculus and intermediate microeconomics.

(088) (AGNR) AGRICULTURE AND NATURAL RESOURCES

ADD AND REQUEST VARIABLE TITLE

530 Topics in Agriculture and Natural Resources (1-3)
Repeatability: May be repeated. Maximum 12 hours.
Comments: May be included in total credit hours required for a major.
Registration Restriction: Consent of instructor.

DEPARTMENT OF ANIMAL SCIENCE

(113) (ANSC) Animal Science

REVISE TITLE, DROP (DE) PREREQUISITE, ADD RECOMMENDED BACKGROUND

420 Reproductive Technologies (3)
Recommended Background: Undergraduate reproductive physiology course.

REVISE TITLE, DROP RECOMMENDED BACKGROUND

481 Beef Management (3)

482 Dairy Management (3)

483 Swine Management (3)

484 Poultry Management (3)

REVISE TITLE

696 Seminar on Advanced Topics in Animal Science (1)

REVISE TITLE AND DESCRIPTION

572 Mixed Linear Statistical Modeling (3) Mixed model theory and applications particularly in the life sciences; matrix algebra foundation for full and non-full rank models (regression and analysis of variance); covariance structures such as for repeated measures and spatial data; exposure to generalized and non-linear mixed models.

REVISE TITLE AND DESCRIPTION, DROP (DE) PREREQUISITE(S) AND COMMENT(S), ADD RECOMMENDED BACKGROUND

550 Animal Immune Physiology (3) Interaction of the immune system with other physiological processes such as reproduction, nutrition, and endocrine that influence whole animal systems.
Recommended Background: Graduate physiology course.

REVISE TO DROP PREREQUISITES AND ADD RECOMMENDED BACKGROUND

430 Nutrient Evaluation and Ration Formulation (3)
Recommended Background: Undergraduate nutrition course covering nomenclature, structures, functions, utilization, and deficiency symptoms of essential nutrients in carnivores, omnivores and herbivores and a course covering introductory computer science.

523 Advanced Mammalian Reproduction (3)
Recommended Background: Reproductive physiology course

REVISE RECOMMENDED BACKGROUND

520 Animal Physiology (4)
Recommended Background: General undergraduate coursework in anatomy and physiology.

530 Animal Nutrition and Metabolism (4)
Recommended Background: Advanced undergraduate courses in nutrition

675 Statistical Genomics (3)
Recommended Background: 6 hours of graduate level statistics and familiarity with genomic experimental methodologies.

ADD REGISTRATION PERMISSION

502 Registration for Use of Facilities (1-15)
Registration Permission: Consent of instructor.

REVISE PRIMARY COURSE TO CHANGE NAME OF ACADEMIC DISCIPLINE OF SECONDARY COURSE

623 Advanced Topics in Obesity (1-4) *(Same as Kinesiology 623).*

DEPARTMENT OF BIOSYSTEMS ENGINEERING AND SOIL SCIENCE

(194) (BSET) Biosystems Engineering Technology

DROP

442 Agricultural Waste Management and Pollution Control (3)

(345) (ESS) ENVIRONMENTAL AND SOIL SCIENCES

REVISE TO DROP REGISTRATION RESTRICTION

544 Environmental Soil Physics (3)

REVISE TO DROP (RE) PREREQUISITE, ADD RECOMMENDED BACKGROUND

613 Advanced Topics in Soil Chemistry and Fertility (3)
Recommended Background: Soil chemistry.

REVISE DESCRIPTION

462 Environmental Climatology (3) Study of global energy budget, past climates, climate variability, climate distribution, and climate change. Emphasis on global warming and its potential impacts on ecosystems, societies, and global sustainability. Students are required to use quantitative, computer, and problem-solving skills to analyze and report climate data for environmental planning.

554 Environmental Soil Biology (3) Biology and biochemistry of the soil environment as they apply to environmental and agricultural processes and sustainability. Topics include the soil habitat, microbial ecology and diversity, biogeochemical cycling of nutrients, biodegradation, and research methodology to investigate soil microorganisms.

DEPARTMENT OF ENTOMOLOGY AND PLANT PATHOLOGY

(341) (EPP) ENTOMOLOGY AND PLANT PATHOLOGY

ADD NEW COURSE FOR GRADUATE CREDIT

491 Measuring Genetic Variation (3) An overview of tools and applications for discovering and utilizing genetic variation. Topics will range from microbes to humans. Will include lectures, assigned reading and discussion, and laboratory demonstrations.

DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY

(390) (FDST) Food Science and Technology

ADD

516 Food Analysis (4) Principles, methods and techniques for qualitative and quantitative analyses of composition and physical, chemical, and biological properties of food and food ingredients.
Contact Hour Distribution: 3 hours and one 2-hour lab.

DEPARTMENT OF FORESTRY, WILDLIFE AND FISHERIES

(993) (WFS) WILDLIFE AND FISHERIES SCIENCE

REVISE HOURS AND TITLE

515 Avian Ecology and Conservation (3)

REVISE HOURS

545 Advanced Population Analysis (3)

546 Advanced Habitat Analysis (3)

DEPARTMENT OF PLANT SCIENCES

(791) (PLSC) PLANT SCIENCES

DROP FOR GRADUATE CREDIT

441 Advanced Turfgrass Management (2)

DROP

448 Horticultural Internet Communication (3)

449 Advanced Turf Practicum (1-3)

ADD FOR GRADUATE CREDIT

452 Turfgrass Strategies (2) Case studies of turfgrass management issues and discussion of their resolution. Development of problem solving skills in areas related to turfgrass management.

462 Professional Development in the Turfgrass Industry (1-2) Exposure to career development opportunities in turfgrass science and management.
Repeatability: May be repeated. Maximum 5 hours.
Recommended Background: Introductory courses in turfgrass science and management.

ADD

538 Turfgrass Pathogens and Management (3) Identification, classification, and management of turfgrass pathogens. Recommendations and development of management plans for golf course, athletic field, and home lawn turfgrasses.
Credit Restriction: Students may not receive credit for both 438 and 538.
Recommended Background: Introductory course in plant pathology or consent of instructor.

541 Advanced Turfgrass Management (3) Principles and scientific basis of turfgrass culture. Adaptation, ecology, physiology, climatic influences on grass culture. Clipping and water management; design.
Contact Hour Distribution: 2 hours and 1 hour lab.
Credit Restriction: Students may not receive credit for both 441 and 541.

552 Plant Biotechnology, Genetics and Breeding (3) General principles and techniques used in plant modification. Principles of molecular and transmission genetics as applied to plant biotechnology and plant improvement.
Credit Restriction: Students may not receive credit for both 452 and 552.

634 Advanced Weed Science Principles (3) Principles of Weed Science with emphasis on herbicide chemistry, herbicide effects on plant physiology, the analysis of herbicide residues in soils and plants, weed biology, and methods to conduct research under field, greenhouse and laboratory conditions. Offered in fall, alternate (even) years.
Recommended Background: An advanced level plant physiology course and an organic chemistry or biochemistry course or consent of instructor.

REVISE CONTACT HOUR DISTRIBUTION, DROP (DE) PREREQUISITES

410 Nursery Management and Production (3)

REVISE TO DROP REGISTRATION RESTRICTION

470 Professional Practices for the Green Industry (3)

REVISE DESCRIPTION, DELETE PREREQUISITE, ADD REGISTRATION PERMISSION AND COMMENT

429 Field Study of Public Horticulture Institutions (2) Extended 10-12 day field study of various public horticulture institutions such as botanical gardens, arboreta, historical grounds, zoos, conservatories, cemeteries, and nature preserves.
Registration Permission: Consent of Instructor.
Comment: Offered only during mini-term; application and student course fee required (additional fees may apply depending upon horticultural sites visited).

REVISE TO DROP PREREQUISITE, ADD RECOMMENDED BACKGROUND

511 Seed Biology and Physiology (1)
Recommended Background: Course work in plant physiology.

653 Advanced Plant Breeding (3)
Recommended Background: Course work in experimental design and analyses and a general genetics course or consent of instructor.

II. PROGRAM CHANGES

REVISE TEXT – MASTER OF SCIENCE PROGRAMS

In the 2009-2010 *Graduate Catalog*, under the College link, revise the 2nd paragraph as follows:

Available majors are agricultural economics; agricultural leadership, education and communications; animal science; biosystems engineering; biosystems engineering technology; entomology and plant pathology; environmental and soil sciences; food science and technology; forestry; landscape architecture (offered jointly with the College of Architecture and Design); plant sciences; and wildlife and fisheries sciences. Minors are available in forestry, plant sciences, and wildlife and fisheries sciences. For a complete listing of majors see the Majors, A-Z link.

DEPARTMENT OF AGRICULTURAL AND EXTENSION EDUCATION (DEPT DROPPED)

▲ DROP THE FOLLOWING MAJOR, DEGREE, AND CONCENTRATIONS

Agricultural and Extension Education – MS
- Agricultural education concentration
- Agricultural extension education concentration

AGRICULTURAL LEADERSHIP, EDUCATION AND COMMUNICATIONS (078/ALEC) (NEW DEPARTMENT)

▲ ADD THE FOLLOWING MAJOR, DEGREE, AND CONCENTRATIONS

Agricultural Leadership, Education and Communications – MS
- Agricultural communications concentration
- Agricultural education concentration
- Agricultural leadership concentration

ADD THE FOLLOWING INTRODUCTORY PARAGRAPH FOR THE NEW DEPARTMENT

The agricultural leadership, education and communications program is designed for students wanting to learn more about leadership skills and styles, educational methods for youth and adults, or methods of communication and styles used in agricultural and related fields. The program may be completed under a thesis or non-thesis option. Candidates for the master's degree must meet the general requirements of the Graduate Council and those stipulated by the department.

SUPPORTING INFORMATION: Rationale: The program has undergone a multi-year review and revision of its mission and program direction. Revising the name of the major is to reflect the change in course requirements from a technical science to a leadership and communications skill based curriculum. Impact on other Academic Units: The change will affect the course number and additional class offerings. Students will be required to take additional courses currently offered by other units. Financial impact: None.

From: **Diacon, Todd A**
Sent: **Thursday, September 24, 2009 2:49 PM**
To: **Albrecht, Mary Lewnes; Yegidis, Bonnie Lee**
Cc: **Martin, Susan D; Gerloff, Delton C; Park, Bill; Beyl, Caula Ann; Stephens, Carrie Ann; Vaughan, Edee**
Subject: **RE: Seeking approval for change of name for a major**

This seems to be a straightforward name change that does not require THEC approval. You have our approval.

Also, I assume campus officials are ok with this name change, and assume it would require approval by the appropriate faculty senate committees?

From: Albrecht, Mary Lewnes
Sent: Thursday, September 24, 2009 1:24 PM
To: Yegidis, Bonnie Lee
Cc: Martin, Susan D; Diacon, Todd A; Gerloff, Delton C; Park, Bill; Beyl, Caula Ann; Stephens, Carrie Ann; Vaughan, Edee (Edee)
Subject: Seeking approval for change of name for a major
Importance: High

Dear Bonnie –

It is my understanding that we must receive your approval for a revision in an academic unit's name. Furthermore, it is my understanding that your office makes the determination as to whether or not the change requires Board of Trustees and/or THEC approval. CASNR is requesting a revision for the Agricultural and Extension Education major at the graduate level.

From: Agricultural and Extension Education, (Interdepartmental Unit) MS
To: Agricultural Leadership, Education and Communications, (Interdepartmental Unit) MS

This has been a multi-year process of reexamination of the traditional major which looked solely at teacher licensure for vocational agriculture programs at the high school level and for adult education in agriculture through the Extension Service. Over the past several years, the program has been energized by new faculty members and they wish to rename the program to reflect the new direction of leadership, education and

communications within agricultural and natural resources settings and industries. A good example of the studies conducted by the faculty and their graduate students is the work by Sarah Kleinhauer examining women deans of colleges of agriculture, their life experiences which lead them into higher education administration, and their leadership styles. Other graduate students will continue to pursue the MS for agricultural education in the high schools or with Extension.

The undergraduate major is undergoing a minor revision:

From: Agricultural and Natural Resources Leadership, Education and Communication
To: Agricultural Leadership, Education and Communications

The undergraduate students pursue various careers in agriculture where a general background in agriculture combined with leadership studies is beneficial such as the Farm Bureau, Cooperatives, breed and other industry trade associations.

If you have any questions regarding the proposed changes, please let me know.

Sincerely,
Mary

Mary Lewnes Albrecht, PhD
Associate Dean for Academic Programs

DEPARTMENT OF AGRICULTURAL ECONOMICS

ADD PARAGRAPH SHOWING PARTICIPATION WITH ECONOMICS MAJOR, PHD

In the 2010-2011 *Graduate Catalog*, add as introductory paragraph text showing participation with Economics major.

Faculty in the Department of Agricultural Economics participate in the Department of Economics, Economics PhD major. Students in the Economics PhD program are required to demonstrate competence in at least two fields of specialization in economics by completion of a two-course sequence with a GPA of 3.25 or better in each field, grades of B or better in each field course, and by submission of a satisfactory research paper in one of those fields. Students interested in pursuing doctoral studies in agricultural economics may do so with one of their two fields in Agricultural Economics (see Department of Economics catalog entry for detailed information). The dissertation research of students within the Economics PhD whose major field is Agricultural Economics can be supervised by Department of Agricultural Economics faculty.

DEPARTMENT OF ANIMAL SCIENCE

REVISE THE INTRODUCTORY PARAGRAPH AND ADMISSION TEXT

In the 2009-2010 *Graduate Catalog*, remove the current introductory and admission text and replace with:

The Department of Animal Science offers graduate programs leading to the Master of Science and Doctor of Philosophy degrees with a major in Animal Science. Areas of research emphasis are physiology (e.g. ruminant and monogastric nutrition, reproduction and stress) and health and well-being (e.g. immunology, microbiology, and pre-harvest food safety). Programs emphasize experiential learning with animal species, including beef and dairy cattle, poultry, swine, small ruminants, and animal models for human disease. See the Department graduate program website for a listing of graduate research faculty and their specific research focus areas (http://animalscience.ag.utk.edu/Teaching-GraduateFaculty.html).

Admission
To be considered for admission, a student must have at least a 3.0 grade point average (GPA) on a 4.0 scale in a completed undergraduate degree program in Animal Science or related field (or at least a 3.0 GPA each term during the junior and senior years). If the applicant has an unsatisfactory GPA, acceptance may be on a probationary basis. In this case, the student is required to complete a minimum of 9 hours of graduate coursework and achieve a minimum cumulative GPA of 3.0 to remove the probationary status. Prerequisite courses may be required if the applicant has insufficient background.

In addition to the materials to be submitted to the Office of Graduate Admissions, applicants must submit directly to the Department of Animal Science Graduate Program Office:
• A completed Animal Science academic and personal information form highlighting educational and career goals and relevant experience.
• Completed Animal Science rating forms submitted by at least three individuals familiar with the applicant's scholastic ability and professional potential. At least two of the three individuals requested to provide a rating form must be from the applicant's former academic institution(s). If the applicant was previously enrolled in a graduate program, one rating form must be completed by the graduate mentor (major professor).

Admission will be contingent upon evaluation of the applicant's undergraduate or graduate grade point average, Graduate Record Examination scores, information provided by evaluators or others, educational and career goals, relevant experience, and scores from the TOEFL or IELTS, if applicable. Applicants to the PhD program normally should have completed a M.S. degree with thesis before beginning the doctoral program. Final admission is contingent upon the applicant obtaining a commitment from a graduate research faculty member to serve as her/his graduate mentor (major professor).

Student Responsibilities and Retention Standards
Students must be fully committed to their graduate program, participate in departmental and professional activities, and assume full responsibility for knowledge and compliance with rules and regulations of the Graduate Council and Department requirements stated in the Animal Science Graduate Student Handbook for their degree program. Retention is dependent on the student maintaining a 3.0 cumulative grade point average in graduate courses taken at UT and completing other milestones in a timely manner as outlined in the Animal Science Graduate Student Handbook (e.g. forming a committee, completion of coursework, submitting a research proposal, making progress in research objectives, and thesis/dissertation preparation).

Academic Probation
A graduate student will be placed on academic probation when the UT cumulative grade point average (GPA) falls below a 3.0, and at least 6 hours of graduate coursework have been completed. For doctoral students, coursework for the M.S. degree, whether taken at UT or elsewhere, will not be included in cumulative GPA calculations. A student will be allowed to continue graduate study in subsequent semesters if each semester's GPA is a 3.0 or greater. Upon achieving a cumulative GPA of at least 3.0, the student will be removed from probationary status. ANSC 511 and ANR 512 hours that were not pre-approved by the Department's Graduate Committee will not be used in probation GPA calculations.

Dismissal
A graduate student earning less than a 3.0 semester grade point average while on academic probation may be dismissed from the program. Other reasons for dismissal include failure to make adequate progress towards other degree requirements (e.g., research project, thesis/dissertation preparation), academic dishonesty (e.g., plagiarism, falsification of data), or other forms of gross misconduct as defined by the Office of Equity and Diversity, Human Resources, Dean of Students' Office, *Hilltopics* or Graduate Council. Dismissal will be accomplished by written notice to the student with a copy to The Graduate School.

REVISE REQUIREMENTS – ANIMAL SCIENCE MAJOR – MS

In the 2009-2010 *Graduate Catalog*, remove the current MS requirements and replace with:

Requirements
The program requires the student to write a thesis based on original research and complete 24 hours of graduate coursework, plus 6 hours of ANSC 500. Coursework must include the following:

- At least 14 hours in courses numbered at or above the 500 level.
- At least 1 credit hour of Teaching/Extension experiential learning.
- At least 3 hours in statistics chosen from courses approved for use in the intercollegiate graduate statistics program.
- 1 hour of research ethics coursework (preferably in the first year).
- 3 hours of graduate-level multi-systems physiology coursework (approved by the student's advisory committee).
- ANSC 596 each spring term for first- and second-year students.
- The remainder of coursework will be selected by the student in consultation with the major professor and advisory committee. A majority of coursework must be completed at the University of Tennessee.

The major professor, an animal science faculty member at the rank of assistant professor or above, chairs the student's graduate advisory committee. The student and major professor select the other members of the advisory committee which should contain at least two other faculty members at the rank of assistant professor or above, one of whom may be outside the Animal Science Department. The student's advisory committee assists in the planning of course work and may require specific courses in addition to those required by the Animal Science graduate program. The student's graduate advisory committee also aids in formulating an appropriate research project and assesses achievement of other degree requirements, including the research proposal and thesis defense.

Students are expected to choose their graduate advisory committee in their first semester, present proposed coursework and research plan to the committee before the beginning of the second semester, and present a written research project proposal to the committee no later than the third semester of matriculation.

REVISE REQUIREMENTS – ANIMAL SCIENCE MAJOR – PHD

In the 2009-2010 *Graduate Catalog*, remove the current PhD requirements and replace with:

Requirements
The program requires the student to write a dissertation based on original research and complete at least 24 hours of graduate coursework at the 500- and 600-level beyond the master's degree, plus 24 hours of ANSC 600. Coursework must include the following:

- A minimum of 6 hours at the 600 level.
- A minimum of 8 hours in related courses outside of animal science (ANSC cross-listed courses may be used for this purpose).
- At least 1 credit hour of Teaching/Extension experiential learning.
- At least 3 hours in statistics chosen from courses approved for use in the intercollegiate graduate statistics program (or 6 hours if student has no previous graduate level statistics coursework).
- 1 hour of research ethics coursework if not taken for the Master of Science degree.
- 3 hours of graduate-level multi-systems physiology coursework if not taken for the Master of Science degree (as approved by the student's advisory committee).
- ANSC 696 each spring term for first- and second-year students.

The remainder of coursework will be selected by the student in consultation with the major professor and committee, reflecting the student's area of emphasis and professional objectives. A majority of coursework must be completed at the University of Tennessee.

The student and major professor select the graduate advisory committee which must be comprised of at least 5 faculty members at the rank of assistant professor or above. The major professor serves as chair, 3 members must reside within the Department of Animal Science, and one member must be from outside the Department. The major professor and at least 2 other members must be approved to direct doctoral research. The student's advisory committee assists in the planning of course work and may require specific courses in addition to those required by the Animal Science graduate program. The graduate advisory committee also aids in formulating an appropriate research project and administers other degree requirements, including the comprehensive exam and dissertation defense.

Students are expected to choose their graduate advisory committee in their first semester, present proposed coursework and research plan to the committee before the beginning of the second semester, and present a written research project proposal to the committee no later than the fourth semester of matriculation.

DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY

- DROP CONCENTRATION – FOOD SCIENCE AND TECHNOLOGY MAJOR – PHD

  Sensory evaluation of foods concentration

REVISE INTRODUCTORY PARAGRAPH

In the 2009-2010 *Graduate Catalog*, revise the first sentence of the introductory paragraph to remove the dropped concentration as follows. Rest of paragraph remains the same.

Students in the doctoral program may choose research in the concentration areas of food chemistry, food microbiology, or food processing.

DEPARTMENT OF FORESTRY, WILDLIFE AND FISHERIES

ADD DESCRIPTION FOR THE FOLLOWING MINORS

In the 2010-2011 *Graduate Catalog*, add text for minors:

Forestry Minor
The Forestry minor requires 9 hours from Forestry courses at the 500-level or above and approved Forestry, Wildlife and Fisheries courses from the 500-level or above. The student's committee must include a member of the faculty from the department who will be responsible for designating courses required for the minor.

Wildlife and Fisheries Science Minor
The Wildlife and Fisheries Science minor requires 9 hours from Wildlife and Fisheries Science courses at the 500-level or above and approved Forestry, Wildlife and Fisheries courses from the 500-level or above. The student's committee must include a member of the faculty from the department who will be responsible for designating courses required for the minor.

DEPARTMENT OF PLANT SCIENCES

- ADD CONCENTRATIONS – PLANT SCIENCES MAJOR – MS

  Crop sciences concentration
  Horticulture concentration
  Plant breeding concentration
  Plant molecular genetics concentration
  Weed science concentration

ADD DESCRIPTION FOR THE FOLLOWING MINORS

In the 2010-2011 *Graduate Catalog*, add text for minors following description for the Non-Thesis Option.

Plant Sciences Minor
The Plant Sciences minor requires 9 hours of course work in the department with at least 6 hours in 500-level courses and above (excluding PLSC 500, PLSC 501, PLSC 502, PLSC 503, PLSC 505, PLSC 561, PLSC 571 or ANSC 571, PLSC 592, PLSC 593, PLSC 600 and PLSC 602). The student's graduate committee must include a member of the faculty from the Plant Sciences department who will be responsible for designating courses required for the minor.

Statistics Minor
The department also participates in a program designed to give Plant Sciences graduate students an opportunity to develop a minor in statistics with course content relevant to their major field of study. See Intercollegiate Graduate Statistics Program (IGSP) for program description (http://www.bus.utk.edu/stat/igsp/overview.htm), a list of participating departments (http://www.bus.utk.edu/stat/igsp/programs.htm), and departmentally approved courses (http://bus.utk.edu/stat/igsp/pss.htm).

ADD DESCRIPTION FOR THE FOLLOWING MINORS

In the 2010-2011 *Graduate Catalog*, add text for minors following description for the PhD requirements.

Plant Sciences Minor
The Plant Sciences minor requires 9 hours of course work in the department with at least 6 hours in 500-level courses and above (excluding PLSC 500, PLSC 501, PLSC 502, PLSC 503, PLSC 505, PLSC 561, PLSC 571 or ANSC 571, PLSC 592, PLSC 593, PLSC 600 and PLSC 602). The student's graduate committee must include a member of the faculty from the Plant Sciences department who will be responsible for designating courses required for the minor.

Statistics Minor
The department also participates in a program designed to give Plant Sciences graduate students an opportunity to develop a minor in statistics with course content relevant to their major field of study. See Intercollegiate Graduate Statistics Program (IGSP) for program description (http://www.bus.utk.edu/stat/igsp/overview.htm), a list of participating departments (http://www.bus.utk.edu/stat/igsp/programs.htm), and departmentally approved courses (http://bus.utk.edu/stat/igsp/pss.htm).

COLLEGE OF ARCHITECTURE AND DESIGN

All changes effective Fall 2010

I. COURSE CHANGES

SCHOOL OF ARCHITECTURE

(133) (ARCH) Architecture

ADD

ARCH 531 Information Modeling (2) Exploration of advanced information modeling programs. Emphasis is placed on learning how the digital model can assist in the design process through the representation of construction and analysis. The use of building information modeling to predict building performance and to document material properties will also be included.

ARCH 541 Design II: Principles (6) Principles of architectural design of form, space, and place emphasizing building configuration and order as informed by persistent themes of buildings explored at a novice level. Design of simple buildings that develop themes introduced in Design I, exploring possibilities of modern design thinking for contemporary situations, typically in a local context.
(DE) Prerequisite(s): 538.
(DE) Corequisite(s): 521.

ARCH 542 Design III: Campus And Urban Architecture (6) Development of architectural design principles and methods emphasizing form and space as informed by persistent themes of buildings explored at an early intermediate level. Design of buildings in a campus/group setting and design of moderately complex urban building type.
(DE) Prerequisite(s): 541.

ARCH 556 Design Implementation: Construction Methods II (3) Development of design implementation including advanced properties of interior and exterior building materials and their relation to construction methods and detailing. Advanced building systems design and detailing in service of architectural expression, sustainability, aesthetics, spatial order and perception, performance, experience, and meaning.

ARCH 583 Architectural Design: Urbanism (6) Investigations analyzing cultural, physical, and environmental influences and precedents of community on architectural form, space and structure. Design of projects: civic realm of urban forms and spaces.
(DE) Prerequisite(s): 571.

ARCH 586 Advanced Architectural Design: Sustainable Architecture (6) Architectural design studio emphasizing concern for the environment, consideration of energy conservation techniques, and use of renewable resources.
(DE) Prerequisite(s): 571.

ARCH 587 Advanced Architectural Design: Development & Design (6) Exploration of image making, consumerism and the allocation of scarce resources. Issues of finance, economics, urban economics, and marketing are analyzed in relation to urban and architectural design. Application of financial feasibility models.
(DE) Prerequisite(s): 571.

ARCH 588 Advanced Architectural Design: Structural Innovations (6) Building design with innovative structural configuration and technology. Exploration of new materials, detailing, and methods in building construction.
(DE) Prerequisite(s): 571.

ARCH 590 Advanced Architectural Design: Special Topics (6) Advanced architectural design based on special topics as defined by instructor.
(DE) Prerequisite(s): 571.

ARCH 599 Design VII: Diploma Thematic Studio (6) Final culminating design studio experience for the MArch professional degree. In-depth, instructor-led themes, with significant options for student interpretation in project development. Required graphic and written products.
(DE) Prerequisite(s): 572 and 507.

REVISE TO ADD DESCRIPTION AND (DE)PREREQUISITE

ARCH 500 Thesis (1-15) Student works independently but with his/her thesis committee, which reviews the work on a systematic basis at critical times during the project. The thesis with its associated issues is defined in the approved 580 Thesis Preparation document. The committee chair serves as the primary critic of the thesis and is responsible to assure that the requirements for the thesis are met.
(DE) Prerequisite(s): 580.

REVISE DESCRIPTION

ARCH 516 Design Implementation: Construction Methods I (3) Fundamentals of design implementation introducing properties of interior and exterior building materials and their relation to construction methods and detailing. Theory and practice of material selection and especially detailing, in service of architectural expression, sustainability, aesthetics, spatial order and perception, performance, experience, and meaning.

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

ARCH 571 Design IV: Building In The Urban Context (6) Architectural design in urban context emphasizing complex form and space informed by persistent themes of buildings explored at an intermediate level. Project development investigating the interrelationships of urban architecture and urban space as 'place.' Design of mixed-use and/or civic buildings in an urban neighborhood or district context.
(DE) Prerequisite(s): 542.
(DE) Corequisite(s): 515.

REVISE TITLE AND DESCRIPTION; ADD (DE)COREQUISITE

ARCH 572: Design VI: Design Integration (6) Designing for integration of the orders of place, program, technology, space, and experiences, explored in simple or moderately complex types, explored at an advanced professional program level. Projects developed from conceptual through design development phase, integrating building systems with a carbon-neutral performance goal. Projects explore regionally adaptable solutions, plural space, integral aesthetics, communication of integration, and advanced digital, modeling.
(DE) Corequisite(s): 509.

COLLEGE OF ARTS AND SCIENCES

All Changes Effective Fall 2010

I: COURSE CHANGES

DEPARTMENT OF ANTHROPOLOGY

(122) (ANTH) ANTHROPOLOGY

ADD

ANTH 504 – Anthropological Statistics I
3 Credit Hours Introduction to frequentist statistics (including standard parametric statistics and some of their nonparametric correlates) emphasizing anthropological applications, available methods and appropriate usage. Exploratory data sets will be provided to facilitate learning, and students may additionally provide their own data.

ANTH 551 – Hunter-gatherer Archaeology and Ethnography
3 Credit Hours Advanced seminar directed to the current literature and thinking about hunter-gatherers worldwide.

ANTH 552 – Peopling of the Americas
3 Credit Hours Archaeological, bioanthropological, linguistic and paleoenvironmental evidence associated with the initial human settlement of the Americas during the late Pleistocene.

ANTH 604 – Anthropological Statistics II
3 Credit Hours Advanced frequentist statistics for anthropology focusing on multivariate methods, time series analyses, resampling statistics, maximum likelihood analyses, with an introduction to Bayesian approaches. While exploratory data sets will be provided, students are strongly encouraged to supply their own research data to facilitate learning.
Registration Restriction(s): Must have completed Anthropology 504 or its equivalent with at least a B.

SCHOOL OF ART

(140) (ART) ART

ADD

ART 504 – First-Semester Graduate Seminar
1 Credit Hour Issues in art, design and art history presented by School of Art faculty.
Grading Restriction: Satisfactory/No Credit grading only.

(135) (ACER) ART CERAMICS

REVISE TITLE, DESCRIPTION, DROP PREREQUISITE, ADD RECOMMENDED BACKGROUND

ACER 421 – Advanced Ceramic Sculpture
6 Credit Hours Continued Investigation of sculpture with a focus on idea development and individual direction. This course will address clay preparation, clay finishing and kiln firing.
Recommended Background: 321 and 322.

ACER 422 – Advanced Pottery
6 Credit Hours Continued investigation of utilitarian forms with a focus on idea development and individual direction. This course will address clay preparation, glazing and kiln firing.
Recommended Background: 323.

(136) (ADES) ART DESIGN/GRAPHIC

ADD FOR GRADUATE CREDIT AND AS SECONDARY CROSS-LISTED COURSES

ADES 401 – Experiments in Sequencing
4 Credit Hours *(See Art Media Arts 401.)*

ADES 402 – Experiments in Space
4 Credit Hours *(See Art Media Arts 402.)*

ADES 403 – Experiments in Systems
4 Credit Hours *(See Art Media Arts 403.)*

REVISE HOURS

ADES 451 – Advanced Graphic Design (4)

ADES 452 – Graphic Design Seminar (4)

(134) (AMED) ART MEDIA ARTS

REVISE TO ADD SECONDARY CROSS-LISTED COURSES

AMED 401 – Experiments in Sequencing
4 Credit Hours. *(Same as Art Design/Graphic 401.)*

AMED 402 – Experiments in Space
4 Credit Hours. *(Same as Art Design/Graphic 402.)*

AMED 403 – Experiments in Systems
4 Credit Hours. *(Same as Art Design/Graphic 403.)*

REVISE HOURS

AMED 431 – Photography II
4 Credit Hours

REVISE TITLE AND DESCRIPTION

AMED 433 – History of Film and Modern and Contemporary Art
3 Credit Hours Study of the development and interaction between the cinematic arts and the visual arts within the context of 20th- and 21st-century art history. *(Same as Cinema Studies 433.)*

REVISE TO MOVE PREREQUISITE TO RECOMMENDED BACKGROUND

AMED 435 – Cinematography as Art (4)
Recommended Background: 235.

AMED 436 – Video Art (4)
Recommended Background: 236.

(138) (APAI) ART PAINTING

DROP

APAI 415 – Watercolor IV

DEPARTMENT OF BIOCHEMISTRY AND CELLULAR AND MOLECULAR BIOLOGY

(188) (BCMB) Biochemistry and Cellular and Molecular Biology

ADD SECONDARY CROSS-LISTED COURSES

480 Physiology of Exercise (3) *(See Kinesiology 480.)*

BCMB 503 – STAIRWISE: STAIR Weekly Integrative Strategic Exercises
1 Credit Hour. *(See Chemical and Biomolecular Engineering 503.)*

BCMB 571 – STAIRMaster I: Fundamentals of Sustainable Technology
3 Credit Hours. *(See Chemical and Biomolecular Engineering 571.)*

BCMB 572 – STAIRCase I: Sustainable Technology Case Studies
2 Credit Hours. *(See Chemical and Biomolecular Engineering 572.)*

BCMB 652 – STAIRCase II: Case Study for Sustainable Energy Production
3 Credit Hours. *(See Chemical and Biomolecular Engineering 652.)*

BCMB 673 – STAIRWWISE: STAIR Weekly Integrative Strategic Exercises
2 Credit Hours. *(See Chemical and Biomolecular Engineering 673.)*

DEPARTMENT OF EARTH AND PLANETARY SCIENCES

(424) (GEOL) GEOLOGY

ADD

GEOL 551 – Planetary Geomorphology
3 Credit Hours Survey of planetary processes and geomorphology. Important planetary processes, including impact cratering, volcanogenic, fluvial, Aeolian, glacial/periglacial, coastal, and tectonic processes will be evaluated in terms of their physical effect on planetary surfaces and their resultant geomorphic expression. Course will include instruction and utilization of GIS.
Recommended Background: Introductory geology or consent of instructor.

GEOL 552 – Process Geomorphology
3 Credit Hours Integrative approach to the development of the surface of the Earth based upon case histories, maps, remote sensing imagery.
Recommended Background: Introductory geology or consent of instructor.

GEOL 555 – Environmental Geology
3 Credit Hours Applications of the geological sciences toward a comprehension of the effects of geological processes on humans and effects of human activities on the Earth's environments.
Contact Hour Distribution: 2 hours and one 3-hour lab or field period.
Recommended Background: Introductory geology or consent of instructor.

GEOL 557 – Global Climate Change
3 Credit Hours Examines natural and anthropogenic changes in global climate systems. Topics include: biogeochemical cycles of greenhouse gases and the water cycle, including water resources and pollutants and changes in the biosphere (extinctions) as both cause and effects of physical global changes. Historical (baseline) dynamics are compared to current changes in order to predict human impacts and suggest technical and policy solutions.
Recommended Background: Introductory geology or consent of instructor.

GEOL 559 – Introduction to Oceanography
3 Credit Hours Principles of oceanography, including physical, chemical, geological, and biological processes and patterns. Emphasis on the physical, chemical, and geologic structure of the oceans and their role in oceanic circulation, global climate change, and the biogeochemical evolution of the oceans through geologic time.
Recommended Background: Introductory geology or consent of instructor.

GEOL 560 - Principles of Geochemistry
4 Credit Hours Applications of chemical principles to geologic systems with emphasis on problem-solving techniques. Topics include phase diagrams, partitioning of trace elements, thermodynamic principles for evaluating stabilities of mineral assemblages, aqueous solutions, and applications of radiogenic and stable isotopes to geologic systems.
Contact Hour Distribution: 3 hours and one 2-hour tutorial.
Recommended Background: General chemistry, calculus, mineralogy and petrology or consent of instructor.

GEOL 571 - Applied Geophysics
3 Credit Hours Basic principles of data collection, processing, and analysis for several common geophysical techniques will be presented through lectures, computer assignments (labs), and field work. Passive (earthquake) and active (reflection and refraction) seismology, potential fields (gravity and magnetics), heat flow, electromagnetics (including ground penetrating radar), and electrical techniques will be covered.
Contact Hour Distribution: One 3-hour meeting per week consisting of lecture, computer lab, or field work. One optional day or weekend field trip will be scheduled.
Recommended Background: Calculus, physics, petrology, sedimentology and stratigraphy and structural geology or consent of instructor.

GEOL 573 - Principles of Near-Surface Geophysics
3 Credit Hours 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.

DROP FOR GRADUATE CREDIT

GEOL 450 – Process Geomorphology (3)

GEOL 451 – Planetary Geomorphology (3)

GEOL 455 – Basic Environmental Geology (3)

GEOL 456 – Global Climate Change (3)

GEOL 459 – Introduction to Oceanography (3)

GEOL 460 – Principles of Geochemistry (4)

GEOL 470 – Applied Geophysics (3)

GEOL 473 – Principles of Near-Surface Geophysics (3)

Current Courses (424) Geology	Equivalent Courses – Effective Fall 2010 – (424) Geology
GEOL 470	GEOL 571
GEOL 471 (effective fall 2010)	GEOL 571
GEOL 451	GEOL 551
GEOL 450	GEOL 552
GEOL 455	GEOL 555
GEOL 456	GEOL 557
GEOL 459	GEOL 559
GEOL 460	GEOL 560
GEOL 473	GEOL 573

(415) (GEOG) GEOGRAPHY

ADD NEW 400-LEVEL COURSE FOR GRADUATE CREDIT

GEOG 430 – Global Environments of the Quaternary
3 Credit Hours Physical and biotic evidence of climate and environmental history over the two to three million year period that humans have inhabited Earth. Geographical and temporal patterns of change, drivers of change, and interrelationships with human society.
Recommended background: 131 or consent of instructor.

ADD

GEOG 512 – Environmental Modeling and Geospatial Analysis
3 Credit Hours Geographic applications in environmental modeling and geospatial analysis. Topics include but are not limited to: modeling concepts, frameworks and approaches; Geographic Information Science (GIS) for modeling; spatial decision support systems and environmental modeling; modeling human-environmental systems; and dynamic systems modeling.
Repeatability: May be repeated with consent of instructor. Maximum 6 hours.
(DE) Prerequisite(s): 411.

REVISE HOURS

GEOG 506 - Directed Readings (1-6)

DEPARTMENT OF HISTORY

(462) (HIST) HISTORY

DROP

HIST 513 – Teaching United States History (3)

INTERDISCIPLINARY PROGRAMS

(623) (LING) LINGUISTICS

ADD

LING 520 – Capstone Project
3 Credit Hours A capstone project, normally the preparation of a paper for presentation at a professional conference or for publication in a journal, planned and completed in consultation with a program advisor.

(994) (WOST) Women's Studies

DROP SECONDARY CROSS-LISTED COURSE

425 Women's Health (3) (*See Health 425.)*

DEPARTMENT OF MODERN FOREIGN LANGUAGES AND LITERATURES

(584) (ITAL) ITALIAN

REVISE DESCRIPTION AND ADD COMMENT

ITAL 401 - Dante and Medieval Culture
3 Credit Hours Dante's times and the *Divine Comedy*. Cross-listed: *(Same as Medieval Studies 401.)*
Comment(s): Open to non-majors. Italian majors and minors will be required to read selected texts and write papers in Italian.

ITAL 402 - Petrarch and Boccaccio
3 Credit Hours A cultural and literary survey from Petrarch to Machiavelli. Cross-listed*: (Same as Medieval Studies 402.)*
Comment(s): Open to non-majors. Italian majors and minors will be required to read selected texts and write papers in Italian.

ITAL 403 - Literature of the Rinascimento
3 Credit Hours A cultural and literary survey of major Italian authors in the 16th century.
Comment(s): Open to non-majors. Italian majors and minors will be required to read selected texts and write papers in Italian.

REVISE DESCRIPTION, ADD RECOMMENDED BACKGROUND AND REPEATABILITY

ITAL 411 - Aspects of Modern Literature and Culture
3 Credit Hours Representative works of Italian modern literature and culture. Taught in Italian.

Recommended Background: 212.
Repeatability: May be repeated with consent of instructor. Maximum 6 hours.

ITAL 412 - Advanced Literary Reading and Conversation
3 Credit Hours A cultural and literary survey of contemporary Italian poetry and short stories. Taught in Italian.
Recommended Background: 212.
Repeatability: May be repeated with consent of instructor. Maximum 6 hours.

(811) (PORT) PORTUGUESE

REVISE TO ADD RECOMMENDED BACKGROUND

PORT 432 – Topics in the Literature and Culture of the Portuguese-speaking World
3 Credit Hours *Cross-listed: (Same as Latin American Studies 432).*
Recommended Background: At least one course at the 300-level taught in Portuguese.

(924) (SPAN) SPANISH

ADD

SPAN 563 – Colonization and Resistance
3 Credit Hours Exploration of the literatures of Latin America and the Caribbean up to 1620. Possible readings will be taken from indigenous literatures existing before the arrival of Europeans in 1492, the works written by the early Spanish explorers and *conquistadores* and the texts created by indigenous, mestizo and criollo writers of the period. Topic varies.
Repeatability: May be repeated with consent of department. Maximum 6 hours.

SPAN 564 – Processes of Emancipation
3 Credit Hours Examination of the literatures of Latin America and the Caribbean from 1620-1825. Topics may include: the Baroque of the Indies, indigenous literature, the discourses of science and the Enlightenment. Texts will be studied in their historical context and in the light of Latin American cultural identity leading up to the wars of Independence. Topic varies.
Repeatability: May be repeated with consent of department. Maximum 6 hours.

SPAN 566 – Latin American and Caribbean Literatures, Independence, and the Struggles of Nation-building
3 Credit Hours Analysis of Latin American and Caribbean foundational texts published between 1825 and 1880 in light of independence and the struggles of nation-building and national identity. Topic varies.
Repeatability: May be repeated with consent of department. Maximum 6 hours.

SPAN 568 – Cosmopolitismo (Latin American Modernismo and Vanguardismo)
3 Credit Hours Critical study of principal writers and literary works associated with Latin American modernismo and vanguardismo published between 1880 and 1940. Concepts and expressions of modernity as reflected in literature of period. Topic varies.
Repeatability: May be repeated with consent of department. Maximum 6 hours.

SPAN 581 – Literature and Historicity
3 Credit Hours Analysis of the dynamic relationship between historical events and literary representations in Latin American and Caribbean works from the 1940s to the present, emphasizing the categories of "history" and "literature" as cultural constructs that are shaped according to chronological and artistic considerations. Topic varies.
Repeatability: May be repeated with consent of department. Maximum 6 hours.

SPAN 582 – Identity Discourses, 1940 to Present Day
3 Credit Hours Analysis of texts that focus on identity formation, its social development, cultural processes and transformation in Latin America and the Caribbean. Topic varies.
Repeatability: May be repeated with consent of department. Maximum 6 hours.

SPAN 585 – Studies in Regional Approaches to Literatures of Latin America and the Caribbean
3 Credit Hours Interpretation of Latin American and Caribbean literatures taking into consideration regional differences attributable to such factors as race, geography, immigration, and economic development. Key regions include Mexico and Central America, Caribbean, Andean countries, and the Southern Cone. Course readings vary between specific regional perspective and transregional one. Topic varies.
Repeatability: May be repeated with consent of department. Maximum 6 hours.

SPAN 586 – Studies in Literary Genres and Latin American and Caribbean Literatures
3 Credit Hours Study of significant literary works within selected genres (including prose fiction, drama, poetry, etc.), and their relationship to the cultural and political practices in Latin America and the Caribbean. Topic varies.
Repeatability: May be repeated with consent of department. Maximum 6 hours.

SPAN 587 – Studies in Selected Topics from Latin American and Caribbean Literatures, Cultures, and Societies
3 Credit Hours Studies in Latin American and Caribbean Literatures, Cultures and Societies. Topics may include gender, race, *mestizaje*, non canonical discourses, etc. Topic varies.
Repeatability: May be repeated with consent of department. Maximum 6 hours.

SPAN 589 – Latin American and Caribbean Literary Criticism
3 Credit Hours Major works in which Latin Americans have developed strategies to define, organize, and catalog literatures published throughout continent. Critical approaches that surpass European and other non-Latin American critical perspectives. Topic varies.
Repeatability: May be repeated with consent of department. Maximum 6 hours.

DROP

SPAN 561 - Spanish American Colonial Literature (3)

SPAN 562 – 19th-Century Spanish American Literature and Nation Building (3)

SPAN 571 – Spanish American Narrative: Criollismo to 1950 (3)

SPAN 572 – Spanish American Narrative: Boom to Present (3)

SPAN 573 – Regional Approaches to Interpreting Spanish American Literature (3)

SPAN 575 – Spanish American Modernismo and Vanguardismo (3)

SPAN 576 – Contemporary Spanish American Poetry (3)

SPAN 577 – Contemporary Spanish American Theater (3)

SPAN 578 – Cultural and Historical Perspectives: Spanish American Essay (3)

SPAN 579 – Spanish American Literary Criticism (3)

SCHOOL OF MUSIC

(698) (MUSC) MUSIC GENERAL

REVISE TO ADD RECOMMENDED BACKGROUND

MUSC 520 – Musical Styles (3)
Recommended Background: Music Theory 400 and Musicology 400, or passage of Music Theory and Musicology diagnostic exams.

(710) (MUIN) MUSIC INSTRUMENTAL

REVISE TO ADD REPEATABILITY

MUIN 584 - Practicum for Instrumental Conductors (1)
Repeatability: May be repeated. Maximum 2 hours.

DEPARTMENT OF POLITICAL SCIENCE

(801) (POLS) POLITICAL SCIENCE

ADD

POLS 542 – Legal Foundations of Public Administration
3 Credit Hours Aspects of public law affecting government agencies. Topics include enabling legislation, municipal charters, intergovernmental agreements, planning and zoning, eminent domain, personnel management and governmental liability.

DROP

POLS 531 – Theory of Planning (3)

POLS 552 – Organization Theory (3)

POLS 583 – Economic Analysis and Development (3)

POLS 585 – Planning methods (3)

POLS 596 – Workshops in Computer Applications (1)

POLS 598 – Problems in Planning (3)

DEPARTMENT OF PSYCHOLOGY

(830) (PSYC) PSYCHOLOGY

ADD NEW 400-LEVEL COURSE FOR GRADUATE CREDIT

PSYC 432 – Childhood Psychopathologies
3 Credit Hours Descriptive, theoretical and research aspects of abnormal development in children and adolescents are covered including, but not limited to, autism, ADHD, depression, eating anorexia and bulimia, and learning disabilities.

ADD

PSYC 518 – Advanced Theories and Interventions in Counseling Psychology
3 Credit Hours Advanced training in application of counseling theories and interventions. Emphasis on developing theory driven case conceptualizations and treatment plans from a variety of theoretical perspectives.
Recommended Background: Basic course in counseling theories.

PSYC 566 – Practicum in Counseling Psychology
3 Credit Hours Supervised practice of individual counseling.
Repeatability: May be repeated. Maximum 6 hours.
(DE) Prerequisite(s): 568 and 635.
(DE) Corequisite(s): 517 and 574.
Comment(s): Admission to doctoral concentration in counseling psychology is required.
Registration Permission: Consent of instructor.

PSYC 577 – Multicultural Psychology: Theory and Research
3 Credit Hours Provides graduate students who are interested in mental health with a basic foundation of knowledge, awareness, and skills in multicultural issues. Covers theories, research, and counseling interventions for working effectively with clients from different socio-cultural groups.

PSYC 622 – Structural Equation Modeling for the Social Sciences
3 Credit Hours Structural equation models, including confirmatory factor analysis, path analysis, hybrid models, and multiple group models approaches. Conceptualization and application of techniques.
Recommended Background: Graduate level statistics course.

PSYC 698 – Seminar in Supervision and Consultation
1 Credit Hour Basic and applied concepts and techniques of supervision and consultation.
(DE) Prerequisite(s): 594 and 595.

DROP SECONDARY CROSS-LISTED COURSES

PSYC 569 – Practicum in Counseling (3) *(See Counselor Education 555.)*

PSYC 574 – Cross-Cultural Counseling: Theory and Research (3) *(See Counselor Education 570.)*

REVISE TO DROP REPEATABILITY

PSYC 517 – Foundations of Counseling Psychology (3)

REVISE TITLE AND DESCRIPTION, DROP COMMENT, ADD REGISTRATION PERMISSION

PSYC 568 – Prepracticum in Counseling Skills
3 Credit Hours Didactic instruction in basic counseling techniques and interviewing skills.
Registration Permission: Consent of instructor.

REVISE TITLE, DROP PREREQUISITES AND RECOMMENDED BACKGROUND

PSYC 672 – Diagnosis and Treatment Planning
3 Credit Hours Classification methods in psychopathology and use of the DSM for differential diagnosis and treatment options appropriate for counseling psychology and other mental health professionals.

REVISE TITLE, HOURS, DESCRIPTION, REPEATABILITY, (DE)PREREQUISITE, AND COMMENT

PSYC 674 – Advanced Practicum in Counseling Psychology
3-6 Credit Hours Supervised advanced practice of individual and group counseling, also campus outreach interventions.
Repeatability: May be repeated. Maximum 12 hours.
(DE) Prerequisite(s): 569.
Comment(s): Admission to doctoral concentration in counseling psychology is required.

DEPARTMENT OF RELIGIOUS STUDIES

(863) (REST) RELIGIOUS STUDIES

REVISE TITLE AND DROP REGISTRATION PERMISSION

REST 499 – Advanced Seminar in the Study of Religion (3)

II: PROGRAM CHANGES

DEPARTMENT OF ANTHROPOLOGY

REVISE – ANTHROPOLOGY MAJOR – MA

In the 2009-2010 *Graduate Catalog*, revise to remove the current MA text and replace with the following:

In addition to the Graduate Council requirements, requirements for the Master of Arts degree with a major in anthropology, in the appropriate sequence of completion, are as follows.

Admission
Students applying for the MA program must:

Have a bachelor's degree from an accredited university with a major in anthropology. Applicants with a major in a related field (such as biology, sociology, geology, classics, history, historic preservation, or geography) will be considered only if they have a formal minor in anthropology or its equivalent.

Have an undergraduate GPA of 3.5 in the major, 3.3 overall

Have completed appropriate undergraduate courses in archaeology or anthropology, with an anthropology minor preferred, if applying to the concentration in Mediterranean archaeology.

Make formal application to the University of Tennessee, Knoxville, Office of Graduate Admissions. Copies of the application form, transcripts, and GRE scores that are sent to Graduate Admissions should also be sent directly to the Department of Anthropology at the same time. In addition, the department requires a letter of intent from the applicant indicating career goals and reasons for selecting the University of Tennessee, Knoxville, three letters of recommendation, and one sample of the prospective student's written work (a class paper or research report). These materials should be sent directly to the Graduate Secretary, Department of Anthropology, South Stadium Hall 250, The University of Tennessee, Knoxville, Tennessee 37996-0720.

Specify that they are applying for admission to the MA program, and state the concentration (archaeology, biological anthropology, cultural anthropology, Mediterranean archaeology, zooarchaeology) they will pursue.

Detailed information about the MA program and application procedures may be found at the department website at http://web.utk.edu/~anthrop/graduate.html

Requirements
The program leading to the Master of Arts degree is a general curriculum that allows for concentration after completion of a core course sequence. Formal requirements include the following.

Because of the structure of first-year studies, MA students must plan to begin their studies in the fall semester. A minimum of 30 hours in graduate courses, at least 20 hours at the 500 level or higher, and 24 hours in course work graded A-F. Course work must include three core classes taken in the first year.

ANTH 510 Method and Theory in Cultural Anthropology.
ANTH 560 Theory in Archaeology.
ANTH 590 Method and Theory in Biological Anthropology.

One additional course from two anthropology concentrations besides the student's primary concentration.

Students concentrating in Mediterranean archaeology should select their additional 18 hours from courses offered in the Anthropology, History, or Classics departments.

During the first year, comprehensive Graduate Evaluation Examinations (GEEs) are required of all MA students and are based on the content of the core courses.

All MA students must attend the graduate section of the visiting lecturer program (ANTH 550).

A graduate-level introductory statistics course, usually STAT 537 or ANTH 504. With permission of the department head an equivalent graduate level course may be substituted.

A formal performance review of each MA graduate student's progress will take place each year.

An MA thesis proposal.

Successful completion of the thesis and final oral presentation and examination.

REVISE – ANTHROPOLOGY MAJOR - PHD

In the 2009-2010 *Graduate Catalog*, revise to remove the current PhD text and replace with the following:

Admission
Students applying for the Doctor of Philosophy degree with a major in anthropology must:

Have a BA or MA degree in anthropology or a minor in anthropology and a degree in a related field such as biology, sociology, geology, classics, history, historic preservation, or geography.

Have a GPA above 3.30 overall in undergraduate or graduate work.

Furnish the department and Graduate School the same materials as applicants for the MA program (see Admission under Master of Arts). The application must specify that the applicant is applying for admission to the PhD program, and state the concentration (archaeology, biological anthropology, cultural anthropology, zooarchaeology) the student will pursue.

Master's thesis candidates in anthropology at the University of Tennessee, Knoxville, who apply and are conditionally accepted into the PhD program can enroll as doctoral students the semester following conferral of the MA.

All other students with a BA or MA must apply by January 15 for admission the following fall and, due to the requirements of the program, must begin their studies in the fall semester.

Detailed information about the PhD program and application procedures may be found at the department website at http://web.utk.edu/~anthrop/graduate.html

In addition to the Graduate Council requirements, requirements for the PhD with a major in anthropology, in the appropriate sequence of completion, are as follows.

Requirements
Every potential PhD candidate must complete two consecutive semesters of full-time residence prior to taking the doctoral comprehensive examination. The student must complete the minimum course work requirements of the Graduate Council (48 hours beyond the baccalaureate degree, or 24 hours beyond the master's degree), including at least 9 hours of 500- or 600-level courses outside of anthropology, distributed as appropriate to the individual's program of study. A minimum of 12 of the 24, or 30 of the 48 hours of coursework must be graded A-F. Coursework must include the three core classes taken in the first year, ANTH 510 Method and Theory in Cultural Anthropology; ANTH 560 Theory in Archaeology; and ANTH 590 Method and Theory in Biological Anthropology.

All PhD students must attend the graduate section of the visiting lecturer program (ANTH 550) each year until they are admitted to candidacy.

A formal performance review of each PhD graduate student's progress will take place each year.

Two graduate courses in statistics, usually STAT 537 and STAT 538 or ANTH 504 and 604. Courses in research methods, information technology or GIS may be substituted for these requirements, as approved by the student's doctoral committee and the department head.

Demonstrate reading comprehension in one foreign language by either successful performance on a language examination administered by the appropriate language department, or completion of the second semester of specialized reading courses for graduate students with a grade of B or better.

Pass a comprehensive oral and written examination designed to test for adequate knowledge in those areas essential to the student's research program, upon which the student is admitted to candidacy.

Dissertation Research
Twenty four hours of dissertation are required. A formal dissertation proposal or equivalent publication or document must be orally defended, followed by the successful completion and final oral presentation and defense of a dissertation.

SCHOOL OF ART

REVISE REQUIREMENTS – ART MAJOR - MFA

In the 2009-2010 *Graduate Catalog*, revise to remove the current bulleted list and replace with the following. Other text remains the same.

Requirements
A minimum of 60 hours to include the following.

- A minimum of 16 hours of studio courses in a concentration area.
- A minimum of 9 hours of graduate-level academic (non-studio) courses of which at least 6 hours are to be in art history.
- 1 hour of First-Semester Graduate Seminar.
- A minimum of 14 hours of electives consisting of any combination of courses offered by the University of Tennessee for graduate credit. Students with a GTA are required to successfully complete 3 hours of Art 503, Theory and Practice of Art Fundamentals. These hours are considered to be elective. A concentration area may have course requirements that reduce the number of elective hours.
- 20 hours of Art 599, Project in Lieu of Thesis. A third year of semi-independent study. Student must have completed all required coursework prior to commencement of Art 599.

DEPARTMENT OF CHEMISTRY

ADD PARTICIPATION – INTERDISCIPLINARY GRADUATE CERTIFICATE IN SUSTAINABILITY SCIENCE

In the 2010-2011 *Graduate Catalog*, add text to show participation in the Interdisciplinary Graduate Certificate in Sustainability Science following the text for the Intercollegiate Graduate Minor in Computational Science.

Interdisciplinary Certificate in Sustainability Science
The Department of Chemistry is one of several departments participating in the Sustainable Technology through Advanced Interdisciplinary Research (STAIR) Program. Any student pursuing a master's or PhD with a major in chemistry can receive a Certificate in Sustainability Science by completing the appropriate STAIR Program certificate requirements. For further information, see the description of the certificate requirements listed under the Chemical & Biomolecular Engineering catalog.

DEPARTMENT OF HISTORY

REVISE REQUIREMENTS – HISTORY MAJOR – PHD

In the 2009-2010 *Graduate Catalog*, revise the 3rd bullet as follows:

- Complete 9 hours in one Group I doctoral field. There is no minimum hour requirement for a Group II field. Complete 9 hours in the Group III field (Teaching World History) including 511 and two additional courses at the 500 level outside of European or United States history; or complete an Alternative Third Field**,** as defined below. Courses taken to fulfill MA degrees may be counted toward all field requirements.

REVISE LANGUAGE REQUIREMENT – HISTORY MAJOR – PHD

In the 2009-2010 *Graduate Catalog*, revise the Language requirement as follows:

Language Requirement

Students must demonstrate competency in a foreign language or languages through coursework or examination. Students in pre-Modern Europe will be required to pass three language exams, including Latin. The other two languages will be determined in consultation with the adviser. Students in Modern Europe will be required to pass two language exams, as determined by the adviser. Students in US history will be required to pass one language exam. The foreign language requirement must be fulfilled before taking the comprehensive examination.

Formerly: Students must demonstrate competence in one foreign language through coursework or examination. The student's doctoral committee may specify any other languages or research tools, such as statistics, essential for the student's preparation. The foreign language requirement must be fulfilled before taking the comprehensive examination.

REVISE GROUP III (TEACHING FIELD) EXAMINATION – HISTORY MAJOR – PHD

In the 2009-2010 *Graduate Catalog*, revise to remove current heading and text and replace with the following:

Alternative Third Field
Students may choose an alternative third field. This entails three courses in a Group I field other than the student's own Group I field and requires approval from the Director of Graduate Studies, the student's adviser, and a faculty member in charge of supervising that alternative field, and culminates in a two-hour oral exam conducted by the adviser and two course instructors. No more than one of these courses can be an independent study.

REVISE DOCTORAL FIELDS – HISTORY MAJOR – PHD

In the 2009-2010 *Graduate Catalog*, revise Group III under the Doctoral Fields heading as follows:

Group III (Teaching Field). World History.

INTERDISCIPLINARY PROGRAMS

REVISE REQUIREMENTS – LINGUISTICS GRADUATE CERTIFICATE

In the 2009-2010 *Graduate Catalog*, revise to delete 1st bullet and revise 2nd and 3rd bullet as follows:

- Students must take 15 hours from the following list (including at least one from LING 423, LING 425, MFLL 512)-- EDPY 531, EDPY 555, ENGL 508, ENGL 509, ENGL 680, FREN 421, FREN 422, FREN 510, GERM 510, GERM 541, GERM 631, GERM 632, LING 400, LING 411, LING 426, LING 431, LING 435, LING 471, LING 472, LING 474, LING 476, LING 477, LING 485, LING 490, LING 510, LING 575, PSYC 400, PSYC 543, PSYC 617, SPAN 420, SPAN 421, SPAN 531, STAT 531. Other courses may, where appropriate, be substituted for the courses listed above with the permission of the Chair of the Linguistics Program.
- LING 520

SCHOOL OF MUSIC

REVISE CONCENTRATION NAME – MUSIC THEORY

In the 2009-2010 *Graduate Catalog*, revise to remove "optional emphasis in music technology" from the Music theory concentration name:

From: Music theory concentration (optional emphasis in music technology)

To: Music theory concentration

DEPARTMENT OF POLITICAL SCIENCE

REVISE PUBLIC ADMINISTRATION MAJOR – MPA

In the 2009-2010 *Graduate Catalog*, revise to remove current text and replace with the following:

The MPA program is intended to prepare students for public service careers by acquainting them with management principles, analytical tools, and the ethical dilemmas they will face as public administrators. It consists of a total of 36 hours, including a core program, an elective specialization and a recommended internship.

Admission
Applicants for admission to the program must have a bachelor's degree or its equivalent. Normally, an overall average of 3.0 and an average of 3.2 in the last two years of political science or social science courses are required. In addition, a composite score of 1100 on the verbal and quantitative parts of the GRE is desired.

Requirements
The MPA is a non-thesis program requiring 36 hours. Specific requirements include the following.

I. **Foundations of public administration 12 hours**
Part A
Political Science 550 Public Administration (required) and one of the following courses:
Political Science 539 State and Local Government
Political Science 542 Legal Foundations of Public Administration
Political Science 558 Politics of Administration
Political Science 566 Ethics, Values, and Morality in Public Administration

Part B (both courses required)
Political Science 512 Quantitative Analysis
Political Science 514 Research and Methodology in Public Administration

II. Specialized Track
12 hours. Students must choose either a Management or a Policy track. ALL students, whether taking a management or policy track, are strongly encouraged to take PS 560.
The specialized track consists of three courses (nine hours) from those listed in a particular track and one course (three hours) from the other track. At least three of the four courses taken must be offered by the department of political science. Any exceptions must be approved by the MPA Coordinator.

Management Track
Political Science 560 Public Budgeting and Finance
Political Science 562 Public Management
Political Science 564 Human Resource Management in Public Administration
Political Science 595 Non-Profit Management
Political Science 660 Special Topics: (if a management focus)
Management 521 Human Resource Management
Recreation and Leisure Studies 540 Fiscal Policy
Recreation and Leisure Studies 541 Management Strategies

Policy Track
Political Science 548 Public Policy Process
Political Science 549 Environmental Policy
Political Science 556 Policy Analysis
Political Science 581 Foundations of Planning
Political Science 660 Contemporary Perspectives on Public Administration

III. Electives
6 hours. Students choose two additional graduate courses to support their career interests. These 2 courses may be within or outside the Department of Political Science and may consist of the courses listed above not taken to satisfy Foundation or Specialized Track requirements, other courses in the Department of Political Science, or courses outside the Department that are approved by the MPA Coordinator.

IV. Internship
6 hours. An internship is strongly recommended for students without previous professional experience but one is not required. For students with previous public service experience, six hours of elective coursework are taken in lieu of an internship. Students who do not complete an internship substitute six hours of coursework. The MPA Coordinator may approve a combination of internship and academic course credit to accommodate student needs.

REVISE REQUIREMENTS – POLITICAL SCIENCE MAJOR – PHD

In the 2009-2010 *Graduate Catalog*, revise the 2nd paragraph as follows:

Students undertaking a major field or dissertation in Comparative Politics are required to demonstrate a proficiency in a foreign language. However, this requirement may be waived by the Director of Graduate Studies in consultation with the Comparative politics faculty.

COLLEGE OF BUSINESS ADMINISTRATION

All Changes Effective Fall 2010

I: COURSE CHANGES

(205) (BUAD) BUSINESS ADMINISTRATION

DROP

595 Entrepreneurial Strategy Implementation (3)

596 Global Business Strategies (3)

Current Courses (205) Business Administration	Equivalent Courses Fall 2010 (625) Management
Business Administration 595	Management 552
Business Administration 596	Management 596

REVISE HOURS

- MOTION: I move that we accept the revision of course 513 pending full faculty vote from the College of Business Administration.
- VOTING RESULTS: Faculty from the College of Business Administration voted to revise the hours on course BA 513 from 9 to 15. There were zero dissenting votes and two abstentions so the revision/change carried.

513 MBA Core III (15)

REVISE TITLE, HOURS, AND DESCRIPTION

591 Global Business Seminar (3) Designed to familiarize MBA students with content needed to manage in a global business environment. Students also have the opportunity to apply their knowledge through an international travel experience. Students will complete in-class coursework on key aspects of international business, an international trip of approximately nine days, and related projects and assignments.

REVISE TO DROP COMMENT AND ADD REGISTRATION RESTRICTION

521 Business Core for Master of Accountancy I (3)
Registration Restriction(s): Master of Accountancy – accounting major.

522 Business Core for Master of Accountancy II (3)
Registration Restriction(s): Master of Accountancy – accounting major.

523 Business Core for Master of Accountancy III (3)
Registration Restriction(s): Master of Accountancy – accounting major.

DEPARTMENT OF ACCOUNTING AND INFORMATION MANAGEMENT

(009) Accounting

REVISE TO DROP (DE)COREQUISITE AND COMMENT; ADD REGISTRATION RESTRICTION (RETAIN (DE)PREREQUISITE)

532 Corporate Taxation and Reorganization (3)
Registration Restriction(s): Master of Accountancy – accounting major.

REVISE COMMENT AND ADD REGISTRATION RESTRICTION

507 Financial Reporting Research and Contemporary Issues (3)
Comment(s): Or consent of instructor.
Registration Restriction(s): Master of Accountancy – accounting major.

518 Professional Standards (3)
Comment(s): Or consent of instructor.
Registration Restriction(s): Master of Accountancy – accounting major.

519 Seminar in Business Risk and Assurance Methodology (3)
Comment(s): Or consent of instructor.
Registration Restriction(s): Master of Accountancy – accounting major.

521 Governmental, Not for Profit, and Management Accounting (3)
Comment(s): Or consent of instructor.
Registration Restriction(s): Master of Accountancy – accounting major.

530 Tax Research, Accounting Practice, and Procedures (3)
Comment(s): Or consent of instructor.
Registration Restriction(s): Master of Accountancy – accounting major.

531 Tax Strategy and Entity Taxation (3)
Comment(s): Or consent of instructor.
Registration Restriction(s): Master of Accountancy – accounting major.

592 Graduate Internship in Accounting (3)
Comment(s): Or consent of Master of Accountancy advisor.
Registration Restriction(s): Master of Accountancy – accounting major.

593 Individual Research in Accounting (3)
Comment(s): Or consent of Master of Accountancy advisor.
Registration Restriction(s): Master of Accountancy – accounting major.

REVISE TO DROP COMMENT AND ADD REGISTRATION RESTRICTION

533 Taxation of Partnerships and Corporations (3)
Registration Restriction(s): Master of Accountancy – accounting major.

539 Multi-Jurisdictional Tax Planning and Policy (3)
Registration Restriction(s): Master of Accountancy – accounting major.

693 Independent Study (3)
Registration Restriction(s): Doctor of Philosophy – Business Administration major – accounting concentration.

REVISE TO DROP REGISTRATION PERMISSION, ADD REGISTRATION RESTRICTION AND COMMENT

611 Doctoral Seminar in Accounting (3)
Comment(s): Or consent of PhD program advisor.
Registration Restriction(s): Doctor of Philosophy – College of Business Administration.

612 Doctoral Seminar in Accounting (3)
Comment(s): Or consent of PhD program advisor.
Registration Restriction(s): Doctor of Philosophy – College of Business Administration.

619 Doctoral Research in Accounting (3)
Comment(s): Or consent of PhD program advisor.
Registration Restriction(s): Doctor of Philosophy – College of Business Administration.

621 Accounting Colloquium (1)
Comment(s): Or consent of PhD program advisor.
Registration Restriction(s): Doctor of Philosophy – College of Business Administration.

622 Accounting Colloquium (1)
Comment(s): Or consent of PhD program advisor.
Registration Restriction(s): Doctor of Philosophy – College of Business Administration.

(558) Information Management

REVISE TO DROP PREREQUISITE, ADD RECOMMENDED BACKGROUND, REGISTRATION RESTRICTION, AND COMMENT

541 Advanced Database Systems (3)
Recommended Background: 341.
Comment(s): Or consent of instructor.
Registration Restriction(s): Master of Accountancy – accounting major.

REVISE COMMENT, DROP PREREQUISITE, AND ADD REGISTRATION RESTRICTION

543 Systems Audit Security and Controls (3)
Comment(s): Or consent of instructor.
Registration Restriction(s): Master of Accountancy – accounting major.

REVISE TO DROP REGISTRATION PERMISSION, ADD RECOMMENDED BACKGROUND, REGISTRATION RESTRICTION, AND COMMENT

549 Enterprise Applications, Security and Controls (3)
Recommended Background: 341.
Comment(s): Or consent of instructor.
Registration Restriction(s): Master of Accountancy – accounting major.

DEPARTMENT OF MANAGEMENT

(529) Human Resource Development

DROP PRIMARY COURSES

602 Designing Effective Organizations (3) *(Same as Management 621.)*

603 Seminar in Macro Organizational Behavior (3) *(Same as Management 622.)*

(625) Management

ADD

530 Effective Negotiating (3) Exploration of the theory and processes of negotiation as it is practiced in a variety of settings; will consider a broad spectrum of negotiation problems encountered by most managers; will have the opportunity to develop a broad range of negotiation skills, experientially, and to understand negotiations in useful analytical frameworks.
Registration Restriction(s): Master of Business Administration admission.
Comment(s): Or consent of instructor.

542 Business Planning in the Healthcare Industry (3) In this capstone level graduate elective, students will analyze trends and opportunities in the changing healthcare industry. Students will research, write, and report on a business plan for a new or improved organization in the Health Care Industry.
(DE) Prerequisite: Business Administration 513.
Registration Restriction(s): Master of Business Administration – business administration major.
Comment(s): Or consent of instructor.

552 Entrepreneurial Strategy Implementation (3) Implementation strategies of entrepreneurial organizations. Guided by a statement of work, student teams interact with the entrepreneur weekly to analyze company data, conduct research, and test pilot programs so as to recommend best practices for strategy implementation.
(DE) Prerequisite: Business Administration 513.
Registration Restriction(s): Master of Business Administration – business administration major.
Comment(s): Or consent of instructor.

559 New Venture Start-up (3) Faculty mentorship is provided to a student entrepreneur during the early months of venture creation. Topics include staffing, IP, alpha and beta customers, sourcing, financing, distribution and capitalization.
(DE) Prerequisite: 551 and 552.
Registration Restriction(s): Master of Business Administration – business administration major.
Comment(s): Or consent of instructor.

596 Capstone: Global Business Strategies (3) Focuses on the function and responsibility of the general manager in a global business environment, whose primary tasks include developing and managing an overall strategy to meet the challenges of competition in an ever-changing world. Through readings and case discussions students will integrate their knowledge from all the functions of business to examine issues in formulating and implementing competitive global strategy in a business simulation.
(DE) Prerequisite: Business Administration 513.
Registration Restriction(s): Master of Business Administration – business administration major.
Comment(s): Or consent of instructor.

616 Designing Effective Organizations (3) Survey of major topics and perspectives in organizational theory and design including consideration of organizations as complex systems. Organizational environments, structure, culture, decision making, organizational learning and change.

617 Seminar in Macro Organizational Behavior (3) Study of current theory and research in organizational behavior focused at the macro level. Attention to behavioral choice and decision making in organizations.

DROP SECONDARY CROSS-LISTED COURSES

621 Designing Effective Organizations (3) *(See Human Resource Development 602.)*

622 Seminar in Macro Organizational Behavior (3) *(See Human Resource Development 603.)*

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

551 New Venture Planning (3) Integration of various functional disciplines and their application to general management of new ventures formed both within larger corporations and independently. Topics include a venture plan and case analysis.
(DE) Prerequisite: Business Administration 513.
Registration Restriction(s): Master of Business Administration – business administration major.
Comment(s): Or consent of instructor.

Current Courses	Equivalent Courses - Effective Fall 2010
(529 Human Resource Development 602 (625) Management 621	(625) Management 616
(529) Human Resource Development 603 (625) Management 622	(625) Management 617

DEPARTMENT OF STATISTICS, OPERATIONS AND MANAGEMENT SCIENCE

(627) Management Science

REVISE TITLE AND DESCRIPTION

531 Deterministic Decision Models (3) Linear programming decision models, solutions, duality, sensitivity analysis, piece-wise linear, separable, and integer optimization models, transportation and selected network flow models, along with application issues of these models.

REVISE TITLE, DESCRIPTION, AND (DE)PREREQUISITE; ADD COMMENT

532 Stochastic Models and Decision Analytics (3) Discrete-time Markov chains, Poisson processes, continuous-time Markov chains, queueing theory, and principles of decision analytics.
(DE) Prerequisite(s): Statistics 563.
Comment(s): Prior knowledge may satisfy prerequisite with consent of instructor.

533 Large-scale Optimization (3) Large scale system optimization of hierarchical and time-staged decision problems, decomposition and handling data uncertainty, computational and implementation issues using modeling languages, dynamic programming.
(DE) Prerequisite(s): 531.
Comment(s): Prior knowledge may satisfy prerequisite with consent of instructor.

REVISE TITLE, HOURS, AND DESCRIPTION; ADD REPEATABILITY, (DE)PREREQUISITE, AND COMMENT

534 Business Analytics Experience (1-6) Application of the principles of decision analytics through experiential descriptive and prescriptive model design and implementation.
Repeatability: May be repeated. Maximum 6 hours.
(DE) Prerequisite(s): 531, 532, 691, and 692; Accounting 505; Finance 505; and Statistics 563, 566, 571 and 572.
Comment(s): Prior knowledge may satisfy prerequisite with consent of instructor.

(962) Statistics

REVISE TITLE

563 Probability (3)

564 Statistical Inference (3)

REVISE TITLE AND DESCRIPTION

566 Introduction to Data Management and Directed Process Studies (3) Data Management: Retrieving, manipulating, and merging data from a variety of database structures. Directed Process Study: Sampling and subgrouping methods for directed study of process variation. Topics include common/special cause models, components of variance, spatial variation, process mapping.

PART II: PROGRAM CHANGES

COLLEGE LINK – DISPLAY PROGRAMS FOR THIS COLLEGE – MBA PROGRAM FOR WORKING PROFESSIONALS

REVISE EXECUTIVE MBA DESCRIPTION

In the 2009-2010 *Graduate Catalog*, remove current text for the Executive MBA program and replace with the following:

Executive MBA

The Executive MBA is provided for a national and international 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 usually 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. In addition to the traditional Executive MBA curriculum, the program also offers specialized areas of focus providing students the opportunity to choose a focus area relevant to their career goals and current business trends. The program has a heavy emphasis in 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 a cohort based, three (consecutive) semester program completed in a period of twelve to sixteen months depending on the student's chosen area of focus. The class meets in Knoxville for 14 day residence periods approximately 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. One or more of the residence periods occur at international locations. 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 for the duration of the program. 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 program has a priority date for application submission preceding the first semester after which time applications will be accepted on a rolling basis subject to space availability in the program. The GMAT may be waived depending on work experience. Students will receive materials for study in mid-November preceding the January start date. Students whose native language is not English must take the Test of English as a Foreign Language (TOEFL) unless they are United States citizens or have earned a degree from an accredited United States college or university in the past two years.

Additional information on the Executive MBA can be found at (www.emba.utk.edu) http://utmbas.utk.edu/utmbas/

COLLEGE LINK – DISPLAY PROGRAMS FOR THIS COLLEGE – BUSINESS ADMINISTRATION MAJOR, MBA

REVISE FULL-TIME MBA DESCRIPTION

In the 2009-2010 *Graduate Catalog*, remove current text for the Full-time MBA program and replace with the following:

Full-Time MBA

The full-time MBA program is designed for students with undergraduate degrees in a wide variety of fields, including the social and natural sciences, the humanities, and professional fields such as engineering, business, agriculture, and architecture. In addition, most students in this program should have two or more years of work experience beyond their undergraduate degree(s). The MBA is a 48 credit hour program with students beginning in August of each year and graduating in December of the following year. During the summer between the second and third semesters, students must complete an internship with a company/organization using skills acquired during the first year of the MBA program.

The MBA program consists of a common first-year core (30 hours), a global requirement (3 hours), a capstone requirement (3 hours), and a selection of concentration and elective courses (12 hours). The first-year core develops a general management foundation upon which specialization is developed in the concentration and elective courses.

The objective of the MBA program is to develop leaders who are prepared to enhance the success of their global organizations. Concentrations are offered in a variety of areas, including finance, logistics, marketing, operations management, and entrepreneurship and innovation (E&I).

The global component of the MBA program consists of 3 credit hours. All MBA students are required to participate in a 3-credit hour international seminar, BUAD 591. Students who are granted a waiver for BUAD 591 take an additional 3-credit hour elective to satisfy the program's overall credit requirements of 48 hours. The international experience consists of coursework and a trip of up to 10 days to areas such as Latin America, Asia or Europe. The academic purpose of the global component of the curriculum is to familiarize students with the complexities of doing business internationally through experiential learning.

During the fall semester of the second year, MBA students complete a required 3-credit hour capstone course. This course applies business strategies in the global context.

Admission
Applications are accepted for fall semester only. The application deadline for fall semester is February 1. Applications by United States citizens and permanent residents received after February 1 will be considered as space allows.

To be considered for admission, the applicant's file must be complete. A completed file includes the Application for Graduate Admission, transcripts of prior college work, an MBA program application, two completed applicant recommendation forms, and the Graduate Management Admission Test (GMAT) score report. Additional information, including the TOEFL score (Test of English as a Foreign Language), may be required by the Office of Graduate and International Admissions for international candidates.

For admission to the MBA program, consideration is given to (1) applicant's academic record with particular attention to the last two years of undergraduate work and previous graduate studies; (2) quality of work experience and other activities that demonstrate potential for leadership; (3) scores on the GMAT and the Test of English as a Foreign Language (TOEFL) for those whose native language is not English; and (4) recommendations from professors and/or work supervisors. The admission decision is based on all factors that make up the total application; therefore, there is no automatic cut-off for either grade point averages or GMAT scores. However, admission preference is given to applicants with full-time work experience after obtaining the undergraduate degree.

Prerequisites
There are no specific course prerequisites for admission; however, we recommend that non-business undergraduates take an introductory course in accounting, finance, and statistics prior to entry. Undergraduate courses and work experience should demonstrate ability with both qualitative and quantitative work.

Requirements

MBA Core
The MBA core (30 hours) consists of courses that introduce students to the foundations of business. The topics introduced within these courses follow three major themes. The first theme covers what every manager needs to know and includes such functional topics as finance, economics, strategy, decision tools, global business, environmental analysis, and leadership skills development. The second theme focuses on functions involved in the flows of products, information, and finances within a globally integrated value chain and includes, but is not limited to, operations management, logistics management, demand management, customer relationship management, supplier management, and resource management. The third theme involves integrating the content of the other two themes using communication skills, applied learning techniques and information technology. Throughout all three themes, significant emphasis is placed on learning the topics in an integrated fashion. Students will understand how various business functions are integrated within an organization, as well as how integration should occur across organizations within the context of a value chain.

Students in the first-year core undertake active learning within a team-based environment. Many core requirements are experiential exercises in which self-discovery within a team setting is an important element of the learning process. Individualized support is provided for developing both written and oral communication skills.

For a complete list of courses that make up the MBA core, please visit http://mba.utk.edu.

Concentration and Electives
A concentration area may be indicated on the MBA Program Application or this declaration may be deferred until after matriculation. In any event, selection should be made after the first semester and must be made after completion of the first year. Requests for changes in concentration areas must be submitted for approval to the MBA Program Office.

Among the 15 hours in the concentration/electives block, 9 hours must be taken in one of the primary concentrations. For the specific courses required in primary concentration areas, see the appropriate department: Finance Concentration, Business Administration Major, MBA - Logistics Concentration, Business Administration Major, MBA - Marketing Concentration, Business Administration Major, MBA and Operations Management Concentration, Business Administration Major, MBA represent primary concentrations. A secondary concentration, innovation and entrepreneurship, can be taken in conjunction with one of the primary concentrations.

The first course in each concentration is designed to provide a foundation upon which the concentration can be built. These courses will be delivered in the latter part of the spring semester of the first year after the spring core course has been completed. They are intended to prepare students for their summer internships. However, these courses should not be thought of as simply the first 3 hours in a 9-hour elective. Rather, these courses are self-contained, intensive introductions to a specialty area of business. Students choose two of these courses in the spring semester, which will permit them flexibility for choosing concentrations in the second year of the program. Two additional courses in the concentration area will be taken in the second fall semester to meet the 9-hour requirement for a concentration.

Elective courses may be chosen from any 500-level courses in the College of Business Administration. Courses outside the college, as well as courses listed in The Graduate Catalog numbered below 500, may be included as an elective only with written prior permission via formal petition to the MBA Program Office.

Secondary Concentration - Innovation and Entrepreneurship
Innovation and entrepreneurship is a secondary concentration (9 hours) that must be taken in conjunction with one of the other MBA concentrations. The secondary concentration makes the MBA concentration/electives block 18 total credit hours. It provides the skills to launch a new business and to function successfully within an established corporation that employs entrepreneurial management strategies. It teaches how to assess entrepreneurial opportunities, apply strategic

consultative thinking to problem solving, assess the commercial potential of an idea or innovation, develop strategic, business and financial plans, develop effective presentations, and serve as an effective member of an entrepreneurial/innovation team. Minimum course requirements are BUAD 520 , plus BUAD 595 and MGT 551.

Transfer Credits
Graduate-level courses taken at other institutions accredited by the Association to Advance Collegiate Schools of Business International that otherwise conform to university policy may be credited toward MBA degree requirements within the following limits.
The maximum number of hours that may be transferred to core, elective, and concentration areas is 6 semester hours. Transfer credit is considered after admission, upon formal petition to the Director of the MBA Program and must meet all requirements of the Graduate Council.

Other Requirements
The application for Admission to Candidacy must be approved by three MBA faculty members and the Director of the MBA program. It must be submitted to the Graduate School at least one full semester prior to the date the degree is conferred. (The Admission to Candidacy application for the MBA degree must be submitted in the spring semester for graduation in the following fall semester.)

To qualify for the degree, the student must achieve a B average (3.0) or above in MBA core courses required in his/her program, a B average or higher in courses comprising the concentration area, and a B average or higher in the overall program.

SUPPORTING INFORMATION: Rationale: This curriculum revision expands the content of the MBA core to 30 hours. Also, the change in program description eliminates the requirement that MBA students must choose a concentration allows more flexibility for each student to customize his or her MBA coursework. Impact on other units: Three dual degree programs (MBA/MS Engineering, MBA/MS Ag Econ, MBA/MS Sports Mgt) specify BA511, BA512 and BA513 as requirements for the MBA Core. Special arrangements will be made for dual degree students so that the total MBA credit hours specified in the dual degree curriculum listings do not change.

REVISE DUAL MS-MBA SHOWCASE – BUSINESS ADMINISTRATION – SPORT MANAGEMENT

In the 2009-2010 *Graduate Catalog*,

1) Revise first paragraph to remove name of dropped major (sport studies) and replace with current major (Recreation and Sport Management).
2) Remove current showcase for the dual program and replace with the following:

Dual Degree MS-MBA Program – Business Administration / Sport Management

Fall – First Year	**Hours Credit**
Business Administration BA 512 MBA Core II	15
Includes modules below:	
Session 1: 7½ Weeks	
Accounting - Financial Accounting I	
Management - Leading Complex Organizations	
Statistics - Quantitative Methods	
Marketing - Demand Management I	
Business Administration - Business Skills Development I	
Session 2: 7½ Weeks	
Accounting - Managerial Accounting I	
Economics - Economics of Strategy	
Marketing – Demand Management II	
Finance - Financial Management I	
Business Administration - Business Skills Development II	
Total fall credit hours	**15**

Spring – First Year	
Business Administration BA 513 MBA Core III	15
Includes modules below:	
Session 1: 7½ Weeks	
Management Science – Descriptive Modeling	
Operations and Management Science – Operations Management	
Logistics - Supply Chain Management I	
Finance – Financial Management II	
Business Administration – Business Skills Development III	
Session 2: 7½ Weeks	
Business Law – Foundations of Business. Law and Ethics	
Economics – Market Forces in the Global Environment	
Management – Competitive Strategy	
Logistics – Supply Chain Management II	
Business Administration – Innovation in Practice	

Recreation and Sport Management RSM 544 – Leadership Theories	3
Total spring credit hours	**18**
Mini-Term – First Year	
Business Administration BA 591 Global Business Seminar	3
Summer – First Year	
Recreation and Sport Management RSM 511 – Personnel and Organization Management	3
Recreation and Sport Management RSM 535 – Ethics in Sport Management	3
Total summer credit hours	**6**
Fall – Second Year	
Recreation and Sport Management RSM 508 – Research Methods	3
Sport Studies SPST 542 – Sociological Aspects of Sport	3
Recreation and Sport Management elective	3
Recreation and Sport Management or Kinesiology Electives	3
Total fall semester credit hours	**12**
Spring – Second Year	
Recreation and Sport Management RSM 501 – Project	6
Recreation and Sport Management RSM 595 – Internship	3
Total spring credit hours	**9**
Total Program Hours	**63**

DEPARTMENT OF MANAGEMENT

REVISE REQUIREMENTS – DOCTOR OF PHILOSOPHY, BUSINESS ADMINISTRATION MAJOR, ORGANIZATIONS AND STRATEGY CONCENTRATION

In the 2009-2010 *Graduate Catalog*, revise minimum course requirements as follows:

Replace Management 621 with Management 616. Replace Management 622 with 617.

DEPARTMENT OF STATISTICS, OPERATIONS AND MANAGEMENT SCIENCE

▲ DROP MAJOR AND DEGREE – MANAGEMENT SCIENCE, MS

▲ ADD MAJOR AND DEGREE – BUSINESS ANALYTICS, MS

Master of Science
Business Analytics Major

The Master of Science degree with a major in Business Analytics is designed as preparation for a career in the application of analytics and quantitative methods to complex problems in all areas of business.

Business Analytics coursework will expose students to a broad range of decision analysis techniques and tools and facilitate the application of these methodologies to real-world business problems. The coursework will further integrate communication and teamwork skills with a knowledge base in business analytics to create expertise in one of four areas of focus: business intelligence, business process optimization, data mining, and applied statistics.

Admission
The master's program requires three applicant recommendation forms and the GRE or GMAT. Applications are encouraged from all majors, but a quantitative background and proficiency in a computer language is required.

Requirements

Core Requirements*	26 hours
Applied Specialization area (as approved by advisor)	12 hours
Total	**38 hours**

*Core Requirements:
Management Science 531, 532, 534, 691, and 692
Statistics 571, 563, 566, and 572
Accounting 505
Finance 505

The faculty in the department of Statistics, Operations, and Management Science will work closely with the student in tailoring a program to his/her needs. The advisor must approve a tentative overall program during the students first semester and must approve all courses on a semester-by-semester basis. The total course load will remain 38 hours for all students.

From: Yegidis, Bonnie Lee
Sent: Thursday, January 07, 2010 9:28 AM
To: Pierce III, Fred A; Diacon, Todd A
Cc: Vaughan, Edee (Edee)
Subject: RE:

Hi Fred,
It does not require THEC approval. We do need to revise the academic program inventory that we file at the end of the year with THEC. Our office will handle the paperwork on this. If we need any further information about this, we will let you know.
Thanks for informing us about this.
Bonnie

From: Pierce III, Fred A
Sent: Thursday, January 07, 2010 8:58 AM
To: Yegidis, Bonnie Lee; Diacon, Todd A
Subject:

Bonnie and Todd:

Below is text from changes submitted to the Graduate Council from the College of Business Administration regarding the revision of our Master of Science in Management Science to Business Analytics. The change is in name so it is a revision and we are not adding a new program, despite the language of dropping and adding. The Department of Statistics, Operations and Management Science feels the updated title makes the program more relevant in the business environment.

DROP Major and degree – Management science, MS
ADD major and degree – business analytics, MS

Catherine Cox in the Graduate School needs confirmation from you that this does not require THEC approval. An email response to me will suffice.

Thank you,

Fred A. Pierce III
Director
Undergraduate Programs
College of Business Administration
University of Tennessee
342 Haslam Building
Knoxville, Tennessee 37996
865-974-2341

COLLEGE OF COMMUNICATION AND INFORMATION

All Changes Effective Fall 2010

I: COURSE CHANGES

(248) (CCI) Communication and Information

REVISE TO ADD REGISTRATION RESTRICTION

CCI 615 Perspectives on Communication and Information Knowledge and Research II (6)
Registration Restriction: Doctor of Philosophy – Communication and Information major.

REVISE TO REMOVE COMMENT(S) AND ADD REGISTRATION RESTRICTION

CCI 501 Orientation to Graduate Study (1)
Registration Restriction: Enrollment is limited to students in the College of Communication and Information or consent of instructor.

CCI 540 Communication Theory (3)
Registration Restriction: Enrollment is limited to students in the College of Communication and Information or consent of instructor.

CCI 610 Perspectives on Communication and Information Knowledge and Research I (6)
Registration Restriction: Doctor of Philosophy – Communication and Information major.

CCI 620 Communication and Information Professional Development Seminar (1-3)
Registration Restriction: Enrollment is limited to students in the College of Communication and Information or consent of instructor.

REVISE TO REMOVE COMMENT(S)

CCI 600 Doctoral Research and Dissertation (3-15)

SCHOOL OF ADVERTISING AND PUBLIC RELATIONS

(012) (ADVT) Advertising

REVISE TO ADD REGISTRATION RESTRICTION

ADVT 510 Advertising and Society (3)
Registration Restriction: Enrollment is limited to graduate students.

ADVT 530 Advertising and Public Relations Research (3)
Registration Restriction: Enrollment is limited to graduate students.

REVISE TO REMOVE COMMENT(S) AND ADD REGISTRATION RESTRICTION

ADVT 500 Thesis (1-15)
Registration Restriction: Enrollment is limited to graduate students.

ADVT 520 Advertising and Communications Theory (3)
Registration Restriction: Enrollment is limited to graduate students.

ADVT 540 Advertising Decision Making (3)
Registration Restriction: Enrollment is limited to graduate students.

ADVT 590 Project (3)
Registration Restriction: Enrollment is limited to graduate students.

(841) (PBRL) Public Relations

REVISE TO REMOVE COMMENT(S)

PBRL 500 Thesis (1-15)

PBRL 590 Project (3)

SCHOOL OF COMMUNICATION STUDIES

(250) (CMST) Communication Studies

REVISE TO REMOVE COMMENT(S)

CMST 593 Independent Study (1-6)

SCHOOL OF INFORMATION SCIENCES

(560) (INSC) Information Sciences

REVISE TITLE AND DESCRIPTION

INSC 582 Information Systems Design and Implementation (3) Information systems used in libraries and information agencies. System development life cycle (SDLC), usability engineering, human computer interaction, and project management.

DROP

INSC 536 The Information Society (3)

INSC 538 Economics of Information (3)

INSC 539 Information Policy (3)

INSC 558 Library Services for a Diverse Society (3)

INSC 586 Information Retrieval Systems (3)

INSC 537 Information Industry (3)

INSC 561 Contemporary Book Publishing (3)

REVISE TO REMOVE COMMENT(S) AND ADD REGISTRATION RESTRICTION

INSC 599 Practicum (3-6)
Registration Restriction: 3.0 GPA required.

SCHOOL OF JOURNALISM AND ELECTRONIC MEDIA

(592) (JREM) Journalism and Electronic Media

ADD

JREM 592 Internship (3) Full-time (30-40 hours per week) work experience in news, production, or sales and management with non-university professional organization. Educational experience beyond that available at the university. Final term paper.
Credit Restriction(s): No retroactive credit for previous work experience.

ADD FOR GRADUATE CREDIT

JREM 422 Managing News Web Sites (3) Development and maintenance of online news site for the School of Journalism and Electronic Media. Adapts television news packages, radio news stories, newspaper stories and magazine feature for the Web. Daily management of Web site.

DROP FOR GRADUATE CREDIT

JREM 412 Opinion Writing (3)

JREM 430 Public Affairs Reporting (3)

DROP

JREM 503 Workshop in Journalism across the Media I (3)

JREM 504 Workshop in Journalism across the Media II (3)

REVISE TO REMOVE COMMENT(S) AND ADD REGISTRATION RESTRICTION

JREM 510 International Journalism (3)
Registration Restriction: Enrollment is limited to graduate students.

JREM 512 Mass Media Research Methods (3)
Registration Restriction: Enrollment is limited to graduate students or consent of instructor.

JREM 555 Seminar in the Technology and Economics of Media and Information Systems (3)
Registration Restriction: Enrollment is limited to graduate students or consent of instructor.

REVISE TO REMOVE COMMENT(S)

JREM 500 Thesis (1-15)

JREM 590 Project (3)

II. PROGRAM CHANGES

SCHOOL OF INFORMATION SCIENCES

REVISE ADMISSION STATEMENT

In the 2009-2010 *Graduate Catalog,* under the College link, Admission heading, revise 1st paragraph as follows:

Admission
Applicants with a final undergraduate grade point average (GPA) of 3.25 and Graduate Record Examination (GRE) scores above the fiftieth percentile will be considered for admission to the MS program. Applicants who have completed twelve hours of graduate coursework at a regionally accredited American institution and have earned a 3.0 grade point average are not required to take the GRE examination for entry to the MS program in information sciences.

COLLEGE OF EDUCATION, HEALTH AND HUMAN SCIENCES

All Changes Effective Fall 2010

I: COURSE CHANGES

DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

(293) (EDAM) Educational Administration

DROP

529 Politics and Public Relations in Education (3)

REVISE TO DROP SECONDARY CROSS-LISTED COURSES (PRIMARY BEING RETAINED)

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

577 Statistics in Applied Fields I (3) *(See Educational Psychology 577.)*

REVISE PRIMARY COURSE TO DROP CROSS-LISTING

513 Administrative and Organizational Theory (3)

Formerly: (Same as Higher Education Administration 513.)

680 Administration of Complex Organizations (3)

Formerly: (Same as Higher Education Administration 680.)

(461) (HEAM) Higher Education Administration

ADD

505 Leadership and Organizational Theory in Higher Education (3) Introduction to the study of leadership theory and organizational behavior models as applied to colleges and universities. Distinctions in mission, process and outcome for colleges and universities as organizations are accented. The linkage of leadership role to the structural, human relations, political, and cultural/symbolic realities of organizations is emphasized.

630 Globalization and Higher Education (3) Doctoral capstone seminar designed to explore the impact of globalization in economic, political, environmental, military, jurisprudence, religious, science and technology sectors to policy and practice in higher education.

632 Academic Life (3) Focuses on the nature of faculty and graduate student work in American colleges and universities. Topics discussed include the purpose of doctoral education, the status of Schools of Education, changing demographics in the professoriate and associated implications for faculty work, and the demands of research and teaching.

DROP

640 Policy Issues in College and University Law (3)

REVISE TO DROP SECONDARY CROSS-LISTED COURSES (PRIMARY COURSES BEING RETAINED)

513 Administrative and Organizational Theory (3) *(See Educational Administration 513.)*

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

680 Administration of Complex Organizations (3) *(See Educational Administration 680.)*

Equivalency Table

Current Course - Fall 2009	Equivalent Course – effective Fall 2010
(293) EDAM Educational Administration 513 (461) HEAM Higher Education Administration 513	(461) HEAM Higher Education Administration 505

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING

(255) (COUN) Counselor Education

REVISE PRIMARY COURSE TO DROP CROSS-LISTING

555 Practicum in Counseling (3)

Formerly: (Same as Psychology 569.)

570 Cross-Cultural Counseling: Theory and Research (3)

Formerly: (Same as Psychology 574.)

(271) (CSE) Cultural Studies in Education

ADD

645 Advanced Sociology of Education (3) In depth analyses of social theories and education addressing contemporary issues and controversies across school structures, practices, cultures, and discourses.

DROP

590 Cultural Studies Seminar (2)

REVISE TITLE, DESCRIPTION, AND REMOVE COMMENT

545 Sociology of Education (3) Sociological analysis of the United States education system. Controversial cultural and social issues that affect the educational system and the students who attend U.S. schools.

607 Advanced Seminar in Educational Studies (3) Interdisciplinary seminar. Readings selected by faculty and participants from classic studies and current periodical literature in anthropology, sociology, history, and philosophy of education. Required for students as part of the Cultural Studies in Education primary specialization for the PhD program.

(310) (EDPY) Educational Psychology

ADD

534 Program Evaluation II (3) Evaluation implementation, including student implementation of an evaluation proposal for a local campus/agency (developed in EDPY 533). Additional topics include meta-evaluation, program theory, evaluation utilization, and the nature of evaluation evidence.
(DE)Prerequisite: 533.

608 Learner-centered Teaching in Post Secondary Education (3) Application of educational psychology learner-centered principles in higher education and other post secondary environments. Opportunity to develop a course syllabus, plan instructional activities, and engage in deep reflection with other participants about many aspects of learner-centered teaching.

613 Advanced Seminar in Reflective Practice (3) Theories of adult learning and research related to facilitating reflective practice in professional settings.
(DE) Prerequisite(s): 513 or consent of instructor.

625 Advanced Seminar in Adult Learning (3) Adult learning theories and concepts, research trends, and methodologies
(DE)Prerequisite(s): 525.
Registration Permission: Consent of instructor.

633 Discursive Psychology (3) Introduction to discursive psychology as a theoretical lens for researching teaching and learning environments.
(DE) Prerequisite(s): 555 or Cultural Studies in Education 560.

660 Evaluation, Statistics, and Measurement Research Seminar (1) Seminar is designed to introduce students to the field of evaluation, statistics, and measurement. Students will review relevant research in these areas and gain hands-on experiences conducting research in these fields.
(DE) Prerequisite: 533.
Registration Restriction(s): Doctor of Philosophy - evaluation, statistics, and measurement major.

667 Evaluation, Statistics, and Measurement: Advanced Topics (3) Rotating topic in evaluation, statistics, and measurement, reviewing the most up-to-date research in these areas.
Repeatability: May be repeated as topic changes: limit of two topics. Maximum 6 hours.
(DE) Prerequisites: 533 and 534.
Registration Permission: Consent of instructor.

678 Statistics in Applied Fields III (3) Techniques in advanced multivariate statistics will be reviewed. Reviewing literature on topics such as logistic regression, multilevel modeling, structural equation modeling, and factor analysis, as well as learning how to conduct these analyses using statistical software will be covered.
(DE) Prerequisites: 577 and 677.
Registration Permission: Consent of instructor.

631 Discourse Analysis of Educational Environments (3) Provides an introduction to the broad area of discourse analysis as an approach for understanding naturally occurring language use, particularly in the context of teaching and learning. Covers both the underlying philosophy and specific methods for collecting and analyzing written and spoken discourse.
(DE) Prerequisite(s): Cultural Studies in Education 560 or Educational Psychology 555.

DROP

531 Discourse Analysis of Educational Environments (3)

532 Online Collaborative Learning: Computer-Mediated Communication (3)

620 Advanced Seminar in Adult Learning (3)

640 Seminar in Applied Educational Psychology (2)

653 Designing and Implementing Personnel Evaluation System (3)

662 Applied Research Design (3)

673 Collaborative Learning (3)

Course Equivalency Table

Current Course (Fall 2009)	Equivalent Course – Effective Fall 2010
(310) Educational Psychology EDPY 531	(310) Educational Psychology EDPY 631

REVISE PRIMARY COURSE TO DROP CROSS-LISTING

577 Statistics in Applied Fields I

Formerly: (Same as Educational Administration 577.)

REVISE TITLE AND DESCRIPTION AND REVISE PRIMARY COURSE TO DROP CROSS-LISTINGS

533 Program Evaluation I (3) Issues and practices in planning and conducting program evaluations in a variety of settings. Fundamentals of theory, ethics, design, measurement, and data analysis; proper role and use of evaluation in educational organizations. Will develop an evaluation proposal to use in course 534 (Program Evaluation II).

Formerly: *Cross-listed: (Same as Educational Administration 533; Higher Education Administration 533.)*

REVISE TITLE

574 Facilitating Change in Educational Environments (3)

REVISE TITLE AND DESCRIPTION

572 Theories of Learning in Applied Educational Psychology (3) Introduction to theories of learning and related research from an applied educational psychology perspective. Includes evaluation of models and approaches that apply theory and research related to cognition, affect and emotions, motivation, behavioral perspectives, mediated/ situated/collaborative learning and cognitive education.

581 Classroom Measurement (3) Processes for measuring and reporting student progress: interpretation and use of available assessment data. Methods of assessment other than tests and measurements, such as portfolios, performance tasks, and exhibitions.

REVISE DESCRIPTION

582 Educational Research Fundamentals (3) Fundamentals of the research process, techniques, and procedures used in education and other fields. Conducting literature reviews, designing research, analyzing data, and report writing are reviewed.

583 Survey Research (3) Overview of survey research methods. Survey design, sampling techniques, data collection methods, and analysis of survey data will be discussed.

REVISE DESCRIPTION AND ADD COMMENT

677 Statistics in Applied Fields II (3) Application of intermediate statistical procedures (e.g., factorial analysis of variance, analysis of covariance, multiple regression, multivariate analysis of variance) via statistical packages.
Comments: Consent of instructor.

REVISE TITLE, DESCRIPTION, AND COMMENT

630 Proseminar in Adult Learning (3) Issues, theories, concepts and research in adult learning.
Comment(s): Requires admission to Adult Learning concentration.

REVISE TITLE, DESCRIPTION AND (DE) PREREQUISITE

622 Advanced Seminar in Adult Development (3) Adult development theory and research.
(DE) Prerequisite(s): 522.

REVISE TITLE AND DESCRIPTION AND ADD PREREQUISITE

651 Advanced Seminar in Evaluation I (3) First of two required second-year seminar courses for Evaluation, Statistics, and Measurement majors. This course addresses advanced evaluation systems and processes, the evaluation of instruction and learning, evaluation decision making through case analysis, evaluation ethics, and organizational framing. Students will be engaged in evaluation work during the course.
(DE)Prerequisite(s): 534.

REVISE TITLE, DESCRIPTION, AND ADD REGISTRATION PERMISSION

652 Advanced Seminar in Evaluation II (3) Second of the two required seminar courses for Evaluation, Statistics, and Measurement majors. Focuses on evaluation project management, budgeting, personnel, client relations, as well as evaluation standards and professionalism. Students will be engaged in evaluation during the course.
Registration Permission: Consent of instructor.

REVISE TITLE, DESCRIPTION, AND COMMENTS; ADD (DE)PREREQUISITE, GRADING RESTRICTION, AND REPEATABILITY

671 Advanced Seminar in Applied Educational Psychology (3) Study and collaborative reflection on selected topics in human learning and development. Emphasis on application of socio-cultural theories of learning and related aspects of the work of Vygotsky and Feuerstein in relation to mediated learning theory. Development of theoretical frameworks that integrate selected topics.
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 6 hours.
(DE) Prerequisites: 572 or permission of instructor.
Comments: Primarily for doctoral students in fields related to teaching, learning and development of children and adults, effective learning environments, cultural studies, and cognition, emotions and motivation. Students with a primary specialization in human learning and development are required to take this course twice.

REVISE TITLE, HOURS, DESCRIPTION, REPEATABILITY, AND RECOMMENDED BACKGROUND

670 Internship in Evaluation, Statistics, and Measurement (3) Applied experiences in evaluation, statistics, and/or measurement in a variety of settings.
Repeatability: May be repeated. Maximum 12 hours.
Recommended Background: 533, 534, 577, and 582.

(569) (IT) Instructional Technology

ADD

532 Introduction to computer-mediated Communication (3) Investigates how computer-mediated communication tools can most effectively be integrated into teaching and learning, including distance and blended environments.

632 Online Learning Environments (3) Theory, research and practice of designing, developing and evaluating online learning environments including distance education and blended learning approaches.

■ ADD NEW ACADEMIC DISCIPLINE AND COURSES

(618) (LEES) Learning Environments and Educational Studies

ADD

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.

504 Special Topics (1-3) Instructor-initiated course offered at convenience of unit on topics of current interest.
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 15 hours.

593 Independent Study (1-3)
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 15 hours.

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

602 Directed Research (1-3) Instructor- or student-initiated group investigation of empirical and theoretical problems in educational and counseling psychology.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 12 hours.

604 Special Topics (1-3) Instructor-initiated courses offered at convenience of unit on topics of interest.
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 15 hours.
Comment(s): Admission to PhD, education major, learning environments and educational concentration required.

655 Research in Learning Environments and Educational Studies (1) Data analyses, collection, and interpretation.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 9 hours.

693 Independent Study (1-3)
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 15 hours.

640 Doctoral Seminar in Learning Environments and Educational Studies (2) Interdisciplinary seminar focused on exploring topics from the perspectives of cultural studies, educational psychology, and instructional technology and emphasizing aspects of the Learning Environments and Educational Studies program that go beyond coursework, comprehensive exams and dissertations. Program core seminar taken fall and spring by first and second year doctoral students.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 8 hours.
Comment(s): Admission to the Learning Environments and Educational Studies Concentration under the Ph.D. Major required.

Course Equivalency Table

Current Courses (Fall 2009)	Equivalent Courses – Effective Fall 2010
(310) Educational Psychology EDPY 532	(569) Instructional Technology IT 532
(310) Educational Psychology EDPY 620	(310) Educational Psychology EDPY 625
(310) Educational Psychology EDPY 640	(618) Learning Environments & Educational Studies (LEES) 640

■ DROP DEPARTMENT - DEPARTMENT OF EXERCISE, SPORT AND LEISURE STUDIES

(274) (DANC) DANCE

■ DROP ACADEMIC DISCIPLINE AND ALL COURSES

415 Teaching Creative Dance for Children
480 Dance History through the 19th-Century
490 Dance in the 20th-Century
495 Dance Pedagogy
520 Jazz: Level IV
530 Modern: Level IV
593 Independent Study

From: Diacon, Todd A -
Sent: Monday, March 09, 2009 11:56 AM
To: George, Thomas W (Tom)
Subject: ESLS changes

Tom: can't remember if I responded to you about the proposed changes in Exercise Science, Sports and Leisure Studies. The answer is that no approval above the campus level is required, but we will forward any changes to the UT System as an informational item.

Todd A. Diacon
Vice Provost for Academic Operations
SEC/NCAA Faculty Athletics Representative
521 Andy Holt Tower
University of Tennessee
Knoxville, TN 37996-0152
865-974-0683 phone
865-974-4811 fax

(347) (EXSC) Exercise Science

■ DROP ACADEMIC DISCIPLINE AND ALL COURSES

480 Physiology of Exercise
500 Thesis
501 Special Project
502 Registration for Use of Facilities
508 Research in Exercise Science
509 Graduate Seminar in Public Health
513 Biomechanics of Orthopaedic Rehabilitation
515 Qualitative Analysis of Movement in Sport and Exercise
521 Physical Activity Epidemiology Methods
531 Biomechanics
533 Psychology of Sport
541 Special Topics
565 Advanced Physiology of Exercise
567 Exercise Testing and Prescription
569 Clinical Exercise Physiology
570 Cardiac Rehabilitation Practicum
593 Independent Study

600 Doctoral Research and Dissertation
601 Research Seminar
622 Directed Independent Research
623 Advanced Topics in Obesity
633 Advanced Methods and Instrumentation in Biomechanics
635 Physical Activity and Positive Health
661 Seminar in Exercise and Applied Physiology
664 Research Participation in Exercise Science
681 Practicum
693 Independent Study

(853) (RELS) Recreation and Leisure Studies

■ DROP ACADEMIC DISCIPLINE AND ALL COURSES

415 Development of Recreation, Leisure, and Athletic Facilities
430 Organization and Administration of Leisure Services
440 Dimensions of Commercial Recreation and Leisure Enterprises
450 Special Topics in Recreation and Leisure Studies
470 Tourism and Leisure Industries
500 Thesis
502 Registration for Use of Facilities
511 Perspectives and Trends in Leisure Studies and Services
515 Philosophical and Conceptual Foundations of Leisure
520 Program Design and Evaluation in Therapeutic Recreation
521 Facilitation Techniques in Therapeutic Recreation
522 Clinical Aspects in Therapeutic Recreation
540 Fiscal Policies for Recreation and Leisure Services Organizations
541 Management Strategies for Recreation and Leisure Services Organizations
590 Graduate Internship
591 Directed Study in Leisure and Recreation
592 Special Topics in Recreation and Leisure Studies

SUPPORTING INFORMATION: Rationale: The Recreation and Leisure Studies major and Sport Management are merging to form the Recreation and Sport Management major. These courses are not needed in the new major. Impact on other units: N/A.

(957) (SPMG) Sport Management

■ DROP ACADEMIC DISCIPLINE AND ALL COURSES

500 Thesis
501 Special Project
502 Registration and Use of Facilities
511 Administration/Supervision in Sport
512 Sport Law
530 Sport and Media Issues
532 Research Techniques in Sport
535 Ethics in Sport Management
540 Sport Marketing
544 Theories of Leadership and Leader Behavior in Sport
553 Case Studies in Sport Management
554 Current Issues in Sport Management
560 Sport Governance
570 Event Management

580 Special Topics
590 Practicum
593 Independent Study
595 Internship

(959) (SPST) Sport Studies – will drop and revise courses under the old/previous dept

DROP

490 Psychology of Coaching
500 Thesis
501 Special Project
502 Registration for Use of Facilities
533 Psychology of Sport
534 Motor Behavior and Skill Acquisition
535 Health and Exercise Psychology
536 Expert Performance in Sports
538 Professional Practice Issues in Sport Studies
539 Research Development in Sport Psychology: Idea Formation to Data Collection
540 Research Development in Sport Psychology: Data Analysis to Manuscript Submission
593 Independent Study
594 Supervised Readings
595 Special Topics
601 Research Seminar - Secondary course *(See Exercise Science 601.)*
633 Advanced Sport Psychology
681 Practicum
695 Special Topics

SUPPORTING INFORMATION: Courses are being dropped due to the elimination of the Masters with a concentration in Sport.

REVISE TITLE AND ADD REGISTRATION RESTRICTION

507 History of Sport in America (3)
Registration Restriction: Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or Permission of Instructor.

REVISE TO ADD REGISTRATION RESTRICTION

515 Social Theories of Sport (3)
Registration Restriction: Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or Permission of Instructor.

600 Doctoral Research and Dissertation (3-15)
Registration Restriction: Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or Permission of Instructor.

693 Independent Study (1-3)
Registration Restriction: Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or Permission of Instructor.

REVISE TO ADD REGISTRATION RESTRICTION AND REMOVE COMMENT AND REGISTRATION PERMISSION

542 Sociological Aspects of Sport (3)
Registration Restriction: Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or Permission of Instructor.

REVISE TITLE AND ADD REGISTRATION RESTRICTION

694 Directed Reading (1-3)
Registration Restriction: Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or Permission of Instructor.

REVISE DESCRIPTION (PRIMARY CROSS-LISTED COURSE)

543 Women, Sport, and Culture (3) Critical examination of the experiences of girls and women in American sport from a psycho-socio-cultural perspective with a particular emphasis on the constructs of gender, race, class, and sexuality and how these constructs both independently and collectively mediate the female sport experience. Explores theories and interpretive frameworks from sport studies, feminist studies, race studies, psychology and cultural studies. *(Same as Kinesiology 543 or Women's Studies 543.)*

MOVE ACADEMIC DISCIPLINE AND ALL COURSES (959) (SPST) SPORT STUDIES

Move the following academic discipline and courses from the (closed/dropped) Department of Exercise, Sport, and Leisure Studies to the (new) Department of Kinesiology, Recreation, and Sport Studies

(959) (SPST) Sport Studies

505 History of Olympics: Ancient and Modern (3)
507 History of Sport in America (3)
514 Advanced Philosophy of Sport (3)
515 Social Theories of Sport (3)
542 Sociological Aspects of Sport (3)
543 Women, Sport, and Culture (3)
600 Doctoral Research and Dissertation (3-15)
693 Independent Study (1-3)
694 Supervised Reading
695 Special Topics

■ ADD DEPARTMENT - DEPARTMENT OF KINESIOLOGY, RECREATION, AND SPORT STUDIES (588/KRSS)

(590) (KNS) Kinesiology

■ ADD NEW ACADEMIC DISCIPLINE AND COURSES

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.

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

501 Special Project (3) Culminating experience for non-thesis major.
Grading Restriction: Satisfactory/No Credit grading only.

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.

508 Research Methods (3) Research for writing of thesis and institutional review board proposals; presentation of research through free communications and poster presentations; calculation and interpretation of statistics related to common research designs used in research; and use of computer software. *(Same as Recreation and Sport Management 508.)*

513 Biomechanics of Musculoskeletal Injury (3) Effect of injury and physical activity on musculoskeletal tissue: injury mechanisms, surgical implications, and rehabilitation related research.

515 Qualitative Analysis of Movement in Sport and Exercise (3) Develop a framework for qualitative analysis of human movement in sports and exercise via the use of video to record sports skills and exercise activities. Understand the practical issues related to recording movement appropriately, interpreting and assessing the movement according to biomechanical principles, and reporting effectively.
Recommended Background: An undergraduate biomechanics or applied anatomy course.

516 Therapeutic Exercise (3) Current research in therapeutic exercise: role of nervous system, soft tissue healing, proprioception, muscle activation patterns, and strength.

521 Physical Activity Epidemiology Methods (3) Epidemiological foundation for research in physical activity related to individual and population-based health. Emphasis on analytic methods, surveys, and research designs. Focus on issues within special populations (e.g., elderly, children).
Recommended Background: Course in statistics or consent of instructor.

531 Biomechanics (3) Fundamental knowledge of 2D and 3D biomechanical principles and applications in kinematics and kinetics, anthropometric models, instrumentation, signal processing and noise reduction, and related topics.
Recommended Background: Undergraduate biomechanics course and Physics 221 or equivalent.

532 Exercise Physiology (3) Physiology of human performance: acute and chronic effects of exercise on metabolic, cardiac, pulmonary, and skeletal systems.
Contact Hour Distribution: 2 hours and 1 lab.
Recommended Background: Human physiology or general physiology course and a general chemistry course.

533 Psychology of Sport (3) Social psychological factors influencing human behavior in a sport context; discussion of contemporary theory, research, and methodology.
Registration Restriction(s): Requires consent of instructor.

534 Motor Behavior and Skill Acquisition (3) Topical explanation and application of principles of human movement behavior to acquisition and performance of skills; discussion of current research and methodology.
Registration Restriction(s): Requires consent of instructor.

535 Health and Exercise Psychology (3) Critical examination of various aspects of health and exercise psychology including the psychological benefits of exercise (e.g., increased well-being) as well as the psychological pitfalls of too much exercise (e.g., exercise addiction, overeating, disordered eating behavior etc.).

536 Expert Performance in Sports (3) Examines expertise in athletic performance with a primary focus on the development and maintenance of expertise. Special emphasis is placed on theoretical and practical perspectives on the study of sport expertise as they intersect with issues regarding sport psychology, race, aging, gender, or other socio-cultural factors.
Registration Restriction(s): Requires consent of instructor.

538 Professional Practice Issues in Kinesiology (3) Critical examination of various aspects of professional practice in sport studies with particular emphasis on ethical issues. Also contains a professional development component related to interviewing, resume building, etc.

539 Research Development in Sport Psychology: Idea Formation to Data Collection (3) First of a two-semester sequence designed to familiarize students with research process in applied sport psychology. Includes idea formation, critical review of related literature, development of a research question and methodology, and data collection.
Registration Restriction(s): Requires consent of instructor.

540 Research Development in Sport Psychology: Data Analysis to Manuscript Submission (3) Second of a two-semester sequence designed to familiarize students with research process in applied sport psychology. Includes data analysis, manuscript preparation and manuscript submission.
Comment(s): Requires consent of instructor.

541 Special Topics (1-3) Advanced study in selected areas of kinesiology.
Repeatability: May be repeated. Maximum 6 hours.
Comment(s): Requires consent of instructor.

543 Women, Sport and Culture (3) *(See Sport Studies 543).*

565 Advanced Physiology of Exercise (3) Systematic study of skeletal muscle and metabolism related to acute exercise and physical training: lectures, discussions of major scientific reviews, and appropriate laboratory experiments.
(DE) Prerequisite(s): 480 or 532.

567 Exercise Testing and Prescription (3) Physiological adaptations to exercise training. Measurement and evaluation of cardiorespiratory function, body composition, strength, and flexibility.
Recommended Background: Undergraduate courses in human physiology and physiology of exercise.

569 Clinical Exercise Physiology (3) Cardiac structure and function, interpretation of 12-lead electrocardiograms, exercise considerations for cardiac and pulmonary patient.
(DE) Prerequisite(s): 480 or 532 and 567.

570 Cardiac Rehabilitation Practicum (1-3) Supervised experience in hospital-based exercise programs for participants with cardiac and/or pulmonary disorders. Use of telemetry monitoring, leading safe exercise regimens counseling participants on safe exercise guidelines. Presenting educational class on topic applicable to participants.
Repeatability: May be repeated. Maximum 6 hours.
(DE) Prerequisite(s): 532 and 567 or consent of instructor.

593 Independent Study (1-3)
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 6 hours.
Registration Restriction: Consent of instructor.

594 Directed Readings (1-3)
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 6 hours.
Comment(s): Requires consent of instructor.

595 Special Topics in Kinesiology (1-3) Advanced study in selected aspects of kinesiology.
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 9 hours.
Comment(s): Requires consent of instructor.

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

622 Directed Independent Research (3-6)
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 6 hours.
Comment(s): For doctoral students. Others must obtain consent of instructor.

633 Advanced Sport Psychology (3) Analysis, synthesis, and discussion of contemporary theory and topics; research development and production in sport psychology.
Repeatability: May be repeated. Maximum 9 hours.
Registration Restriction: Consent of Instructor.

634 Advanced Methods and Instrumentation in Biomechanics (3) Focus on practical experience, theoretical foundations and literature of advanced methods and instrumentation in biomechanics.
Recommended Background: 531 or consent of instructor.

661 Seminar in Exercise and Applied Physiology (1-3) Selected topics in exercise physiology and physical activity research.
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 6 hours.

662 Seminar topics in Biomechanics (1-3)
Repeatability: May be repeated. Maximum 6 hours.
(DE) Prerequisite(s): 531.
Recommended Background: 422.

664 Research Participation in Kinesiology (1-6) Participation in research with faculty member whose interests coincide with those of student.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 6 hours.

681 Practicum (1-3) Intern experience in areas of major interest.
Repeatability: May be repeated. Maximum 6 hours.
Comment(s): Requires consent of instructor.

693 Independent Study (1-3)
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 6 hours.
Comment(s): Requires consent of instructor.

694 Supervised Reading (1-3)
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 6 hours.
Comment(s): Requires consent of instructor.

695 Special Topics (1-3) Study for doctoral students in selected aspects of kinesiology (e.g., biomechanics, epidemiology, exercise physiology, motor behavior, and sport psychology).
Grading Restriction: Satisfactory/No Credit or letter grade.
Registration Restriction: Consent of Instructor.
Repeatability: May be repeated. Maximum 9 hours.

ADD PRIMARY COURSES AND CROSS-LIST

480 Physiology of Exercise (3) Lecture and laboratory class dealing with functions of the body in muscular work. Topics include physiological aspects of fatigue, training, and adaptation to environment. *(Same as Biochemistry and Cellular and Molecular Biology 480.)*
Contact Hour Distribution: 2 lectures and 1 lab.
(DE) Prerequisite(s): 440.
Recommended Background: Biochemistry and Cellular and Molecular Biology 230.

602 Research Seminar (1) Departmental research seminar. Includes research presentations on different topics in Kinesiology, Recreation, and Sport Studies. *(Same as Sport Studies 602.)*
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 6 hours.
Registration Restriction: Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or Permission of Instructor.

635 Physical Activity and Positive Health (3)
Review of clinical, epidemiological, and experimental evidence concerning relationship and effects of exercise on health-related components of fitness. *(Same as Public Health 635.)*
(DE) Prerequisite(s): 480 or 532 and 567 or consent of instructor.
Recommended Background: Elementary statistics course.

ADD SECONDARY CROSS-LISTED COURSES

509 Graduate Seminar in Public Health (1) (*See Public Health 509.*)

623 Advanced Topics in Obesity (1-4) *(See Animal Science 623.)*

■ ADD NEW ACADEMIC DISCIPLINE AND COURSES

(850) (RSM) Recreation and Sport Management

500 Thesis (3-12)
Repeatability: May be repeated.
Registration Restriction(s): Recreation and Sport Management major.

501 Project (3) Research study under the supervision of a faculty member.
Registration Restriction(s): Recreation and Sport Management major.

502 Registration for Use of Facilities (1-15) 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.
Registration Restriction(s): Recreation and Sport Management major.

508 Research Methods (3) Research for writing of thesis and institutional review board proposals; presentation of research through free communications and poster presentations; calculation and interpretation of statistics related to common research designs used in research; and use of computer software. *(See Kinesiology 508).*

510 Financial Aspects of Sport (3) Application of fiscal policies and procedures to operation of sport and recreation 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.
Registration Restriction(s): Recreation and Sport Management major.

511 Personnel and Organization Management (3) A survey of advanced management theory, concepts, and strategies for contemporary recreation and sport organizations. Select topics covered in the course include: Strategic management and leadership; organizational diagnostics; transforming the culture of organizations; high performance organizations (HPO)/peak performance organizations (PPO); strategic staffing and HR functions; benchmarking and performance measurement; research and evaluation as strategic functions of managerial leadership; administrative ethics and corporate social responsibility.
Registration Restriction(s): Recreation and Sport Management major.

512 Legal Aspects of Sport (3) Application of contract law, breach of contract, and monetary damages within sport and recreation settings: risk assessment and development of effective risk management strategies; development of contracts; and analysis of cases involving discrimination based upon gender, race, and age as well as protection of rights at amateur and professional levels of sport.
Registration Restriction(s): Recreation and Sport Management major or Kinesiology major.

530 Sport and Media Issues (3) Social issues within context of media and sport. Development of sport media and media influence on sport.
Registration Restriction(s): Recreation and Sport Management major.

535 Ethics in Sport Management (3) Social issues and ethics in sport management.
Registration Restriction(s): Recreation and Sport Management major.

540 Sport Marketing (3) Provides an understanding of diverse aspects of marketing research in sport in order to improve marketing and financial decision-making. Students are exposed to the value and types of marketing research.
Registration Restriction(s): Recreation and Sport Management major.

544 Leadership Theories (3) Integration of various theoretical approaches to leadership styles within cultural contexts, research, and field experier
Registration Restriction(s): Recreation and Sport Management major.

550 Intercollegiate Athletics (3) An overview of all levels of intercollegiate athletics and issues associated with intercollegiate athletics.
Registration Restriction(s): Recreation and Sport Management major.

554 Issues in Recreation and Sport Management (3) Survey of pertinent literature in refereed and applied journals and texts.
Repeatability: May be repeated if topic differs. Maximum 9 hours.
Registration Restriction(s): Recreation and Sport Management major.

555 Facility Planning and Development (3) Principles of designing, planning, equipping, and operating various facilities. Elements of risk management and safety are incorporated into the design process.
Registration Restriction(s): Recreation and Sport Management major.

560 Sport Governance (3) Principles of organizational governance theories as applied to sport organizations. Review of history, mission, and struc governing bodies in sport.
Registration Restriction(s): Recreation and Sport Management major.

570 Event Management (3) Study of the various principles involved in the organization and management of events. Students will combine theory a
Repeatability: May be repeated. Maximum 6 hours.
Registration Restriction(s): Recreation and Sport Management major.

580 Special Topics (1-3)
Repeatability: May be repeated if topic differs. Maximum 9 hours.
Registration Restriction(s): Recreation and Sport Management major.

590 Practicum (3) Supervised part-time experience (minimum of 120 clock hours) at an approved site.
Grading Restriction(s): Satisfactory/No Credit grading only.
Registration Restriction(s): Recreation and Sport Management major.

593 Independent Study (1-3) Independent study in a specialized area under the direction of a faculty member. Independent study project must be
Repeatability: May be repeated. Maximum 9 hours.
Registration Restriction(s): Consent of instructor.

595 Internship (6) Full-time work experience requiring a minimum of 480 hours of clock time.
Registration Restriction(s): Recreation and Sport Management major.

(959) (SPST) Sport Studies

ADD

504 History and Sociology of International Sports (3) Using scholarship in the history and sociology of sport this class studies the development of sport in selected countries throughout the world. Students examine the impact of globalization processes on sports and a variety of issues including the origins of sport, globalization, class, disability, education, ethnicity, gender, labor migration, nationalism, politics, race, religion, and sexuality.
Registration Restriction: Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or Permission of Instructor.

680 Special Topics (1-3) Study for doctoral students in selected aspects of sport studies.
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 9 hours.
Registration Restriction: Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor.

ADD SECONDARY CROSS-LISTED COURSE

602 Research Seminar (1) *(See Kinesiology 602).*

EQUIVALENCY TABLE

Current Courses	Equivalency Course – effective fall 2010
(347) Exercise Science	(590) Kinesiology
EXSC 480	KNS 480
EXSC 500	KNS 500
EXSC 501	KNS 501
EXSC 502	KNS 502
EXSC 508	KNS 508

EXSC 509	KNS 509
EXSC 513	KNS 513
EXSC 515	KNS 515
EXSC 516	KNS 516
EXSC 521	KNS 521
EXSC 531	KNS 531
EXSC 533	KNS 532
EXSC 541	KNS 541
EXSC 565	KNS 565
EXSC 567	KNS 567
EXSC 569	KNS 569
EXSC 570	KNS 570
EXSC 593	KNS 593
EXSC 600	KNS 600
EXSC 601 and (959) Sport Studies 601 (cross-listed)	KNS 602 and (959) Sport Studies 602 (cross-listed)
EXSC 622	KNS 622
EXSC 623	KNS 623
EXSC 633	KNS 634
EXSC 635	KNS 635
EXSC 661	KNS 661
EXSC 664	KNS 664
EXSC 681	KNS 681
EXSC 693	KNS 693
(853) Recreation and Leisure Studies	(850) Recreation and Sport Management
RELS 515	RSM 515
RELS 520	RSM 520
RELS 521	RSM 521
RELS 522	RSM 522
RELS 540	RSM 510

(957) Sport Management	(850) Recreation and Sport Management
SPMT 500	RSM 500
SPMG 501	RSM 501
SPMG 502	RSM 502
SPMG 511	RSM 511
SPMG 512	RSM 512
SPMG 530	RSM 530
SPMG 532	RSM 508
SPMG535	RSM 535
SPMG 540	RSM540
SPMG 554	RSM 554
SPMG 560	RSM 560
SPMG 570	RSM 570
SPMG 580	RSM 580
SPMG 590	RSM 590
SPMG 593	RSM 593
SPMG 595	RSM 595
(959) Sport Studies	(590) Kinesiology
SPST 490	KNS 490
SPST 533	KNS 533
SPST 534	KNS 534
SPST 535	KNS 535
SPST 536	KNS 536
SPST 538	KNS 538
SPST 539	KNS 539
SPST 540	KNS 540
SPST 594	KNS 594
SPST 595	KNS 595
SPST 633	KNS 633
SPST 695	KNS 695

DEPARTMENT OF NUTRITION

■ DROP ACADEMIC DISCIPLINE AND ALL COURSES

(449) (HLTH) Health

400 Consumer Health (3) *Same as Public Health 400.*
406 Death, Dying and Bereavement (3) *Same as Safety 406*
420 Sex Education As It Relates to Human Sexuality (3)
425 Women's Health (3) *Same as Women's Studies 425*
430 Suicide and Crisis Intervention (3)
435 Substance Use and Abuse (3)
465 Aging and Health (3)
500 Thesis (1-15)
502 Registration for Use of Facilities (1-15)
520 Sex Education and Human Sexuality (3)
530 Health Promotion and Health Education Program Development (3)
540 Evaluation in Health Promotion and Health Education (3)
570 Special Topics (1-3)
590 Research Methods in Health (3) *Same as Public Health 590; Safety 592*
593 Directed Independent Studies (1-3)
600 Doctoral Research and Dissertation (3-15)
601 Internship/Research in Safety and Health (3-6) - Secondary course *(See Safety 601)*
610 Critical Analysis of Writing and Research (3)
620 Advanced Research Techniques in Health (3)
650 Health Aspects of Gerontology (3) Primary course - *Same as Public Health 650*
655 Seminar in Nation's Health (3) Primary course - *Same as Public health 655*
660 International Health (3) Primary course - *Same as Public Health 660*

SUPPORTING INFORMATION: Rationale: Health, Public Health and Safety courses are being merged and moved into the new Department of Public Health. Impact: None.

(839) (PUBH) Public Health (will drop and revise courses under the old department)

DROP

493 Directed Independent Study (1-3)

522 Public Health Leadership (3)

523 Management in Extended Care Settings (3)

544 Statistical Software for the Health Professional (3)

560 Theories and Techniques in Health Planning (4)

DROP SECONDARY CROSS-LISTED COURSES

400 Consumer Health (3) *(See Health 400.)*

590 Research Methods in Health *(See Health 590.)*

650 Health Aspects of Gerontology (3) *(See Health 650.)*

655 Seminar In Nation's Health *(See Health 655.)*

660 International Health *(See Health 660.)*

REVISE TO DROP (DE) PREREQUISITE OR (DE) COREQUISITE

540 Principles of Epidemiology (3)

REVISE PRIMARY COURSES TO CHANGE NAME OF ACADEMIC DISCIPLINE OF SECONDARY COURSES

509 Graduate Seminar in Public Health *(Same as Kinesiology 509; Nursing 509; Nutrition 509; Social Work 509.)*

Formerly: (Same as Exercise Science 509; Nursing 509; Nutrition 509; Social Work 509.)

635 Physical Activity and Positive Health (3) *(Same as Kinesiology 635)*

Formerly: *(Same as Exercise Science 635.)*

MOVE ACADEMIC DISCIPLINE AND ALL COURSES (839) (PUBH) PUBLIC HEALTH

MOVE THE FOLLOWING ACADEMIC DISCIPLINE AND COURSES FROM THE DEPARTMENT OF NUTRITION TO THE NEW DEPARTMENT OF PUBLIC HEALTH

(839) (PUBH) Public Health

502 Registration for Use of Facilities (1-15)
509 Graduate Seminar in Public Health (1)
510 Environmental and Occupational Health (3)
520 Public Health Policy and Administration (3)
521 Organization Theory and Health Care Delivery (3)
525 Financial Management of Health Programs (3)
530 Biostatistics (3)
540 Principles of Epidemiology (3)
542 Advanced Epidemiologic Methods (3)
550 Principles and Practices of Community Health Education (3)
552 Community Health Problem Solving (4)
555 Health and Society (3)
580 Special Topics (3)
587 Internship (3)
588 Internship (3)
589 Internship (3)
593 Directed Independent Study (1-3)
635 Physical Activity and Positive Health (3) *(See Exercise Science 635)*

(726) (NUTR) Nutrition

ADD

505 Nutrition Intervention in the Community (3) Assess food and nutrition needs across the socio-ecological model, define related problems, writing goals and objectives and design and evaluate interventions to meet the food and nutrition related needs in the community at all levels.
(RE) Prerequisite(s): 412.
Recommended Background: An advanced community nutrition course or consent of the instructor.

506 Public Health Nutrition Management (3) Describe and analyze roles and responsibilities of public health nutrition personnel; describe and develop skills in planning, implementing, and evaluating public health nutrition programs, based on community assessment project from Nutrition 505.
(RE) Prerequisite(s): 505.

519 Analysis of Practice in Community Nutrition (3) Analysis of community nutrition practice from a systems-level to professional practice levels
(RE) Prerequisite(s): 515.

543 Research Methods I (2) Scientific method, study design, data interpretation, and critical evaluation of current nutrition literature.
Recommended Background: Statistics and advanced nutrition.

545 Research Methods II (2) Ethics and compliance, scientific grant writing, and critical evaluation of current nutrition literature.
(RE) Prerequisite(s): 543.

618 Nutrition and Aging (3) Topical readings from the current research literature will be assigned each week and discussed in class the following week.
Recommended Background: Advanced nutrition course or consent of instructor.

DROP

513 Community Nutrition I (3)

514 Community Nutrition II (3)

518 Nutrition and Aging (3)

540 Seminar in Nutrition (1)

541 Research Methods (3)

ADD EXISTING 400-LEVEL COURSE FOR GRADUATE CREDIT

412 Food and Nutrition in the Community (3) Influence of health characteristics, geographic, social, economic, educational and cultural factors on food and nutrition programming; relationship of community food and nutrition problems to programs and services for families and communities with particular attention to disease prevention; public policy (WC*). This is a writing intensive course for undergraduate students (WC*). This designation means that the course will require formal and informal writing assignments that total 5,000 words.
Recommended Background: 302, 415.

(890) (SAFE) Safety

■ DROP ACADEMIC DISCIPLINE AND ALL COURSES

406 Death, Dying and Bereavement (3) – Secondary course *(See as Health 406.)*

443 Sports and Recreational Safety (3)

452 Safety Principles and Practices (3)

500 Thesis (1-15)

502 Registration for Use of Facilities (1-15)

532 Behavioral Problems in Safety Education and Accident Prevention (3)

533 Problems and Research in Accident Prevention (3)

534 Organization, Administration and Supervision of Safety Programs (3)

535 Emergency Management (3)

536 Safety Instrumentation (3)

537 Advanced Emergency Management (3)

560 Fire Risk Management (3)

564 Personnel Policies in Safety Management (3)

572 Graduate Workshop in Safety (3)

590 Special Topics (1-3

592 Research Methods in Health (3) – Secondary course *(See as Health 590.)*

593 Directed Independent Study (1-3)

601 Internship/Research in Safety and Health (3-6) – Primary course *(Same as Health 601.*)

EQUIVALENCY TABLE

Current Courses	Equivalent Courses - effective Fall 2010
(726) Nutrition NUTR 513	(726) Nutrition NUTR 505
(726) Nutrition NUTR 514	(726) Nutrition NUTR 506
(726) Nutrition NUTR 541	(726) Nutrition NUTR 543
(449) Health 590 (Primary) *(839) Public Health 590 (Secondary)* *(890) Safety 592 (Secondary)*	*(839) Public Health PUBH 536*
(449) Health HLTH 620	*(839) Public Health PUBH 636*
(839) Public Health PUBH 560	*(839) Public Health PUBH 527*

■ ADD DEPARTMENT - DEPARTMENT OF PUBLIC HEALTH (839) (PUBH)

(839) (PUBH) Public Health

MOVE ACADEMIC DISCIPLINE (839) PUBLIC HEALTH AND COURSES TO NEW DEPARTMENT

ADD

500 Thesis (1-15)
Grading Restriction: P/NP only.

527 Theories and Techniques in Health Planning (4) Overview of health planning concepts and methodologies; systems-oriented planning process. Major elements of planning: formulation and conceptualization of problem, plan design, evaluation and implementation. Health problems of institutions, communities and selected population groups, appropriate diagnoses, and programs for addressing needs.

536 Research Methods In Health (3) Basic quantitative and qualitative research techniques in a variety of health settings. Development of research skills, data collection instruments, and problem identification for research topic.
(RE) Prerequisites: Public Health 530 or Statistics 531; and Public Health 540.

537 Fundamentals of Program Evaluation (3) Familiarizes students in different types of program evaluation, including needs assessment, formative research, process evaluation, monitoring of outcomes, impact assessment, and cost analysis. The course covers experimental, quasi-experimental, and non-experimental study designs, including the strengths and limitations of each.
(RE) Prerequisites: 530 or Statistics 531; and 540.

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

609 Public Health Doctoral Seminar (1) Will further prepare the public health doctoral student for the dissertation process, including proper framing of a research question, conducting the literature review, and specification of methods. Students will lead discussions and presentations on methods being used in their dissertations and early results. Will also include an exploration of current health behavior and health education-related research being conducted across the University.
Repeatability: May be repeated. Maximum 4 hours.
(RE) Prerequisites: 509 and 510 and 520 and 540 and 555 and 536 and 537 and 530 or 531.

636 Advanced Research Methods (3) Application of multivariate statistics to research questions in health behavior; analysis of public health data.
(RE) Prerequisites: 536 and Statistics 531 and, Statistics 532 or Statistics 537, and Statistics 538.

637 Applications in Program Evaluation (3) Integrating program planning and evaluation; working with community stakeholders; qualitative evaluation methods; study designs and data analysis strategies for experimental and quasi-experimental evaluations; preparing an evaluation proposal and budget.
(RE) Prerequisites: 537 and Statistics 531 and, Statistics 532 or Statistics 537, and Statistics 538.

656 Comparative Theories in Health Behavior (3) Theoretical models of health behavior; analysis, synthesis, and discussion of historical, contemporary and cross-cultural relevance of models; application of theory to research, prevention and intervention in public health; critical reading and evaluation of theory-based research on health behavior.
(RE) Prerequisites: 555.

680 Special Topics (3)
Repeatability: May be repeated if topic differs. Maximum 6 hours.
Registration Permission: Consent of instructor.

693 Independent Studies (1-3) Individual study of selected issues.
Repeatability: May be repeated. Maximum 6 hours.
Registration Permission: Consent of instructor.

DEPARTMENT OF RETAIL, HOSPITALITY, AND TOURISM MANAGEMENT

■ DROP ACADEMIC DISCIPLINE AND ALL COURSES IN THE GRADUATE CATALOG – UNDERGRADUATE IS RETAINING ACADEMIC DISCIPLINE

(514) (HRT) Hotel, Restaurant, and Tourism

423 Marketing for Hospitality and Tourism (3)
435 Meeting Planning, Special Events and Convention Management

500 Thesis (1-15)
501 Professional Project (3-6)
502 Registration for use of facilities (1-15)
510 Trends and Issues in Service Management (3)
523 Tourism Analysis (3) (to RHTM)
524 Tourism Destination Development (3)
532 Human Resource Management In Service Industry (3)
534 Special Topics in Food service and Lodging Administration (1-3)
535 Directed Study in Foodservice and Lodging Administration (1)
537 Seminar in Foodservice and Lodging Administration (1)
547 Field Experience (3-9)
600 Doctoral Research and Dissertation (3-15)
614 Trends and issues in Hospitality and Tourism (3)
615 Literature and Thought in Hospitality and Tourism (3) (added under RHTM)

- DROP ACADEMIC DISCIPLINE AND ALL COURSES IN THE GRADUATE CATALOG – UNDERGRADUATE IS RETAINING ACADEMIC DISCIPLINE

(865) (RCS) Retail and Consumer Sciences

412 e-Retailing (3)
415 Retail Promotion (3)
500 Thesis (1-15)
501 Professional project (3-6)
502 Registration For Use of Facilities (1-15)
510 Retail Strategy and *Decision Making (3)*
511 International Trade and Retail Analysis (3)
538 Consumer Product and Service Development (3)
541 Consumer Analysis in Services Management (3)
562 Research Methods (3)
590 Research Seminar (1)
593 Directed Study (1-3)
595 Special Topics in Retail and Consumer Sciences (1-3)
600 Doctoral Research (3-15)
614 Theory in Retail Environment (3)
615 Retail and Consumer Sciences Literature and Thought (3)
616 Research Methods, Models and Measurements in Retail and Consumer Sciences (3)
625 Strategic Managerial Retailing (3)
641 Retail and Consumer Behavior (3)
695 Advanced Topics in Retail and Consumer Sciences (3)

- ADD NEW ACADEMIC DISCIPLINE AND COURSES

(866) (RHTM) Retail, Hospitality and Tourism Management

511 International Trade (3) International trade and marketing concepts with implications for retail, hospitality and tourism. Theoretical and applied analysis of international markets.

590 Research Seminar (1) Research topics in retail, hospitality and tourism management.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 2 hours.

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

614 Theories in Retail, Hospitality and Tourism Management (3) Analysis and evaluation of theory in retail, hospitality and tourism environment and its application to research in retail, hospitality and tourism.

615 Literature and Thought in Retail, Hospitality and Tourism Management (3) Evaluation of hospitality and tourism management literature with emphasis upon research literature, development of scholarly thought, and identification of potential areas of further study.

616 Research Methods, Models and Measurement in Retail, Hospitality and Tourism Management (3) Quantitative and qualitative methods and analytical concepts in the research process. Formulation of models and measurement retail, hospitality and tourism constructs.

617 Tourism Analysis (3) Trade theory and regional analysis methodologies applied to tourism and the service industry, including travel balance account, retail tourism, interregional transactions flow, economic impacts, environmental economics, demand theory and forecasting.

625 Strategic Managerial Retail, Hospitality and Tourism Management Decision (3) Making orientation that integrates strategic framework components with preparation and analysis of specific retail, hospitality and tourism management case situations.

641 Consumer Behavior (3) Theories and concepts from social science in relation to ultimate consumer's behavior.

***695* Advanced Topics in Retail, Hospitality and Tourism Management Lecture (3) Group** discussion, individual research on advanced topics and research areas of current significance to retail, hospitality and tourism.
Repeatability: May be repeated. Maximum 9 hours.
Recommended Background: 9 graduate hours in consumer sciences.

Equivalency Table

Current Course	Equivalent courses effective fall 2010
(514) Hotel, Restaurant and Tourism 523	(866) Retail, Hospitality and Tourism Management 617
(514) Hotel, Restaurant and Tourism 615	(866) Retail, Hospitality and Tourism Management 615
(865) Retail and Consumer Sciences 511	(866) Retail, Hospitality and Tourism Management 511
(865) Retail and Consumer Sciences 590	(866) Retail, Hospitality and Tourism Management 590
(865) Retail and Consumer Sciences 600	(866) Retail, Hospitality and Tourism Management 600
(865) Retail and Consumer Sciences 614	(866) Retail, Hospitality and Tourism Management 614
(865) Retail and Consumer Sciences 615	(866) Retail, Hospitality and Tourism Management 615
(865) Retail and Consumer Sciences 616	(866) Retail, Hospitality and Tourism Management 616
(865) Retail and Consumer Sciences 625	(866) Retail, Hospitality and Tourism Management 625
(865) Retail and Consumer Sciences 641	(866) Retail, Hospitality and Tourism Management 641
(865) Retail and Consumer Sciences 695	(866) Retail, Hospitality and Tourism Management 695

DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

(285) (EDDE) Education of the Deaf and Hard of Hearing

REVISE TITLE, DESCRIPTION, AND ADD COMMENT

529 Teaching Reading, Writing and Reasoning to Deaf/Hard of Hearing (3) Theoretical principles and instructional approaches that contribute to effective learning of reading, writing and reasoning among students with hearing loss.
Comment: Taught in American Sign Language.

(932) (SPED) Special Education

ADD EXISTING 400-LEVEL COURSE FOR GRADUATE CREDIT

472 Field Experience in Early Childhood Special Education (3-15) Practicum in educational settings serving young children with disabilities. Provides experience in assessment, curriculum planning and teaching.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 15 hours.
Comments: Admission to teacher education program and consent of instructor.

Revising the UG course. Formerly: (2-5) Placement in educational settings serving young children with special needs. Provides experience in assessment, curriculum planning and teaching. *Repeatability: May be repeated. Maximum 5 hours.*
Registration Restriction(s): Qualification — admission to teacher education

REVISE DESCRIPTION

456 Effective Instruction of Students with Learning Disabilities and Other High Incidence Disabilities (3) Determining and implementing best practices in instruction, both remediation and accommodation strategies, for students with learning disabilities. Emphasis is placed on language-based disabilities, dyslexia, math disabilities, comorbid disorders such as Attention Deficit Hyperactivity Disorder, and Asperger's Syndrome. Assessment of cognitive and academic skills and response to intervention (RTI) are addressed.

REVISE TITLE AND DESCRIPTION

459 Physical and Health Impairments: Educational Implications (3) The impact of neuromotor, orthopedic, and musculoskeletal impairments, degenerative and terminal conditions, health impairments including infectious diseases, and sensory losses on student learning. Adaptations and teaching strategies for meeting the needs of students with physical and health impairments in general and special education contexts.

REVISE DESCRIPTION AND COMMENT

506 Internships in Teaching in Special Education (3-15) Designed to provide participants with internship experiences in teaching special education. Experiences will include the planning, delivery of special services, instruction, and evaluation across various educational environments and levels.
Comments: Admission to graduate program and consent of instructor.

REVISE TITLE, DESCRIPTION, AND COMMENT

557 Classroom Management (3) Designed to examine validated methodology of classwide and individual strategies for successfully managing a classroom across a variety of learning environments and levels. Participants will develop an understanding of motivation and behavior to create a learning environment that encourages positive social interactions, active engagement in learning, and self-motivation.
Comments: Admission to graduate program or consent of instructor.

590 Application of Assistive Technology (3) Application of assistive and instructional technology for students in all disability categories and across all chronological and functioning age ranges. Adaptive software, hardware for access, and strategies for technology usage, assessment, and instruction.
Comments: Admission to graduate program or consent of instructor.

REVISE TITLE, DESCRIPTION, AND COMMENTS; DROP PREREQUISITES, COREQUISITES; AND ADD REPEATABILITY

431 Advanced Field Experience in Special Education Program (3) Advanced practicum in teaching special education programs. Planning, developing, implementing, and evaluating instruction.
Repeatability: May be repeated. Maximum 15 hours.
Comments: Admission to teacher education program and consent of instructor.

(978) Theory and Practice in Teacher Education

DROP

542 Integrated Middle School Methods (6)

II. PROGRAM CHANGES

DEPARTMENT OF CHILD AND FAMILY STUDIES

REVISE CHILD AND FAMILY STUDIES MAJOR – MS –

The child and family studies major requires a minimum of 36 hours of coursework—12 credits in foundation coursework and 24 additional credit hours, selected with guidance of the student's master's committee (nine credit hours in child and family studies prefix courses; six credit hours in graduate electives, which may include child and family studies-prefix courses; three credit hours in Statistics 531, Statistics 537, of Social Work 605; and six credit hours of thesis research in Child and Family Studies 500 for the thesis option or six credit hours of practicum in Child and Family Studies 564 and 565 for the non-thesis option). A project is implemented during the second semester of practicum experience (CFS 565) and is evaluated by the student's master's committee for the non-thesis option written comprehensive examination. Students seeking the MS degree with a major in child and family studies must select a master's committee chair and file a plan of study with the department head after 12 hours of graduate credit.

	Hours Credit
[1]Child and Family Studies Foundation Courses	12
[2]Computation-based Statistics	3
Child and Family Studies Specialization Electives	9
[3]General Electives	6
Thesis Research (Child and Family Studies 500) or Practicum Experience (Child and Family Studies 564 and 565)	6
	Total 36

[1]Child and Family Studies 510, 511, 550, 570.
[2]Statistics 531 or 537 or Social Work 605.
[3]Courses may be child and family studies prefix courses or may include courses from outside the child and family studies curriculum.

DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

- ADD THE FOLLOWING MAJOR, DEGREE, AND CONCENTRATION

  Education Major - EdS

  Educational Administration concentration

Education Major, EdS (Interdepartmental)

The department offers a concentration in Educational Administration under the Specialist in Education degree with a major in education. This degree is designed for individuals who already possess a master's degree in education. Exceptions may be made only by the faculty of the program to which the student is applying. This degree may be used to fulfill the course requirements for obtaining licensure as a school administrator.

Licensure Alternative
The EdS requires 42 hours of course work. Evening and summer classes are combined with on-the-job internship activities organized around real school problems. The school principal and a faculty representative of the educational administration and supervision program together supervise the internship.

The desired outcome of the program leading to licensure as a school administrator is to produce thoughtful principal and supervisory practitioners with the skills and scholarship to provide quality leadership to the organizations they serve. Graduates are expected to have a vision of quality education combined with good leadership skills to lead our schools in the twenty-first century.

The program leading to licensure as a school administrator is designed around the standards developed by the State of Tennessee, The Tennessee Instructional Leadership Standards (TILS), and the Interstate School Leaders Licensure Consortium (ISLLC) for the knowledge and skills required today for a school principal. It meets the certification requirements of the Tennessee State Board of Education. The program is also accredited by the National Council for the Accreditation of Teacher Education (NCATE) and recognized by the University Council for Educational Administration (UCEA) indicating national recognition as a quality program.

Non-licensure Alternative
The non-licensure alternative program is designed to prepare leaders for a variety of settings in schools and in other social service agencies. It requires a common set of four courses with the remainder of the program tailored to the students' special needs. The degree requires 42 hours of course work and may require an internship, which is decided in consultation with the faculty advisor.

Admission
Application forms should be completed and submitted prior to April. These include the Office of Graduate Admissions' application and for those interested in licensure, the Educational Specialist application. A graduate GPA of 3.2 or higher, documentation of teaching or related experience (a minimum of three years of school-related experience is needed for licensure as a school administrator), and three rating forms that assess a candidate's strengths, weaknesses, leadership, and scholarly potential are required.

Requirements
The EdS with a major in education with a concentration in educational administration requires a minimum of 42 hours of study. A final comprehensive examination is required as is a culminating research paper or thesis depending on the program.

	Hours Credit
Core Requirements (EDAM 515, EDAM 513, EDAM 548, EDAM 553)	12
Licensure Specialization (EDAM 523, EDAM 554, EDAM 583, EDAM 544, [1] TPTE 519) OR	15
Non-licensure specialization (selected by the student and advisor) Research (EDAM 516, [2]EDAM 592)	
[3]Elective: EDPY 577 or EDPY 560	9
Internship: (EDAM 580 required for licensure students) or electives non-licensure students	6
Total hours	**42**

[1]Theory and Practice in Teacher Education 519 or an approved curriculum course.
[2]A thesis option is available with approval of advisor.
[3]Elective from outside the Educational Administration area chosen in consultation with advisor.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING

- DROP CONCENTRATIONS – EDUCATION MAJOR, PHD

  Cultural studies of educational foundations concentration
  Instructional technology concentration

- DROP CONCENTRATIONS – EDUCATIONAL PSYCHOLOGY AND RESEARCH, PHD

  Adult education concentration
  Applied educational psychology concentration
  Collaborative learning concentration
  Evaluation and assessment concentration

- ADD CONCENTRATIONS – EDUCATION MAJOR, EDS

  School counseling concentration
  School psychology concentration

- ADD CONCENTRATION – EDUCATION MAJOR, PHD

  Learning Environments and Educational Studies concentration

- ADD CONCENTRATIONS – EDUCATIONAL PSYCHOLOGY AND RESEARCH, PHD

  Adult learning concentration
  Evaluation, statistics, and measurement concentration

▲ DROP MAJOR AND DEGREE

School Counseling - EdS

▲ DROP MAJOR AND DEGREE

School Psychology - EdS

▲ DROP GRADUATE CERTIFICATES

Evaluation
Quantitative research methods in education

▲ ADD GRADUATE CERTIFICATE

Evaluation, statistics, and measurement

REVISE DEPARTMENTAL INTRODUCTORY PARAGRAPH

In the 2009-2010 *Graduate Catalog* remove current introductory paragraph and replace with the following:

EDUCATIONAL PSYCHOLOGY AND COUNSELING
The Department of Educational Psychology and Counseling offers eight masters programs, three educational specialist programs, and five doctoral programs. These sixteen programs are positioned under six majors: Counseling, Counselor Education, Education, Educational Psychology, Educational Psychology and Research, and School Psychology. The Counselor Education and School Psychology doctoral programs are free-standing majors. The (a) Adult Learning and (b) Evaluation, Statistics, and Measurement doctoral programs are concentrations under the Educational Psychology and Research Major. The doctoral program, “Learning Environments and Educational Studies,” is a doctoral concentration under the Education Major.

Two of our doctoral programs operate under the supervision of national accrediting agencies: Counselor Education is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), and the School Psychology program is accredited/approved by American Psychological Association (APA), the National Association of School Psychologists (NASP), and the National Council for Accreditation of Teacher Education (NCATE). Two Masters programs, Mental Health Counseling and School Counseling, are also accredited by CACREP. The Masters program in Rehabilitation Counseling is accredited by the Council on Rehabilitation Education, Inc. (CORE). No supervisory agencies exist to accredit other programs in the Department. Overall, the Department’s programs prepare graduates to work in the public schools, higher education, mental health agencies, and business and industry.

REVISE REQUIREMENTS – EDUCATION MAJOR – EDS – INSTRUCTIONAL TECHNOLOGY CONCENTRATION

In the 2009-2010 *Graduate Catalog* remove current requirements and replace with the following:

Education Major, EdS – Instructional Technology Concentration

The department offers a concentration in Instructional Technology under the Specialist in Education degree with a major in Education. This degree is designed for those students who already possess a master's degree in education or a related field.

Requirements (Thesis/Non-Thesis)

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

[1] Must hold master's degree in education or related field.
[2] A student without prior coursework in instructional technology must take IT 521, IT 570, IT 573, IT 575 and one elective (3 hours).
[3] Two courses (6 hours) must be taken outside the IT program area.
[4] Thesis students must take IT 518; Problems students must take IT 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.

ADD HEADING, TEXT AND REQUIREMENTS - EDUCATION MAJOR - SCHOOL COUNSELING CONCENTRATION - EDS

In the 2010-11 *Graduate Catalog* add heading, text and requirements for the new School Counseling concentration (EdS)

Education Major, EdS – School Counseling Concentration

The Specialist in Education degree with a concentration in school counseling is for individuals who already have a license in school counseling and wish to upgrade their skills and knowledge, individuals who possess a master's degree in a counseling-related area and wish to obtain licensure in school counseling, or individuals who have a master's degree in a non-related counseling field and wish to obtain courses leading to licensure as a professional school counselor.

The common curriculum for all students seeking a Specialist in Education degree includes the following areas:
• COUN 670
• Advanced Theory Course Options – COUN 660, or COUN 665, or COUN 680, or COUN 604*
• Research Course Options – EDPY 555, or EDPY 582, or EDPY 583
• Elective Courses by advisement (minimum of 15 hours)**
• The non-thesis program requires a comprehensive examination in which the candidate will demonstrate research skills through examination questions
• The requirements are This degree is 24 semester hours beyond a 48 semester hour master's degree in school counseling
• A minimum of 6 of the 24 semester hours is required from outside the counselor education program
*Counselor Education 604 is counseling related and the topic changes each semester depending on the specific professional goals of the counseling students. Crisis counseling, child and adolescent counseling, and play therapy are examples of course content previously offered.
**The elective courses will be determined by the EdS student and his/her advisor and committee members. Depending on the specific professional goals of the student, the student will be advised to take counseling-related courses that enhance his/her curriculum. Courses commonly taken as electives include, but are not limited to CFS 540, CFS 552, CFS 567, CFS 515, SOWK 564, and SOCI 551.

Prerequisite Requirements
Category I – Students with licensure in school counseling who have completed the 48 hour master's program in school counseling at the University of Tennessee will not be required to take any courses beyond those included in the EdS program in school counseling.
Category II – Students with a master's program in school counseling requiring less than the 48 hours included in the University of Tennessee program will have to take courses in school-counseling areas not reflected in their masters program in school counseling.
Category III – Individuals with a master's degree in a counseling-related area (e.g., mental health counseling) will be required to take the courses in the University of Tennessee's 48-hour School-Counseling Program that were not included in their counseling-related master's program.
Category IV – Individuals with a master's degree in a non-counseling area will likely have taken few courses similar to those required in the school-counseling master's program at the University of Tennessee and, as a result, will need to take the entire University of Tennessee master's degree program in school counseling.

ADD HEADING, TEXT AND REQUIREMENTS - EDUCATION MAJOR - SCHOOL PSYCHOLOGY CONCENTRATION - EDS

In the 2010-11 *Graduate Catalog* add heading, text and requirements for the new School Psychology concentration (EdS)

Education Major, EdS – School Psychology Concentration

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 credit 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*.

ADD HEADING, TEXT AND REQUIREMENTS - EDUCATIONAL PSYCHOLOGY AND RESEARCH MAJOR - EVALUATION, STATISTICS, AND MEASUREMENT CONCENTRATION - PHD

In the 2010-11 *Graduate Catalog* add heading, text and requirements for the new Evaluation, Statistics, and measurement concentration (PhD)

Educational Psychology and Research Major, PhD – Evaluation, Statistics, and Measurement Concentration

The Evaluation, Statistics, and Measurement (ESM) concentration is designed to (a) provide students with broad but rigorous skills so they can function, upon graduation, as esteemed professionals, (b) generate scholarship that is relevant to and appreciated by scholars external to the University of Tennessee who work in areas of evaluation, applied statistics, and measurement, and (c) achieve a reputation, nationally and internationally, as the preferred place where highly qualified students and faculty members want to study and work. This specialization combines elements of theory, methods, and hands-on applications to provide students with relevant knowledge, skills, and dispositions for engaging in research, teaching, and/or the practice of evaluation, statistics, or measurement.

Requirements
The PhD concentration in Evaluation, Statistics, and Measurement involves a minimum of 88 hours beyond the baccalaureate degree distributed among the following categories.

	Hours/Credit
[1] Basic Concentration	19
[2] Advanced Concentration	18
[3] Research	15
[4] Cognate	6
[5] Electives	6
[6] Dissertation	24
	Total 88

[1] The Basic Concentration consists of the following courses: EDPY 601, 582, 533, 555, 577, 677, and 660 (660 is a one credit hour course taken a minimum of three times).
[2] The advanced concentration consists of the following courses: EDPY 651, 652, 534, 670 (a three-hour course taken two times), and either 667 or 678.
[3] Research courses must include EDPY 581 and 583 as well as three additional courses chosen from the following: EDPY 506, 530, 550, 661, 662, 663, or CS 625, 660 or CE 525, or IOP 627, or Psychology 521, 522, 555, any stat course above 500, or other approved options (contact program faculty for a complete list of options).
[4] Students, in consultation with their advisor, must select two courses outside ESM that compliment their professional focus.
[5] Students, in consultation with their advisor, select two courses focused on content areas they expect to address as professionals.
[6] Students will enroll in a minimum of 24 hours of dissertation at the conclusion of their coursework.

REVISE REQUIREMENTS – SCHOOL PSYCHOLOGY MAJOR – PHD

In the 2009-2010 *Graduate Catalog*, remove the text under the Requirements heading and replace with the following:

Requirements
Students with an undergraduate degree who are admitted to the PhD School Psychology Program will typically take 5 years of full time study to complete the program. In some instances, students with a relevant Ed.S. or Master's degree can complete the program in 3-4 years. All students must complete a minimum of 24 dissertation hours and a 2000 hour internship at the end of their training, with 600 hours in a school/educational setting. The Graduate School requires students without a graduate degree to take 48 hours of graduate course credit and those with a graduate degree to take 24 hours of graduate course credit. However, to meet School Psychology Program requirements students are almost always required to take more hours than the minimums required by the graduate school.

REVISE REQUIREMENTS – COUNSELOR EDUCATION MAJOR – PHD

In the 2009-2010 *Graduate Catalog*, revise and replace

Doctoral program admission criteria include the following:

- Master's degree in counseling or counselor-related field.
- Minimum of two years of work experience in counseling or counseling-related field.
- Fitness for the program, including self-awareness and emotional stability as indicated by references and interview.
- Potential for leadership and advocacy as indicated by references, publications, presentations, and other professional activities.
- Expertise in technological applications.

In addition, general graduate admission standards for international students require a transcript from the home country indicating an equivalent of the University of Tennessee grade point average of 3.0 or higher. Official results of TOEFL must be submitted. A minimum score of 213 on the computer-based test, 550 on the paper test, or 80 on the Internet-based Test typically with a score of 20 on each of the sections of the test (reading, listening, writing, and speaking), and scores on the GRE that meet the admission requirements.

Requirements
Course work for the program in counselor education includes the following.

	Hours Credit
Major	30
Professional Orientation	4
Cognate	6
Research	21
Dissertation	24
	Total 85

More detailed information about course work is available in the program handbook and through the advising process.

ADD HEADING, TEXT AND REQUIREMENTS – EDUCATION MAJOR – LEARNING ENVIRONMENTS AND EDUCATIONAL STUDIES - PHD

In the 2010-11 *Graduate Catalog* add heading, text and requirements for the new Learning Environments and Educational concentration (PhD)

Education Major, PhD – Learning Environments and Educational concentration

The doctoral program with a concentration in learning environments and educational studies is designed to ground advanced students in theoretical, philosophical and research foundations of human learning and development, cultural and social contexts of learning, the design process of learning environments, and skills for inquiring into and critiquing these environments. The program prepares graduates to work in high level professional careers in a wide range of settings such as higher education, K-12 education, community-based agencies and community-based participatory research, research institutions and other applied educational, social and political settings.

Students select a primary specialization of 18 hours in one of three areas: (1) cultural studies, (2) human learning and development, or (3) instructional technology. They also select a secondary specialization of 12 hours in an area that will support their individual interests. Students are encouraged to obtain a graduate certificate in qualitative research methods, quantitative research methods, or program evaluation. Coursework consists of

		Hours Credit
1.	Concentration core	9
2.	Primary specialization	18
3.	Secondary specialization	12
4.	Research methods	15
5.	Electives	6
6.	Dissertation	24
		Total Hours 83

The program features

- Emphasis on participatory theories of learning, social justice, and innovative uses of technology
- Mastery of two related areas of specialization selected by each student
- Interdisciplinary research team involvement in design, analysis, presentations at regional and national conferences, and publication of studies
- Focus on learning in community through a two year interdisciplinary seminar
- International and intercultural atmosphere
- Opportunity to gain higher education teaching experience

ADD HEADING, TEXT AND REQUIREMENTS - EDUCATIONAL PSYCHOLOGY AND RESEARCH MAJOR – ADULT LEARNING CONCENTRATION - PHD

In the 2010-11 *Graduate Catalog* add heading, text and requirements for the new Adult Learning concentration (PhD)

Educational Psychology and Research Major, PhD – Adult Learning Concentration

The doctoral concentration in Adult Learning serves the needs of individuals who work with adult learners in diverse settings, including business, government, higher education, and non-profit organizations. Emphasis of the program is on the development of reflective practitioners and engaged scholars who actively participate in leadership and service that promotes lifelong learning in a global community. The program focuses on three areas of study and practice: 1) self-directed learning, 2) transformative learning, and 3) reflective practice. In addition to addressing more general areas of adult learning, core faculty express their areas of specialization in their supervision of student research and in their respective courses. For example, faculty members' specializations may serve as the focus of proseminars, especially as the seminars focus on evolving research in related disciplines, research methodologies, and exemplars of notable studies in the three areas of adult learning.

A Master's degree is not required for students who apply for admission to the doctoral program. For students admitted to the program, prior graduate work will be examined on a case-by-case basis as it might be used to satisfy the overall course requirements of the doctoral program. Students may use up to 24 semester credit hours of prior coursework for this purpose.

The program offers students a choice of two ways to meet the university's residency requirement. One is the traditional residency requirement that calls for two consecutive semesters of full-time study (nine credit hours). The other is an alternative residency requirement that requires students to enroll in six to nine credit hours of coursework each semester for six consecutive semesters.[1]

The curriculum is structured in terms of a core, an advanced core, research methods requirements, a cognate, electives, and dissertation research. In most cases, students will be expected to successfully complete requisite 500-level courses or their equivalents prior to enrolling in advanced courses at the 600-level. Courses that constitute the several areas of the curriculum are shown below. In some circumstances, a student may substitute other courses upon approval by his or her major advisor.

Basic Core Courses (9 credit hours)[2]

EDPY 525 Adult Learning (3)
EDPY 522 Adult Development (3)
EDPY 513 Reflective Practice in Education and Psychology (3)

Advanced Core Courses (22 credit hours)

EDPY 601 Professional Seminar (1)
EDPY 625 Advanced Seminar in Adult Learning (3)
EDPY 622 Advanced Seminar in Adult Development (3)
EDPY 613 Advanced Seminar in Reflective Practice (3)
EDPY 630 Proseminar in Adult Learning (4 semesters x 3 credit hr. = 12)

Research Methods[3] (15)

Course in Research Methods (3)
Course in Statistics (3)
Course in Qualitative Research (3)
(Selected course based on student's research interest) (3)
(Selected course based on student's research interest) (3)

Cognate (6)
To be selected (3)
To be selected (3)

Electives (9)

Dissertation (24)

Total Hours (85)

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[1] The alternative residency was approved as a feature of the doctoral program in Collaborative Learning in 1996 and modified in 2004. The original residency requirements that served as part of the former Ed.D. major in Education called for students to enroll in six to nine credit hours of coursework each semester for six consecutive semesters, including summer terms. When the major changed to a Ph.D. in Education and later to Educational Psychology and Research, this alternative residency was modified to include two consecutive semesters of nine hours of coursework, consistent with the university's traditional residency requirement. However, a ruling by the Graduate School allows graduate students to use two consecutive semesters of nine credit hours of dissertation research (600) credit to satisfy the traditional residency.
[2] Pre-requisites EP 620, 622, 630, respectively.
[3] The first three courses shown are required.

REVISE CERTIFICATE - QUALITATIVE RESEARCH METHODS IN EDUCATION

In the 2009-10 *Graduate Catalog* remove current text for the Qualitative graduate certificate and replace with the following:

Qualitative Research Methods in Education Graduate Certificate
The 12-hour graduate certificate in qualitative research methods in education is an interdepartmental program of study that is administered by faculty within the Department of Educational Psychology and Counseling. The certificate is intended for currently admitted graduate students wishing to develop their skills in conducting qualitative research studies. Certificate candidates must currently be admitted to a graduate program at the university or hold a terminal research degree.

Requirements

- CSE 560
- At least one of the following: CSE 661, CFS 650, EDAM 618
- At least two of the following: EDPY 531, EDAM 617, CSE 660, CSE 625, CSE 526

Other courses within the College of Education, Health, and Human Sciences may, where appropriate, be substituted for the courses listed above with the permission of the program coordinator.

▲ ADD CERTIFICATE – EVALUATION, STATISTICS, AND MEASUREMENT

In the 2010-11 *Graduate Catalog* add the Evaluation, Statistics, and Measurement graduate certificate as follows:

Evaluation, Statistics, and Measurement Graduate Certificate
The 18-hour graduate certificate in evaluation, statistics, and measurement is administered within the Department of Educational Psychology and Counseling. The certificate is intended for currently admitted University of Tennessee doctoral students (or individuals who have already earned a doctoral degree) wishing to develop knowledge and skills in evaluation, statistics, and measurement.

Requirements for the Graduate Certificate in Evaluation, Statistics, and Measurement

- EDPY 533: Program Evaluation I
- EDPY 534: Program Evaluation II
- EDPY 577: Statistics in Applied Fields I
- EDPY 677: Statistics in Applied Fields II
- One of the following: EDPY 581 (Classroom Measurement) or 583 (Survey Research.
- One of the following: EDPY 663 (Scale Construction) or 678 (Statistics in Applied Fields III).
- Individuals must be currently enrolled in a Doctoral Program at the University of Tennessee or have earned a doctoral degree from UT or another university.
- Individuals must complete all 18 credits of the courses listed above.
- Individuals must earn at least a 3.5 GPA in the certificate courses.
- All courses must be completed within the five years of applying for a certificate.

Refer to the Graduate Catalog for a description of the courses.

Contact ESM program faculty for more information and a copy of the certificate application.

DEPARTMENT OF EXERCISE, SPORT, AND LEISURE STUDIES (DEPARTMENT DROPPED)

▲ DROP EXERCISE SCIENCE MAJOR – MS – AND CONCENTRATIONS

Biomechanics/sports medicine concentration
Exercise physiology concentration

SUPPORTING INFORMATION: Rationale: Forming new major in Kinesiology. Kinesiology will be a merger of Biomechanics, Exercise Physiology and Sport Psychology/Motor Behavior.

▲ DROP RECREATION AND LEISURE STUDIES MAJOR – MS – AND CONCENTRATIONS

Recreation and leisure administration concentration
Therapeutic recreation concentration

SUPPORTING INFORMATION: Rationale: Recreation and Leisure Studies is merging with Sport Management to become Recreation and Sport Management. Dropping two low enrollment programs (Recreation and Leisure Administration and Sport Sociology) and combining two larger programs (Therapeutic Recreation and Sport Management) will create efficiencies.

▲ DROP DUAL MS-MBA PROGRAM – SPORT STUDIES MAJOR - SPORT MANAGEMENT CONCENTRATION

▲ DROP SPORT STUDIES MAJOR – MS – AND CONCENTRATIONS

Sport management concentration
Sport psychology concentration
Sport sociology concentration

▲ DROP EXERCISE AND SPORT SCIENCES MAJOR – PHD – AND CONCENTRATIONS

Exercise science concentration
Sport studies concentration

■ ADD DEPARTMENT - DEPARTMENT OF KINESIOLOGY, RECREATION, AND SPORT STUDIES (588-KRSS)

In the 2010-11 *Graduate Catalog* add introductory text for the new department:

The Department of Kinesiology, Recreation, and Sport Studies prepares scholars, practitioners, and leaders in exercise, sport, and recreation by conducting cutting-edge research and maintaining a commitment to inclusive excellence, social justice, and global initiatives.

Graduate Assistantships
A limited number of graduate assistantships are available. These assistantships are open to students in the master's and doctoral programs. Students interested in these opportunities should file their applications before February 1.

Admission
Applicants are required to complete the departmental application that can be found on our department website: http://web.utk.edu/~sals/grad/Admissons/default.html. This application is in addition to the Graduate Application for Admission, submitted to the Office of Graduate Admissions. Applications from persons who have less than a 3.0 GPA will, in general, not be considered.

The following retention policy applies to all graduate students seeking a degree in the department.

- Graduate students are required to maintain an overall 3.0 GPA.
- Any student who falls below this standard will be advised in writing by the department head of the need to discuss the matter with his/her advisor.
- If a student's overall GPA remains below 3.0 for a second semester, the student will have his/her degree status revoked.

Kinesiology Major - MS
Kinesiology is an academic discipline that involves the study of human movement, especially the role of physical activity and its impact on health, human performance, society, and quality of life. Three concentrations are offered at the master's level: (1) Exercise Physiology, (2) Biomechanics, and (3) Sport Psychology and Motor Behavior. The study of kinesiology can lead to a variety of careers in teaching, research, and delivery of services. These careers are usually related to physical activity, fitness, health promotion, rehabilitation, sports medicine, athletic training, coaching, and sport psychology consulting. Positions are found in a variety of settings including schools, colleges and universities, public and private agencies, clinical environments, government, business and the military. A description of each program along with application for each follows.

The biomechanics concentration (Master of Science) involves the study of biomechanical implications to exercise and rehabilitation. This program area focuses on the mechanism, prevention, and rehabilitation of musculoskeletal injuries. The emphases in courses taught in this area include biomechanical as well as medical considerations related to exercise and/or rehabilitation. Master's students may elect to do a 6-credit thesis, which is recommended for those intending to pursue a doctorate in the field. Graduate students work with biomechanics/sports medicine faculty to pursue research in the areas of biomechanics of lower extremity function, footwear biomechanics, core stability, flexibility, and the biomechanics of injury mechanism and prevention.

The exercise physiology concentration (Master of Science) involves the study of the acute and chronic effects of exercise on the human body. Students may elect to do internships in cardiac rehabilitation at several area hospitals and are encouraged to take the American College of Sports Medicine (ACSM) Exercise Specialist exam upon graduation. Master's students may elect to do a 6-credit thesis, which is recommended for those intending to pursue a doctorate in the field. Graduate students collaborate with an exercise physiology faculty member to perform research in the areas of physical activity assessment, metabolism, the health benefits of exercise, and body composition assessment.

The sport psychology and motor behavior concentration (Master of Science) involves the study of psychological theory relevant to the performance of sport and movement skills, systematic research of both a quantitative and qualitative nature, the application of psychological concepts to the performance and learning of physical activities in a variety of settings. Students acquire the knowledge and skills necessary to critically examine the literature in sport psychology and motor behavior, provide psychological assistance for sport performers in a variety of forms (e.g., mental training, injury rehabilitation, skill refinement, stress management, etc.), and design evidence-based approaches for teaching movement skills. The majority of graduates of the sport psychology and motor behavior master's concentration obtain positions in teaching, coaching, athletic training, and strength and conditioning when they finish their degrees. The remaining students apply for PhD programs after completing master's degree requirements and aspire to careers as faculty members at the university level.

Recreation and Sport Management Major - MS
Two concentrations are offered at the master's level in Recreation and Sport Management: Sport Management and Therapeutic Recreation. One of the primary features of the concentrations is an emphasis on the experiential education approach to academic preparation. Students graduating from this program will gain a tremendous amount of practical experience to accompany their academic degree.

The sport management concentration (Master of Science) provides the opportunity for students to have a quality academic experience and to gain professional experience as they prepare for careers in the sports industry. Students learn a combination of skills related to the planning, organizing, leading, and evaluating of any organization or department for which the primary product or service is sport related. Sport management has been a formally recognized degree program since 1983, providing students with the cutting-edge knowledge necessary for a successful career in the sport industry. The standard curriculum offers students a unique combination of course work and practicum experience in both the public and private sector. Graduates obtain positions in collegiate and other amateur sport settings, professional sports and sport business.

The therapeutic recreation concentration (Master of Science) 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. In light of the fact that many public, quasi-public and nonprofit recreation and therapeutic recreation employers are mandating professional certification as a condition of employment, obtaining certification is a must. Courses in the program prepare the student to do so. The primary purpose of certification is to ensure that personnel employed in therapeutic recreation meet high standards of performance. Practice exams and study sessions provide students with ample opportunities to successfully pass the certification examination of the National Council for Therapeutic Recreation (NCTRC).

Kinesiology and Sport Studies Major - PhD
The PhD degree with a major in Kinesiology and Sport Studies is a research-intensive degree focused on preparing individuals in the areas of kinesiology and sport studies. Specific areas of specialization are biomechanics, exercise physiology, physical activity epidemiology, socio-cultural studies, sport management, and sport psychology and motor behavior. Most individuals graduating from this program go on to careers in higher education. The program can usually be completed in 3 years (2 years of course work and 1 year for the dissertation). For more information on the PhD degree with a major in Kinesiology and Sport Studies, see our website.

▲ ADD KINESIOLOGY MAJOR – MS – AND CONCENTRATIONS

Biomechanics concentration
Exercise physiology concentration
Sport psychology and motor behavior concentration

In the 2010-11 *Graduate Catalog* add heading and requirements for new major and concentrations:

Kinesiology Major, MS
Kinesiology is an academic discipline that involves the study of human movement, especially the role of physical activity and its impact on health, human performance, society, and quality of life. Three concentrations are offered at the master's level: (1) exercise physiology, (2) biomechanics, and (3) sport psychology and motor behavior. The study of kinesiology can lead to a variety of careers in teaching, research, and delivery of services. These careers are usually related to physical activity, fitness, health promotion, rehabilitation, sports medicine, athletic training, coaching, and sport psychology consulting. Positions are found in a variety of settings including schools, colleges and universities, public and private agencies, clinical environments, government, business and the military. A description of each program along with application for each follows.

The biomechanics concentration (Master of Science) focuses on the mechanisms, prevention, and rehabilitation of musculoskeletal injuries. The primary emphasis is on biomechanical considerations related to exercise and rehabilitation. Master's students may elect to do a 6-credit thesis, which is recommended for those intending to pursue a doctorate in the field. Graduate students work with biomechanics faculty to pursue research in the areas of biomechanics of lower extremity function, footwear biomechanics, and the biomechanics of injury mechanisms and injury prevention.

The exercise physiology concentration (Master of Science) involves the study of the acute and chronic effects of exercise on the human body. Master's students may elect to do a 6-credit thesis, which is recommended for those intending to pursue a doctorate in the field. Students may elect to do internships in cardiac rehabilitation at several area hospitals and are encouraged to take the American College of Sports Medicine (ACSM) Exercise Specialist exam upon graduation. Graduate students collaborate with an exercise physiology faculty member to perform research in the areas of physical activity assessment, metabolism, the health benefits of exercise, and body composition assessment.

The sport psychology and motor behavior concentration (Master of Science) involves the study of psychological theory relevant to the performance of sport and movement skills, systematic research of both a quantitative and qualitative nature, the application of psychological concepts to the performance and learning of physical activities in a variety of settings. Students acquire the knowledge and skills necessary to critically examine the literature in sport psychology and motor behavior, provide psychological assistance for sport performers in a variety of forms (e.g., mental training, injury rehabilitation, skill refinement, stress management, etc.), and design evidence-based approaches for teaching movement skills. The majority of graduates of the sport psychology and motor behavior master's concentration obtain positions in teaching, coaching, athletic training, and strength and conditioning when they finish their degrees. The remaining students apply for PhD programs after completing master's degree requirements and aspire to careers as faculty members at the university level.

Required Courses for Biomechanics Concentration (MS)
All master's students in Biomechanics must complete the following courses during their 30-credit hour program of study:

Kinesiology KNS 508 - Research Methods in Kinesiology and Sport and Recreation Management (3)
Kinesiology KNS 513 - Biomechanics of Musculoskeletal Injury (3)
Kinesiology KNS 515 - Qualitative Analysis of Movement in Sport & Exercise (3)
Kinesiology KNS 531 - Biomechanics (3)
Kinesiology KNS 601 - Research Seminar (1) – taken two times
Kinesiology KNS 634 - Advanced Methods and Instrumentation in Biomechanics (3)
Kinesiology KNS elective - one additional 3 hour Kinesiology course

Recommended Electives:

Kinesiology KNS 500 - Thesis (6)**
Kinesiology KNS 501 - Special Project (3)
Kinesiology KNS 521 - Physical Activity Epidemiology Methods (3)
Kinesiology KNS 532 - Exercise Physiology (3)
Kinesiology KNS 533 - Psychology of Sport (3)
Kinesiology KNS 535 - Health and Exercise Psychology (3)
Kinesiology KNS 536 – Expert Performance in Sports (3)
Kinesiology KNS 545- Women, Sport, and Culture (3)
Kinesiology KNS 567 - Exercise Testing and Prescription (3)
Kinesiology KNS 569 - Clinical Exercise Physiology (3)
Kinesiology KNS 593 - Directed Independent Study (1 - 3)
Kinesiology KNS 622 - Directed Independent Research (3 - 6)
Kinesiology KNS 635 - Physical Activity and Positive Health (3)
Kinesiology KNS 662 - Seminar in Biomechanics (1-3)
Kinesiology KNS 664 - Research Participation in Exercise Science (1 - 6)
Kinesiology KNS 693 - Independent Study (1-3)
Biomedical Engineering BME 473 - Applied Biomechanics (3)
Biomedical Engineering BME 507 - Application of Linear Algebra in Engineering Systems (3)
Biomedical Engineering BME 531 - Advanced Biomechanics I (3)
Biomedical Engineering BME 631 - Advanced Biomechanics II (3)
Biomedical Engineering BME 538 - Ultrasonic Methods and Bioinstrumentation (3)
Biomedical Engineering BME 632 - Biomechanics Design (3)
Kinesiology KNS 534 - Motor Behavior and Skill Acquisition

Statistics STAT 531 - Survey of Statistical Methods I (3)
Statistics STAT 532 - Survey of Statistical Methods II (3)

**NOTE: If you select the Thesis option you must take a statistics course approved by your advisor

Required Courses Exercise Physiology Concentration (MS)
All Master's students in Exercise Physiology must complete the following courses during their 30-credit hour program of study:

Kinesiology KNS 508 - Research Methods in Kinesiology and Sport and Recreation Management (3)
Kinesiology KNS 532 - Exercise Physiology (3)
Kinesiology KNS 565 - Advanced Exercise Physiology (3)
Kinesiology KNS 567 - Exercise Testing and Prescription (3)
Kinesiology KNS 601 - Research Seminar (1) – taken two times
Kinesiology KNS 635- Physical Activity and Positive Health (3)
Kinesiology KNS elective- one additional 3 hour Kinesiology course

Recommended Electives:
Kinesiology KNS 500 - Thesis (6) **
Kinesiology KNS 501 - Special Project (3)
Kinesiology KNS 513 - Biomechanics of Musculoskeletal Injury (3)
Kinesiology KNS 515 - Qualitative Analysis of Movement in Sport & Exercise (3)
Kinesiology KNS 521 - Physical Activity Epidemiology Methods (3)
Kinesiology KNS 531 - Biomechanics (3)
Kinesiology KNS 533 - Psychology of Sport (3)
Kinesiology KNS 535 - Health and Exercise Psychology (3)
Kinesiology KNS 545- Women, Sport, and Culture (3)
Kinesiology KNS 569 - Clinical Exercise Physiology (3)*
Kinesiology KNS 570 - Cardiac Rehabilitation Practicum (1-3)*
Kinesiology KNS 593 - Directed Independent Study (1 - 3 hours, can be repeated)
Kinesiology KNS 622 - Directed Independent Research (3-6)
Kinesiology KNS 623 - Advanced Topics in Obesity (1-4 credit seminar)
Kinesiology KNS 664 - Research Participation in Exercise Science (1-6)
Kinesiology KNS 693 - Independent Study (1-3)
Nursing NURS 505 - Advanced Clinical Pharmacology (3)*
Social Work SOWK 605 - Analysis of Social Work Data 1 (3)
Social Work SOWK 606 - Analysis of Social Work Data II (3)
Statistics STAT 531 - Survey of Statistical Methods I (3)
Statistics STAT 532 - Survey of Statistical Methods II (3)

*highly recommended for students interested in cardiac rehabilitation
** NOTE: If you select the Thesis option you must take a statistics course approved by your advisor (Social Work 605 or Statistics 531 are recommended)

Required Courses for Sport Psychology and Motor Behavior Concentration (MS)

Requirements
The master's degree concentration in sport psychology and motor behavior has a great deal of flexibility that allows students to take courses that best suit their individual professional goals and interests. Students are required to take 30 hours, with at least 20 of those hours comprised of 500 or 600 level courses. A minimum of 15 hours must be selected from the following list of courses:

Kinesiology KNS 490 - Psychology of Coaching (3) (must be taken for graduate credit)
Kinesiology KNS 533 - Psychology of Sport (3)
Kinesiology KNS 534 - Motor Behavior and Skill Acquisition (3)
Kinesiology KNS 535 - Health and Exercise Psychology (3)
Kinesiology KNS 536 - Expert Performance in Sport (3)
Kinesiology KNS 538 - Professional Practice Issues in Sport Studies (3)
Kinesiology KNS 543 - Women, Sport, and Culture (3)
Kinesiology KNS 633 - Advanced Sport Psychology (3)

Additional courses may be selected from either kinesiology or other departments, with the advisor's approval. In addition, if a student takes any 400-level classes in the graduate catalog, the student must consult with the instructor regarding the additional class requirements needed to earn graduate credit. The non-thesis option, which consists of 30 hours and a written comprehensive exam, is designed for graduates seeking positions as practitioners (e.g., teachers, coaches, athletic trainers, etc.). The thesis option, which consists of 24 hours of course work and a 6-hour thesis (KNS 500), is recommended for students who intend to pursue a Ph.D. degree after graduating and is available only upon consultation with and approval by the student's advisor.

SUPPORTING INFORMATION: Rationale: Forming new major in Kinesiology. Kinesiology will be a merger of Biomechanics, Exercise Physiology and Sport Psychology/Motor Behavior.

▲ ADD RECREATION AND SPORT MANAGEMENT MAJOR – MS – AND CONCENTRATIONS

Sport management concentration
Therapeutic recreation concentration

In the 2010-11 *Graduate Catalog* add heading and requirements of new major and concentrations:

Recreation and Sport Management Major, MS
Two concentrations are offered at the master's level in Recreation and Sport Management: Sport Management and Therapeutic Recreation. One of the primary features of the concentrations is an emphasis on the experiential education approach to academic preparation. Students graduating from this program will gain practical experience to accompany their academic degree. A description of each program along with application procedures for each follows.

SPORT MANAGEMENT CONCENTRATION
The Sport Management concentration provides the opportunity for students to have a quality academic experience and to gain professional experience as they prepare for careers in the sports industry.

Application Process
A minimum overall grade point average of 3.0 on a 4.0 scale or a 3.00 GPA during the senior year of undergraduate study from an accredited university or college is required. Applicants must first be admitted to the University of Tennessee as a graduate student, and then be admitted to the Sport and Recreation Management Graduate Program, Sport Management Concentration.

Admission priority is given to applications completed by February 1. Application requirements to the Sport Management Graduate Program are as follows:

- University Application
- Department Application Form
- Transcripts
- Three (3) Rating Forms
- Resume
- Submission of GRE scores

Requirements
Sport Management Concentration (Non-Thesis Option)

	Hours Credit
Recreation and Sport Management 508, 511, 535	9
[1] Recreation and Sport Management Electives	6
[2] Sport Studies Elective	3
[3] Electives	12
Recreation and Sport Management 501 (Project)	3
Total hours 33	

Sport Management Concentration (Thesis Option)

	Hours Credit
Recreation and Sport Management 508, 511, 535	9
[1] Recreation and Sport Management Electives	6
[2]Sport Studies Elective	3
[3] Electives	9
Recreation and Sport Management 500 (Thesis)	6
Total hours 33	

[1] Recreation and Sport Management 510, 512, 515, 530, 540, 544, 550, 554, 555, 560, 570, 580.
[2] Sport Studies 504, 507, 515, 542, 543
[3] These courses can be taken within the department. A total of six (6) hours may be earned in RSM 590 or 595 combined.

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.

Application Process
Applications are reviewed prior to beginning of the fall and spring semester. Application deadline for fall admission is August 1, and application deadline for spring admission is December 1. A minimum grade point average of 3.00 on a 4.00 scale or a 3.00 GPA during the senior year from an accredited university or college is required. Applicants must first be admitted to the University of Tennessee as a graduate student, and then be admitted to the Recreation and Sport Management Graduate Program, Therapeutic Recreation concentration.

Application requirements to Therapeutic Recreation Graduate Program are as follows:

- University Application
- Department Application Form
- Transcripts
- Three (3) Rating Forms
- Resume

Professional Certification
Students enrolled in the Therapeutic Recreation concentration are urged to prepare for and take the professional certification examination offered by The National Council for Therapeutic Recreation. Many public, quasi-public and nonprofit employers are mandating professional certification as a condition of employment. Courses in the degree program prepare the student to do so. The primary purpose of certification is to ensure that personnel employed in therapeutic recreation meet high standards of performance.

Requirements
Therapeutic Recreation Concentration (Non-Thesis Option)

	Hours Credit
Recreation and Sport Management RSM 511, 515, 520, 521, 522, 525	18
[1] Recreation and Sport Management RSM 595	6
Recreation and Sport Management RSM 508	3
Electives	9
	Total hours 36

[1] Must meet national certification requirements

Therapeutic Recreation Concentration (Thesis Option)

	Hours Credit
Recreation and Sport Management RSM 511, 515, 520, 521, 522, 525	18
[1] Recreation and Sport Management RSM 595	6
Recreation and Sport Management RSM 508	3
Thesis	6
Electives	3
	Total hours 36

[1] Must meet national certification requirements

▲ ADD DUAL MS-MBA – RECREATION AND SPORT MANAGEMENT MAJOR – SPORT MANAGEMENT CONCENTRATION

The College of Education, Health, and Human Sciences and the College of Business Administration offer an integrated program leading to the conferral of the Master of Science with a major in Recreation and Sport Management (concentration in Sport Management) and the Master of Business Administration. Increasingly, sports and sports-related companies are represented by significant business enterprises. Success in these enterprises requires the application of business fundamentals, analytical techniques, and management skills within the specific context of the sports industry. The objective of the dual degree program is to train individuals in sport management and business management to integrate both sport and management and to prepare them to undertake leadership roles in this growing, dynamic, and competitive industry.

Admission
Applications are accepted for fall semester only. Applicants for the MS-MBA program must make separate applications, and be accepted by the Office of Graduate Admissions for the Master of Business Administration program and the Master of Science with a major in Recreation and Sport Management, Sport Management concentration. Students will initially apply for the MBA program, indicating on their application the intent to pursue the dual MS-MBA program. Students accepted for both the MS and MBA programs will be assigned to Dual Program Committee advisors, who will be responsible for course approval and supervision of the students' progress through the dual program. Applications by U.S. citizens and permanent residents received after the application deadline (February 1) will be considered as space allows. Additional information is required and different application dates are established by the Office of Graduate Admissions for international students.

Requirements
The MBA curriculum consists of 33 hours of common coursework in the College of Business Administration. Dual degree candidates enrolled in the sport management concentration are required to take 30 hours of graduate level Sport Management courses and internship. The dual degree candidate must satisfy the curriculum and graduation requirements of the sport management concentration and the College of Business Administration. Students withdrawing from the dual degree program before completing both degrees will not receive credit toward graduation in either degree program for courses taken in the other degree program, except as such courses qualify for credit without regard to the dual degree program. The MBA and MS will be awarded upon successful completion of the requirements of the dual program.

Dual MS-MBA Program
Curriculum Requirements

Fall – First Year	**Hours Credit**
Business Administration BUAD 512 MBA Core II	15

Includes modules below:

Session 1: 7½ Weeks
- Accounting - Financial Accounting I
- Management - Leading Complex Organizations
- Statistics - Quantitative Methods
- Marketing - Demand Management I
- Business Administration - Business Skills Development I

Session 2: 7½ Weeks
- Accounting - Managerial Accounting I
- Economics - Economics of Strategy
- Marketing – Demand Management II
- Finance - Financial Management I
- Business Administration - Business Skills Development II

Total fall credit hours	**15**

Spring – First Year

Business Administration BUAD 513 MBA Core III	15

Includes modules below:

Session 1: 7½ Weeks
- Management Science – Descriptive Modeling
- Operations and Management Science – Operations Management
- Logistics - Supply Chain Management I
- Finance – Financial Management II
- Business Administration – Business Skills Development III

Session 2: 7½ Weeks
- Business Law – Foundations of Bus. Law and Ethics
- Economics – Market Forces in the Global Environment
- Management – Competitive Strategy
- Logistics – Supply Chain Management II
- Business Administration – Innovation in Practice

Recreation and Sport Management RSM 544 –Leadership Theories	3
Total spring credit hours	**18**

Mini-Term – First Year

Business Administration BA 591 Global Business Seminar	3

Summer – First Year

Recreation and Sport Management RSM 511 – Personnel and Organization Management	3
Recreation and Sport Management RSM 535 – Ethics in Sport Management	3
Total summer credit hours	**6**

Fall – Second Year

Recreation and Sport Management RSM 508 – Research Methods	3
Sport Studies SPST 542 – Sociological Aspects of Sport	3
Recreation and Sport Management elective	3
Recreation and Sport Management or Kinesiology Electives	3
Total fall credit hours	**12**

Spring – Second Year

Recreation and Sport Management RSM 501 – Project	6
Recreation and Sport Management RSM 595 – Internship	3
Total spring credit hours	**9**

Total Hours	**63**

▲ ADD KINESIOLOGY AND SPORT STUDIES MAJOR – PHD – AND CONCENTRATIONS

Kinesiology concentration
Sport Studies concentration

In the 2010-11 *Graduate Catalog* add heading and requirements of new major and concentrations:

The PhD degree with a major in Kinesiology and Sport Studies is a research-intensive degree focused on preparing individuals in the areas of kinesiology and sport studies. Specific areas of specialization are listed below. The program can usually be completed in 3 years (2 years of course work and 1 year for the dissertation). Students must pass comprehensive exams and file admission to candidacy paperwork prior to taking dissertation hours.

Students must complete a Master's degree prior to admission into the program. The doctoral committee approves the course of study. The minimum requirements of the degree are listed below. At least 24 of these hours, exclusive of the dissertation, must be beyond the Master's level.

Requirements	**Credit Hours**
Concentration (Kinesiology or Sport Studies)	15
Research	18
Specialization (see below for options)	9
Cognate (must come from an area related to and supportive of the concentration and specialization	6
Dissertation	24

NOTE: The above are viewed as minimum requirements and are subject to modification by the student's committee.

Kinesiology Concentration
The PhD major in kinesiology and sport studies offers a concentration in kinesiology, which deals with the study of human movement. Emphasis is placed on the acquisition of skills needed for high quality research and innovative teaching. Students are expected to become proficient in research methods within their respective areas of specialization. The program prepares students for postdoctoral or faculty positions in higher education, or positions in applied sport and clinical settings and has specializations in Biomechanics, Exercise Physiology, Physical Activity Epidemiology and Sport Psychology and Motor Behavior.

Biomechanics specialization
The PhD specialization in biomechanics focuses on mechanisms, prevention, and rehabilitation of musculoskeletal injuries and diseases. Doctoral students in the biomechanics specialization receive research training under the direct supervision of a faculty member in the areas of lower extremity injury mechanisms, rehabilitation, and prevention, effects of impact loading to lower extremity joints during dynamic movements, gait mechanics following total joint replacement, gait retraining using real-time feedback, and evaluation of medical orthoses and footwear. They gain instructional experience by teaching laboratory sections of undergraduate biomechanics and anatomy courses. Students take courses in biomechanics, and supporting coursework in biomedical engineering, mechanical engineering, statistics, and/or mathematics.

Exercise Physiology specialization
The PhD specialization in exercise physiology focuses on applied human physiology, and uses a systems approach to study the acute responses to exercise and the chronic adaptations to physical training. Doctoral students in the exercise physiology specialization gain hands-on experience in research by working under the direct supervision of a faculty member in the areas of physical activity assessment, metabolism, the health benefits of exercise, and body composition assessment. They also gain experience in instruction by teaching undergraduate laboratories under the mentorship of a faculty member. The supporting coursework (i.e. cognate) can be taken in a number of areas, including Nutrition, Statistics, or Nursing.

Physical Activity Epidemiology specialization
The PhD specialization in physical activity epidemiology examines how the burden of chronic disease at the population-level can be impacted through the frequency, intensity, type and duration of physical activity. Doctoral students will receive training in physical activity assessment techniques, research designs, field-based skills, and secondary data analysis. In addition, doctoral students will have the opportunity to learn geographic information system and statistical techniques as well as design community-based interventions to promote physical activity across the lifespan.

Sport Psychology and Motor Behavior specialization
The PhD specialization in sport psychology and motor behavior emphasizes an interdisciplinary approach to course work and research as well as the development of students' proficiency in both qualitative and quantitative research methods. Students are expected to obtain a significant grounding in the allied parent disciplines. Students must have completed all requirements for a master's degree in kinesiology, physical education, psychology, sport studies, or a related field prior to beginning the doctoral program.

Sport Studies Concentration
The PhD degree with a major in kinesiology and sport studies offers a concentration in sport studies with areas of specialization in socio-cultural studies and sport management. The program stresses an interdisciplinary approach to course work and research and expects students to become proficient in qualitative and quantitative research methods. Students are expected to obtain a significant grounding in the allied, parent disciplines. The program prepares students to obtain faculty or administration positions in higher education.

Socio-Cultural Studies specialization
The PhD specialization in Socio-Cultural Studies derives its primary intellectual identity from the disciplines of history, philosophy, and sociology. The program draws upon perspectives from cultural studies, feminist theory, global studies, ethics, and other specialized forms of inquiry in critically examining all levels of competitive sport and other organized movement activities. We teach students to forge connections between theoretical considerations and potential solutions to a wide variety of real-world challenges. We are committed to the principles of diversity and social justice and to the provision of positive sport and movement experiences for all people. The majority of doctorate students pursue careers as faculty in higher education after completing their degree. However, some have obtained positions outside of academia, for example in diversity services for major corporations.

Sport Management specialization
The Sport Management doctoral specialization within Sport Studies prepares graduates for positions as faculty members in higher education. The coursework for the program is developed between the student and the faculty advisor to meet the educational goals of the student. Students have the flexibility to develop a program that allows them to focus on the area of Sport Management in which they have an interest. Doctoral students will receive training in research design and methodology and are expected to conduct research outside the requirements of the classroom. The program consists of 15 hours within the concentration, 18 hours of research courses, nine hours within the specialization and a minimum of six hours in an outside or cognate area.

MOVE AND REVISE EXERCISE PHYSIOLOGY MINOR FROM DROPPED DEPARTMENT (EXERCISE, SPORT AND LEISURE STUDIES) TO NEW DEPARTMENT: KINESIOLOGY, RECREATION, AND SPORT STUDIES

In the 2009-10 *Graduate Catalog* move and add heading and requirements of minor under new department name:

Exercise Physiology Minor
The graduate minor consists of Kinesiology KNS 532, 567, 601, and one of the following: Kinesiology KNS 521, 565, 569, 635 or other 3-credit class approved by the student's graduate committee.

DEPARTMENT OF NUTRITION

- ▲ DROP EDUCATION MAJOR – PHD – COMMUNITY HEALTH CONCENTRATION
- ▲ DROP CERTIFICATE – APPLIED EPIDEMIOLOGY
- ▲ DROP CERTIFICATE – PUBLIC HEALTH LEADERSHIP

MOVE PUBLIC HEALTH MAJOR – (MPH) – AND CONCENTRATIONS FROM THE DEPARTMENT OF NUTRITION TO NEW DEPARTMENT (DEPARTMENT OF PUBLIC HEALTH)

Public Health – MPH
- Community health education concentration
- Health planning/administration concentration
- Veterinary public health concentration

- ▲ DROP NUTRITION MAJOR – MS – NUTRITION SCIENCE CONCENTRATION
- ▲ ADD NUTRITION MAJOR – MS – CELLULAR AND MOLECULAR NUTRITION CONCENTRATION

MOVE EPIDEMIOLOGY MINOR (ADDED IN APRIL 2009) FROM THE DEPARTMENT OF NUTRITION TO NEW DEPARTMENT: DEPARTMENT OF PUBLIC HEALTH

REVISE DEPARTMENTAL INTRODUCTORY PARAGRAPH
In the 2009-2010 *Graduate Catalog* remove current introductory paragraph and replace with the following:

The Master of Science program is available with a major in nutrition and concentrations in cellular and molecular nutrition or public health nutrition. A graduate degree combined with a Dietetic Internship (DI) beyond the baccalaureate degree qualifies the graduate to apply for the Registration Examination to become a Registered Dietitian (RD). Students may learn more from the department about the Dietetic Internship from the departmental website. The Dietetic Internship is currently granted accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association; 120 South Riverside Plaza; Chicago, Illinois 60606-6995; telephone (312) 899-0040. Students may also select from related minors including exercise physiology or interdisciplinary minor programs in gerontology, statistics, or epidemiology.

Admission
A complete file for review includes the Graduate Application for Admission, completed departmental application form, Graduate Record Examination (GRE) scores for the general section, and three Graduate Rating Forms completed by individuals who can attest to the applicant's potential for graduate education. Forms may be obtained from the department's website or the departmental office at 229 Jessie Harris Building, The University of Tennessee, Knoxville, 37996-1920. Application due dates can be found on the department's website. Admission into the graduate program in the department is dependent on completion of undergraduate courses that give the necessary background for success in the graduate program. Required undergraduate courses include general and organic chemistry, physiological chemistry/biochemistry, physiology, statistics and advanced nutrition. Applicants to all programs with related research interests and experience will be given preference.

REVISE REQUIREMENTS – NUTRITION MAJOR – MS

In the 2009-2010 *Graduate Catalog*, remove current text and replace with the following:

Nutrition Major, MS

Requirements
Students may choose a thesis or non-thesis (public health nutrition only) option in nutrition.

Thesis Option
The program consists of a minimum of 33 hours with at least 20 hours of coursework in the department.
Cellular and molecular nutrition students must take NUTR 412 or 505, NUTR 511, NUTR 512, NTR 543 and 544, 3 hours of graduate-level statistics, Life Sciences 520, two courses selected from CEM 609, BCMB 540, or Animal Science 556, and 6-7 additional hours in NUTR or in a cognate area outside the department.
Public health nutrition students must take NUTR 505, NUTR 506, NUTR 509, NUTR 511, NUTR 512, NUTR 515, NUTR 516, NUTR 522, NUTR 543 and 544, and PUBH 520, PUBH 530, PUBH 540.
6 hours of Thesis NUTR 500
A minimum of 22 hours at the 500- or 600-level is required.
An oral comprehensive examination is required upon completion of the thesis.

Non-Thesis Option
The program consists of a minimum of 50 hours with at least 38 hours of coursework in the department.
The non-thesis option is not available within the cellular and molecular nutrition concentration.
Public health nutrition students must take NUTR 505, NUTR 506, NUTR 509, NUTR 511, NUTR 512, NUTR 515, NUTR 516, NUTR 519, NUTR 522, NUTR 543 and 544, and PUBH 520, PUBH 530, PUBH 540.
6 hours in one area outside the department are required.
A minimum of 24 hours at the 500- and 600-level is required.
A written comprehensive examination is required for completion of the program.

REVISE REQUIREMENTS – NUTRITIONAL SCIENCES MAJOR – PHD

In the 2009-2010 *Graduate Catalog*, remove current text and replace with the following:

Nutritional Sciences Major, PhD
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. A minimum of 24 hours of graduate course work (graded A-F) beyond the master's degree is required.

Requirements
- 16 hours in nutrition; these must include NUTR 412 or 505, NUTR 511, NUTR 512, NUTR 543 and 544.
- 9 hours at the 600 level (exclusive of dissertation); at least 4 of these hours must be in nutrition.

REVISE DUAL MS-MPH PROGRAM - NUTRITION

In the 2009-2010 *Graduate Catalog*, remove current text and replace with the following:

Dual MS-MPH Program – Nutrition
The College of Education, Health, and Human Sciences offers a coordinated dual program leading to the conferral of both the Master of Science with a major in nutrition (public health nutrition concentration) and the Master of Public Health. The dual program allows students to complete both degrees in less time than would be required to earn both degrees independently.

The program is designed to meet the needs of students who are interested in the benefits of majors in both nutrition and public health. Therefore, it accommodates the interests of students who

- Plan a career in public health nutrition and want to acquire the knowledge and skills of the nutritionist and public health professional.
- Plan a career in nutrition and want to acquire the knowledge, skills and perspective of the public health professional.
- Plan a career in public health and want to acquire the knowledge, skills and perspective of the nutritionist.

Admission
Applicants for the MS-MPH program must make separate applications to and be accepted by the Department of Nutrition for the MS, and the Department of Public Health for the MPH, and also the Public Health Academic Program Committee.

Students who have been accepted for both degree programs may apply for approval to pursue the dual program any time prior to, or after, matriculation.

Requirements
A dual degree candidate must satisfy the requirements for both the Master of Science degree (public health nutrition concentration) and the Master of Public Health degree, as well as the requirements for the dual program. All candidates for the dual degree must successfully complete PUBH 555; 2 hours (1 hour each) of PUBH 509 and NUTR 509; and a minimum of 60 hours. A maximum of 9 hours of credit toward the Master of Science degree will be awarded for successful completion of approved graduate-level public health courses.

For non-thesis Master of Science students, a maximum of 14 hours of credit for successful completion of graduate-level nutrition courses will be awarded toward the MPH. For thesis Master of Science students, a maximum of 16 hours of credit for successful completion of approved graduate-level nutrition courses will be awarded toward the MPH.
All courses for which such cross-credit is awarded must be approved by the Public Health Academic Program Committee and the student's graduate committee. A single block field experience (or public health internship) is required of all students. For non-thesis MS students the analytical field paper that incorporates public health nutrition and the student's public health concentration is required.

Approved Dual Credit
For thesis students MS courses to be counted toward the MPH program must include 9 hours of NUTR 515, 1 hour of NUTR 509, a maximum of ~~4 hours~~ 3 hours of NUTR 543 and 544, and 3 hours of NUTR 516. For non-thesis students MS courses to be counted toward the MPH program must include a maximum of 10 hours of NUTR 515 and 519, 1 hour of NUTR 509, and 3 hours of NUTR 516. For thesis and non-thesis students MPH courses to be counted toward the MS include PUBH 520, PUBH 530 and PUBH 540.

■ ADD NEW DEPARTMENT - DEPARTMENT OF PUBLIC HEALTH

In the 2010-11 *Graduate Catalog* add introductory text for the new department:

The Department of Public Health is committed to providing high quality academic preparation for students to become effective public health professionals, scholars and teachers, and public health advocates in various health-related fields. The discipline of public health is rooted in the basic science of epidemiology, and integrates behavioral, social, and organizational sciences in a socio-ecological model whose ultimate aim is to improve the health of populations. The internal ethic of public health is a commitment to social justice and the elimination of health inequities between and among populations or population sub-groups.

▲ ADD PUBLIC HEALTH MAJOR – MPH – AND CONCENTRATIONS

Community Health Education concentration
Health Planning/Administration concentration
Veterinary Public Health concentration

In the 2010-11 *Graduate Catalog* add heading and requirements of new major and concentrations:

Public Health Major, MPH
The MPH is a non-thesis program requiring completion of 42 hours of course work including nine weeks of field practice. The field internship provides a full-time experience with an affiliated health agency or organization offering one or more health programs. Of importance, field practice allows the student to apply academic theories, concepts, and skills in an actual work setting.
Graduate study with a major in public health leads to the Master of Public Health (MPH). Three professional preparation concentrations are available – community health education, health planning/administration, and veterinary public health. Preparation for professional practice in improving community health emphasizes a population perspective, service-learning and application opportunities through rigorous internships.

Requirements:

	Hours Credit
[1] Public Health Foundations	20
[2] Concentrations of Study (Community Health Education, Health Planning/ Administration or Veterinary Public Health	10
[3] Electives	6
[4] Internship	6
	Total Hours 42

[1] Public Health foundation courses: Public Health 509 (2 hrs), 510, 520, 530, 537, 540, 555.
[2] Community Health Education: Public Health 536, 550, 552
Health Planning and Administration: Public Health 521, 525, 527
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 the MPH program office.
[4] Internship: Public Health 587, 588. 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 course work to overcome background deficiencies.

THE UNIVERSITY OF TENNESSEE

College of Education, Health and Human Sciences
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September 10, 2009

MEMORANDUM

TO: Dr. Susan Martin, Provost and Vice Chancellor for Academic Affairs
The University of Tennessee

FROM: Dr. Bob Rider, Dean
College of Education, Health, and Human Sciences

RE: Approval to Establish Department of Public Health

As a follow-up to our earlier conversation and as a prerequisite to placing curricular materials before the undergraduate and graduate councils for entry into academic catalogues, I am writing to request your approval to establish the Department of Public Health. As discussed previously, the creation of the Department of Public Health is the next step in advancing the strategic plan that is intended to conclude with the establishment of a School of Public Health. This step is also in accord with the budgetary priorities proposed by President Simek.

Finally, it is important to note that the creation of a Department of Public Health is revenue neutral, as all faculty positions, including the likely head, programs, and facilities are in place. Please let me know if additional information is needed.

Approved: _____
Dr. Susan Martin, Provost and Vice Chancellor for Academic Affairs

Enhancing Quality of Life through Research, Outreach and Practice

▲ ADD DUAL MS-MPH PROGRAM – PUBLIC HEALTH

In the 2010-2011 *Graduate Catalog*, add heading and text for dual program:

Dual MS-MPH Program – Public Health
Also offered is a coordinated dual program leading to the conferral of both the Master of Science with a major in nutrition (public health nutrition concentration) and the Master of Public Health. The dual program allows students to complete both degrees in less time than would be required to earn both degrees independently.

The program is designed to meet the needs of students who are interested in the benefits of majors in both nutrition and public health. Therefore, it accommodates the interests of students who:

- plan a career in public health nutrition and want to acquire the knowledge and skills of the nutritionist and public health professional;
- plan a career in nutrition and want to acquire the knowledge and skills and the perspective of the public health professional;
- plan a career in public health and want to acquire the knowledge, skills and perspective of the nutritionist.

Admission
Applicants for the MS-MPH program must make separate applications to and be accepted by the Department of Nutrition for the MS, and the Department of Public Health for the MPH, and also the Public Health Academic Program Committee. Students who have been accepted by both departments may apply for approval to pursue the dual program any time prior to, or after, matriculation in either or both departments. Such approval will be granted, provided that dual program studies are started prior to entry into the fourth semester of the MS and MPH programs.

Requirements
A dual-degree candidate must satisfy the requirements for both the MS (public health nutrition concentration) and the MPH degrees, as well as the requirements for the dual program. All candidates for the dual degree must successfully complete Public Health 555; Public Health 509 (2 hours); and a minimum of 60 hours. The Department of Nutrition will award a maximum of 9 hours of credit toward the MS for successful completion of approved graduate level courses offered in the Department of Public Health. The Department of Public Health will award a maximum of 11 hours of credit toward the MPH for successful completion of approved courses offered in the Department of Nutrition. All courses for which such cross-credit is awarded must be approved by the Public Health Academic Program Committee and the student's graduate committee. A single block field experience (or public health internship) is required of all students and the analytical field paper incorporates public health nutrition and the student's public health concentration.

Dual-degree students who withdraw from the program before completion of the requirements for both degrees will not receive credit towards the MS or MPH for courses taken in the other program, except as such courses qualify for credit without regard to the dual program.

Approved Dual Credit
For thesis students MS courses to be counted toward the MPH program must include 9 hours of NUTR 515, 1 hour of NUTR 509 , a maximum of 3 hours of NUTR 543 and 544, and 3 hours of NUTR 516. For non-thesis students MS courses to be counted toward the MPH program must include a maximum of 10 hours of NUTR 515 and 519, 1 hour of NUTR 509 , and 3 hours of NUTR 516. For thesis and non-thesis students MPH courses to be counted toward the MS include PUBH 520 , PUBH 530 and PUBH 540 .

▲ ADD EDUCATION MAJOR – PHD – AND CONCENTRATION

Health behavior and health education concentration

In the 2010-11 *Graduate Catalog* add heading and requirements:

Education Major, PhD - Health Behavior and Health Education Concentration
The Health Behavior and Health Education (HBHE) concentration integrates the behavioral and natural sciences with public health, through a focus on community health – including community health education and health promotion - to prepare scholars with an interest in improving the health of the nation.

Requirements:	**Hours Credit**
[1] Research and Foundations	20
[2] Health Behavior and Health Education Major	29
[3] Electives	5
[4] Cognate	6
Dissertation (Public Health 600)	24
	Total Hours 84

[1] Public Health 509 (2 semesters) 510, 520, 530, 540, 555, and 537 or equivalent courses if taken outside of the University of Tennessee, approved by the Department Head.
[2] Public Health 550, 536, 552, 636, 637, 609 (4 semesters); STATS 531 and STATS 532 OR STATS 537 and STATS 538.
[3] Must have prior approval of Dissertation Committee Chair
[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.

MOVE EPIDEMIOLOGY MINOR (ADDED IN APRIL 2009) FROM THE DEPARTMENT OF NUTRITION TO NEW DEPARTMENT (DEPARTMENT OF PUBLIC HEALTH)

DEPARTMENT OF RETAIL, HOSPITALITY, AND TOURISM MANAGEMENT

- DROP CONCENTRATIONS – RETAIL, HOSPITALITY, AND TOURISM MANAGEMENT MAJOR – PHD

  Hospitality and tourism management concentration
  Retail and consumer sciences concentration

▲ DROP GRADUATE CERTIFICATES

  Services management
  Tourism development

REVISE REQUIREMENTS – RETAIL, HOSPITALITY, AND TOURISM MANAGEMENT MAJOR – PHD

In the 2009-2010 *Graduate Catalog*, remove current text and replace with the following:

Retail, Hospitality, and Tourism Management Major, PhD

	Hours Credit
[1] Required Courses	12
[2] Research Methods	6
[3] Statistics	12
[4] Cognate Area	9
[5] Instructional Methods	3
Electives	20
Dissertation	24
Total hours	**86**

[1] Retail, Hospitality, and Tourism Management 614, 615, 625, 641.
[2] Retail, Hospitality, and Tourism Management 590, 616.
[3] STAT 537 or 571 or Psychology 521 or Social Work 605, STAT 579 and elective or
3a STAT 538 or 572 or Psychology 522 or Social Work 606, STAT 579 and 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

SUPPORTING INFORMATION: Rationale: Due to budget restraints we have dropped all Master's degree programs and Certificate programs from our department curriculum. We eliminated both HTM and RCS concentrations. We now have one concentration combined to make up the Retail, Hospitality, and Tourism Management PhD program.

DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

- ADD CONCENTRATION – TEACHER EDUCATION MAJOR – EDS

  Educational Technology

REVISE REQUIREMENTS – TEACHER EDUCATION MAJOR – EDS

In the 2009-2010 *Graduate Catalog*, remove current text and replace with the following:

Teacher Education Major, EdS
The department offers a Specialist in Education degree with a major in teacher education. This degree is designed for those students who already possess a master's degree in education. Exceptions may be made only by the faculty of the program to which the student is applying. The Specialist in Education with a major in teacher education encompasses concentrations in educational technology; elementary education; English education; foreign language/ESL education; mathematics education; reading education; science education; social science education; and special education.

These concentrations require completion of a minimum of 30 hours of coursework beyond the master's, including 6 hours in core courses, 18 hours in specialized courses, and 6 hours to be determined by the student's committee. Both thesis and non-thesis options are available.

Admission
Candidates must complete both university and departmental applications, including the Office of Graduate Admissions' application and the EdS teacher education application from the department. A graduate GPA of 3.20 or higher, documentation of teaching or related experience, and three rating forms with recommendations that assess a candidate's strengths, weaknesses, leadership, and scholarly potential are required. Some concentrations have specific application deadlines while others have a rolling admissions policy. Some concentrations require a minimum of three years of teaching or related experience.

In addition, some concentrations have additional requirements such as writing samples, work samples, or interviews. The departmental EdS application, rating forms, specific program deadlines, and other requirements are available from the department.

Requirements
The total EdS program involves a minimum of four semesters of study with no fewer than 60 hours of graduate credit beyond the baccalaureate, including research/thesis hours. Education courses at the 400-level required for licensure are not eligible. At least 2/3 of the semester hours accumulated in the master's and all of the last 30 hours of coursework must be in 500- or 600-level courses. The EdS thesis must be approved by the student's committee prior to submission to the Graduate School for final approval and acceptance. The student must register for thesis hours during this time.

	Hours Credit
[1] Core Area	6
[2] Concentration Specialty Area	12
[3] Research	6
[4] Related Studies	6
Total (Thesis and Non-Thesis)	**30**

[1] Must include one course from two of the following areas outside the concentration – curriculum or leadership; anthropological, historical, philosophical or social foundations; human growth and development; preK-4 teaching methodology; instructional technology or assessment.
[2] Selected by committee.
[3] Theory and Practice in Teacher Education 503, 518 or 500 (thesis).
[4] Must be related to focus of degree and must be outside specialty area education program, e.g., English, reading, speech, drama, communication, educational technology, math, science, social sciences.

REVISE REQUIREMENTS – TEACHER EDUCATION MAJOR – MS – SPECIAL EDUCATION CONCENTRATION

In the 2009-2010 *Graduate Catalog*, revise the special education concentration, track 1, footnote 1 as follows:

Special Education Concentration • Track 1
Thesis Option

	Hours Credit
[1] Core	9
[2] Concentration	15
TPTE 500 (Thesis)	6
	[3] **Total 30**

[1] SPED 587; SPED 586 or EDUC PSYCH 505, SPED 590; SPED 553.
[2] Select (with major advisor) from affective motivational disorder (6-9); general special education (6-9); elementary education (6-9); reading education (6-9); cognitive education (6-9); gifted education (6-9); modified programs (6-12); comprehensive programs (6-12). Others by committee approval.

Non-Thesis Option

	Hours Credit
[1] Core	9
[2] Concentration	27
	[3] Total 36

[1] SPED 587; SPED 586 or EDUC PSYCH 505, SPED 590; SPED 553.
[2] Select (with major advisor) from affective motivational disorder (6-9); general special education (6-9); elementary education (6-9); reading education (6-9); cognitive education (6-9); gifted education (6-9); modified programs (6-12); comprehensive programs (6-12). Others by committee approval.
[3] Problem courses in lieu of thesis (30 hours); additional problem courses (6 hours); oral exams over problems courses.

REVISE REQUIREMENTS – TEACHER EDUCATION MAJOR – MS – TRACK 2: INITIAL LICENSURE PROGRAMS

In the 2009-2010 *Graduate Catalog*, revise text under the heading: Track 2 Common Course Requirements as follows:

Track 2 Common Course Requirements
Master's Track 2 programs are 36-hour (non-thesis); 42-hour (thesis). Students, regardless of teaching area (e.g., elementary, secondary, etc.), complete a common teacher licensure core of 24 hours during the professional year (see below).

REVISE REQUIREMENTS – TEACHER EDUCATION MAJOR – MS – TRACK 2: INITIAL LICENSURE PROGRAMS

In the 2009-2010 *Graduate Catalog*, revise the text under the heading: Middle Grades Teaching as follows:

Middle Grades Teaching
Theory and Practice in Teacher Education 517; Reading Education 543; 6 hours of electives (see faculty advisor).

REVISE REQUIREMENTS – TEACHER EDUCATION MAJOR – MS – TRACK 2: INITIAL LICENSURE PROGRAMS

In the 2009-2010 *Graduate Catalog*, revise text under the heading: Modified and Early Childhood Special Education as follows:

Modified and Comprehensive Special Education
SPED 553, SPED 590; 6 hours of electives (see advisor).

REVISE COLLEGE SECTION OF THE CATALOG

In the 2009-2010 *Graduate Catalog*, remove the current introductory college section and replace with the following:

The College of Education, Health, and Human Sciences was created in 2002 through a merger of the former College of Education and the former College of Human Ecology. The merger of these two colleges, both with rich histories and exemplary records of achievement, resulted from a recognition of complementary institutional missions and a belief that the two colleges, as one, would become more effective in dealing with the complex challenges facing families, schools, and communities in the 21st century.

The work of those associated with the College of Education, Health and Human Sciences is focused on enhancing the quality of human life through research, outreach, and practice. To facilitate this work the College is subdivided into the following academic departments: Child and Family Studies; Educational Leadership and Policy Studies; Educational Psychology and Counseling; Exercise, Sport, and Leisure Studies; Nutrition; Retail, Hospitality, and Tourism Management; Theory and Practice in Teacher Education Teacher Education.

Accreditation
The Teacher Education Program at the University of Tennessee is accredited by the National Council for Accreditation of Teacher Education (NCATE), www.ncate.org. This accreditation covers the initial teacher preparation programs and advanced educator preparation programs.

The College of Education, Health, and Human Sciences holds accreditation with the American Association of Family and Consumer Sciences. Among its accredited academic programs are the following – Counselor Education, Mental Health Counseling and School Counseling by the Council for Accreditation of Counseling and Related Educational Programs; Education of the Deaf and Hard of Hearing by the Council on Education of the Deaf; Rehabilitation Counseling by the Council on Rehabilitation Education; School Psychology by the American Psychological Association and the National Association of School Psychologists; Public Health by the Council on Education for Public Health; Sport Management (Graduate Level) by the NASSM/NASPE Sport Management Program Review Council; Dietetics by the American Dietetics Association; Recreation and Leisure Studies by the National Recreation and Park Association/American Association for Leisure and Recreation.

Funded Projects
Facilities for research and service include the Academic Enrichment Program, the Affymetrix MicroArray Core Facility, the Appalachian Collaborative Center for Learning, the Assessment and Instruction in Mathematics, the Appalachian Rural Systemic Initiative, the Center on Deafness, the Center on Disability and Employment; the Center for Literacy Studies, the Center for Physical Activity and Health, the Early Learning Center for Research and Practice, the Cornerstone, the Educational Interpreting Program, the Educational Opportunity Center, the Family Life Project, the Gerber Grant Project, Gradkids, the High School Equivalency Program, the Institute for Assessment and Evaluation, the Instructional Services Center, the Korn Learning, Assessment, and Social Skills Center, the Least Restrictive Environment for Life Project, the Math and Science Regional Center, the Nutrition Institute, the Orientation to Deafness Program, the Pre-College Upward Bound Program, Project Impact, Project Wave, the Reading Center, the Rehabilitation Counseling in Deafness Program, the Rehabilitation Counseling Program, the Small Animal Research Lab, the Southeastern Regional Interpreter Training Consortium, the Talent Search Program, the Technology Enhanced Curriculum Lab, the Tennessee's Early Intervention System, the THEC Minority Teacher Education Project, the Center for Higher Education, Research & Policy, the Tourism Institute, the UT-TIE, the Urban Impact Project, and the Veterans' Pre-College Program.

Graduate Programs of Study
Graduate study in the College of Education, Health, and Human Sciences prepares students for teaching, research, and public service in schools, colleges, universities, and agencies or managerial positions in government, business, and industry. The college offers graduate programs leading to completion of the following degrees: Master of Science, Master of Public Health, Specialist in Education, and Doctor of Philosophy.

Teacher Education
Post-baccalaureate students who desire to become teachers (i.e., Pre-Kindergarten-Grade 12) must make application to the College of Education, Health, and Human Sciences' Teacher Education Program and complete the equivalent of an undergraduate minor in education before enrolling in required graduate courses. Information on admission to teacher education and prerequisite undergraduate courses is available through the *Undergraduate Catalog*, the college's Student Services Center (Jane and David Bailey Education Complex A332) or at http://cehhs.utk.edu/main.html.

Title II, HEA Compliance Report
Per requirements of Title II of the Higher Education Act, the College of Education, Health, and Human Sciences reports the following pass rates on State required licensure tests for the 2007-2008 Academic Year – the University of Tennessee 98%; State of Tennessee 98%.

COLLEGE OF ENGINEERING

All changes effective Fall 2010.

I. COURSE CHANGES

DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING

(223) Chemical and Biomolecular Engineering

ADD

511 Chemical and Biomolecular Engineering Journal Club (1) Readings and discussion based on current literature.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 10 hours.
Credit Restriction: A maximum of 6 hours can be applied toward a graduate degree in Chemical and Biomolecular Engineering.
Comment(s): Graduate standing in Chemical and Biomolecular Engineering.
Registration Permission: Consent of instructor.
Instruction/Delivery Mode: SEM/CV.

579 Advanced Biomolecular Engineering (3) Applications of engineering approaches and analysis to molecular and cellular biological sciences.

ADD AND CROSS-LIST PRIMARY COURSE(S)

503 STAIRWISE: STAIR Weekly Integrative Strategic Exercises (1) Seminar and Journal Club for sustainable technologies STAIR (Sustainable Technology through Advanced Interdisciplinary Research) program requirement. *(Same as Biochemistry and Cellular and Molecular Biology 503).*
Grading Restriction: Satisfactory/No Credit Grading only.
Repeatability: May be repeated. Maximum 10 hours.
Credit Restriction: A maximum of 6 hours combined between 501 and 503 can be applied toward a graduate degree in Chemical and Biomolecular Engineering.
Comment(s): Open to all graduate students in the STAIR Program Departments (Biochemistry and Cellular and Molecular Biology, Chemistry, Chemical and Biomolecular Engineering, Civil and Environmental Engineering, and Materials Science and Engineering).

571 STAIRMaster I: Fundamentals of Sustainable Technology (3) Module-based, interdisciplinary course incorporating fundamental concepts in biological, chemical, materials science, and engineering disciplines required for the development and analysis of sustainable technologies, emphasizing applications to energy technologies. This course also addresses the social and political challenges necessary to implement these technologies. STAIR (Sustainable Technology through Advanced Interdisciplinary Research) program requirement. *(Same as Biochemistry and Cellular and Molecular Biology 571).*
Comment(s): Graduate standing in Biochemistry and Cellular and Molecular Biology, Chemistry, Chemical and Biomolecular Engineering, Civil and Environmental Engineering, and Materials Science and Engineering.
Registration Permission: Consent of instructor.

572 STAIRCase I: Sustainable Technology Case Studies (2) Interdisciplinary course serving as a training platform for development of team efforts in the solution of energy and manufacturing challenges. Case studies focusing on analysis of sustainable technologies, emphasizing applications to energy technologies. STAIR (Sustainable Technology through Advanced Interdisciplinary Research) program requirement. *(Same as Biochemistry and Cellular and Molecular Biology 572).*
(DE) Prerequisite: 571.
Comment(s): Graduate standing in Biochemistry and Cellular and Molecular Biology, Chemistry, Chemical and Biomolecular Engineering, Civil and Environmental Engineering, and Materials Science and Engineering.
Registration Permission: Consent of instructor.

673 STAIRWISE: STAIR Weekly Integrative Strategic Exercises (2) Seminars dealing with current sustainable technology advances in biological, chemical, material science and engineering disciplines. Topics posted in advance. STAIR (Sustainable Technology through Advanced Interdisciplinary Research) program requirement. May be taken instead of 503 STAIRWISE. *(Same as Biochemistry and Cellular and Molecular Biology 673).*
Repeatability: May be repeated. Maximum 6 hours.
Credit Restriction: Maximum 4 hours may be applied toward major.
Comment(s): Open to all graduate students in the STAIR Program Departments (Biochemistry and Cellular and Molecular Biology, Chemistry, Chemical and Biomolecular Engineering, Civil and Environmental Engineering, and Materials Science and Engineering).

REVISE TO ADD CREDIT RESTRICTION

501 Graduate Seminar (1)
Credit Restriction: A maximum of 6 hours combined between 501 and 503 can be applied toward a graduate degree in Chemical and Biomolecular Engineering.

REVISE TITLE, DESCRIPTION AND PREREQUISITE AND ADD SECONDARY CROSS-LISTED COURSE

652 STAIRCase II: Case Study for 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. Interdisciplinary course. STAIR (Sustainable Technology through Advanced Disciplinary Research) program requirement. (*Same as Biochemistry and Cellular and Molecular Biology 652).*
(DE) Prerequisite(s): 572.

REVISE TITLE AND (DE)PREREQUISITE

671 Applications of Advanced Biomolecular Engineering (3)
(DE) Prerequisite: 579.

REVISE TO DROP PREREQUISITE, ADD REGISTRATION PERMISSION, REVISE RECOMMENDED BACKGROUND

672 Computational Bioinformatics (3)
Recommended Background: Programming skills, and linear algebra.
Registration Permission: Graduate standing.

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

(344) Environmental Engineering

ADD

526 Ecological Engineering for Stream Rehabilitation (3) Course introduces the design concept and selected topics used in ecological engineering. Topics include environmental flows, fluvial geomorphology, stream ecology and lotic habitat, indicators for biotic stress, and biomonitoring/bioassessment. Concepts are discussed within the context of an ecohydraulic, habitat-based approach for stream restoration/rehabilitation design.
Registration Permission: Consent of instructor.

DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

(266) Computer Science

ADD

526 Introduction to Data Mining (3) A comprehensive introduction to the field of data mining. Topics covered include data preprocessing, predictive modeling (e.g., decision trees, SVM, Bayes, K-nearest neighbors, bagging, boosting), model evaluation techniques, clustering (hierarchical, partitional, density-based), classification, association analysis, and anomaly detection. Case studies from text mining, electronic commerce, social science, and bioinformatics are covered. All programming projects are student-designed (no standard packages permitted).
Recommended Background: Programming proficiency in languages such as C, C++, or Java. Knowledge of scripting languages such as Perl or Python is very beneficial.

527 Biologically-Inspired Computation (3) Recent developments in computational methods inspired by nature, such as neural networks, genetic algorithms, evolutionary programming, ant-swarm optimization, artificial immune systems, swarm intelligence, cellular automata, multi-agent systems, cooperation, and competition.

528 Introduction to Machine Learning (3) Theoretical and practical aspects of machine learning techniques that enable computer systems to learn from experience. Methods studied include concept learning, decision tree learning, neural networks, Bayesian learning, instance-based learning, genetic algorithms, rule learning, analytical learning, and reinforcement learning.
Recommended Background: 302, 311, Mathematics 251; and Mathematics 323, or Electrical and Computer Engineering 313.

529 Autonomous Mobile Robots (3) Introduction to key artificial intelligence issues involved in the development of intelligent robotics. Methods studied include locomotion, navigation, sensing, localization, mapping, exploration, path planning, robot learning, uncertainty, and multi-robot systems.
Recommended Background: 302, 311, Mathematics 251; and Mathematics 323, or Electrical and Computer Engineering 313.

554 Markov Chains in Computer Science (3) Theoretical and computational aspects of finite-state Markov chains in computer science. Applications including analysis of algorithms, computer and network system models, and performance evaluation. Probability relevant to discrete-state stochastic processes. Discrete- and continuous-parameter Markov chains. Small scale programming assignments to compute basic properties. Introduction to variable-length memory chains, infinite-state chains, and multitype branching processes.
Recommended Background 311 and 380.

556 Computer Graphics (3) Digital image synthesis, geometric modeling and animation. Topics may include visual perception, displays and color spaces, frame buffers, affine transformations, data structures for geometrical primitives, visible surface determination, shading and texturing, anti-aliasing, computing light transport, rendering equation, shader programming, general purpose GPU programming, level of detail, curves and surfaces, and graphics hardware.
Recommended Background: 302.

557 Visualization (3) Graphical techniques to reveal intrinsic properties in data, acquired or computationally-simulated, from various scientific, medical and engineering applications. Topics may include visual perception, structure and storage of high-dimensional data (structured and unstructured), visualization of scalar fields, vector fields, tensor fields, or other complex quantities, time-varying data, advanced light transport (single-scattering and multiple-scattering), transfer functions, graphs and manifolds, level sets, interpolation, hierarchical and parallel acceleration methods. The design and use of leading production visualization packages will also be covered.
Recommended Background: 556.

565 Survey of Programming Languages (3) Survey of different programming paradigms and their application to real-world applications. Topics may include scripting languages, event-based languages, functional languages, logic-based languages, and other cutting-edge language paradigms.
Recommended Background: 302.

567 Graphical User Interfaces (3) Design and implementation of graphical user interfaces. Topics may include design principles for effective human-computer interaction, and algorithms for dialog management, output rendering, and animation.
Recommended Background: 360 and 365.

DROP

551 Pattern Analysis (3)

REVISE TITLE

525 Engineering Dependable Software (3)

REVISE DESCRIPTION

530 Computer Systems Organization (3) An exploration of the central issues in computer architecture: instruction set principles and design, memory hierarchies (cache and main memories, mass storage, virtual memory) and design, pipelining, instruction-level parallelism, bus organization, RISC (Reduced Instruction Set Computers), CISC (Complex Instruction Set Computers), multiprocessors, implementation issues, technology trends, architecture modeling and simulation.

(319) Electrical and Computer Engineering

ADD

546 Advanced Antenna Arrays (3) An extensive presentation of the basic properties and recent advances of microstrip antennas. Analysis and design of reflector antennas. Analysis and synthesis of linear and planar antenna arrays, followed by an introduction to phased array antennas.

621 Computational Methods for Power System Analysis (3) LU factorization, sparse matrix techniques, advanced power flow solutions using Newton-Raphson and fast decoupled methods, continuation power flow, three-phase power flow, power system state estimation, numerical integration and its application to power system transient stability, eigenvalue analysis and its application to voltage stability.
(DE) Prerequisite(s): 521.
Comment(s): Prior knowledge may satisfy prerequisite with consent of instructor.

622 Power System Economics (3) Organization of electricity markets, participating in electricity markets from producers' and the consumers' perspectives, ancillary services, transmission investment, and generation investment, mathematical optimization and its application to optimal power flow, locational marginal pricing, transmission congestion management, forward markets.
(DE) Prerequisites: 521.
Comment(s): Prior knowledge may satisfy prerequisite with consent of instructor.

641 Electromagnetics II (3) Advanced methods are introduced starting with Physical Optics (PO) and continuing with Geometric Optics (GO), Geometrical Theory of Diffraction (GTD), Method of Equivalent Currents (MEC) and Physical Theory of Diffraction (PTD), Radar Cross Section (RCS), Radiation and Scattering from Complex Structures.

645 Phased Array Antennas (3) Extensive presentation of phased array analysis based on Floquet model expansion. It includes a pattern analysis and synthesis, Floquet mode analysis of infinite arrays, mutual coupling effects in a finite array, arrays of waveguides and waveguide horns and a generalized scattering matrix analysis will be utilized in detail.

655 Power-Aware Computing (3) Introduces the principles and methods of power-aware design for both deeply embedded systems and computer servers. Topics include program optimization; power management at various levels such as operating system, middleware, compiler, and computer architecture; power-aware real-time scheduling; power control for computer servers, server clusters and large-scale datacenters; server virtualization and consolidation for power efficiency; power-efficient MAC and routing protocols in wireless sensor and ad hoc networks.

DROP

557 Computer Architecture and Design (3)

REVISE TITLE AND DESCRIPTION

541 Electromagnetics I (3) Integrated, detailed coverage of the classical topics, from Maxwell's equations to Green's functions. It covers electromagnetic boundary-value problems in rectangular, cylindrical, and spherical coordinates.

545 Microwave Circuits I (3) Basic linear and nonlinear analysis of passive and active microwave circuits. Emphasis is design, fabrication, and testing of power combiners, low noise amplifiers, gain blocks, power amplifiers, mixers, and oscillators.

REVISE TITLE, DESCRIPTION AND (DE) PREREQUISTE

632 Advanced Topics in High-Speed Integrated Circuit Design (3) Design and analysis of high-speed integrated circuits for communications and other applications requiring high-frequency operation. Design and simulation techniques using modern industry-standard tools.
Prerequisite(s): 532 or consent of instructor.

REVISE DESCRIPTION AND ADD PREREQUISITE

523 Power Electronics and Drives (3) Principles, pulse-width modulation techniques, and control for three-phase power converters. Average models of three-phase converters in stationary and rotating reference frames. Small-signal models in rotating reference frame and control design. Three-phase inverter applications as motor drives. Drive system modeling and control.
Prerequisite(s): 482 or consent of instructor.

623 Advanced Power Electronics and Drives (3) Design of three-phase power converters. Control design, semiconductor device selection, passive components design and selection, loss calculation, thermal design, protection, and auxiliary circuits. Interface issues with source and load. Harmonic and EMI filters. Drive system design.
Prerequisite(s): 523 or consent of instructor.

REVISE TO DROP (DE) PREREQUISITE, ADD RECOMMEDED BACKGROUND

571 Pattern Recognition (3)
Recommended Background: Coursework in probability or statistics.

572 Digital Image Processing (3)
Recommended Background: At least one year of calculus.

REVISE (DE)PREREQUISITE

657 Advanced Computer Architecture and Design (3)
(DE) Prerequisite(s): Computer Science 530.

DEPARTMENT OF INDUSTRIAL AND INFORMATION ENGINEERING

(556) Industrial Engineering

ADD AND CROSS-LIST SECONDARY COURSE

557 Technology Product Development and Entrepreneurship (3) *(See Mechanical Engineering 519)*

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

(638) Materials Science and Engineering

ADD

501 Introduction to Materials Research (1-3)
Grading Restriction: P/NP only.
Repeatability: May be repeated, maximum 9 hours.
Credit Restriction: may not be used toward degree requirements.

513 Fundamentals of Materials Science III (3) Thermodynamics of materials: thermodynamics, diffusion, phase diagram, kinetics.

514 Fundamentals of Materials Science IV (3) Electronics, optics and magnetism: electrical & thermal conduction, quantum physics, band theory, dielectrics, magnetic and optical properties.

REVISE TITLE AND (DE)PREREQUISITE

515 Diffusion, Phase Transformations, and Microstructure of Materials (3)
(DE) Prerequisite(s): 513.

REVISE TITLE

516 Fundamentals of Plastic Deformation (3)

REVISE DESCRIPTION

511 Fundamentals of Materials Science and Engineering I (3) Structure of materials: chemical bonding in materials, crystal structure, defects in crystals, diffraction.

512 Fundamentals of Materials Science and Engineering II (3) Mechanics of materials: Stress and strain at a point, elastic constitutive equations, phenomenological bulk behavior, deformation mechanisms.
Formerly: Physical properties: electrical and thermal conduction, elementary quantum physics, band theory, dielectric materials, magnetic and optical properties. Mechanical behavior: stress and strain at a point, elastic constitutive equations, phenomenological bulk behavior, and deformation mechanisms.

REVISE (DE)PREREQUISITE

610 Structure and Dynamics of Materials (3)
(DE) Prerequisite(s): 511 and 514.

611 Fundamentals of Thermodynamics, Phase Transformations, and Material Simulations at Small Length Scales (3)
(DE) Prerequisite(s): 513.

650 Mechanical Behavior of Solids at Elevated Temperatures (3)
(DE) Prerequisite(s): 512.

674 Materials Physics (3)
(DE) Prerequisite(s): 511 and 514.

675 Advanced Structural Analysis (3)
(DE) Prerequisite(s): 511 and 514.

DEPARTMENT OF MECHANICAL, AEROSPACE, AND BIOMEDICAL ENGINEERING

(018) Aerospace Engineering

ADD SECONDARY CROSS-LISTED COURSES

565 Structural Dynamics (3) *(See Mechanical Engineering 565.)*

SUPPORTING INFORMATION: Course replaces 573 which is being dropped. Impact on other units: None. Financial Impact: None.

577 Neural and Fuzzy Approaches in Engineering (3) *(See Nuclear Engineering 577.)*

DROP SECONDARY CROSS-LISTED COURSE

573 Computational Solid Mechanics (3) *(See Engineering Science 553.)*

SUPPORTING INFORMATION: Rationale: This course is being replaced by 565. Impact on other units: None. Financial Impact: None.

(192) Biomedical Engineering

ADD

520 Systems Biology and Complex System Theory (3) Mathematical techniques and complex system theory for understanding and solving biological as well as biomedical problems at the small scale. The focus is on mathematical modeling, dynamic analysis, control and automation techniques for disease diagnosis and treatment at the molecular and cellular level. Case studies include: immune system dynamics and control, immune-vaccine interactions and optimal vaccine strategy design, cellular system control, molecular diagnosis and treatment, lab-on-a-chip technology, DNA and protein microarray technology, and controlled drug delivery.
Credit Restriction: Students cannot receive credit for both 420 and 520.
Recommended Background: Mathematics 231 and 200 or 251.

ADD SECONDARY CROSS-LISTED COURSE

565 Structural Dynamics (3) *(See Mechanical Engineering 565.)*

REVISE TITLE, DESCRIPTION, DROP (DE) PREREQUISITE, ADD REGISTRATION PERMISSION

682 Micro/nano Bio-systems and Bio-mimetics for Biomedical Applications (3) Emerging techniques and theory in biological and biomedical research on the micro and nanoscale. The focus is on employing engineering principles for understanding and solving micro-/nano-scale biomedical problems, and learning from micro-/nano-scale biological principles for biomedical engineering innovation. Cases studies include cellular mechanics, communication, control and organization of multi-cellular and multi-organ systems, nanomedicine, bio-sensors, bio-actuators, drug delivery, bio-MEMS, DNA microarrays, AFM and laser scanning confocal microscopy imaging.
Registration Permission: Consent of instructor.

REVISE TITLE AND DESCRIPTION OF SECONDARY CROSS-LISTED COURSE

577 Neural and Fuzzy Approaches in Engineering (3) *(See Nuclear Engineering 577.)*

DROP FOR GRADUATE CREDIT (UNDERGRADUATE COURSES ARE BEING RETAINED)

494 Special Project in Biomedical Engineering (1-3)

495 Special Project in Biomedical Engineering (1-3)

(335) Engineering Science

DROP PRIMARY CROSS-LISTED COURSE

553 Computational Solid Mechanics (3) *(Same as Aerospace Engineering 573 and Mechanical Engineering 563.)*

SUPPORTING INFORMATION: Rationale: Course is being replaced by Mechanical Engineering 565. Impact on other units: None.

DROP SECONDARY CROSS-LISTED COURSE

578 Fuzzy Systems in Engineering (3) *(See Nuclear Engineering 578.)*

REVISE TITLE AND DESCRIPTION OF SECONDARY CROSS-LISTED COURSE

577 Neural and Fuzzy Approaches in Engineering (3) *(See Nuclear Engineering 577.)*

(650) Mechanical Engineering

ADD

576 Sustainable Energy Engineering (3) An in-depth examination of engineering systems to convert, store, transport, and use energy, with emphasis on technologies that reduce dependence on fossil fuels and/or emission of greenhouse gases; Examines various conventional energy production technologies such as fossil fuel and nuclear (both fission and fusion) and renewable energy conversion technologies such as solar, wind, hydro, geothermal, wave, and thermoelectric energy; Examines their end-use practices, consumption practices. The course will emphasize using quantitative methods to assess and compare different technologies.
Credit Restriction: Students cannot receive credit for both 476 and 576.
Recommended Background: 331.
Registration Permission: Consent of instructor.

ADD PRIMARY COURSE AND CROSS-LIST

565 Structural Dynamics (3) Dynamic analysis of flexible structures, elasticity and Green's strain tensor, partial differential equations. Variational mechanics, Hamilton's principle, energy methods, eigenvalue and forced response problems, separation of variables. Approximate solution techniques: collocation methods, Rayleigh-Ritz, finite element method. Applications in beam-cable structures, rotordynamics and composite materials. *(Same as Aerospace Engineering 565 and Biomedical Engineering 565.)*
Recommended Background: 321 and 463.

SUPPORTING INFORMATION: Rationale: Course replaces 563, Aerospace Engineering 573 and Engineering Science 553 (primary) which are being dropped.

ADD CREDIT RESTRICTION

505 Mechatronics (3)
Credit Restriction: Students cannot receive credit for both 405 and 505.

588 Introduction to Hybrid Electric Vehicles (3)
Credit Restriction: Students cannot receive credit for both 480 and 588.

REVISE TO ADD CROSS-LISTING, REGISTRATION PERMISSION AND CREDIT RESTRICTION; DROP (DE)PREREQ

519 Technology Product Development and Entrepreneurship (3) *(Same as Industrial Engineering 557.)*
Credit Restriction: Students cannot receive credit for both 457 and 519.
Registration Permission: Consent of instructor.

REVISE TITLE AND DESCRIPTION OF SECONDARY CROSS-LISTED COURSE

577 Neural and Fuzzy Approaches in Engineering (3) *(See Nuclear Engineering 577.)*

DROP SECONDARY CROSS-LISTED COURSE

563 Computational Solid Mechanics (3)

DEPARTMENT OF NUCLEAR ENGINEERING

(716) Nuclear Engineering

ADD

530 Nuclear Security Science and Analysis (3) Understanding nuclear threats and the evolution of nuclear threats to present day. Issues and strategies in detecting nuclear threats. Issues and approaches for nuclear security concerns, both state-level (e.g., nonproliferation and deterrence) and asymmetric concerns (e.g., nuclear smuggling and nuclear terrorism). Exercises in applied nuclear security scenarios.

532 Advanced Topics in Nuclear Security Science and Analysis (3) Advanced topics in radiation measurement science, nondestructive assay techniques, and nuclear material safeguards. Exercise on analysis of nuclear security data.
(DE) Prerequisite(s): 401.
Registration Permission: Consent of instructor.

575 Equipment and System Prognostics (3) The three types of prognostic techniques will be introduced with theoretical foundations, assumptions, and data requirements: Conventional reliability-based using failure times (e.g. Weibull analysis), Population based with environmental considerations (e.g. proportional hazards modeling), Individual based (e.g. general path model).
(DE) Prerequisite(s): 579 or consent of instructor.

DROP PRIMARY CROSS-LISTED COURSE

578 Fuzzy Systems in Engineering (3) *(Same as Engineering Science 578.)*

REVISE TITLE, DESCRIPTION AND DROP REGISTRATION PERMISSION

579 Empirical Models for Monitoring and Diagnostics (3)
Development and application of advanced statistical and artificial intelligence based techniques for process and equipment monitoring and diagnostics. Linear, non-linear, parametric, and non-parametric techniques including ridge regression, principal component analysis, kernel regression. Data preprocessing, model optimization, and uncertainty analysis will be taught.

REVISE DESCRIPTION AND (DE)COREQUISITE

401 Radiological Engineering Laboratory (3) Radiation sources, detector types, radiation counting and spectroscopy, analog and digital electronics for detectors.
(RE) Corerequisite(s) 470.

REVISE DESCRIPTION AND PREREQUISITE

402 Nuclear Engineering Laboratory (3) Heat transfer experiments, instrumentation and controls, diffusion properties of neutrons, measurements of nuclear materials, nuclear reactor measurements.
(DE) Prerequisite: 401.

REVISE DESCRIPTION

404 Nuclear Fuel Cycle (3) Mining, milling, enrichment, fuel fabrication, in-core management, nuclear reactor theory, reprocessing, waste disposal, regulatory requirements, nuclear facilities, nuclear material accountancy and physical protection. Exercise on signatures and observables of nuclear materials processing.

REVISE DESCRIPTION, ADD REGISTRATION PERMISSION AND DROP (DE) PREREQUISITE

550 Radiation Measurements Laboratory (3) Physics and electronics associated with radiation detection and measurement, methods of data analysis. Application of detector measurements and fundamentals of radiation detection instrumentation operation in the context of detecting, identifying, and quantifying radioactive materials. Use of radiation detection systems in process monitoring and safeguards systems, and in monitoring for security applications.
Registration Permission: Consent of instructor.

REVISE TITLE AND DESCRIPTION OF PRIMARY COURSE AND ADD ADDITIONAL CROSS LISTING

577 Neural and Fuzzy Approaches in Engineering (3) Neural network and fuzzy logic technology for use in intelligent systems; neural network architectures and optimization, fuzzy approaches and neuro-fuzzy hybrid models. *(Same as Aerospace Engineering 577; Biomedical Engineering 577; Engineering Science 577; Mechanical Engineering 577.)*

II. PROGRAM CHANGES

▲ ADD DUAL PROGRAM - RELIABILITY AND MAINTAINABILITY ENGINEERING MAJOR – MS-MBA

In the 2009-2010 *Graduate Catalog*, add a dual MS-MBA Program in Reliability and Maintainability Engineering Major

Dual MS-MBA Program – Reliability and Maintainability Engineering

Requirements

	Hours Credit
August – First Year	
Business Administration 511 (MBA Core I)	3
Fall – First Year	
Business Administration 501 (MBA Career Development)	1
Business Administration 512 (MBA Core II)	15
Spring	
Business Administration 513 (MBA Core III)	9
MBA Hub Elective	3
Engineering Major[1]	3
Summer	
Engineering Major1/ Math	6
Fall – Second Year	

Engineering Major[1]	6
MBA Innovative & Entrepreneurship Elective	6
Spring	
Engineering Major[1]	9
	Total 61

[1] Engineering Major courses must be selected to satisfy Reliability and Maintainability Engineering major degree requirements.

- ADD CONCENTRATIONS – GRADUATE CERTIFICATE – RELIABILITY AND MAINTAINABILITY ENGINEERING

  Chemical Engineering concentration
  Computer Engineering concentration
  Electrical Engineering concentration
  Industrial Engineering concentration
  Materials Science and Engineering concentration
  Nuclear Engineering concentration

In the 2009-2010 *Graduate Catalog*, add the above concentrations to the Reliability and Maintainability Engineering Graduate Certificate. Also show participation with text and link under each appropriate department (Chemical and Biomolecular Engineering; Electrical Engineering and Computer Science; Industrial and Information Engineering; Mechanical, Aerospace, and Biomedical Engineering; and Nuclear Engineering).

REVISE GRADUATE CERTIFICATE – RELIABILITY AND MAINTAINABILITY ENGINEERING

In the 2009-2010 *Graduate Catalog*, remove the current text for the Reliability and Maintainability Engineering Graduate Certificate and replace with the following:

Reliability and Maintainability Engineering Graduate Certificate

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 Chemical and Biomolecular Engineering, Industrial and Information Engineering, Mechanical Engineering, or Nuclear Engineering 483 and Chemical and Biomolecular Engineering, Industrial and Information Engineering, Materials Science and Engineering, Mechanical Engineering, or Nuclear Engineering 484, plus two elective courses selected from a list of courses provided by the participating departments – Chemical and Biomolecular Engineering, Electrical Engineering and Computer Science, Industrial and Information Engineering, Mechanical, Aerospace, and Biomedical Engineering, and Nuclear Engineering. Currently, the available elective courses are Chemical and Biomolecular Engineering 562 and 585, Electrical and Computer Engineering 503, 504, Industrial and Information Engineering 516, 517 and 562, Mechanical Engineering 534, and Nuclear Engineering 575, 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.

REVISE RELIABILITY AND MAINTAINABILITY ENGINEERING MAJOR, MS

In the 2009-2010 *Graduate Catalog*, under the Requirements Heading, add the following bold text as the third sentence of the paragraph:

…student's major professor and committee. **At least 12 hours, including Project in Lieu of Thesis, must be taken in the student's major**. After the completion of the formal program...

In the 2009-2010 *Graduate Catalog*, revise the 2nd and 3rd bullets of the Reliability and Maintainability Engineering Core Courses as follows:

Reliability and Maintainability Engineering Core Courses:

- CBE 483*, IE 483*, ME 483*, or NE 483*
- CBE 484*, IE 484*, MSE 484*, ME 484*, or NE 484*

In the 2009-2010 *Graduate Catalog*, revise the Reliability and Maintainability Engineering Electives to add an asterisk to IE 516 and IE 517.

- IE 516*
- IE 517*

DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING

▲ ADD CERTIFICATE – INTERDISCIPLINARY GRADUATE CERTIFICATE IN SUSTAINABILITY SCIENCE

In the 2009-2010 *Graduate Catalog*, add the Sustainability Science Certificate as follows:

SUSTAINABILITY SCIENCE INTERDISCIPLINARY GRADUATE CERTIFICATE

The Department of Chemical and Biomolecular Engineering offers a graduate certificate in sustainability science designed to prepare students to be conversant in all of the fields relevant to sustainable energy production. The program draws upon the strengths of faculty members in five departments: Chemical and Biomolecular Engineering; Civil and Environmental Engineering; and Materials Science and Engineering in the College of Engineering and Biochemistry and Cellular and Molecular Biology and Chemistry in the College of Arts and Sciences. The required courses focus upon the fundamental scientific concepts and the social and political considerations involved in developing sustainable energy.

Admission
Students must be admitted as degree-seeking graduate students either in master's programs, doctoral programs, or as certificate students. Other graduate students with strong mathematical preparation may apply with the specific consent of the program coordinator. Application to the certificate program is made by submitting graduate transcripts and a letter of application to the program coordinator.

Program of Study
The 12-hour certificate is earned by completing Chemical and Biomolecular Engineering 571, 572, 652, and 4 semesters of 503 or 2 semesters of 673. All courses are cross-listed in Biochemistry, Cellular, and Molecular Biology. Students must maintain a GPA of 3.00.

REVISE INTRODUCTORY TEXT

On departmental information page of the 2009-2010 *Graduate Catalog*, Core Graduate Classes in Chemical and Biomolecular Engineering heading, revise 2nd sentence as follows:

These fundamentals are represented by four core courses – CBE 506,CBE 531, CBE 547, CBE 579.

ADD TEXT FOR PARTICIPATION TO THE RELIABILITY AND MAINTAINABILITY ENGINEERING GRADUATE CERTIFICATE

Insert in the 2010-2011 *Graduate Catalog*, participation in the Reliability and Maintainability Engineering Graduate Certificate under the Department of Chemical and Biomolecular Engineering.

RELIABILITY AND MAINTAINABILITY ENGINEERING GRADUATE CERTIFICATE

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 Chemical and Biomolecular Engineering, Industrial and Information Engineering, Mechanical Engineering, or Nuclear Engineering 483 and Chemical and Biomolecular Engineering, Industrial and Information Engineering, Materials Science and Engineering, Mechanical Engineering, or Nuclear Engineering 484, plus two elective courses selected from a list of courses provided by the participating departments – Chemical and Biomolecular Engineering, Electrical Engineering and Computer Science, Industrial and Information Engineering, Mechanical, Aerospace, and Biomedical Engineering, and Nuclear Engineering. Currently, the available elective courses are Chemical and Biomolecular Engineering 562 and 585, Electrical and Computer Engineering 503, 504, Industrial and Information Engineering 516, 517 and 562, Mechanical Engineering 534, and Nuclear Engineering 575, 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.

REVISE CHEMICAL ENGINEERING MAJOR, MS – THESIS OPTION

In the 2009-2010 *Graduate Catalog*, Thesis Option heading, revise first and third bullets as follows:

- A total of at least 21 semester hours in graduate-level courses (excluding 500, 501, 503, and 511) in chemical and biomolecular engineering and related areas beyond the baccalaureate. These courses must include the four core courses.

- Active participation in graduate seminars in the department. Resident students must register for CBE 501 or 503 every semester it is offered.

REVISE CHEMICAL ENGINEERING MAJOR – PHD

In the 2009-2010 *Graduate Catalog*, under the Requirements heading, revise the 1st bullet, 2nd sentence as follows:

- These courses must include the four core courses and at least 6 hours of courses at the 600 level from the University of Tennessee, Knoxville.

In the 2009-2010 *Graduate Catalog*, Requirements heading, revise the 5th bullet, 2nd sentence as follows:

- Active participation in graduate seminars conducted by the department. Resident students must register for 501 or 503 every semester offered.

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

- DROP THE FOLLOWING CONCENTRATION – CIVIL ENGINEERING - MS

  Environmental Engineering

REVISE THE FIVE-YEAR BS-MS PROGRAM

In the 2009-2010 *Graduate Catalog*, revise the introductory paragraph as follows:

The department offers a 5-year BS-MS program with a BS (major in civil engineering) and an MS (major in civil engineering or environmental engineering) for qualified students. The primary component of the program is that qualified students may take up to 6 hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor's and master's degrees at the University of Tennessee. This program is designed for students attending the University of Tennessee for their Master of Science degree because other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the Bachelor of Science degree. Significant components of the program are:

REVISE THE SECOND BULLET AS FOLLOWS:

- Admission must be approved by the department and the Graduate School.

REVISE THE THIRD BULLET AS FOLLOWS:

- Students must at least be conditionally admitted to the program prior to taking courses that receive credit for both the BS and MS degrees. All courses taken for graduate credit must be approved by the graduate program director. Students admitted to the program must request permission from the Graduate School to take approved courses for graduate credit. Students admitted to the program must also follow the normal procedure for admission to the Graduate School.

REVISE THE FOURTH BULLET AS FOLLOWS:

- Students will not be eligible for assistantships until they are enrolled as graduate-level students in the Graduate School.

DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

ADD FIVE-YEAR BS-MS PROGRAM TO COMPUTER ENGINEERING, COMPUTER SCIENCE, AND ELECTRICAL ENGINEERING

In the 2009-2010 *Graduate Catalog*, add the Five-Year BS-MS Programs to Computer Engineering, Computer Science, and Electrical Engineering directly above the description of the Computational Science Minor:

Five-Year BS-MS Program -- Computer Engineering

The department offers a 5 year BS-MS program for qualified students. The primary component of the program is that qualified students may take up to 6 hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor's and master's degrees at the University of Tennessee. This program is designed for students attending the University of Tennessee for their Master of Science degree because other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the Bachelor of Science degree.

Significant components of the program are:

Students must have an overall GPA of at least 3.4 to be admitted to the program. Conditional admission may be granted after completing 64 hours of required course work while full admission is granted after completing 96 hours of required course work with a minimum overall GPA of 3.4 in required course work.

Students must at least have conditional admission before taking graduate courses for both their bachelor's and master's degrees. All courses taken for graduate credit must be approved by the departmental chair of the program. Students admitted to the program must request permission from the Graduate School to take approved courses for graduate credit. Students admitted to the program must also follow the normal procedure for admission to the Graduate School.

Admission of students into this program must be approved by the department and the Graduate School.

- Students will not be eligible for graduate assistantships until they are enrolled as graduate-level students in the Graduate School.

Five-Year BS-MS Program -- Computer Science

The department offers a 5 year BS-MS program for qualified students. The primary component of the program is that qualified students may take up to 6 hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor's and master's degrees at the University of Tennessee. This program is designed for students attending the University of Tennessee for their Master of Science degree because other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the Bachelor of Science degree.

Significant components of the program are:

Students must have an overall GPA of at least 3.4 to be admitted to the program. Conditional admission may be granted after completing 64 hours of required course work while full admission is granted after completing 96 hours of required course work with a minimum overall GPA of 3.4 in required course work.

Students must at least have conditional admission before taking graduate courses for both their bachelor's and master's degrees. All courses taken for graduate credit must be approved by the departmental chair of the program. Students admitted to the program must request permission from the Graduate School to take approved courses for graduate credit. Students admitted to the program must also follow the normal procedure for admission to the Graduate School.

Admission of students into this program must be approved by the department and the Graduate School.

- Students will not be eligible for graduate assistantships until they are enrolled as graduate-level students in the Graduate School.

Five-Year BS-MS Program -- Electrical Engineering

The department offers a 5 year BS-MS program for qualified students. The primary component of the program is that qualified students may take up to 6 hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor's and master's degrees at the University of Tennessee. This program is designed for students attending the University of Tennessee for their Master of Science degree because other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the Bachelor of Science degree.

Significant components of the program are:

Students must have an overall GPA of at least 3.4 to be admitted to the program. Conditional admission may be granted after completing 64 hours of required course work while full admission is granted after completing 96 hours of required course work with a minimum overall GPA of 3.4 in required course work.

Students must at least have conditional admission before taking graduate courses for both their bachelor's and master's degrees. All courses taken for graduate credit must be approved by the departmental chair of the program. Students admitted to the program must request permission from the Graduate School to take approved courses for graduate credit. Students admitted to the program must also follow the normal procedure for admission to the Graduate School.

Admission of students into this program must be approved by the department and the Graduate School.

- Students will not be eligible for graduate assistantships until they are enrolled as graduate-level students in the Graduate School.

ADD TEXT FOR PARTICIPATION TO THE RELIABILITY AND MAINTAINABILITY ENGINEERING GRADUATE CERTIFICATE

Insert in the 2010-2011 *Graduate Catalog*, participation in the Reliability and Maintainability Engineering Graduate Certificate under the Department of Electrical Engineering and Computer Science.

RELIABILITY AND MAINTAINABILITY ENGINEERING GRADUATE CERTIFICATE

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 Chemical and Biomolecular Engineering, Industrial and Information Engineering, Mechanical Engineering, or Nuclear Engineering 483 and Chemical and Biomolecular Engineering, Industrial and Information Engineering, Materials Science and Engineering, Mechanical Engineering, or Nuclear Engineering 484, plus two elective courses selected from a list of courses provided by the participating departments – Chemical and Biomolecular Engineering, Electrical Engineering and Computer

Science, Industrial and Information Engineering, Mechanical, Aerospace, and Biomedical Engineering, and Nuclear Engineering. Currently, the available elective courses are Chemical and Biomolecular Engineering 562 and 585, Electrical and Computer Engineering 503, 504, Industrial and Information Engineering 516, 517 and 562, Mechanical Engineering 534, and Nuclear Engineering 575, 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.

REVISE NAME - REVISE TO REMOVE THE WORD "INTERCOLLEGIATE" FROM THE TITLE OF THE INTERCOLLEGIATE/INTERDISCIPLINARY GRADUATE MINOR IN COMPUTATIONAL SCIENCE (IGMCS) AND REVISE TEXT TO ADD WEB SITE ADDRESS

In the 2009-2010 *Graduate Catalog*, revise Heading, first paragraph, and first line of second paragraph to reflect the name change.

Interdisciplinary Graduate Minor in Computational Science (IGMCS)

In the 2009-2010 *Graduate Catalog*, revise introductory paragraph, third sentence to add the web site address as follows:

…see the description of the IGMCS below or visit the IGMCS website at http://igmcs.utk.edu/.

REVISE COMPUTER ENGINEERING MAJOR, MS – THESIS OPTION

In the 2009-2010 *Graduate Catalog*, revise to remove current thesis option text and replace with the following:

Thesis Option (30 hours)

Six semester hours of coursework, which may be any combination of mathematics at the 400-level* or above approved by the graduate committee, or courses in the department at the 500-level or above, or courses outside the department that have been approved by the student's master committee and the graduate committee. An additional 18 semester hours of 400-level* or above work in the department, with at least 6 hours selected from the following courses: ECE 551, ECE 552, ECE 553, ECE 554, ECE 555, ECE 556, ECE 557, COSC 530, ECE 571, ECE 572, ECE 651, ECE 652, ECE 653, ECE 655, ECE 657, ECE 658, and ECE 659. A master's thesis (ECE 500), totaling 6 hours is required, as well as a final oral exam covering the thesis and related course work.

REVISE COMPUTER ENGINEERING MAJOR, MS – NON-THESIS COURSES ONLY OPTION

In the 2009-2010 *Graduate Catalog*, remove the current Non-Thesis Courses Only option text and replace as follows:

Non-Thesis Courses Only Option (30 hours)
Six semester hours of coursework, which may be any combination of mathematics at the 400-level* or above approved by the graduate committee, or courses in the department at the 500-level or above, or courses outside the department that have been approved by the student's master committee and the graduate committee. An additional 24 semester hours of 400-level* or above courses in the department with 18 of the hours at the 500-level or 600-level. Of the 18 hours required at the graduate level, at least 6 hours selected from the following courses: ECE 551, ECE 552, ECE 553, ECE 554, ECE 555, ECE 556, ECE 557, COSC 530, ECE 571, ECE 572, ECE 651, ECE 652, ECE 653, ECE 655, ECE 657, ECE 658, and ECE 659. A final comprehensive written examination. Information concerning the examination is available in the departmental office.

REVISE COMPUTER ENGINEERING MAJOR, MS - NON-THESIS PROJECT OPTION

In the 2009-2010 *Graduate Catalog*, remove the current Non-Thesis Project option text and replace with the following:

Non-Thesis Project Option (30 hours)
Six semester hours of coursework, which may be any combination of mathematics at the 400-level* or above approved by the graduate committee, or courses in the department at the 500-level or above, or courses outside the department that have been approved by the student's master committee and the graduate committee. An additional 21 semester hours of 400-level* or above courses in the department, with 15 of the hours at the 500-level or 600-level. Of the 15 hours required at the graduate level, at least 6 hours selected from the following courses: ECE 551, ECE 552, ECE 553, ECE 554, ECE 555, ECE 556, ECE 557, COSC 530, ECE 571, ECE 572, ECE 651, ECE 652, ECE 653, ECE 655, ECE 657, ECE 658, and ECE 659. ECE 501 (Project in Lieu of Thesis) with a minimum grade of B. This course will be administered by the student's master's committee. A written project proposal describing what the student will do in the course must be submitted in advance for the student's master's committee approval. A written final report and oral presentation is required and one copy of the final draft must be submitted to the graduate committee. A final written and oral examination covering the project and related course work.

REVISE REQUIREMENTS – COMPUTER ENGINEERING MAJOR, PHD

In the 2009-2010 *Graduate Catalog*, revise 1 a. as follows:

a. Six semester hours of mathematics at the 400-level* or above, approved by the graduate committee; or 6 semester hours of courses in the department at the 500-level or above; or 6 hours of courses outside the department approved by the student's master committee and the graduate committee.

In the 2009-2010 Graduate Catalog, revise section 1 b. as follows:

b. An additional 18 semester hours of 400-level* or above work in the department, with at least 6 hours selected from the following courses: ECE 551, ECE 552, ECE 553, ECE 554, ECE 555, ECE 556, ECE 557, COSC 530, ECE 571, ECE 572, ECE 651, ECE 652, ECE 653, ECE 655, ECE 657, ECE 658, and ECE 659. In addition, the student must satisfy requirements 2 through 7 below.

In the 2009-2010 *Graduate Catalog*, revise section 2 c. as follows:

c. A minimum of six semester hours of mathematics (offered by the Mathematics department) at the 500-level or above, as approved by the graduate committee.

In the 2009-2010 *Graduate Catalog*, revise section 3 as follows:

3. Satisfactory performance on a qualifying examination. The qualifying examination is prepared by the Electrical Engineering and Computer Science faculty and consists of a written examination covering courses required in the undergraduate curriculum. Information concerning the qualifying examination is available in the departmental office. A student needs to pass the qualifying examination before the end of their first year to remain in the program (the first year begins the first day of classes at UT).

In the 2009-2010 *Graduate Catalog*, revise section 7 as follows:

7. Successful public defense of the dissertation by the student. A minimum of 6 months must separate the comprehensive examination and the dissertation defense.

REVISE REQUIREMENTS – COMPUTER SCIENCE MAJOR, PHD

In the 2009-2010 *Graduate Catalog*, revise to remove the current requirements section and replace with the following:

Requirements
Satisfactory performance on a qualifying examination. The qualifying examination is prepared by the Electrical Engineering and Computer Science faculty and consists of a written examination covering courses required in the undergraduate curriculum. Information concerning the qualifying examination is available in the departmental office. A student needs to pass the qualifying examination before the end of their first year to remain in the program (the first year begins the first day of classes at UT).

Original research reported in a dissertation of high quality is emphasized. The minimum hour requirements are 24 hours of COSC 600 Doctoral Research and Dissertation and 24 hours of graduate courses beyond the equivalent of a master's degree (i.e., beyond 30 graduate hours) graded A-F. COSC 530, COSC 560 and COSC 580 or COSC 581 are required for the degree. At least 6 hours of 600-level graded courses must be taken in computer science at the University of Tennessee, Knoxville. The student's advisor and committee will establish the specific course requirements.

Satisfactory performance on a comprehensive examination administered by the student's committee. The exam results are reported to the graduate committee for approval and the exam is filed in the department. The comprehensive exam is given when the student is ready to apply for admission to candidacy. The comprehensive examination consists of both written and oral parts. The written part consists of a complete review of the literature in the student's dissertation topic and a proposed research plan for the dissertation work. The student's committee may require additional written sections. The student must demonstrate a mastery of the dissertation area, ability to think analytically and creatively, skill in using academic resources, and ability to complete the dissertation satisfactorily. The oral part of the comprehensive examination consists primarily of a professional presentation of a proposal for dissertation work and its defense. The committee may cover additional topics in the oral part.

Successful public defense of the dissertation. A minimum of 6 months must separate the comprehensive examination and the dissertation defense.

REVISE ELECTRICAL ENGINEERING MAJOR, MS – THESIS OPTION

In the 2009-2010 *Graduate Catalog*, revise to remove the current Thesis Option section and replace with the following:

Thesis Option (30 hours)
Six semester hours of mathematics at the 400-level* or above approved by the graduate committee; or 6 semester hours of Electrical and Computer Engineering courses at the 500-level or above; or 6 semester hours of non-Electrical and Computer Engineering courses approved by the student's master committee and the graduate committee. An additional

18 semester hours of 400-level* or above work in electrical and computer engineering, with at least 6 hours of 500-level or 600-level work in each of two areas of electrical and computer engineering. A master's thesis (ECE 500), totaling 6 hours is required, as well as a final oral exam covering the thesis and related course work.

REVISE ELECTRICAL ENGINEERING MAJOR, MS – NON-THESIS COURSES ONLY OPTION

In the 2009-2010 *Graduate Catalog*, revise to remove the current Non-Thesis Courses Only Option text and replace with:

Non-Thesis Courses Only Option (30 hours)
Six semester hours of mathematics at the 400-level* or above, approved by the graduate committee; or 6 semester hours of Electrical and Computer Engineering courses at the 500-level or above; or 6 semester hours of non-Electrical and Computer Engineering courses approved by the student's master committee and the graduate committee. An additional 24 semester hours of 400-level* or above work in electrical engineering or computer engineering with 18 of the hours at the 500-level or 600-level. Of the 18 hours required at the graduate level, at least 6 must be in each of two areas of electrical and computer engineering and an additional 6 hours outside of the two areas. A final comprehensive written examination. Information concerning the examination is available in the departmental office.

REVISE ELECTRICAL ENGINEERING MAJOR, MS – NON-THESIS PROJECT OPTION

In the 2009-2010 *Graduate Catalog*, revise to remove the current Non-Thesis Project Option text and replace:

Non-Thesis Project Option (30 hours)
Six semester hours of mathematics at the 400-level* or above, approved by the graduate committee; or 6 semester hours of Electrical and Computer Engineering courses at the 500-level or above; or 6 semester hours of non-Electrical and Computer Engineering courses approved by the student's master committee and the graduate committee. An additional 21 semester hours of 400-level* or above work in electrical engineering or computer engineering, with 15 of the hours at the 500-level or 600-level. Of the 15 hours required at the graduate level, at least 6 must be in each of two areas of electrical and computer engineering and an additional 3 hours of work outside of the two areas. ECE 501 (Project in Lieu of Thesis) with a minimum grade of B. This course will be administered by the student's master's committee. A written project proposal describing what the student will do in the course must be submitted in advance for the student's master's committee approval. A written final report and oral presentation is required and one copy of the final draft must be submitted to the graduate committee. A final written and oral examination covering the project and related course work

REVISE REQUIREMENTS – ELECTRICAL ENGINEERING MAJOR, PHD

In the 2009-2010 *Graduate Catalog*, revise to remove current 1 a. text and replace with the following:

a. 6 semester hours of mathematics at the 400-level* or above, approved by the graduate committee; or 6 semester hours of Electrical and Computer Engineering courses at the 500-level or above; or 6 semester hours of non-Electrical and Computer Engineering courses approved by the student's master committee and the graduate committee.

In the 2009-2010 *Graduate Catalog*, revise to replace 2 c. as follows:

c. A minimum of six semester hours of mathematics (offered by the Mathematics department) at the 500-level or above, as approved by the graduate committee.

In the 2009-2010 *Graduate Catalog*, revise to remove current number 3 and replace with the following:

3. Satisfactory performance on a qualifying examination. The qualifying examination is prepared by the Electrical Engineering and Computer Science faculty and consists of a written examination covering courses required in the undergraduate curriculum. Information concerning the qualifying examination is available in the departmental office. A student needs to pass the qualifying examination before the end of their first year to remain in the program (the first year begins the first day of classes at UT).

In the 2009-2010 *Graduate Catalog*, revise to remove current number 7 and replace with the following:

7. Successful public defense of the dissertation by the student. A minimum of 6 months must separate the comprehensive examination and the dissertation defense.

DEPARTMENT OF INDUSTRIAL AND INFORMATION ENGINEERING

ADD TEXT FOR PARTICIPATION TO THE RELIABILITY AND MAINTAINABILITY ENGINEERING GRADUATE CERTIFICATE

Insert in the 2010-2011 *Graduate Catalog*, participation in the Reliability and Maintainability Engineering Graduate Certificate under the Department of Industrial and Information Engineering.

RELIABILITY AND MAINTAINABILITY ENGINEERING GRADUATE CERTIFICATE

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 Chemical and Biomolecular Engineering, Industrial and Information Engineering, Mechanical Engineering, or Nuclear Engineering 483 and Chemical and Biomolecular Engineering, Industrial and Information Engineering, Materials Science and Engineering, Mechanical Engineering, or Nuclear Engineering 484, plus two elective courses selected from a list of courses provided by the participating departments – Chemical and Biomolecular Engineering, Electrical Engineering and Computer Science, Industrial and Information Engineering, Mechanical, Aerospace, and Biomedical Engineering, and Nuclear Engineering. Currently, the available elective courses are Chemical and Biomolecular Engineering 562 and 585, Electrical and Computer Engineering 503, 504, Industrial and Information Engineering 516, 517 and 562, Mechanical Engineering 534, and Nuclear Engineering 575, 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.

REVISE THE FIVE-YEAR BS-MS PROGRAM – INDUSTRIAL ENGINEERING MAJOR

In the 2009-2010 *Graduate Catalog*, remove the current introductory paragraph and replace with the following:

The department offers a 5-year BS-MS program with a major in industrial engineering for qualified students. The primary component of the program is a qualified student may take up to 9 hours of approved graduate courses for their senior undergraduate courses and have them count toward both the bachelor's and master's degrees at the University of Tennessee. This program is designed for students attending the University of Tennessee for their Master of Science degree because other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the Bachelor of Science degree. The student may also take an additional 9 credit of courses, while working towards their bachelor's, which will count only for the master's degree. Qualifications for admission to the program are:

IN THE 2009-2010 *GRADUATE CATALOG*, COMBINE BULLETS 1 AND 2 AND REVISE AS FOLLOWS:

- The student must have an earned minimum cumulative GPA of at least 3.4 to be considered for admission to the program. Conditional admission may be granted the student after completing 65 hours of the required course work.

IN THE 2009-2010 *GRADUATE CATALOG*, REVISE 3RD BULLET AS FOLLOWS:

- Conditional admission must be obtained before taking a graduate course that is to be used to satisfy the requirements of both the bachelor's and master's degrees. Students admitted to the program must request permission from the Graduate School to take approved courses for graduate credit. Students admitted to the program must also follow the normal procedure for admission to the Graduate School.

IN THE 2009-2010 *GRADUATE CATALOG*, REVISE TO ADD A NEW BULLET AFTER THE FORTH BULLET:

- Full admission must be obtained before taking a graduate course that is to be used to satisfy the requirements only for the master's degree. These courses must be identified in advance, with the proposed master's advisor or the Industrial Engineering Graduate Program Coordinator.

IN THE 2009-2010 *GRADUATE CATALOG*, REVISE 7TH BULLET AS FOLLOWS:

- Students will not be eligible for graduate assistantships until they are enrolled as graduate-level students in the Graduate School.

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

ADD TEXT FOR PARTICIPATION TO THE GRADUATE CERTIFICATE IN SUSTAINABILITY SCIENCE

Insert in the 2010-2011 *Graduate Catalog*, participation in the Sustainability Science graduate certificate under the Department of Materials Science and Engineering.

SUSTAINABILITY SCIENCE GRADUATE CERTIFICATE

The Department of Materials Science and Engineering participates in the graduate certificate program in sustainability science, designed to prepare students to be conversant in all of the fields relevant to sustainable energy production. The program draws upon the strengths of faculty members in five departments: Chemical and Biomolecular Engineering, Civil

and Environmental Engineering, and Materials Science and Engineering in the College of Engineering, and Biochemistry and Cellular and Molecular Biology and Chemistry in the College of Arts and Sciences. The required courses focus upon the fundamental scientific concepts and the social and political considerations involved in developing sustainable energy. Students pursuing a MS or PhD in Materials Science and Engineering or Polymer Engineering may be admitted to the certificate program. For additional information, see the description of the certificate program listed under the Department of Chemical and Biomolecular Engineering.

ADD TEXT FOR PARTICIPATION TO THE RELIABILITY AND MAINTAINABILITY ENGINEERING GRADUATE CERTIFICATE

Insert in the 2010-2011 *Graduate Catalog*, participation in the Reliability and Maintainability Engineering Graduate Certificate under the Department of Materials Science and Engineering.

RELIABILITY AND MAINTAINABILITY ENGINEERING GRADUATE CERTIFICATE

The Department of Materials Science and Engineering participates in the graduate certificate program in sustainability science, designed to prepare students to be conversant in all of the fields relevant to sustainable energy production. The program draws upon the strengths of faculty members in five departments: Chemical and Biomolecular Engineering, Civil and Environmental Engineering, and Materials Science and Engineering in the College of Engineering, and Biochemistry and Cellular and Molecular Biology and Chemistry in the College of Arts and Sciences. The required courses focus upon the fundamental scientific concepts and the social and political considerations involved in developing sustainable energy. Students pursuing a MS or PhD in Materials Science and Engineering or Polymer Engineering may be admitted to the certificate program. For additional information, see the description of the certificate program listed under the Department of Chemical and Biomolecular Engineering.

REVISE MATERIALS SCIENCE AND ENGINEERING MAJOR, MS – THESIS OPTION

In the 2009-2010 *Graduate Catalog*, revise the 1st and 2nd bullets and revise the last paragraph as follows:

- A major consisting of 12 hours of graduate courses in materials science and engineering consisting of 511, 512, 513, and 514.

- Additional courses up to 12 hours total in related areas. These courses must include MSE 515 and MSE 516 for the metallurgy concentration; MSE 539 and MSE 540 for the polymers concentration; two graduate specialization courses approved by the student's faculty committee for the materials concentration; and two courses from the approved nanomaterials specialization list for the nanomaterials concentration.

All resident students are required to participate in the graduate seminar in materials science and engineering, as appropriate, during each semester in which it is offered. Three hours of MSE 503 may be counted toward degree requirements.

REVISE MATERIALS SCIENCE AND ENGINEERING MAJOR, MS – NON-THESIS OPTION

In the 2009-2010 *Graduate Catalog*, revise the 1st bullet as follows:

- Completion of a total of 30 hours of graduate course work. At least 18 of those hours must be in the department and include MSE 511, MSE 512, MSE 513, and MSE 514. Up to 12 hours may be in related areas. Three hours of MSE 503 may be counted toward degree requirements. The materials science and engineering major must include the same courses required for the thesis option. The faculty committee must approve the candidate's degree program.

REVISE MATERIALS SCIENCE AND ENGINEERING MAJOR, PHD

In the 2009-2010 *Graduate Catalog*, revise the 3rd bullet as follows :

- 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, including MSE 511, MSE 512, MSE 513, and MSE 514, at least 6 hours of 600-level courses, and 30 hours of dissertation. Six hours of MSE 503 may be counted toward degree requirements. At least 24 hours must be courses taught in the department. The materials science and engineering major must include the courses required for the master's program. For students in the nanomaterials concentration at least 12 hours of course work must be from the approved nanomaterials specialization list.

DEPARTMENT OF MECHANICAL, AEROSPACE, AND BIOMEDICAL ENGINEERING

- ADD CONCENTRATIONS – AEROSPACE ENGINEERING – MS AND PHD
  Thermal-Fluid Mechanics concentration
  Systems and Controls concentration
  Applied Mechanics concentration

- ADD CONCENTRATIONS – BIOMEDICAL ENGINEERING – MS AND PHD
  Biomechanics concentration
  Biomedical Systems concentration

- ADD CONCENTRATION –ENGINEERING SCIENCE – MS
  Flight Test Engineering concentration (UTSI only)

- ADD CONCENTRATIONS –ENGINEERING SCIENCE – MS AND PHD
  Thermal-Fluid Mechanics concentration
  Systems and Controls concentration
  Applied Mechanics concentration

- ADD CONCENTRATIONS – MECHANICAL ENGINEERING – MS AND PHD
  Thermal-Fluid Mechanics concentration
  Systems and Controls concentration
  Applied Mechanics concentration

- ADD CONCENTRATIONS – RELIABILITY AND MAINTAINABILITY ENGINEERING – MS
  Aerospace engineering concentration
  Biomedical engineering concentration
  Mechanical engineering concentration

ADD TEXT FOR PARTICIPATION TO THE RELIABILITY AND MAINTAINABILITY ENGINEERING GRADUATE CERTIFICATE

Insert in the 2010-2011 *Graduate Catalog*, participation in the Reliability and Maintainability Engineering Graduate Certificate under the Department of Mechanical, Aerospace, and Biomedical Engineering.

RELIABILITY AND MAINTAINABILITY ENGINEERING GRADUATE CERTIFICATE

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 Chemical and Biomolecular Engineering, Industrial and Information Engineering, Mechanical Engineering, or Nuclear Engineering 483 and Chemical and Biomolecular Engineering, Industrial and Information Engineering, Materials Science and Engineering, Mechanical Engineering, or Nuclear Engineering 484, plus two elective courses selected from a list of courses provided by the participating departments – Chemical and Biomolecular Engineering, Electrical Engineering and Computer Science, Industrial and Information Engineering, Mechanical, Aerospace, and Biomedical Engineering, and Nuclear Engineering. Currently, the available elective courses are Chemical and Biomolecular Engineering 562 and 585, Electrical and Computer Engineering 503, 504, Industrial and Information Engineering 516, 517 and 562, Mechanical Engineering 534, and Nuclear Engineering 575, 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.

REVISE THE FIVE-YEAR BS-MS PROGRAM

In the 2009-2010 *Graduate Catalog*, remove the current introductory paragraph and replace with the following:

The department offers a 5 year BS-MS program for qualified students. The primary component of the program is that qualified students may take up to 9 hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor's and master's degrees at the University of Tennessee. This program is designed for students attending the University of Tennessee for their Master of Science degree because other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the Bachelor of Science degree.

In the 2009-2010 *Graduate Catalog*, under "Significant components of the program are:" – Keep 1st paragraph as is and revise the 2nd, 3rd, and 4th as follows:

Students must at least have conditional admission before taking graduate courses for both their bachelor's and master's degrees. All courses taken for graduate credit must be approved by the departmental chair of the program. Students

admitted to the program must request permission from the Graduate School to take approved courses for graduate credit. Students admitted to the program must also follow the normal procedure for admission to the Graduate School.

Admission of students into this program must be approved by the department and the Graduate School.

Students will not be eligible for graduate assistantships until they are admitted to Graduate School.

ADD PARTICIPATION IN THE FIVE-YEAR BS-MS PROGRAM – AREOSPACE ENGINEERING

Under the Aerospace Engineering link add the above revised FIVE-YEAR BS-MS PROGRAM

ADD PARTICIPATION IN THE FIVE-YEAR BS-MS PROGRAM – BIOMEDICAL ENGINEERING

Under the Biomedical Engineering link add the above revised FIVE-YEAR BS-MS PROGRAM

ADD PARTICIPATION IN THE FIVE-YEAR BS-MS PROGRAM – MECHANICAL ENGINEERING

Under the Mechanical Engineering link add the above revised FIVE-YEAR BS-MS PROGRAM

DEPARTMENT OF NUCLEAR ENGINEERING

▲ ADD CERTIFICATE – NUCLEAR SECURITY SCIENCE AND ANALYSIS

In the 2009-2010 *Graduate Catalog*, add a graduate certificate in Nuclear Security Science and Analysis (NSSA)

The Department of Nuclear Engineering offers a graduate certificate in nuclear security science and analysis (NSSA). The program is designed primarily for students seeking specialization in nuclear security science with emphasis on current or aspiring members of the intelligence community. Additionally, this program will prepare graduate students to engage in the research and development of new tools and processes related to nuclear security science and analysis.

The 12-credit certificate is earned by completing four courses from the following list, including two required courses, one qualifying Nuclear Engineering elective course, and one NSSA elective. Required courses include: NE 530 (Nuclear Security Science and Analysis) and NE 404 (Nuclear Fuel Cycle). Qualifying Nuclear Engineering elective courses include NE 433 (Health physics) and NE 470 (Nuclear Reactor Theory I). NSSA electives include NE 532 (Advanced Topics in Nuclear Security Science and Analysis), Political Science 688 (Seminar on Arms, Arms Control, and Nuclear Non-proliferation), and NE 550 (Radiation Measurements Laboratory). The selection of courses, which must be approved by the department, is determined through a student advising conference that considers the student's personal interests, academic background, and work experience. Criteria for acceptance into the program are the same as for acceptance into the M.S. program in nuclear engineering.

ADD TEXT FOR PARTICIPATION TO THE RELIABILITY AND MAINTAINABILITY ENGINEERING GRADUATE CERTIFICATE

Insert in the 2010-2011 *Graduate Catalog*, participation in the Reliability and Maintainability Engineering Graduate Certificate under the Department Nuclear Engineering

RELIABILITY AND MAINTAINABILITY ENGINEERING GRADUATE CERTIFICATE

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 Chemical and Biomolecular Engineering, Industrial and Information Engineering, Mechanical Engineering, or Nuclear Engineering 483 and Chemical and Biomolecular Engineering, Industrial and Information Engineering, Materials Science and Engineering, Mechanical Engineering, or Nuclear Engineering 484, plus two elective courses selected from a list of courses provided by the participating departments – Chemical and Biomolecular Engineering, Electrical Engineering and Computer Science, Industrial and Information Engineering, Mechanical, Aerospace, and Biomedical Engineering, and Nuclear Engineering. Currently, the available elective courses are Chemical and Biomolecular Engineering 562 and 585, Electrical and Computer Engineering 503, 504, Industrial and Information Engineering 516, 517 and 562, Mechanical Engineering 534, and Nuclear Engineering 575, 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.

COLLEGE OF LAW

All Changes Effective Fall 2010

I: COURSE CHANGES

ADD

945 Environmental Practicum (3) Supervised fieldwork requiring students to respond to specific environmental challenges in practice. Students will help local governments, state agencies, landowners, and non-profit organizations develop quality land use and growth management policies and practices. Students will coordinate with graduate students from other departments. This opportunity will allow students and faculty to work with other disciplines in integrated environmental decision-making and problem-solving thus improving their ability to understand, communicate with, and influence other disciplines.
Instruction/Delivery Mode: FS/FLD
(DE) Prerequisite or (DE) Corequisite: 814.
Recommended Background: 866, 867, or 868.

948 Public Defender Externship (6) Supervised fieldwork requiring students to practice as a public defender and to assume substantial responsibility for the defense of criminal cases in state or federal courts. Externship students will attend classes about practical lawyering skills, local practice and procedure, and Tennessee or federal criminal law. Each student will work under the direct supervision of a full-time, experienced public defender as well as other public defenders in the office. Students may assist in the investigation of crimes, the interview and preparation of witnesses, drafting of relevant documents, negotiation and formal presentation of guilty pleas, and representation of the accused in preliminary hearings or trials.
Instruction/Delivery Mode: FS/FLD
Credit Restriction: May not be taken concurrently with 905, 947, or 949.
(DE) Prerequisites: 813, 920, and either 854 or 855.
(DE) Prerequisite or (DE) Corequisite: 814.
Comment(s): Third-year standing required; second-semester second-year students may be eligible by waiver, space permitting.
Registration Permission: Consent of instructor.

951 Domestic Violence Clinic (3) Supervised fieldwork requiring students to assume substantial responsibility for representing victims of domestic violence in various civil contexts. Students will explore and begin to develop the fundamental professional skills involved in practicing law. Students will gain experience interviewing and counseling clients, negotiating with other attorneys, planning for dispute resolutions, trials and hearings, initiating and defending claims, conducting factual investigations and presenting evidence.
Instruction/Delivery Mode: FS/FLD
(DE) Prerequisite(s) or (DE) Corequisite{s): 814, and either 862 or 958..
Comment(s): Third-year standing required; second-semester second-year students may be eligible by waiver, space permitting.
Registration Permission: Consent of instructor.

953 Wills Clinic (3) Supervised fieldwork requiring students to assume substantial responsibility for representing clients in cases involving trusts and estates matters. Students will interview clients, draft wills, living wills, trusts and other documents for clients, and handle occasional probate matters.
Instruction/Delivery Mode: FS/FLD
(DE) Prerequisite(s) or (DE) Corequisite(s): 814 and 935.
Comment(s): Third-year standing required; second-semester second-year students may be eligible by waiver, space permitting.
Registration Permission: Consent of instructor.

REVISE DESCRIPTION, CREDIT RESTRICTION, AND COMMENTS. REMOVE (DE)PREREQ; ADD (DE)PREREQ OR COREQUISITE

905 Advocacy Clinic (6) Supervised fieldwork requiring substantial responsibility for representing clients with various civil and criminal legal problems. Will explore and begin to develop the fundamental professional skills involved in practicing law. Will gain experience interviewing and counseling clients, negotiating with other attorneys, planning for dispute resolutions, trials and hearings, initiating and defending claims, conducting factual investigations and presenting evidence. Will also explore holistic lawyering and systematic solutions to individual legal problems.
Instruction/Delivery Mode: FS/FLD
Credit Restriction: May not be taken concurrently with 947, 948, or 949.
(DE) Prerequisite(s) or Corequisite(s): 814 and 920.
Comment(s): Third-year standing required. Students may not take Advocacy Clinic (905) in the same semester as the Prosecutorial Externship (947), the Public Defender Externship (948), or the Judicial Externship (949). Second semester second year students may be eligible by waiver, space permitting.

REVISE DESCRIPTION. REMOVE (DE) PREREQUISITES. ADD (DE)PREREQ OR COREQ AND COMMENT(S)

908 Mediation Clinic (3) Supervised fieldwork requiring students to assume substantial responsibility for mediating actual legal disputes. Students study mediation process, theory, strategy, tactics and skills through readings, simulations and service as mediators in the Knox County General Sessions Court and other settings. The course includes mediation ethics, the relationship of mediation to other dispute resolution methods, the roles of attorneys in mediation and the writing of mediation agreements.
Instruction/Delivery Mode: FS/FLD
(DE) Prerequisite(s) or Corequisite(s): 814 and 914.
Comment(s): 914 may be waived based on participation in ABA Representation in Mediation Competition or substantial prior mediation training.

REVISE (DE)PREREQUISITE(S) AND (DE) PREREQUISITE(S) OR COREQUISITE(S); ADD COMMENT; REMOVE CREDIT RESTRICTION

946 - Business Law Clinic (6) Supervised fieldwork assuming substantial responsibility for representing clients with various business and transactional matters. Exploration and development of fundamental professional skills involved in practicing business and transactional law. Interviewing and counseling clients, negotiating with other attorneys and parties, planning, negotiating and documenting transactions and dispute resolutions, conducting factual investigations and legal audits of businesses, and monitoring and ensuring compliance with federal, state and local statutes, rules and regulations.
Instruction/Delivery Mode: FS/FLD
(DE) Prerequisites: 818, 826, 827, and 972.
(DE) Prerequisite(s) or Corequisite(s): 814 and 842.
Comment(s): 826 may be waived for students who have sufficient business background.

REVISE DESCRIPTION, CREDIT RESTRICTION, (DE)PREREQ AND COMMENTS; ADD (DE)PREREQ OR COREQ

947 Prosecutorial Externship (6) Supervised fieldwork requiring substantial responsibility for the prosecution of criminal cases in state or federal courts. Externship students will attend classes about practical lawyering skills, local practice and procedure, and Tennessee or federal criminal law. Each student will work under the direct supervision of a full-time, experienced prosecutor as well as other professional prosecutors in the office. May assist in the investigation of crimes, the interview and preparation of witnesses, drafting of relevant documents, negotiation and formal presentation of guilty pleas, presentation of cases to the grand jury and representation of the government in preliminary hearings or trials.
Instruction/Delivery Mode: FS/FLD
Credit Restriction: May not be taken concurrently with 905, 947, or 949.
(DE) Prerequisites: 813, 920, and either 854 or 855.
(DE) Prerequisite or (DE) Corequisite: 814.
Comment(s): Third-year standing required; second-semester second-year students may be eligible by waiver, space permitting.

REVISE DESCRIPTION; ADD CREDIT RESTRICTION, (DE)PREREQUISITE OR COREQUISITE, AND COMMENT(S)

949 Judicial Externship (4) Supervised fieldwork requiring working under the supervision of judges or judicial law clerks. Will enhance traditional classroom learning by observing the legal process from the perspective of a judge. In addition to learning from court observations, will assist the judge in researching and drafting memoranda, opinions and orders.
Instruction/Delivery Mode: FS/FLD.
Credit Restriction: May not be taken concurrently with 905, 947, or 948.
(DE) Prerequisite or (DE) Corequisite: 814.
Comment(s): Third-year standing required; second-semester second-year students may be eligible by waiver, space permitting.
Registration Permission: Consent of instructor.

REVISE TO ADD (DE)PREREQUISITE OR COREQUISITE AND COMMENTS

909 Non-Profit Corporations (3) Examines federal and state laws that govern non-profit corporations and offers practical clinical experience representing local corporations. Teams of students conduct "legal audits" of local non-profit corporations, make presentations to administrators and directors, draft corporate documents, and help clients resolve legal problems.
Instruction/Delivery Mode: FS/FLD.
(DE) Prerequisite or (DE) Corequisite: 814.
Comment(s): Third year standing required; second-semester second-year students may be eligible by waiver, space permitting.

COLLEGE OF NURSING

All changes effective fall 2010

I. COURSE CHANGES

REVISE (RE)PREREQUISITE, REMOVE (DE)COREQUISITE AND RECOMMENDED BACKGROUND.

605 Middle-range Theoretical Formulations for Nursing Science Development (3)
(RE)Prerequisite(s): 601

II. PROGRAM CHANGES

REVISE NURSING MAJOR – MSN

In the 2009-2010 *Graduate Catalog*, under the "Special Policies" heading, add the following new bullet as the last bullet.

- Non-RN students who earn less than a C grade in an undergraduate, pre-licensure nursing course, will not be allowed to continue in the MSN program. Non-RN students must maintain a cumulative 3.0 GPA in undergraduate pre-licensure nursing courses to be allowed to remain in the program.

COLLEGE OF SOCIAL WORK

All Changes Effective Fall 2010

I: COURSE CHANGES

(905) (SOWK) Social Work

ADD

567 Introduction to Veterinary Social Work (2) Concentration elective on the introductory principles and applications of veterinary social work. Reviews research, practice settings, and policy needs in the four areas of veterinary social work: the link between human and animal violence, animal assisted interventions, grief and bereavement, and compassion fatigue. Students will be expected to become knowledgeable about research findings and apply them to social work practice skills and policy advocacy. Will engage in service learning, reflective critical thinking about course content, and teaching through class presentations.
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

568 Advanced Veterinary Social Work (2) Concentration elective on the advanced principles and applications of veterinary social work. Builds upon introductory veterinary social work content and strongly utilizes an applications approach to further review and explore research, practice settings, and policy needs in the four areas of veterinary social work. Will engage in service learning, critical thinking and problem-solving methods from a strengths-based, ecological perspective, and teaching through class presentations. Students will also be further challenged to examine their personal views verses their professional social work identity and increase awareness of their strengths and areas of growth for each.
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538, 539 and 567.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

REVISE (RE)PREREQUISITES AND COMMENTS; ADD REGISTRATION PERMISSION

531 Working with Maltreated and Traumatized Children and Their Families (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

532 Short-Term Interventions (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

540 General Topics in Social Work (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

545 Evidence-based Resource Development Practice Across Systems (3)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

546 Evidence-based Social and Economic Development Practice Across Systems (3)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

548 Advanced Policy Practice (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

549 Evaluative Research (3)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

552 Community Organization (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

554 Social Work in Community-based Health Care (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

555 Psychological Development and Mental Health in Later Life (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

556 Social Policy of North America (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

557 Principles and Techniques of Mediation (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

558 Legislative Advocacy and Political Social Work (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

559 Community Based Practice in Mexico and the United States (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

560 Evidence-based Interpersonal Practice with Groups (3)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

562 Evidence-based Interpersonal Practice with Adult Individuals (3)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

563 Systematic Planning and Evaluation for Interpersonal Practice (3)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

564 Evidence-based Substance Abuse Treatment (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

566 Social and Cultural Aspects of Aging (2)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

570 Evidence-based Practice with Families (3)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

571 Evidence-based Practice with Children and Adolescents (3)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

572 Evidence-based Practice with Older Adults (3)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538 and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing.

REVISE TO ADD VARIABLE HOURS AND ADD REPEATABILITY

510 Social Work and Social Welfare Policy and Services (2-3)
Repeatability: May be taken once for credit.

REVISE TO DELETE (RE)PREREQUISITES AND COMMENTS

520 Evidence-Based Practice (1)

REVISE TO ADD (RE)PREREQUISITES, COMMENTS, AND REGISTRATION PERMISSION

535 School Social Work (3)
(RE) Prerequisite(s): 510, 512, 513, 517, 519, 522, 537, 538, and 539.
Comment(s): Advanced Standing satisfies prerequisites. Non-MSSW students may register with consent of instructor.
Registration Permission: Advanced Standing

REVISE HOURS; DELETE (RE)PREREQUISITES AND COMMENTS

537 Introduction to Psychopathology and Social Work Practice (3)

REVISE TO ADD VARIABLE HOURS AND REPEATABILITY; DELETE (RE)PREREQUISITES AND COMMENTS

539 Leadership Skills and Knowledge for Advanced Social Work Practice (2-3)
Repeatability: May be taken once for credit.

II. PROGRAM CHANGES

▲ ADD GRADUATE CERTIFICATE – VETERINARY SOCIAL WORK

Veterinary Social Work Graduate Certificate
Students who are already enrolled in the Masters of Science in Social Work program may also earn a certificate in veterinary social work. This program will provide students with the coursework and practical experience needed to incorporate and facilitate human animal interaction programs and interventions in ethically sound ways.

Admission
To be admitted to this program, students must meet the Graduate Admission requirements for a certificate program, interview with the veterinary social work faculty, and have passed all course work in the foundation year of the Masters of Science in Social Work program.

Program of Study
The certificate program consists of 20 hours of course work: 4 hours of veterinary social work courses (SOWK 567 and SOWK 568), 2 elective hours (SOWK 557), 3 elective hours with assignment in the course on a veterinary social work topic (SOWK 570, SOWK 571 or SOWK 572), and 12 field placement credits.

Other courses may, where appropriate, be substituted for the courses listed above with the permission of the director.

REVISE SOCIAL WORK MAJOR – MSSW

In the 2009-2010 *Graduate Catalog*, revise Professional Foundation Curriculum text. Remove current text and replace with the following:

Professional Foundation Curriculum
MSSW foundation content (first year – fall and spring semester) includes fundamental, evidence-based knowledge and skills that will prepare students to practice across client systems within a culturally affirming generalist social work context. MSSW foundation curriculum includes content in the following areas – social work practice, research, human behavior in the social environment, social policy, populations at risk and social and economic justice, values and ethics, diversity, critical thinking/evidence-based practice, leadership, supervision, management, introductory psychopathology, and field.

REVISE SOCIAL WORK MAJOR – MSSW

In the 2009-2010 *Graduate Catalog*, remove the Advanced Content heading and paragraph.

GRADUATE CURRICULUM COMMITTEE
Addendum to the Graduate Curriculum meeting of October 22, 2009

COLLEGE OF VETERINARY MEDICINE

COURSE CHANGES

The College of Veterinary Medicine respectfully requests that all the course changes submitted and approved by the Graduate Curriculum Committee on October 22, 2009, become effective Summer Semester, 2010, rather than Fall Semester, 2010.

Rationale
The above referenced courses can only be taken by senior students enrolled in the College of Veterinary Medicine, and a number of the courses are required for completion of the Doctor of Veterinary Medicine degree while the others are elective courses which will allow students to gain additional knowledge and experience in a specific field of veterinary medicine. The senior year for veterinary students is three semesters long and begins with summer semester each year. If the above course changes become effective Fall Semester, 2010, students in the College's Class of 2011 will begin their senior year courses (clinical rotations) Summer Semester, 2010, on the current curriculum and then move to the new courses (curriculum) Fall Semester, 2011. This will create much confusion and represents a major challenge in scheduling. The current curriculum is based on four week blocks of time (13 blocks per three semesters), and all but one block is divided into two 2 week rotations (sub courses like Equine Surgery and Equine Emergency Medicine and Critical Care). There are 54 weeks in the current curriculum which includes 50 weeks for credit and 4 weeks of vacation.

The new curriculum is based on one week blocks of time (54 per three semesters), and all core/required courses are three weeks in length while elective courses may be two or one week in length. If I may use the Radiology core course as an example, there are four (4) weeks of Radiology in the current curriculum, Radiology I and II, each two (2) weeks in length, with Radiology I taught in the first half of the year and Radiology II in the second half of the year. In the revised curriculum, there is a single Radiology core course, three weeks long, taught throughout the entire year. If students in the Class of 2011 begin their fourth year Summer Semester, 2010, on the current curriculum, I will need to try to reconcile the Radiology courses for those students who take Radiology I as a two week course, and have not had Radiology II, with the three week long Radiology core course in the new curriculum. This cannot be done well because of differences in content in the old and new radiology courses. This same problem holds for other courses as well. The best solution for this problem is for the Graduate Curriculum Committee to allow the College of Veterinary Medicine to implement the new senior year courses (curriculum) Summer Semester, 2010. This change will only impact the College of Veterinary Medicine and no other academic units in the University since these courses can only be taken by senior students enrolled in the College of Veterinary Medicine. In addition, the College registers each student in his/her courses on the UTK Registration System. I am willing to do whatever is necessary to facilitate this change. I apologize for not requesting that these course changes be effective Summer Semester, 2010, when submitting for the October Graduate Curriculum Committee meeting. Thank you for considering this request.

James J. Brace, Associate Dean for Academic and Student Affairs

INTERCOLLEGIATE

COMPARATIVE AND EXPERIMENTAL MEDICINE

All changes effective Fall 2010

I. COURSE CHANGES

(261) (CMVM) Comparative and Experimental Medicine – College of Veterinary Medicine

ADD SECONDARY CROSS-LISTED COURSE

541 Cellular and Molecular Basis of Disease (2) *(See Comparative and Experimental Medicine – Graduate School of Medicine 541.)*

ADD PRIMARY COURSE AND CROSS-LIST

542 Cellular and Molecular Basis of Disease (2) Disease at molecular level. Changes in molecular events in cells that lead to disease and occur as a result of disease. Correlation with clinical and pathological states. Systems covered: renal, liver/pancreas, metabolism, endocrinology, reproduction, immunology. *(Same as Comparative and Experimental Medicine – Graduate School of Medicine 542.)*
(DE) Prerequisite(s): Biochemistry and Cellular and Molecular Biology 419.

ADD

616 Comparative and Experimental Medicine Seminar (1) Research seminars pertinent to disciplines within the program.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 12 hours.
Credit Restriction: Maximum 3 hours may be applied toward degree requirements.

(262) (CMMD) Comparative and Experimental Medicine – Graduate School of Medicine

REVISE CREDIT HOURS AND DESCRIPTION AND CROSS-LIST

541 Cellular and Molecular Basis of Disease (2) Disease at molecular level. Changes in molecular events in cells that lead to disease and occur as a result of disease. Correlation with clinical and pathological states. Systems covered: neurological, muscular, bone, respiratory, hematology. *(Same as Comparative and Experimental Medicine – College of Veterinary Medicine 541.)*

Formerly: (4) Disease at molecular level. Changes in molecular events in cells that lead to disease and occur as result of disease. Correlation with clinical and pathological states.

ADD SECONDARY CROSS-LISTED COURSE

542 Cellular and Molecular Basis of Disease (2) (*See Comparative and Experimental Medicine – College of Veterinary Medicine 542.)*

REVISE REPEATABILITY AND ADD CREDIT RESTRICTION

610 Medical Biology Seminar (1)
Repeatability: May be repeated. Maximum 12 hours.
Credit Restriction: Maximum 3 hours may be applied toward degree requirements.