



1-19-2017

# Curriculum Committee Report - January 19, 2017

Graduate Council

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**Graduate Curriculum Committee Meeting Report**  
**Fred Brown Residence Hall, Multipurpose Room C**  
**Thursday, January 19, 2017**

Members present: Robert Fuller (Chair), David Bemis, Stergios Botzakis, Kivanc Ekici, Rachel Fleming-May, Rebecca Jackson, Sibyl Marshall, Stefanie Ohnesorg, Tam'ra-Kay Francis (GSS representative).

Also in attendance: Mary Albrecht (Accreditation), Jessica Garner (Bredesen Center), John Stier (College of Agricultural Sciences and Natural Resources), Katherine Ambroziak (College of Architecture and Design), Chuck Collins (College of Arts and Sciences), Masood Parang (Tickle College of Engineering), Mary Gunther (College of Nursing), Dixie Thompson (Dean of the Graduate School), Catherine Cox (Graduate Council Liaison).

Sibyl Marshall called the meeting to order at 2:05 p.m. Robert Fuller, Chair, arrived immediately thereafter and completed the meeting as chair.

Curriculum proposals for discussion:

**College of Agricultural Sciences and Natural Resources**

Course adds: 35

Course drops: 35

Course revisions: 13

course changes = 83

***Edit to ALEC 542 (Request to change the title from Graphic Design to Layout and Design)***

***Curriculum Committee voted electronically and approved the edit.***

*Department of Agricultural and Resource Economics*

Add accelerated 5-year BS-MS (Agricultural and Resource Economics major)

*Department of Animal Science*

Add accelerated dual MS-DVM Program (Animal Science major)

*Department of Entomology and Plant Pathology*

Drop two PhD concentrations (Biodiversity & ecosystem resilience and Organismal biology and ecology)

Add one PhD concentration (Organismal biology, ecology, and systematics)

*Department of Food Science*

Department name change: from Food Science and Technology to Food Science

**College of Architecture and Design**

Course adds: 6

Course drops: 4

Course revisions: 7

course changes = 17

*School of Architecture*

Add description for the Urban design concentration

Add description for the Sustainable design concentration

**College of Arts and Sciences**

Course adds: 23

Course drops: 23

Course revisions: 35

course changes = 81

*School of Art*

Drop concentration, Art major, MFA (Transmedia design)  
Add concentration, Art major, MFA (Time-Based Art)

*Interdisciplinary Programs – Women’s Studies*

Drop Graduate Certificate (Women’s Studies)

*Department of Sociology*

Add concentration, Sociology major to both the MA and PhD (Critical race and ethnic studies))

*Department of Modern Foreign Languages and Literatures*

Revised requirements, French major, MA

**Edit from Curriculum Committee meeting. Curriculum Committee asked that the second bullet be revised.**

**Second bullet was revised as follows:**

- **The thesis committee must be established and a formal proposal approved by the end of the second semester of course work. The thesis must be completed by the end of the fourth semester of course work. The thesis will contain 10,000 to 15,000 words. Any student who fails to receive a passing grade in FREN 500 in their third and fourth semesters will be required to complete the non-thesis option.**

***Curriculum Committee voted electronically and approved the above edit.***

**Haslam College of Business**

Course adds: 16

Course drops: 6

Course revisions: 14

course changes = 36

*Department of Management*

Drop concentration, Business Administration major, PhD (Organizations and strategy)

Add concentration, Business Administration major, PhD (Strategy, entrepreneurship and organizations)

Drop major, degree, and concentration: Business Administration major, MBA, Human resource management concentration

Drop major and degree: Human resource management, MS

Add major and degree: Management and human resources, MS

**College of Communication and Information**

Course changes - NONE

**College of Education, Health, and Human Sciences**

Course adds: 9

Course drops: 1

Course revisions: 30

course changes = 40

*Department of Child and Family Studies*

Add certificate: International, children, youth, and families

*Department of Educational Psychology and Counseling*

Drop major, degree, and concentration: Education major, MS, Cultural Studies of educational foundations concentration

Move Graduate certificate: Cultural Studies in Education from Department of Educational Psychology and Counseling to Department of Theory and Practice in Teacher Education

*Department of Public Health*

Drop the 2 concentrations from the DrPH (Community health education and Epidemiology)

*Department of Theory and Practice in Teacher Education*

Add major, degree, and concentration to Non-Licensure Track 1: (Teacher Education major, MS, Cultural studies of educational foundations concentration)

**Tickle College of Engineering**

Course adds: 22

Course drops: 17

Course revisions: 16

course changes = 55

*Department of Electrical Engineering and Computer Science*

Add concentration: Computer Engineering major, for both MS and PhD (Signal processing)

Add concentration: Electrical Engineering major, for both MS and PhD (Signal processing)

Add certificate: Wide Bandgap Power Electronics

*Department of Industrial and Systems Engineering*

Add concentrations: Industrial Engineering major, MS (Automotive manufacturing and Systems engineering)

**College of Law**

Course adds: 2

Course drops: 0

Course revisions: 1

course changes = 3

**College of Nursing**

Course adds: 0

Course drops: 0

Course revisions: 7

course changes = 7

Drop concentrations: Nursing major, MSN (Mental health nursing and Pediatric nursing)

Add concentrations: Nursing major, MSN (Pediatric nurse practitioner and Psychiatric mental health nurse practitioner)

Drop concentrations: Nursing major, DNP (Mental health practitioner and Pediatric nursing)

Add concentrations: Nursing major, DNP (Pediatric nurse practitioner and Psychiatric mental health nurse practitioner)

Drop 3 Certificates: Adult health nursing clinical nurse specialist, Mental health nursing, and Pediatric nursing

Add 3 Certificates: Adult gerontology clinical nurse specialist, Psychiatric mental health nurse practitioner, and Pediatric nurse practitioner

**College of Social Work**

Course adds: 0  
Course drops: 0  
Course revisions: 39 course changes = 39

**College of Veterinary Medicine**

Course adds: 3  
Course drops: 0  
Course revisions: 8 course changes = 11

Add accelerated dual DVM-MS Program (Animal Science major)

**Intercollegiate – Comparative and Experimental Medicine**

Course adds: 1  
Course drops: 0  
Course revisions: 3 course changes = 4

**Intercollegiate – Bredesen Center for Interdisciplinary Research and Graduate Education**

Course adds: 0  
Course drops: 1  
Course revisions: 0 course changes = 1

**Totals:**

Course Adds = 117  
Course Drops = 87  
Course Revisions = 173  
**Total course changes = 377**

Motion to Amend course SCM 575, page G2707, of the November 10, 2016 Graduate Council Minutes. Haslam College of Business asked to amend course SCM 575 – to replace the 6 hour course offering to a variable course offering of 6-9 hours. Curriculum Committee voted and approved the Amendment.

<b>Thursday January 19, 2017 2:00 P.M.</b>	<b>Graduate Curriculum Committee Meeting</b>	<b>Location Change Fred Brown Hall Multipurpose Rm C</b>
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## AGENDA

**College of Agricultural Sciences and Natural Resources**

**College of Architecture and Design**

**College of Arts and Sciences**

**Haslam College of Business**

**College of Communication and Information**

**College of Education, Health, and Human Sciences**

**Tickle College of Engineering**

**College of Law**

**College of Nursing**

**College of Social Work**

**College of Veterinary Medicine**

**Intercollegiate: Comparative and Experimental Medicine**

**Bredesen Center for Interdisciplinary Research and Graduate Education**

- ❖ **Indicates new majors/ degrees /certificates being added / dropped.**
- **Indicates concentrations being added / dropped.**
- + **Indicates a new academic discipline being added.**

# COLLEGE OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES

All Changes Effective Fall 2017

## I. COURSE CHANGES

### INTERDEPARTMENTAL

#### (AGNR) Agricultural and Natural Resources

##### ADD EXISTING 400-LEVEL COURSE FOR GRADUATE CREDIT

**AGNR 480 How to Feed the World (3)** Human population growth will require food production to double by 2050. Explore ways our global society might sustainably increase food production, in ways that protect our environmental resources while maintaining food security and food justices. Aspects include socio-political, business, technology, cultural, religious, and natural sciences in various learning formats ranging from group discussions to guest lectures. Students are expected to develop potential solutions towards solving the world's food and environmental crises. May be used as capstone option for International Agriculture and International Resources minor.

*Registration Restriction: Junior, Senior or Graduate Student status*

Rationale: In 2016, the inaugural year of the course, several graduate students from at least two colleges (Architecture and Design and CASNR) indicated in 2016 a desire to take the course because it relates to their major and/or they have a special interest in international studies; two are taking it despite it not being offered for graduate credit. Having graduate students in the course benefits the upper-level undergraduate students as they learn from higher-level peers and graduate students will benefit from developing their leadership and communication skills as they lead discussions. Impact on other units: Negligible. Financial impact: None, the anticipated few additional students (<10 annually) can be handled within the existing instructional support.

### DEPARTMENT OF AGRICULTURAL LEADERSHIP, EDUCATION AND COMMUNICATIONS

Learning Outcomes for the MS degree in Agricultural Leadership, Education and Communications

1. Students will demonstrate the ability to communicate through written scholarly work (thesis or creative component).
2. Students will demonstrate the ability to communicate through oral presentations of their thesis or creative component.
3. Students will demonstrate leadership activities which impact a community.

#### (ALEC) Agricultural Leadership, Education and Communications

##### ADD

**ALEC 542 Layout and Design (3)** Explore elements of desktop layout and visual design principles to develop effective communication material for agricultural audiences.

Rationale: Hired a new faculty member in agricultural communications and he would like to expand the agricultural communication course electives. Impact on other units: None. Financial impact: None. This does not support Program Learning Outcomes for the MS in Agricultural Leadership, Education and Communications. Support from assessment activities: The current faculty member who has been hired to oversee the Agricultural Communications concentration has conducted research to determine needed skills of agricultural communication graduates and graphic design was one of the most needed skills.

##### DROP

**ALEC 550 Multicultural Education and Cultural Competence in Diverse Organizations and Communities (3)**

Rationale: No faculty member to teach the course. Impact on other units: None. Financial impact: None

##### REVISE TITLE AND DESCRIPTION; ADD REGISTRATION RESTRICTION

**ALEC 510 Ethical Leadership in Agriculture (3)** Analysis of theories, models, and practices of ethical decision making and leadership through agriculture contexts.

*Registration Restriction(s): Minimum student level – graduate.*

Formerly: 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.

Rationale: To align title with the course description. Impact on other units: None. Financial impact: None. This supports Program Learning Outcome 1 for the MS in Agricultural Leadership, Education and Communications as students will be more engaged leadership experiences. Support from assessment activities: Students who have been assessed (exit interviews) have expressed a need for more ALEC coursework in the area of ethical leadership practices.

## REVISE TO ADD (DE)PREREQUISITE

**ALEC 529 Research Proposal Development (3)** Develop a current research or creative component topic area. Research and write the first three chapters of the thesis or dissertation by closely examining each component of the proposal and then carrying out the writing and construction of the proposal.

*(DE) Prerequisite(s): 524.*

Formerly: None

Rationale: Students need to have a knowledge base of research methods before taking the course. Impact on other units: None. Financial impact: None. This supports Program Learning Outcome 2 for the MS in Agricultural Leadership, Education and Communications as students will be more engaged in research which will enhance their proposal writing endeavors. Support from assessment activities: Students who have not taken ALEC 524 prior to ALEC 529 do not perform as well on the proposal writing assignments. Therefore, the graduate committee in ALEC has requested this be a requirement prior to taking ALEC 529.

## DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS

Learning Objectives for the MS Thesis Option in Agricultural and Resource Economics:

1. Appropriateness of conceptual frameworks in theses at the time of the thesis defense.
2. Appropriateness of methods and procedures in theses at the time of the thesis defense.
3. Professional appropriateness of oral presentations during defense of theses.

## (AREC) Agricultural and Resource Economics

### ADD EXISTING 400-LEVEL COURSES FOR GRADUATE CREDIT

**AREC 443 Food Industry Management and Marketing (3)** Market analysis and business strategy for agricultural products from 'farm to fork'. Food industry procurement systems, transportation and logistics; supply chain forecasting and planning; management of food processing facilities; development of business plans for new food products and comprehensive marketing plans.

*(RE) Prerequisite(s): 201 or Economics 201, Statistics 201, Agricultural and Resource Economics 342, 350.*

This course supports learning objectives 1, 2, and 3 for the MS Thesis Option.

Rationale: Provide an additional course option for students in Agricultural Economics concentration in the MS Thesis and Non-thesis Options and for students in the MBA-MS Agricultural Economics Program. Impact on other units: None. Financial impact: None, existing faculty will instruct the course.

**AREC 444 Agricultural Production and Technology Management (3)** Advanced Topics in agricultural production management and applied use of advanced tools to make farm management decisions. Topics include business structure, managing income tax, machinery management, human resources, and the adoption and use of new and emerging technologies. Applied tools include mathematical programming, regression analysis, and spreadsheet decision tools.

*(RE) Prerequisite(s): 324, 342, Agriculture and Natural Resources 291.*

This course supports learning objectives 1, 2, and 3 for the MS Thesis Option.

Rationale: Provide an additional course option for students in Agricultural Economics Concentration in the MS Thesis and Non-thesis Options and for students in the MBA-MS Agricultural Economics Program. Impact on other units: None. Financial impact: None, existing faculty will instruct the course.

Support from assessment activities: Minor change; none needed.

## REVISE TITLE AND DESCRIPTION

**AREC 412 Agricultural Finance and Risk Management (3)** Microeconomic and financial concepts applied to decision problems faced by farms and agribusinesses; financial statement analysis; firm capital structure; time value of money, capital budgeting and investment analysis, risk management and diversification; computer applications.

Formerly: Agricultural Finance (3) Macro finance, financial objectives, acquisition of debt and equity funds, capital investments, capital allocation, debt repayment, credit analysis, borrower and lender loan application analysis, insurance strategies, computer applications, kinds and sources of agricultural credit, and financial intermediation.

This course supports learning objectives 1, 2, and 3 for the MS Thesis Option.

Rationale: Bring course title and description in line with current undergraduate catalog description. Impact on other units: None. Financial impact: None, existing faculty will instruct the course. Support from assessment activities: Not applicable.



### REVISE TITLE, CREDIT HOURS, AND DESCRIPTION

**AREC 445 Renewable Energy Economics (2)** Overview of the economics of renewable energy including wind, solar, hydro, and biomass technologies. Assessment of the economic, environmental, and policy forces that are shaping the renewable energy industry. Exploration of methods for evaluating the economic feasibility of investment in renewable energy.

Formerly: Economics of Biomass for Renewable Energy (3) Overview of the economics of renewable energy and the potential role for biomass. Assessment of the economic, environmental, and policy forces that are shaping the bioenergy feedstock production, logistics, and conversion.

This course supports learning objectives 1, 2, and 3 for the MS Thesis Option.

Rationale: Bring course title, description, and credit hours in line with current undergraduate catalog description. Impact on other units: None. Financial impact: None, existing faculty will instruct the course. Support from assessment activities: Not applicable.

### REVISE TITLE AND ADD COMMENT

**AREC 442 Advanced Agribusiness Management (3)** Advanced concepts in developing business and marketing plans and in applied management principles, such as inventory control and pricing techniques. Discussion of management issues including going international, employee supervision, management succession and guerilla marketing. Teamwork emphasized in managing an agribusiness firm through game simulation. Written and oral presentation required.

*Comment(s): Graduate standing may satisfy prerequisites.*

Formerly: Agribusiness Management (3) Advanced concepts in developing business and marketing plans and in applied management principles such as inventory control and pricing techniques. Discussion of management issues including going international, employee supervision, management succession and guerilla marketing. Teamwork emphasized in managing an agribusiness firm through game simulation. Written and oral presentation required.

This course supports learning objectives 1, 2, and 3 for the MS Thesis Option.

Rationale: Bring course title in line with current undergraduate catalog description. Impact on other units: None. Financial impact: None, existing faculty will instruct the course. Support from assessment activities: Not applicable.

### REVISE (RE)PREREQUISITES

**AREC 420 International Agricultural Trade and Marketing (3)** Introduction to real and monetary aspects of international trade effect on agricultural commodity flows; partial equilibrium analysis of international trade in agricultural products; institutional aspects of international marketing of agricultural products.

*(RE) Prerequisite(s): Economics 311.*

Formerly: International Agricultural Trade and Marketing (3)  
(RE) Prerequisite(s): 320 or Economics 311.

This course supports learning objectives 1, 2, and 3 for the MS Thesis Option.

Rationale: Bring prerequisites in line with current undergraduate catalog description as AREC 320 is no longer being taught. Impact on other units: None. Financial impact: None, existing faculty will instruct the course. Support from assessment activities: Not applicable.

### REVISE (RE)PREREQUISITES AND ADD COMMENT

**AREC 460 Rural Economic Development (3)** Use of economic principles in understanding rural economic development at community and regional levels, emphasizing the linkages between rural and urban communities, business location decisions, and how geography shapes markets. Integrating historical and current information, students will explore efficiency and equity as driving forces behind public and private sector policy to encourage, manage and forecast domestic and international development.

*(RE) Prerequisite(s): Economics 311.*

*Comment(s): Graduate standing may satisfy prerequisites.*

Formerly: Rural Economic Development (3) Use of economic principles in understanding rural economic development at community and regional levels, emphasizing the linkages between rural and urban communities, business location decisions, and how geography shapes markets. Integrating historical and current information, students will explore efficiency and equity as driving forces behind public and private sector policy to encourage, manage and forecast domestic and international development.

(RE) Prerequisite(s): 320 or Economics 311.

This course supports learning objectives 1, 2, and 3 for the MS Thesis Option.

Rationale: Bring prerequisites in line with current undergraduate catalog description as AREC 320 is no longer being taught. Impact on other units: None. Financial impact: None, existing faculty will instruct the course. Support from assessment activities: Not applicable.

**AREC 472 Natural Resource Economics (3)** Economic analysis of natural resource use and conservation with emphasis on land, water and other renewable resources. Principles for benefit-cost analyses of natural resource projects and policies. Methods for valuation of non-market impacts associated with natural resource use. Sustainability as an economic concept.

*(RE) Prerequisite(s): Economics 311.*

*Comment(s): Graduate standing may satisfy prerequisites.*

Formerly: Natural Resource Economics (3) Economic analysis of natural resource use and conservation with emphasis on land, water and other renewable resources. Principles for benefit-cost analyses of natural resource projects and policies. Methods for valuation of non-market impacts associated with natural resource use. Sustainability as an economic concept.  
(RE) Prerequisite(s): 320 or Economics 311.

This course supports learning objectives 1, 2, and 3 for the MS Thesis Option.

Rationale: Bring prerequisites in line with current undergraduate catalog description as AREC 320 is no longer being taught. Impact on other units: None. Financial impact: None, existing faculty will instruct the course. Support from assessment activities: Not applicable.

## DEPARTMENT OF BIOSYSTEMS ENGINEERING AND SOIL SCIENCES

Learning outcomes for the MS in Biosystems Engineering

1. Understanding of the scientific method as applied to research and to engineering design and development. Specifically, understanding the importance of developing and testing hypotheses, and of the use of scientific, mathematical, and statistical tools in. [sic]
2. Capacity to effectively locate literature relevant to a topic, and to critically evaluate such literature. In particular, familiarity with the primary scientific literature, as well as secondary and commercial sources.
3. Capacity to write proposals; conduct experiments; design, construct, and test devices; and write coherent technical reports based on such work.
4. Understanding of professional scientific ethics, including issues such as designation of authorship, and patent rights.
5. Competence in a particular focus area of Biosystems Engineering.

Learning outcomes for the PhD in Biosystems Engineering

1. Understanding of the scientific method as applied to research and to engineering design and development. Specifically, understanding the importance of developing and testing hypotheses, and of the use of scientific, mathematical, and statistical tools in. [sic]
2. Capacity to effectively locate literature relevant to a topic, and to critically evaluate such literature. In particular, familiarity with the primary scientific literature, as well as secondary and commercial sources.
3. Capacity to write proposals; conduct experiments; design, construct, and test devices; and write coherent technical reports based on such work.
4. Understanding of professional scientific ethics, including issues such as designation of authorship, and patent rights.
5. Competence in a particular focus area of Biosystems Engineering.

## (BSE) Biosystems Engineering

### DROP 400-LEVEL COURSE FOR GRADUATE CREDIT

#### BSE 451 Electronic Systems (4)

#### ADD

**BSE 551 Electronic Systems (4)** Basic electronics with biological applications. Analog and digital electronics; sensing and controlling physical and environmental parameters; sensor selection and interfacing; signal conditioning; process control. Includes laboratory experiments and design projects.

*Recommended Background: DC/AC Circuit Analysis in Electrical Engineering or Physics.*

*Credit Restriction: Students cannot receive credit for both 451 and 551*

*Registration Restriction(s): Minimum student level - graduate*

Rationale: Fills same place in curriculum and graduate program SLOs as BSE451, but makes it easier for graduate students to meet requirements and allows them to get credit for 500-level course. Will meet at same time and place as BSE451, and will have same additional requirements (above and beyond 451) as are currently required for 451 graduate credit. Impact on other units: None. Financial impact: None.

Response to assessment: increase ease of separating assessment of UG and graduate classes.

SLO addressed by this course: Understanding of the scientific method as applied to research and to engineering technology design and development. Specifically, understanding the importance of developing and testing hypotheses, and of the use of scientific, mathematical, and statistical tools. SLO metrics associated with this course: None.

## DEPARTMENT OF ENTOMOLOGY AND PLANT PATHOLOGY

Learning outcomes for the MS in Entomology and Plant Pathology

1. Demonstrate the ability to make professional, effective, and accurate research presentations.
2. Plan and perform original research that will be described in a scientifically sound, clearly written thesis.
3. Demonstrate they have mastered information relative to their thesis and field of study (i.e., bioinformatics and genomics, entomology OR plant pathology).

Learning outcomes for the PhD in Entomology, Plant Pathology and Nematology

1. Demonstrate the ability to make professional, effective, and accurate research presentations.

2. Plan and perform original research that will be described in a scientifically sound, clearly written document and published in relevant scientific outlets.
3. Demonstrate that they have mastered information relative to their dissertation and field of study (i.e., biodiversity and ecosystem resilience; bioinformatics, genomics, and their molecular interactions; organismal biology and ecology; and [sic]
4. Demonstrate professional skills and experience in academic outreach, extension, leadership/service, mentoring and teaching.

## **(EPP) Entomology and Plant Pathology**

### **DROP**

#### **EPP 541 Seminar (1)**

Rationale: Currently there were two separate courses for seminar, one for MS students (EPP 541) and another for PhD students (EPP 640). The course requirements for both groups of students are the same. In order to increase the efficient use of our FTEs, all EPP graduate students will enroll in EPP 640, which will increase the enrollment numbers for EPP 640. Impact on other units: None. Financial impact: None.

#### **EPP 565 Career Skills, Communications, Ethics, and Professionalism for Scientists (1)**

Rationale: Course was proposed in 2013 and approved for the 2014 catalog. No one to teach the course has ever been identified and subsequently, the course has never been taught. These topics are covered in other courses taught in several departments. Impact on other units: None. Financial impact: None.

#### **EPP 620 Biodiversity Analysis for Ecosystem Sustainability and Resilience (3)**

Rationale: Course was proposed in 2013 and approved for the 2014 catalog. The faculty member who proposed to teach the course left the department in 2015 and the course has never been taught. Impact on other units: None. Financial impact: None.

### **REVISE DESCRIPTION AND REGISTRATION RESTRICTION**

**EPP 640 Seminar (1)** Presentation of research proposals and research (dissertation or thesis) seminars by students. Presentations on current topics by outside speakers.

*Registration Restriction(s): Minimum student level – graduate.*

Formerly: Presentation of research proposals and dissertation research seminars by students. Presentations on current topics by outside speakers.

Registration Restriction(s): Minimum student level – graduate. PhD students only.

Rationale: The seminar course for MS students (EPP 541) will be dropped and both MS and PhD students will take EPP 640. Impact on other units: None. Financial impact: None.

## **DEPARTMENT OF FOOD SCIENCE**

### **INFORMATIONAL ITEM – DEPARTMENT NAME CHANGE**

- **FORMER DEPARTMENT (DROP) – FOOD SCIENCE AND TECHNOLOGY**
- **ADD DEPARTMENT – FOOD SCIENCE**

### **DROP ACADEMIC DISCIPLINE AND ALL COURSES**

#### **(FDST) Food Science and Technology**

**FDST 410 - Food Chemistry**

**FDST 421 - Food Microbiology**

**FDST 429 - Food Microbiology Lab**

**FDST 430 - Sensory Evaluation of Food**

**FDST 445 - Applied Food Science**

**FDST 461 - Fresh Meats**

**FDST 462 - Manufactured Meat Technology**

**FDST 490 - Food Product Development**

**FDST 495 - Quality Assurance and Sanitation Practices**

**FDST 500 - Thesis**

**FDST 501 - Seminar**

**FDST 502 - Registration for Use of Facilities**

FDST 503 - Problems in Lieu of Thesis  
FDST 504 - Research Planning  
FDST 514 - Food Colloids  
FDST 516 - Food Analysis  
FDST 521 - Advanced Food Microbiology  
FDST 530 - Food Biochemistry  
FDST 541 - Food Engineering  
FDST 545 - Food Rheology  
FDST 590 - Special Topics in Food Technology and Science  
FDST 592 - Internship in Food Science and Technology  
FDST 593 - Directed Studies  
FDST 600 - Doctoral Research and Dissertation  
FDST 601 - Seminar  
FDST 603 - Research Planning  
FDST 616 - Physical Properties of Foods  
FDST 617 - Food Proteins  
FDST 618 - Structure and Functionality of Polysaccharides  
FDST 690 - Innovations in Food-related Technologies

#### ADD NEW ACADEMIC DISCIPLINE AND COURSES

#### (FDSC) FOOD SCIENCE

**FDSC 410 Food Chemistry (3)** Reactions of water, proteins, lipids, carbohydrates, minerals, enzymes, vitamins, and additives in foods.

*(RE) Prerequisite(s): Chemistry 110 or 350.*

**FDSC 421 Food Microbiology (3)** Physical, chemical, and environmental factors moderating growth and survival of foodborne microorganisms. Pathogenic and spoilage microorganisms affecting quality of foods and their control.

*Cross-listed: (Same as Microbiology 421.)*

*(RE) Prerequisite(s): Microbiology 210 or Biology 220 and 229.*

**FDSC 429 Food Microbiology Lab (2)** Methods for examination, enumeration, cultivation, and identification of foodborne microorganisms.

*(RE) Corequisite(s): 421.*

**FDSC 430 Sensory Evaluation of Food (3)** Principles and procedures of sensory evaluation of food, methods of test analyses, physiological, psychological, and environmental factors affecting sensory perception.

*Contact Hour Distribution: 2 hours and 1 lab.*

*Recommended Background: A statistics course.*

**FDSC 445 Applied Food Science (3)** Interactions and functions of dairy, egg, cereal, and other plant based ingredients during the production and storage of processed food products.

*Contact Hour Distribution: 2 hours lecture and 1 lab.*

*(RE) Prerequisite(s): 100 or 241, or consent of instructor; and 410 and 421.*

**FDSC 490 Food Product Development (3)** Food Science capstone course. Application of principles of food chemistry, food processing and engineering, food microbiology, food laws and regulations, sensory evaluation, and statistics in the development of a food product concept.

*Contact Hour Distribution: 2 hours and one 3-hour lab.*

*(RE) Prerequisite(s): 241, 390, 410 or 418, and 421 or 428.*

*(RE) Corequisite(s): 430.*

*Registration Restriction(s): Only open to food science majors with science or technology concentrations. Minimum student level – senior.*

**FDSC 495 Quality Assurance and Sanitation Practices (3)** Design and evaluation of an industrial food processing operation to produce safe and high quality food products. Introduction to Good Manufacturing Practices (GMP) and Hazard Analysis and Critical Control Point (HACCP) Programs.

*(RE) Prerequisite(s): 410 or 418; and 421 or 428.*

*Registration Restriction(s): Minimum student level — senior.*

**FDSC 500 Thesis (1-15)**

*Grading Restriction: P/NP only.*

*Repeatability: May be repeated.*

*Credit Level Restriction: Graduate credit only.*

*Registration Restriction(s): Minimum student level – graduate.*

**FDSC 501 Seminar (1)** Individual reports and discussion on topics from current literature.

*Repeatability: May be repeated. Maximum 3 hours.*

**FDSC 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.*

*Credit Level Restriction: Graduate credit only.*

*Registration Restriction(s): Minimum student level – graduate.*

**FDSC 503 Problems in Lieu of Thesis (2-3)**

*Grading Restriction: Satisfactory/No Credit grading only.*

*Repeatability: May be repeated. Maximum 12 hours.*

*Credit Level Restriction: Graduate credit only.*

*Registration Restriction(s): Minimum student level – graduate.*

**FDSC 504 Research Planning (1-3)** Preliminary research and investigation of thesis research topic.

*Grading Restriction: Satisfactory/No credit grading only.*

*Repeatability: May be repeated. Maximum 12 hours.*

*Credit Restriction: May not be used toward degree requirements.*

**FDSC 514 Food Colloids (3)** Presents fundamental colloidal theories in the context of food systems. Topics include interactions between colloidal particles, stability of colloidal dispersions, and interfacial phenomena.

*Recommended Background: food chemistry, physical chemistry, college-level physics.*

*Registration Restriction(s): Minimum student level – graduate.*

**\$FDSC 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.*

*Credit Restriction: Students cannot receive credit for both 415 and 516.*

**FDSC 521 Advanced Food Microbiology (3)** Extrinsic and intrinsic factors associated with foods and food processing that relate to growth, survival, inhibition, detection, and recovery of foodborne pathogens and spoilage organisms; traditional and current approaches to microbiological food safety and quality.

*(RE) Prerequisite(s): 421 and 429.*

**FDSC 530 Food Biochemistry (3)** Applied biochemistry to plant- and animal-based food. Biochemical reactions in edible tissues pre- and post-harvest.

*Recommended Background: Food chemistry.*

*Registration Restriction(s): Seniors and graduate students.*

**\$FDSC 541 Food Engineering (3)** Transport processes in food engineering; unit operations; thermal and non-thermal processing of foods; food separations; processing and physicochemical properties of foods; calculations, design practices, and equipment used in food processing operations.

*Contact Hour Distribution: 2 hours and one 2-hour lab.*

*Credit Restriction: Students cannot receive credit for both 341 and 541.*

*Recommended Background: Basic calculus and physics.*

**FDSC 545 Food Rheology (3)** Principles of fundamental and empirical rheological tests are described. Rheological properties of food colloidal and polymeric systems and application of rheology to understand microstructure and functionality of food systems are discussed.

*Recommended Background: Organic chemistry and food chemistry.*

*Registration Restriction(s): Minimum student level – graduate.*

**\$FDSC 590 Special Topics in Food Technology and Science (1-3)** Critical reviews of current research and production concerns of food industry.

*Repeatability: May be repeated. Maximum 9 hours.*

**FDSC 592 Internship in Food Science and Technology (1-3)** Practical experience in a selected setting under the supervision of a local professional and departmental representative.

*Grading Restriction: Satisfactory/No Credit grading only.*

*Repeatability: May be repeated. Maximum 3 hours.*

*Registration Restriction(s): Minimum student level – graduate.*

*Registration Permission: Consent of Instructor. Must be within the Department of Food Science and Technology.*

**FDSC 593 Directed Studies (1-3)** Research on non-thesis topics chosen by student and major professor. Supervised experience in food industry or governmental laboratories.

*Repeatability: May be repeated. Maximum 6 hours.*

*Registration Restriction(s): Minimum student level – graduate.*

**FDSC 600 Doctoral Research and Dissertation (3-15)**

*Grading Restriction: P/NP only.*

*Repeatability: May be repeated.*

*Registration Restriction(s): Minimum student level – graduate.*

**FDSC 601 Seminar (1)** Reports and directed discussion on research topics from current literature.

*Repeatability: May be repeated. Maximum 3 hours.*

*Registration Restriction(s): Minimum student level – graduate.*

**FDSC 603 Research Planning (1-6)** Preliminary research and investigation of dissertation research topic, and preparation of a research proposal.

*Grading Restriction: Satisfactory/No credit grading only.*

*Repeatability: May be repeated. Maximum 18 hours.*

*Credit Restriction: May not be used toward degree requirements.*

*Registration Restriction(s): Minimum student level – graduate.*

**FDSC 616 Physical Properties of Foods (3)** Discusses physical properties of foods and applications of fundamental principles to understand and create colloidal and polymeric structures relevant to food systems.

*Recommended Background: Organic chemistry and food chemistry.*

*Registration Restriction(s): Minimum student level – graduate.*

**FDSC 617 Food Proteins (3)** Physicochemical properties of proteins used as ingredients in foods. Common methods used for the manufacturing of protein ingredients. Future trends in food proteins and novel methods for quantification and characterization of food proteins.

*Recommended Background: Organic chemistry and food chemistry.*

*Registration Restriction(s): Minimum student level – graduate.*

**FDSC 618 Structure and Functionality of Polysaccharides (3)** Occurrence of polysaccharides and their role in nature, conformation and behavior in solutions, gelling mechanisms, and applications.

*Recommended Background: Organic chemistry and food chemistry.*

*Registration Restriction(s): Minimum student level – graduate.*

**FDSC 690 Innovations in Food-related Technologies (1)** Will focus on procedures and regulations related to intellectual property.

*Registration Restriction(s): Minimum student level – graduate.*

COURSE EQUIVALENCY TABLE

Current Courses Food Science and Technology (FDST)	Equivalent Courses Effective Fall 2017 Food Science (FDSC)
FDST 410	FDSC 410
FDST 421	FDSC 421
FDST 429	FDSC 429
FDST 430	FDSC 430
FDST 445	FDSC 445
FDST 461	None
FDST 462	None
FDST 490	FDSC 490
FDST 495	FDSC 495
FDST 500	FDSC 500
FDST 501	FDSC 501
FDST 502	FDSC 502
FDST 503	FDSC 503
FDST 504	FDSC 504
FDST 514	FDSC 514
FDST 516	FDSC 516

FDST 521	FDSC 521
FDST 530	FDSC 530
FDST 541	FDSC 541
FDST 545	FDSC 545
FDST 590	FDSC 590
FDST 592	FDSC 592
FDST 593	FDSC 593
FDST 600	FDSC 600
FDST 601	FDSC 601
FDST 603	FDSC 603
FDST 616	FDSC 616
FDST 617	FDSC 617
FDST 618	FDSC 618
FDST 690	FDSC 690

Rationale: The Department of Food Science and Technology is changing its name to Department of Food Science. Our goal is to be more recognized as a science-based discipline. The name change was approved by Interim Chancellor, Tim Cross. Consequently, the academic discipline for our courses are also changing. We are dropping the FDST academic discipline. Our courses will be under the new academic discipline of (FDSC). The name of the major is also changing. Impact on other units: None. Appropriate catalog changes and equivalency tables will alleviate any issues with course numbers/names. Financial impact: None.

## DEPARTMENT OF FORESTRY, WILDLIFE AND FISHERIES

Learning Objectives for the M.S. in Forestry

1. Students are able to use appropriate theory to conceptualize research problems.
2. Students are able to use appropriate methods and procedures to achieve specific research objectives.
3. Students are able to speak to professional audiences.
4. Students have mastered information relevant to their dissertation and field of study.

### (FORS) Forestry

#### REVISE DESCRIPTION

**FORS 512 Seminar (1)** Current developments in forestry. All thesis-option M.S. students must complete the course twice during their program.

Formerly: Current developments in forestry. All M.S. students must complete the course twice during their program.

Rationale: This change clarifies the existing policy regarding FORS 512. Impact on other units: None Financial Impact: None.

### (FWF) Forestry, Wildlife and Fisheries

Learning Objectives for the PhD in Natural Resources

1. Students are able to use appropriate theory to conceptualize research problems.
2. Students are able to use appropriate methods and procedures to achieve specific research objectives.
3. Students are able to speak to professional audiences.
4. Students have mastered information relevant to their dissertation and field of study.

#### ADD

**FWF 530 Introduction to Geographic Information Systems (GIS) for Natural Resources (3)** Introductory course in geographic information systems (GIS), with applications in natural resources. This course emphasizes creating detailed, professional grade maps, but also includes overview and application of the theory and analyses associated with GIS.

Rationale: Addresses Learning Objectives 2 and 4 for all graduate degrees and is based on comments from past students and employers as part of the assessment. Impact on other units: None Financial Impact: None – instructor is currently teaching the class to undergraduates and is adding a graduate-level section. How assessments indicated the need for the course: exit interviews with graduating students, plus comments from departmental advisory board both indicated the need for this course.

**FWF 690 Advanced Topics in Natural Resources (1-3)** Exposure and in-depth training in contemporary topics and approaches important to advanced research in natural resources. Variable title for transcript purposes.

*Repeatability: May be repeated with consent of department. Maximum 9 hours.*

*Registration Restriction(s): Minimum student level – graduate.*

Rationale: Addresses Learning Objectives 2 and 4 for doctoral students by allowing faculty to work with students individually on new techniques or topics that do not warrant an ongoing course. Impact on other units: None Financial Impact: None – most graduate faculty are working with students on these topics; this allows students to gain academic credit. How assessments indicated the need for the course, None.

**FWF 693 Independent Study (1-3)** Directed research on topic of mutual interest to faculty and student. Variable title for transcript purposes.

*Repeatability: May be repeated. Maximum 6 hours.*

*Registration Restriction(s): Minimum student level – graduate.*

*Registration Permission: Consent of instructor.*

Rationale: Addresses Learning Objectives 2 and 4 for doctoral students by allowing faculty to work with small groups of students on new techniques or topics that do not warrant an ongoing course. Impact on other units: None Financial Impact: None – most graduate faculty are working with students on these topics; this allows students to gain academic credit. How assessments indicated the need for the course-None

#### **REVISE REPEATABILITY**

**FWF 612 Seminar (1-3)** Current issues and developments in natural resources. All natural resource doctoral students must complete 612 twice during their program of study.

*Repeatability: May be repeated. Maximum 3 hours.*

Formerly: May be repeated. Maximum 2 hours.

Rationale: This change allows doctoral students to earn one credit annually for their participation in seminar. Impact on other units: None Financial Impact: None.

#### **(WFS) Wildlife and Fisheries Science**

Learning Objectives for the M.S. in Wildlife and Fisheries Science

1. Students are able to use appropriate theory to conceptualize research problems.
2. Students are able to use appropriate methods and procedures to achieve specific research objectives.
3. Students are able to speak to professional audiences.
4. Students have mastered information relevant to their dissertation and field of study.

#### **REVISE DESCRIPTION AND REMOVE COMMENT**

**WFS 512 Seminar (1-3)** Current developments in wildlife and fisheries science. All M.S. students must complete the course twice during their program.

Formerly: Current developments in wildlife and fisheries science.

Comment(s): All master's students must complete the course twice during their program.

Rationale: This change clarifies the existing policy regarding WFS 512. Impact on other units: None Financial Impact: None.

#### **DEPARTMENT OF PLANT SCIENCES**

Learning outcomes for a MS in Plant Sciences

1. Effectively communicate through oral presentations (e.g., of thesis proposals or creative projects)
2. Competently communicate their research findings in appropriate venues (including to lay and trade audiences and the global scientific community)
3. Able to coordinate design, implementation, evaluation and synthesis of conclusions for research or projects that provide novel contributions to their discipline fields

Learning outcomes for a PhD in Plant, Soil and Environmental Sciences (shared with Environmental and Soil Sciences)

1. Effectively communicate through oral presentations (e.g., of special topic projects and dissertation proposals)
2. Competently communicate their research findings in appropriate venues (including to lay and trade audiences and the global scientific community)
3. Coordinate design, implementation, evaluation and synthesis of conclusions for research or projects that provide novel contributions to their discipline fields.
4. Demonstrate peer professional engagement through memberships in professional associations that serve their academic disciplines.

#### **REVISE PRIMARY CROSS-LISTED COURSE TO ADD REGISTRATION RESTRICTION**

**PLSC 525 Research Ethics for the Life Sciences (1)**

*Cross-Listed: (Same as Animal Science 525 and Comparative and Experimental Medicine 525).*

*Registration Restriction: Minimum student level – graduate, or permission of instructor.*

Formerly: None.

Rationale: Undergraduate enrollees were academically at an insufficient level of preparedness to understand and contribute to classroom discussion. Instructor requested restriction to graduate level students. Impact on other units: None. Financial impact: None.

Notification to add Registration Restriction was sent to the Secondary Cross-Listed Departments:



## **II. PROGRAM CHANGES**

### **INTERDEPARTMENTAL**

#### **AGRICULTURAL AND NATURAL RESOURCES**

##### **REVISE REQUIREMENTS FOR WATERSHED MINOR**

Add course to SCIENCE/ENGINEERING course list  
LAR 534 Operative Landscapes

Add course to POLICY, CULTURES and SOCIETY course list  
AREC 570 Advanced Natural Resource Economics

Rationale: all changes suggested by faculty and approved by Watershed Minor Faculty Executive Committee. Impact on other units: None. Financial impact: none, these are existing courses.

#### **DEPARTMENT OF AGRICULTURAL LEADERSHIP, EDUCATION AND COMMUNICATIONS**

##### **REVISE REQUIREMENTS – AGRICULTURAL LEADERSHIP, EDUCATION AND COMMUNICATIONS MAJOR, MS, NON-THESIS OPTION**

In the 2017-18 Graduate Catalog under Requirements, first bullet, revise non-thesis program requirements from 36 to 30.

Formerly: 36.

Rationale: It was previously presumed that graduate students had to complete 6 hours outside the department but they do not. The graduate committee would like to make both the thesis and non-thesis options 30 hours.

Impact on other units: Students will not be required to take additional courses outside of ALEC and this may cause a decrease in student enrollment in some distance – delivered courses. Financial impact: Increase revenue for the department. This supports Program Learning Outcomes 1, 2, and 3 for the MS in Agricultural Leadership, Education and Communications as students will be more engaged in written and oral communication coursework.

Support from assessment activities: Students who have been assessed (exit interviews) have expressed a need for more ALEC coursework and that they do not gain any valuable and/or usable information from courses outside the Department.

##### **REVISE DEPARTMENT INTRODUCTORY DESCRIPTION - AGRICULTURAL LEADERSHIP, EDUCATION AND COMMUNICATIONS MAJOR**

In the 2017-18 Graduate Catalog, remove current introductory text and replace with the following:

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, methods of communication and styles, and community outreach programs 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.

Formerly: 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.

Rationale: The extension option was never added and needs to be included because a large portion of student enrollment is Extension agents. Impact on other units: None. Financial impact: None.

#### **DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS**

##### **ADD DUAL ACCELERATED FIVE YEAR BS-MS PROGRAM – AGRICULTURAL AND RESOURCE ECONOMICS MAJORS**

###### **Accelerated Five Year BS-MS Program, Agricultural and Resource Economics Major**

The Department of Agricultural and Resource Economics offers an accelerated 5-year Bachelors of Science and Masters of Science (BS-MS) Program for qualified students. Students obtain a BS degree in Agricultural and Resource Economics with a major in Food and Agricultural Business or Natural Resource and Environmental Economics in seven semesters by completing 120 credit hours, including 9 credit hours of graduate courses that count towards both the BS degree and the MS degree. Students then go on to obtain a thesis-based MS degree in Agricultural and Resource Economics (Agricultural Economics Concentration or Natural Resource Economics Concentration) in three semesters and one summer, completing an additional 22 credit hours of graduate work. Students are typically considered for conditional admission to the BS-MS Program during the

third year of undergraduate studies at The University of Tennessee. The MS Program requires that a student complete a thesis project of original research. Therefore, a student is required to start developing a thesis research project in consultation with a thesis advisory committee immediately following their third year of undergraduate studies.

Students seeking admission into the Program must meet the following BS-MS Program requirements:

1. The applicant must have declared a major in Food and Agricultural Business or Natural Resource and Environmental Economics.
2. The applicant must have a minimum GPA of 3.25.
3. The applicant must have completed MS Graduate Program prerequisites MATH 125, STAT 201 or STAT 207, ECON 311, and AREC 324 with a B or better in each course before taking graduate courses as an undergraduate.
4. The applicant must have completed at least 90 hours of coursework toward a BS degree with a major in Food and Agricultural Business or Natural Resource and Environmental Economics.
5. The applicant must ask for three letters of recommendation to be sent directly from the letter writer to the Director of Graduate Studies in Agricultural and Resource Economics.
6. The applicant must complete an interview with the members of the Undergraduate and Graduate Committees in the Department of Agricultural and Resource Economics.
7. The applicant must obtain a commitment from a faculty member in Agricultural and Resource Economics to serve as their major professor and at least two other faculty members to serve on their thesis advisory committee. The major professor serves as mentor and advisor for the MS degree portion of the Program.

Besides the aforementioned BS-MS Program requirements, the department may consider other factors such as applicant maturity and work experience before conditionally admitting a student to the BS-MS Program. Conditional admission of a student into the BS-MS Program must be approved by both the Department of Agricultural and Resource Economics and the Graduate School. Applicants are informed of the admission decision before the beginning of the fourth year of their BS.

Any course taken for graduate credit before satisfying all of the requirements for the BS degree must be approved by both the Director of Graduate Studies in Agricultural and Resource Economics and the Graduate School. The courses must be identified in advance, in consultation with the undergraduate advisor, proposed major professor, and thesis advisory committee members. The form "Agricultural and Resource Economics Conditional Admission 5 Year BS-MS" is available from the Graduate Director and must be completed, signed by the student and the Graduate Director before submitting to the Graduate School for approval and processing. A student who is conditionally admitted to the BS-MS Program completes a maximum of 9 hours of graduate credit during the student's fourth year of undergraduate study, and applies those 9 credit hours to satisfy both BS and MS degree requirements.

Conditional admission into the BS-MS Program does not guarantee acceptance into either the Graduate School or the MS Program. Students in the BS-MS Program must apply for admission to the Graduate School and to the MS Program during their fourth year of undergraduate study, following the same procedures that all other student applicants follow. Students will be fully admitted to the MS Program after they have been accepted both by the Graduate School and by the MS Program in Agricultural and Resource Economics. Students will not be eligible for graduate assistantships until they are enrolled as graduate students in the Graduate School.

## **DEPARTMENT OF ANIMAL SCIENCE**

### **❖ ADD ACCELERATED DUAL MS-DVM PROGRAM – ANIMAL SCIENCE MAJOR**

#### **Accelerated MS-DVM Program, Animal Science Major, for DVM students**

For qualified students, the Department of Animal Science offers an accelerated MS degree program for individuals pursuing a doctor in veterinary medicine degree. Central to this program is that a qualified veterinary student may have up to 9 hours of veterinary medicine courses count toward both the doctor of veterinary medicine degree and the MS degree. To this end, a student may earn the DVM and MS in about five to five-and-a-half years rather than the six to six-and-a-half years that otherwise would be required.

Normally, students would be considered for conditional admission to the program during, or following, their first year of veterinary medicine study at the University of Tennessee, College of Veterinary Medicine. Because the MS program requires that a student write a thesis based on original research, efforts related to identifying a graduate mentor and starting a research-based project in consultation with a graduate advisory committee (that meets MS committee requirements) are appropriate in and around or following their first year of veterinary study.

To be considered for conditional admission to the program:

A student must be a declared Veterinary Medicine major with a minimum GPA of 3.0 and must have completed at least one semester of coursework required for the Veterinary Medicine degree.

A student must also coordinate the provision of three letters of recommendation and complete a personal interview with individuals comprising the Graduate Committee in the Department of Animal Science and College of Veterinary Medicine. A student must obtain a written commitment from an Animal Science graduate research faculty member to serve as their graduate mentor-advisor (i.e., major professor) and at least two other graduate research faculty members to serve on their graduate advisory committee.

The Department may consider other relevant factors such as an applicant's work experience and level of maturity before conditionally admitting a student to the MS program. Conditional admission of a student must be approved by the Department of Animal Science, College of Veterinary Medicine, College of Agricultural Sciences and Natural Resources, and the Graduate School.

The student must have earned a grade of at least a "B" in A - F graded courses in any of the eligible courses to be taken for graduate credit before satisfying all requirements for the DVM degree. Courses to be used for MS graduate credit must be approved by both the individual's graduate advisory committee and by the Graduate Director. These courses should be identified, in consultation with the student's graduate advisory committee members and be listed on the Animal Science Conditional Admission Form for the Five Year DVM/MS program. The Animal Science Conditional Admission Form is available from the Animal Science Graduate Program Director and must be completed, signed, and submitted to the College of Veterinary Medicine, College of Agricultural Sciences and Natural Resources and the Graduate School for final approval and processing for conditional admission.

There is a maximum limit of 9 hours on the number of veterinary medicine-level hours that a student may complete before completing doctor of veterinary medicine and being formally admitted to MS program. A student that is conditionally admitted to the MS program completes 9 hours of veterinary credit approved by their graduate advisory committee, and applies those 9 hours to satisfy DVM degree requirements which would also be applied to the MS degree course requirements. In cases where veterinary medicine courses that are to be used for the Animal Science MS degree are completed before applicant requests consideration for conditional admission (e.g., animal physiology or other courses), this coursework may be used for MS degree if the individual obtains approval from their graduate advisory committee and the Graduate Director.

Conditional admission into this type of accelerated program does not guarantee acceptance into either the Graduate School or the MS program. Students would normally apply for admission to the Graduate School and to the MS program during their fourth year of study in the DVM program, following the same procedures that all other MS student applicants follow. At that time, GRE scores must be submitted as part of the application for admission into any graduate program in the Department of Animal Science. Students will be fully admitted to the MS program after they have been accepted both by the Graduate School and by the Animal Science MS program. Students will not be eligible for graduate assistantships until they are enrolled as graduate students in the Graduate School in the Department of Animal Science Graduate Program.

Rationale: Because graduate students often take/benefit from certain veterinary school courses (e.g., physiology, theriogenology and others), the basis of this change is to provide individuals pursuing a doctor in veterinary medicine degree at the University of Tennessee College of Veterinary Medicine to apply up to 9 credit hours of veterinary-based course work towards their MS program of study. These would be graduate courses that our graduate students would have taken or find benefit to their graduate program of study. Several examples exist in other programs allowing use of Veterinary Medicine credits. This is also consistent with our Accelerated BS to MS program in Animal Science allowing undergraduate students to use up to 9 credit hours of their coursework towards the 24 required credit hours for MS degree. Because use of the senior requesting graduate credit form is not relevant for this scenario, our department will develop a conditional admission form for which VM courses to be used for DVM degree as well as the MS degree will be identified and approved in advance of completing degree requirements. Approval of the individuals' graduate advisory committee, the graduate director, CASNR, and Graduate School will be obtained as a part of conditional admission to this accelerated DVM/MS program. Doing so will assist towards formalizing process and ensuring that all that should be are a part of the approval process. Impact on other units: The College of Veterinary Medicine encourages research scholarship activities of their admitted students. This approach goes towards providing additional opportunities to enhance quality of research experiences of certain veterinary students while also allowing for earning a research based degree in a shorter time frame. Financial impact: None.

#### **REVISE TEXT – ACCLERATED FIVE YEAR BS-MS PROGRAM, ANIMAL SCIENCE MAJOR**

In paragraph 1, second sentence: Delete the word approved and add the word "level" to appear after the word graduate.

Revised sentence should read as "Central to this program is that a qualified student may take up to 9 credit hours of graduate level courses for their senior undergraduate electives and have them count toward both the BS degree and the MS degree."

Formerly: Central to this program is that a qualified student may take up to 9 credit hours of approved graduate courses for their senior undergraduate electives and have them count toward both the BS degree and the MS degree.

In paragraph 3, third sentence: Remove the word "both" and add College of Agricultural Sciences and Natural Resources after mention of the Department of Animal Science.

Revised sentence should read as "Conditional admission of a student into the 5-year BS-MS program must be approved by the Department of Animal Science, College of Agricultural Sciences and Natural Resources, and the Graduate School."

Formerly: Conditional admission of a student into the 5-year BS-MS program must be approved by both the Department of Animal Science and the Graduate School.

Revise paragraph 4: Remove current paragraph and replace with the following:

"Any graduate course that is to be counted towards both the BS degree and the MS degree must be approved by the student's graduate advisory committee, the departmental Graduate Director, the College of Agricultural Sciences and Natural Resources, and by the Graduate School. These courses must be identified, in consultation with the graduate advisory committee members. The form "Animal Science Conditional Admission 5 Year BS-MS" is available from the Graduate Director and must be completed, signed by the student, the student's graduate advisory committee, the Graduate Director, and College of Agricultural Sciences and Natural Resources before submitting to the Graduate School for approval and processing."

Formerly: Any course taken for graduate credit before satisfying all requirements for the BS degree must be approved both by the Graduate Director and by the Graduate School. These courses must be identified in advance, in consultation with the graduate advisory committee members. The form "Senior Requesting Graduate Credit" is found on the Graduate School website and must be completed, signed, and submitted to the Graduate School for approval and processing.

Revise paragraph 5, remove second sentence and replace with the following: "A student that is conditionally admitted to the BS-MS program completes 9 credit hours of graduate level coursework during the student's undergraduate study, and applies those 9 credit hours to satisfy BS degree requirements may also apply the 9 credit hours towards MS degree requirements."

Formerly: A student that is conditionally admitted to the BS-MS program completes 9 credit hours of graduate credit during the student's fourth year of undergraduate study (by submitting the "Senior Requesting Graduate Credit Form" to the Graduate School), and applies those 9 credit hours to satisfy BS degree requirements may also apply the 9 credit hours towards MS degree requirements.

Rationale: Senior requesting graduate credit form is not relevant for accelerated programs. Edits are also helpful for adding clarity related to the expectation that individuals would take graduate level courses while an undergraduate but not necessarily require Graduate School permission for receiving Graduate credit for said courses until after they graduate with a BS. Impact on other units: None. Financial impact: None.

## DEPARTMENT OF ENTOMOLOGY AND PLANT PATHOLOGY

### ➤ DROP CONCENTRATIONS – ENTOMOLOGY, PLANT PATHOLOGY AND NEMATOLOGY MAJOR, PHD

- Biodiversity and Ecosystem resilience concentration
- Organismal biology and ecology concentration

### ➤ ADD CONCENTRATION - ENTOMOLOGY, PLANT PATHOLOGY AND NEMATOLOGY MAJOR, PHD

- Organismal biology, ecology, and systematics concentration

Rationale: Elements of two concentrations, Organismal Biology and Ecology, and Biodiversity and Ecosystem Resilience have been combined to form one concentration, renamed Organismal Biology, Ecology, and Systematics. Impact on other units: None. All PhD students in the Biodiversity and Ecosystem Resilience concentration have agreed to move to the Organismal Biology, Ecology, and Systematics concentration. The students participated fully in changing the course requirements for the new concentration. Impact on other units: None. Financial impact: None.

In the 2017-18 Graduate Catalog, revise introductory paragraph to show dropping and adding of names of concentrations. And, add paragraph showing department participates in Statistics Minor.

The Department of Entomology and Plant Pathology offers a graduate program leading to the Master of Science with a major in Entomology and Plant Pathology and a Doctor of Philosophy with a major in Entomology, Plant Pathology, and Nematology. The Master of Science program has three concentrations: Bioinformatics and Genomics, Entomology, and Plant Pathology. The PhD program has three concentrations: Bioinformatics, Genomics, and Molecular Interactions; Organismal Biology, Ecology, and Systematics; and Sustainable Disease and Integrated Pest Management. For more information about departmental programs, visit the departmental website at <https://ag.tennessee.edu/EPP/Pages/default.aspx>.

#### Statistics Minor

The department also participates in a program designed to give EPP graduate students the opportunity to pursue a minor in statistics. See the Intercollegiate Graduate Statistics Program (IGSP) for a description of the program and approved courses (<http://igsp.bus.utk.edu/>).

### REVISE TEXT – ENTOMOLOGY, PLANT PATHOLOGY, AND NEMATOLOGY MAJOR; PHD

In the 2017-18 Graduate Catalog, revise first paragraph to show dropping and adding of names of concentrations.

A Doctor of Philosophy degree with a major in Entomology, Plant Pathology, and Nematology is offered in the Department of Entomology and Plant Pathology (EPP). Concentrations include bioinformatics, genomics, and molecular interactions; organismal biology, ecology, and systematics; and sustainable disease and integrated pest management. Please see the doctoral program link on the website of the Department of Entomology and Plant Pathology for additional information <https://ag.tennessee.edu/EPP/Pages/default.aspx>.

Formerly: A Doctor of Philosophy degree with a major in Entomology, Plant Pathology and Nematology is offered in the Department of Entomology and Plant Pathology (EPP). Concentrations include biodiversity and ecosystem resilience; bioinformatics, genomics, and molecular interactions; organismal biology and ecology; and sustainable disease and integrated pest management. Please see the doctoral program link on the website of the Department of Entomology and Plant Pathology for additional information, visit the EPP website <https://ag.tennessee.edu/EPP/Pages/default.aspx>.

Rationale: The capstone course for the Biodiversity and Ecosystem Resilience (BER) concentration (EPP 620) will be dropped and has not been taught since it was approved. Courses related to this concentration have now been added as options for the Organismal Biology, Ecology, and Systematics (OBES) concentration. Graduate students currently in BER were engaged in revising the requirements for OBES and have agreed to transfer from BER to OBES. Impact on other units: None. Financial Impact: None.

## **REVISE REQUIREMENTS FOR NEW (RENAMED) CONCENTRATION – ORGANISMAL BIOLOGY, ECOLOGY, AND SYSTEMATICS, PHD**

Organismal Biology, Ecology, and Systematics concentration

- 1) Revise 3rd paragraph and remove 4th as shown below (combining 3rd and 4th paragraph into one):

Required (Nine credit hours selected from the list below based on program direction)

- EPP 505 Mycology (3)
- EPP 514 Phytobacteriology (3)
- EPP 520 Nematology (3)
- EPP 521 Plant Virology (3)
- EPP 523 Field Crop and Vegetable Entomology (3)
- EPP 525 Medical and Veterinary Entomology (3)
- EPP 528 Molecular Techniques in Entomology, Nematology, and Plant Pathology (3)
- EPP 530 Integrated Pest Management (3)
- EPP 548 Taxonomy of Adult Insects (3)
- EPP 551 Biological Control (3)
- EPP 552 Insect Morphology (3)

- 2) Revise 5th paragraph of elective course requirements to add two courses to the list

- EPP 512 Soilborne Plant Pathogens (3)
- ESS 516 Soil Biology and Biochemistry (3)

Rationale: Elements of two concentrations, Organismal Biology and Ecology, and Biodiversity and Ecosystem Resilience have been combined to form one concentration, renamed Organismal Biology, Ecology, and Systematics. Impact on other units: None. All PhD students in the Biodiversity and Ecosystem Resilience concentration have agreed to move to the Organismal Biology, Ecology, and Systematics concentration. The students participated fully in changing the course requirements for the new concentration. Impact on other units: None. Financial impact: None.

## **REVISE PLANT PATHOLOGY MINOR**

In the 2017-18 Graduate Catalog, revise the first sentence as follows:

The Plant Pathology minor requires 9 credit hours of plant pathology-oriented 500-level coursework or above in the department (excluding EPP 500, EPP 600, EPP 603, EPP 640, and EPP 675).

Formerly: The Plant Pathology minor requires 9 hours of plant pathology-oriented 500-level coursework or above in the department (excluding EPP 500, EPP 541, EPP 600, EPP 603, EPP 640, and EPP 675).

## **DEPARTMENT OF FOOD SCIENCE**

### **INFORMATIONAL ITEM – DEPARTMENT NAME CHANGE**

- **FORMER DEPARTMENT (DROP) – FOOD SCIENCE AND TECHNOLOGY**
- **ADD DEPARTMENT – FOOD SCIENCE**

Rationale: The shorter name adequately describes the department's mission, faculty expertise, and breadth of undergraduate programs, and better aligns name with other CASNR departments. Removes stigma from the degree Food Science and Technology, as evidenced by ORNL Human Resource department reducing pay grade during an offer to an alumnus as the word "technology" was seen as synonymous with a 2-year technical degree. Name change was approved 22 August 2016 by Dean Beyl and Chancellor Arrington. Impact on other units: None. Financial impact: Limited to time and effort to change name in documents such as catalog and websites.

August 22, 2016

Dr. Caula Beyl  
Dean and Professor  
College of Agricultural Sciences & Natural Resources  
126 Morgan Hall, 2621 Morgan Circle  
Knoxville, TN 37996

Dear Dr. Beyl:

The faculty in the department of Food Science and Technology have recently discussed changing the department's name and degree names to simply Food Science. We feel as though the shorter name adequately describes the department's mission, the faculty's expertise, and the breadth of undergraduate programs. This name will also be more in line with the names of Animal Science and Plant Sciences within CASNR.

Our goal is to be more recognized as a science-based discipline. Across the nation, among those universities that do not combine Food Science and Human Nutrition, approximately 2/3 have Food Science departments and 1/3 have Food Science and Technology departments.

The discussion of our departmental name began after an increasing awareness of the confusion around technology/technologist and technical degrees. One example in 2015 occurred when one of our BS graduates interviewed with Oak Ridge National Laboratories (ORNL). She received a position offer from ORNL but then the human resources department noticed that her degree was in Food Science and Technology which they considered a "technology" degree not a "science" degree. As a result, they rescinded the offer and made her a new offer at a much lower pay grade to reflect that of technologists rather than scientists. This confusion that "technology" degrees are similar to 2-yr technical degrees seems to be a growing concern in recent years.

My understanding of the procedures for such a request suggests that the name change must be approved by the chancellor. However, I am not sure if that is Dr. Arrington, Dr. Cheek, or both. As for the degree name change, the "Curricular Submission Guidelines for the Undergraduate Council 2016-2017" suggests that the provost approval is required (Page 12 in attached document).

I hope you would support such a name change in the department and degree program.

Sincerely,



Mark Morgan  
Professor and Head

Approved:   
Dr. Caula Beyl, Dean

Approved:   
Dr. Tim Cross, Interim Chancellor

**MOVE ALL ASSOCIATED PROGRAMS FROM UNDER THE DROPPED DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY TO UNDER THE NEW DEPARTMENT OF FOOD SCIENCE**

❖ **DROP MAJORS FOR MS AND PHD**

**Food Science and Technology Major, MS**

**Food Science and Technology Major, PhD**

Food chemistry concentration  
Food microbiology concentration  
Food processing concentration

❖ **ADD MAJORS FOR MS AND PHD**

**Food Science Major, MS**

**Food Science Major, PhD**

- Food chemistry concentration
- Food microbiology concentration
- Food processing concentration

Learning Objectives for the MS in Food Science

- 1) Students able to find, critically evaluate, and discuss scientific literature and information relevant to food science.
- 2) Students able to design and conduct research projects to test hypotheses, analyze data, and formulate conclusions.
- 3) Students able to effectively communicate research findings to professional audiences.

Learning Objectives for the PhD in Food Science

- 1) Students able to find, critically evaluate, and discuss scientific literature and information relevant to food science.
- 2) Students able to design and conduct research projects to test hypotheses, analyze data, and formulate conclusions.
- 3) Students able to effectively communicate research findings to professional audiences.

Rationale: This change will better reflect the programs in department and avoid any future confusion about Technology and Technical degrees. Impact on other units: None. Financial impact: None.

Rationale: Changes from the former course prefix (FDST) to the proposed new course prefix (FDSC) and "Food Science and Technology" to "Food Science" in the program descriptions are needed to be consistent with the above proposed changes in the department name and course prefix. Impact on other units: None. Financial impact: None.

## **DEPARTMENT OF FORESTRY, WILDLIFE AND FISHERIES**

### **REVISE REQUIREMENTS – FORESTRY MAJOR, MS, THESIS OPTION**

In the 2017-18 Graduate Catalog, revise the 3rd bullet under the thesis option as follows:

All students are required to include FORS 512 Seminar, in their program. All thesis-option M.S. students must complete the course twice during their program.

Formerly: All students are required to include FORS 512 Seminar, in their programs. This is required of each graduate student in residence for the fall or spring semester.

### **REVISE REQUIREMENTS – WILDLIFE AND FISHERIES SCIENCE MAJOR, MS, THESIS OPTION**

In the 2017-18 Graduate Catalog, revise the 3rd bullet under the thesis option as follows:

All students are required to include WFS 512 Seminar, in their program. All M.S. students must complete the course twice during their program.

Formerly: All students are required to include WFS 512 Seminar, in their programs. This is required of each graduate student in residence fall or spring semester.

Rationale: These changes reflect proposed changes in catalog descriptions of the courses and clarifies the existing policy regarding FORS 512 and WFS 512. Impact on other units: None Financial Impact: None.

# COLLEGE OF ARCHITECTURE AND DESIGN

All changes effective Fall 2017

## I. COURSE CHANGES

### SCHOOL OF ARCHITECTURE

Learning objectives for the MArch Degree in Architecture

Graduates of the Master of Architecture (M. Arch) program will be able to demonstrate that they have the basic knowledge, skills, and abilities necessary to enter the profession and to become licensed architects.

Graduating students must demonstrate the ability to build abstract relationships and understand the impact of architectural design based on research and analysis of multiple theoretical, social, political, economic, cultural and environmental contexts.

Integrating Building Practices, Technical Skills and Knowledge: Graduating students must demonstrate a comprehension of the technical aspects of design, systems and materials, and be able to apply that comprehension in their coursework.

Leadership and Practice: Graduating students must have an understanding of the architect's role in managing and advocating for legal, ethical, and critical action for the good of the client, society and the public.

### (ARCH) Architecture

#### ADD

**ARCH 504 Design Tactics (3)** Exploration of the relationship between text, image, and building while connecting advanced technology with widely practiced methods of representation. Emphasis is placed on a disciplinary continuum from the technical to the cultural, as the course investigates the inherent representational nature of architectural practice.

**ARCH 547 Structural Principles in Architecture (4)** Design and expression with structural archetypes of timber frames, light wood, steel frames, masonry, and reinforced concrete construction, and combinations thereof. Emphasis on formal ordering systems and essential behaviors, including lateral bracing and load-tracing. Schematic detailing. Design guideline sizing. Incorporates seminar sessions exploring a broader culture of technology. Includes a workshop/lab component.

**ARCH 548 Materials and Methods in Architecture (4)** 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. Incorporates seminar sessions exploring a broader culture of technology. Includes a workshop/lab component.

**ARCH 549 Building Systems in Architecture (4)** Design and expression with mechanical heating, ventilation, and cooling systems, solar energy, plumbing systems, electric lighting, daylighting, acoustics, and electrical systems in buildings. Incorporates seminar sessions exploring a broader culture of technology. Includes a workshop/lab component.

Rationale: ARCH 504 is a new courses developed to better deliver contemporary architectural representational content to students. ARCH 547, ARCH 548, and ARCH 549 are new courses developed to better deliver contemporary building and construction technology content to students. Impact on Other Academic Units: None. Financial Impact: None.

#### REVISE (RE)PREREQUISITES

##### **ARCH 509 Seminar in Design Integration (3)**

*(RE) Prerequisite(s): 547, 548, 549*

Formerly: (RE) Prerequisite(s): 546, 540, 516

#### REVISE DESCRIPTION

**511 History and Theory of Architecture I (3)** Architecture and ideas of building and community form in major world cultures from the prehistoric era to about 1750 CE.

Formerly: Architecture and ideas of building and community form in major world cultures from the prehistoric era to about 1500.

**512 History and Theory of Architecture II (3)** Architecture and ideas of building and community form in major world cultures from 1750 CE to the late-20th century.

Formerly: Architecture and ideas of building and community form in major world cultures from 1500 AD to the mid-20th century.



## SCHOOL OF LANDSCAPE ARCHITECTURE

Learning objectives for the MALA, MSLA, MLA Degree in Landscape Architecture

Students will demonstrate the ability to communicate through written, oral, and multi-media visual means.

Students will demonstrate the ability to technically manipulate landscape form through topography/landform, and architectural means.

Students will demonstrate an ability to apply various modes of design thinking to frame and engage complex environmental situations.

Students will demonstrate the ability to produce competent, compelling designs, visions, and strategies for possible landscape futures.

### (LAR) Landscape Architecture

#### ADD

**LAR 534 Operative Landscapes (3)** Surveys the evolving socio-ecological conditions resulting from urbanization, climate dynamics, evolving economies and technological innovation. Landscape architects around the world increasingly engage these complexities in the built environment to create new possibilities for the economic, social, and environmental performance of landscapes in public, private, and infrastructural territories. Will use contemporary projects as a basis for understanding multi-scalar design approaches, technical details, and maintenance regimes. Emphasis will be placed on built landscapes and living systems as integral parts of more dynamic, resilient, and sustainable approaches to landscape design, implementation, and management across scales from the site to the watershed.

*(RE) Prerequisite(s): GEOL 590*

*Registration Restriction(s): Landscape architecture major or consent of instructor.*

**LAR 535 Operative Landscape Tactics (3)** Provides instruction on the practical design, implementation, and management of living systems as fundamental elements of multifunctional infrastructures and operative landscapes at a range of scales and contexts. Planning, design, implementation, maintenance, and professional communication methods are exercised through a series of project scenarios.

*(RE) Prerequisite(s): LAR 534.*

*Registration Restriction(s): Landscape architecture major or consent of instructor.*

Rationale: LAR 534 and LAR 535 are new courses developed to better deliver contemporary ecological content to students. Impact on Other Academic Units: None. Financial Impact: None.

#### DROP

**LAR 511 A Cultural History of Regional Public Policy and the Land (3)**

**LAR 512 Contemporary Landscape Architecture Design and Discourses (3)**

**LAR 513 Strategies and Case Studies in Landscape Stewardship and Restoration Ecology (3)**

**LAR 514 Studies in Emerging Global Strategies of Practice (3)**

Rationale: The courses being dropped have not been taught for several years and are being listed by the School of Architecture as part of their concentrations. Dropping them from the catalog will aid in simplifying catalog for students and faculty planning. Impact on Other Academic Units: None. Financial Impact: None.

#### REVISE TITLE

**LAR 532 Plants in Design (3)**

Formerly: Living Systems II: Plants in Design (3)

Rationale: Revised title to LAR 532 simplifies the course title to avoid sequencing/naming problems when future curriculum changes in this sequence are made. Impact on Other Academic Units: None. Financial Impact: None.

#### REVISE DESCRIPTION

**LAR 553 Design Studio III (6)** Focus on regional landscape systems with emphasis on community development, spatial planning, urban/rural networks, and natural resource sustainability. Students engage with community partners to tackle complex issues such as water resource stewardship, infrastructure adaptation, ecological resilience, environmental justice, policy innovation, and economic development. Interdisciplinary teams of architecture and landscape architecture students are encouraged.

**LAR 554 Design Studio IV (6)** Focus on medium to large scale sites with emphasis on dynamic landscape formation, landscape tectonics, and the use of landform in relation to spatial and programmatic potentials. Students develop comprehensive digital models and work parametrically in order to rapidly explore a wide range of formal, spatial, and programmatic configurations.

**LAR 555 Design Studio V (6)** Focus on issues of infrastructure and urbanism with particular emphasis on new approaches to the design of metropolitan conditions using landscape as the primary organizing system. Students develop comprehensive projects which include inventive programmatic conditions, strategies for implementation, and concrete spatial and formal designs.

Rationale: Revised descriptions to studios update language to more accurately describe the content of the studios. Revisions to the dual degree sequences traces the above changes through the dual degree sequences. Impact on Other Academic Units: None. Financial Impact: None.

## **II. PROGRAM CHANGES**

### **SCHOOL OF ARCHITECTURE**

#### **REVISE REQUIREMENTS – ARCHITECTURE MAJOR, MARCH (HIGH PERFORMANCE BUILDING CONCENTRATION**

In the 2017-18 Graduate Catalog, remove current text and replace with the following:

##### High Performance Buildings

The High Performance Buildings concentration incorporates knowledge from a wide range of disciplines that share a common base within the College of Architecture and Design and other University of Tennessee Colleges and Institutes. The methodology is based on an integrated design process in which design, research and technology are reinforced with disciplines such as building design, product development, materials science, building physics, climatic design, structural design, computation and modeling, and production techniques. In addition, individual methods from these and other perspectives are also encouraged. The High Performance Buildings concentration may address issues of the innovative and sustainable design of buildings, building components and (sub) systems of buildings, and on how these relate to each other and to architecture as an integrated complex system.

The High Performance Buildings concentration offers opportunities for topical study such as, but not limited to:

Advanced Building Design

Facade Design and High-Performance Building Envelopes

Innovative uses of Traditional materials, both massive and lightweight

Building Performance Design, Development, and Evaluation (energy, structural, mechanic, construction, etc.)

Digital Modeling and Digital Manufacturing

Smart Structures and Lightweight Structures

New Materials and Environmental Performance Criteria

Design with Climate: Daylight, Solar, Water Harvesting, Passive Cooling

Potential resources:

Governor's Chair for Urbanism + Energy

Institute for Smart Structures (ISS)

Design | Build | Evaluate Initiative

Oak Ridge National Laboratory (ORNL)

Requirements for High Performance Buildings concentration (12 hours):

All courses must meet the approval of Chair of Graduate Architecture Program in order to be counted towards the concentration.

In addition, faculty will be required to approve the use of their course towards the concentration based on fitness of content.

Documentation will be kept by the School of Architecture, but it is the student's responsibility to solicit approval through the advising process.

Six hours from one of the following:

ARCH 500 Thesis (6)

ARCH 586 Advanced Architectural Design: Sustainable Arch (6)

ARCH 588 Advanced Architectural Design: Structural Innovations (6)

ARCH 590 Advanced Architectural Design: Special Topics (6)

ARCH 599 Design VII: Diploma Thematic Studio (6)

Plus six elective hours from one of these courses or similar courses per advising process:

ARCH 525 Special Topics in Architecture (1-3)

ARCH 550 Special Topics in History, Theory and Criticism (1-3)

ARCH 552 Special Topics in Sustainable Design (1-3)  
ARCH 554 Special Topics in Materials and Construction (1-3)  
ARCH 555 Special Topics in Digital Fabrication (1-3)

Of the six elective hours, up to three hours may be from:

ARCH 526 Directed Readings in Architecture (3)  
ARCH 593 Independent Study (1-9)

Rationale: The faculty have updated the concentration description to more accurately reflect courses currently being taught in the college and university that bear on the concentration. Additionally, language has been added that makes it necessary to get approval through advising within the School of Architecture for any courses students intent to have count towards the concentration. This fosters more rigor in the pursuit of concentrations and fosters more reflection on the path of study on the part of students.

### **ADD DESCRIPTION FOR THE URBAN DESIGN CONCENTRATION - ARCHITECTURE MAJOR, MARCH**

In the 2017-18 Graduate Catalog, add heading and text for the Urban Design concentration

#### Urban Design concentration

The urban design concentration gives students in the College of Architecture and Design a mechanism through which to develop a deep understanding of how architectural thinking impacts the myriad conditions of urbanism across multiple contexts. This concentration prompts both analytical and speculative work related to the richly layered processes that define the continuing formation of the city at multiple scales, from individual buildings to the larger metropolitan and regional scale of cities. Students are asked to reflect on the larger roles and responsibilities of architecture in the contemporary city: in the arenas of urban development and growth; on infrastructure and land use; on the impact of urbanism on natural resources; and on questions of density and spatial patterning. Students doing design and research in the concentration will actively develop new knowledge regarding the complex relationships between economic, political, technological, and social conditions that are endemic in the urbanisms of North America and globally.

The urban design concentration offers opportunities for topical study such as, but not limited to:

History and Theory of Urbanism  
Urban Design, Landscape, and Infrastructure  
Urban Morphology  
Comparative Research and Understanding Between Cities  
Walkable Urbanism  
The Impact of Automobility on Spatial Ordering  
Transit-Oriented Development  
Urban Housing  
Development  
Networks and Systems

#### Potential Resources:

Governor's Chair for Energy + Urbanism  
UTK Smart Communities Initiative  
Regional Planning Agencies in Knoxville  
Regional Planning Agencies in Nashville  
Regional Planning Agencies in Chattanooga  
Nashville Civic Design Center  
Urban Land Institute  
Vanderbilt University Real Estate Development Program

#### Requirements for the urban design concentration(12 hours):

All courses must meet the approval of Chair of Graduate Architecture Program in order to be counted towards the concentration. In addition, faculty will be required to approve the use of their course towards the concentration based on fitness of content. Documentation will be kept by the School of Architecture, but It is the student's responsibility to solicit approval through the advising process.

Six hours from one of the following:

ARCH 500 Thesis (6)  
ARCH 571 Design IV: Building in the Urban Context  
ARCH 583 Architectural Design: Urban Context (6)  
ARCH 599 Design VII: Diploma Thematic Studio (in Urban Design) (6)

Plus six elective hours from one of these courses or similar courses per advising process:

ARCH 515 Seminar in Issues in Urban Design (3)  
ARCH 525 Special Topics in Architecture (1-3)  
ARCH 550 Special Topics in History, Theory and Criticism (1-3)  
ARCH 552 Special Topics in Sustainable Design (1-3)  
ARCH 554 Special Topics in Materials and Construction (1-3)  
ARCH 555 Special Topics in Digital Fabrication (1-3)

Of the six elective hours, up to three hours may be from:

ARCH 526 Directed Readings in Architecture (3)  
ARCH 591 Foreign Study (1-9)  
ARCH 592 Off-Campus Study (1-9)  
ARCH 593 Independent Study (1-9)  
LAR 526 Directed Readings in Landscape Architecture

Of the six elective hours, up to 3 hours may be from approved courses in other departments, such as:

GEOGRAPHY  
GEOG 441 Cities as Economic Engines  
GEOG 442 Urban Spaces and Urban Society  
GEOG 449 Geography of Transportation  
GEOG 541 Topics in Urban/Economic Geography  
GEOG 641 Seminar in Urban/Economic Geography

Landscape Architecture

LAR 525 Special Topics  
LAR 583 Design Theory and Methods I

### **REVISE REQUIREMENTS – ARCHITECTURE MAJOR, MARCH (CONSERVATION AND STEWARDSHIP CONCENTRATION**

In the 2017-18 Graduate Catalog, remove current text and replace with the following:

Conservation and Stewardship concentration

The Conservation and Stewardship concentration promotes and produces knowledge and techniques in the restoration and regeneration of a wide array of cultural artifacts. Broadly based in the arts and the sciences, the Conservation and Stewardship concentration focuses on collaborative research and coursework – in particular on the relationships between the design disciplines and their effect on both built and natural environments. Owing to the growing global concern for sustainable and regenerative responses to designed and natural environments, this concentration explores the processes and systems that affect both local and global responses to contemporary issues of public policy. The Conservation and Stewardship concentration has three goals: to expand local knowledge through topical research, to document the physical environment and the human effect on these environments, and to disseminate that documented knowledge to educate future practitioners and scholars, and the public at-large.

The Conservation and Stewardship Concentration offers opportunities for topical study such as, but not limited to:

Sustainable Urban and Rural Landscapes  
TVA and Public Policy  
Cultural Resource Conservation and Development  
Architectural Preservation

Potential Resources:

Governor's Chair for Energy + Urbanism  
UTK Smart Communities Initiative  
Knox Heritage  
Regional Planning Agencies in Knoxville  
Regional Planning Agencies in Nashville  
Regional Planning Agencies in Chattanooga  
Nashville Civic Design Center

Requirements for Conservation and Stewardship concentration (12 credit hours):

All courses must meet the approval of Chair of Graduate Architecture Program in order to be counted towards the concentration. In addition, faculty will be required to approve the use of their course towards the concentration based on fitness of content. Documentation will be kept by the School of Architecture, but it is the student's responsibility to solicit approval through the advising process.

Six Credits from the following:

ARCH 500 Thesis (6)  
ARCH 525 Special Topics in Architecture (1-3)  
ARCH 550 Special Topics in History, Theory and Criticism (1-3)  
ARCH 552 Special Topics in Sustainable Design (1-3)  
ARCH 554 Special Topics in Materials and Construction (1-3)  
ARCH 586 Advanced Arch Des: Sustainable Arch (6)  
ARCH 590 Advanced Arch Des: Special Topics (6)  
ARCH 599 Design VII: Diploma Thematic Studio (6)

Plus six elective hours from one of these courses or similar courses per advising process:

Of the six elective hours, up to three hours may be from:

ARCH 526 Directed Readings in Architecture (3)  
ARCH 591 Foreign Study (1-9)  
ARCH 593 Independent Study (1-9)

Of the six elective hours, up to three hours may be from approved courses in other departments, such as:

ART

ART 481 Museum Studies I: Museums, Purpose and Function

ANTHROPOLOGY

ANTH 510 Method and Theory in Cultural Anthropology

CLASSICS

CLAS 436 Cities and Sanctuaries of the Greek and Roman World

GEOGRAPHY

GEOG 411 Introduction to Geographic Information Science

HISTORY

HIST 642 Seminar in 19th-Century United States

HIST 643 Seminar in 20th-Century United States

LANDSCAPE ARCHITECTURE

LAR 513 Strategies and Case Studies in Landscape Stewardship and Restoration Ecology

LAR 525 Special Topics

LAR 583 Design Theory and Methods I

POLITICAL SCIENCE

POLS 548 Public Policy Process

POLS 549 Environmental Policy

POLS 556 Policy Analysis

Rationale: The faculty have updated the concentration description to more accurately reflect courses currently being taught in the college and university that bear on the concentration. Additionally, language has been added that makes it necessary to get approval through advising within the School of Architecture for any courses students intent to have count towards the concentration. This fosters more rigor in the pursuit of concentrations and fosters more reflection on the path of study on the part of students.

**ADD DESCRIPTION FOR THE SUSTAINABLE DESIGN CONCENTRATION - ARCHITECTURE MAJOR, MARCH**

In the 2017-18 Graduate Catalog, add heading and text for the Urban Design concentration

Sustainable Design concentration

The College of Architecture and Design offers a concentration in sustainable design incorporating knowledge from a wide range of disciplines, ranging from technical to philosophical. This concentration explores the interrelation between decisions made when designing the built environment and their short-term and long-term impacts on the ecological environment. Students are asked to take responsibility for the role architecture plays in the consumption of natural resources, underscoring the need for interdisciplinary dialogue and leadership at building, site, city, and regional scales.

The Sustainable Design concentration offers opportunities for topical study such as, but not limited to:

Building Design  
Building Technology  
Materials and Methods of Design Implementation  
Urban Design  
Landscape Architecture Design  
Land Use Planning and Policy  
Ecology  
Economics  
Environmental Sciences  
Forestry and Natural Resources  
Plant Sciences  
Agriculture

Potential resources:

Design | Build | Evaluate Initiative  
Institute for Smart Structures (ISS)  
UTK Smart Communities Initiative  
Institute for Secure and Sustainable Environments (ISSE)  
Nashville Civic Design Center (NCDC)  
Oak Ridge National Laboratory (ORNL)

Requirements for sustainable design concentration (12 hours):  
All courses must meet the approval of Chair of Graduate Architecture Program in order to be counted towards the concentration. In addition, faculty will be required to approve the use of their course towards the concentration based on fitness of content. Documentation will be kept by the School of Architecture, but it is the student's responsibility to solicit approval through the advising process.

Six hours from one of the following:

ARCH 500 Thesis (6)  
ARCH 586 Advanced Architectural Design: Sustainable Architecture (6)  
ARCH 590 Advanced Architectural Design: Special Topics (6)  
ARCH 599 Design VII: Diploma Thematic Studio (6)

Plus six elective hours from one of these courses or similar courses per advising process:

ARCH 525 Special Topics in Architecture (1-3)  
ARCH 550 Special Topics in History, Theory and Criticism (1-3)  
ARCH 552 Special Topics in Sustainable Design (1-3)  
ARCH 554 Special Topics in Materials and Construction (1-3)  
ARCH 555 Special Topics in Digital Fabrication (1-3)

Of the six elective hours, up to three hours may be from:

ARCH 526 Directed Readings in Architecture (3)  
ARCH 591 Foreign Study (1-9)  
ARCH 593 Independent Study (1-9)  
LAR 526 Directed Readings in Landscape Architecture

Of the six elective hours, up to three hours may be from approved courses in other departments, such as:

AGRICULTURAL AND RESOURCE ECONOMICS  
AREC 472 Natural Resource Economics (3)  
AREC 570 Advanced Natural Resource Economics (3)

BIOSYSTEMS ENGINEERING  
BSE 562 Selected Topics in Natural Resource Engineering (3)

ECOLOGY  
EEB 503 Ecology and Evolutionary Biology Seminar (1)  
EEB 509 Core: Ecology (4)

ECONOMICS  
ECON 463 Environmental Economics (3) [Prerequisite(s): 311]  
ECON 677 Environmental and Natural Resource Economics (3)  
ECON 678 Economics of Environmental Policy (3)

FORESTRY  
FORS 423 Wildland Recreation Planning and Management (3)  
FORS 515 Forest Conservation Workshop (1-3)

FORESTRY, WILDLIFE AND FISHERIES  
FWF 520 Natural Resource Issues at International Level (3)  
FWF 540 Seminar on Integrated Resources Management in Biosphere Reserves (2)

GEOGRAPHY  
GEOG 434 Climatology (3)  
GEOG 436 Water Resources (3)  
GEOG 449 Geography of Transportation (3)  
GEOG 536 Topics in Watershed Dynamics (3)  
GEOG 541 Topics in Urban/Economic Geography (3)  
GEOG 545 Topics in Population Geography (3)

GEOLOGY  
GEOL 555 Environmental Geology (3)

LANDSCAPE ARCHITECTURE  
LAR 513 Strategies and Case Studies in Landscape Stewardship and Restoration Ecology  
LAR 525 Special Topics

MECHANICAL ENGINEERING  
ME 572 Sustainable Energy Engineering (3)

PHILOSOPHY

PHIL 545 Topics in Environmental Ethics (3)

POLITICAL SCIENCE

POLS 581 Fundamentals of Planning (3)

PLANT SCIENCES

PLSC 421 Native Plants in the Landscape (3)

PLSC 515 Agroecology (3)

PLSC 536 Ecology of Grazing Land Systems (3)

SOCIOLOGY

SOCI 465 Social Values and the Environment (3)

SOCI 562 Sociology of Environmental Policy (3)

SOCI 661 Environmental Theory (3)

**REVISE REQUIREMENTS – DUAL MARCH/MLA PROGRAM ARCHITECTURE/LANDSCAPE ARCHITECTURE**

In the 2017-18 Graduate Catalog, revise the following:

Fall–First Year

Revise 2nd bullet point – to remove course ARCH 539 and replace with ARCH 547 Structural Principals in Architecture 4 Credit Hours

Spring–First Year

Delete 2nd bullet point (ARCH 516)

Revise 3rd bullet point: to remove course ARCH 540 and replace with ARCH 548 Materials and Methods in Architecture 4 credit hours

Fall–Second Year

Revise 3rd bullet point: to remove course LAR 585 and replace with LAR 583 Design Theory and Methods I 3 credit hours

Revise 4th bullet point: to remove course PLSC 501 and replace with PLSC 501 Special Topics in Plant Sciences 3 credit hours or PLSC 421 Native Plants in the Landscape 3 credit hours

Spring – Second Year

Revise 4th bullet point: delete wording and replace with GEOL 590 Urban Landscape Ecology 3 credit hours

Fall–Third Year

Revise 2nd bullet point: to remove course ARCH 545 and replace with ARCH 549 Building Systems In Architecture 4 Credit Hours

Revise 4th bullet point: to remove course PLSC 421 Native Plants in the Landscape 3 credit hours and replace with: Directed elective in Architecture or Landscape Architecture or open elective approved by Directors of Architecture and Landscape Architecture schools 3 credit hours

Spring–Third Year

Remove 2nd bullet point: remove course ARCH 546

Add as the last bullet point: Directed elective in Architecture OR Landscape Architecture OR Open Elective Approved by the Directors of Architecture & Landscape Architecture schools 3 credit hours

Fall–Fourth Year

Revise 4th bullet point: to remove course LAR 533 and replace with LAR 534 Operative Landscapes 3 credit hours

Spring–Fourth Year

Revise 3rd bullet point: to remove course LAR 532 and replace with LAR 535 Operative Landscape Tactics 3 credit hours

**REVISE REQUIREMENTS – DUAL MARCH/MLA PROGRAM ARCHITECTURE/LANDSCAPE ARCHITECTURE FOR THE ADVANCED PLACEMENT OPTION**

In the 2017-18 Graduate Catalog, revise the following:

Fall–First Year

Revise 3rd bullet point: to remove LAR 585 and replace with LAR 583 Design Theory and Methods I 3 credit hours

Revise 4th bullet point: to remove course PLSC 501 and replace with PLSC 501 Special Topics in Plant Sciences 3 credit hours or PLSC 421 Native Plants in the Landscape 3 credit hours

Spring – First Year

Revise 4th bullet point: to remove wording and replace with course: GEOL 590 Urban Landscape Ecology 3 credit hours

Fall–Second Year

Revise 3rd bullet point: to remove course PLSC 421 and replace with LAR 534 Operative Landscapes 3 credit hours

Spring–Second Year

Revise 4th bullet point to remove Architecture approved elective and replace with LAR 535 Operative Landscape Tactics 3 credit hours

Fall–Third Year

Revise 4th bullet point to remove LAR 533 and replace with: Directed elective in Architecture OR Landscape Architecture OR Open Elective approved by the directors of architecture & landscape architecture schools 3 credit hours

Spring–Third Year

Revise 3rd bullet point to remove LAR 532 and replace with: Directed elective in Architecture OR Landscape Architecture OR Open Elective approved by the directors of architecture & landscape architecture schools 3 credit hours

Rationale: Revisions to the dual degree sequences updates the requirements for the dual degree sequences. Impact on Other Academic Units: None. Financial Impact: None.

## **SCHOOL OF LANDSCAPE ARCHITECTURE**

### **REVISE REQUIREMENTS – DUAL MLA/MARCH PROGRAM LANDSCAPE ARCHITECTURE/ ARCHITECTURE**

In the 2017-18 Graduate Catalog, revise the following:

Fall–First Year

Revise 2nd bullet point – to remove course ARCH 539 and replace with ARCH 547 Structural Principals in Architecture 4 Credit Hours

Spring–First Year

Delete 2nd bullet point (ARCH 516)

Revise 3rd bullet point: to remove course ARCH 540 and replace with ARCH 548 Materials and Methods in Architecture 4 credit hours

Fall–Second Year

Revise 3rd bullet point: to remove course LAR 585 and replace with LAR 583 Design Theory and Methods I 3 credit hours

Revise 4th bullet point: to remove course PLSC 501 and replace with PLSC 501 Special Topics in Plant Sciences 3 credit hours or PLSC 421 Native Plants in the Landscape 3 credit hours

Spring – Second Year

Revise 4th bullet point: delete wording and replace with GEOL 590 Urban Landscape Ecology 3 credit hours

Fall–Third Year

Revise 2nd bullet point: to remove course ARCH 545 and replace with ARCH 549 Building Systems In Architecture 4 Credit Hours

Revise 4th bullet point: to remove course PLSC 421 Native Plants in the Landscape 3 credit hours and replace with: Directed elective in Architecture or Landscape Architecture or open elective approved by Directors of Architecture & Landscape Architecture schools 3 credit hours

Spring–Third Year

Remove 2nd bullet point: remove course ARCH 546

Add as the last bullet point: Directed elective in Architecture OR Landscape Architecture OR Open Elective Approved by the Directors of Architecture & Landscape Architecture schools 3 credit hours

Fall–Fourth Year

Revise 4th bullet point: to remove course LAR 533 and replace with LAR 534 Operative Landscapes 3 credit hours

Spring–Fourth Year

Revise 3rd bullet point: to remove course LAR 532 and replace with LAR 535 Operative Landscape Tactics 3 credit hours

### **REVISE REQUIREMENTS – DUAL MLA/MARCH PROGRAM LANDSCAPE ARCHITECTURE/ARCHITECTURE FOR THE ADVANCED PLACEMENT OPTION**

In the 2017-18 Graduate Catalog, revise the following:

Fall–First Year

Revise 3rd bullet point: to remove LAR 585 and replace with LAR 583 Design Theory and Methods I 3 credit hours

Revise 4th bullet point: to remove course PLSC 501 and replace with PLSC 501 Special Topics in Plant Sciences 3 credit hours or PLSC 421 Native Plants in the Landscape 3 credit hours



Spring – First Year

Revise 4th bullet point: to remove wording and replace with course: GEOL 590 Urban Landscape Ecology 3 credit hours

Fall–Second Year

Revise 3rd bullet point: to remove course PLSC 421 and replace with LAR 534 Operative Landscapes 3 credit hours

Spring–Second Year

Revise 4th bullet point to remove Architecture approved elective and replace with LAR 535 Operative Landscape Tactics 3 credit hours

Fall–Third Year

Revise 4th bullet point to remove LAR 533 and replace with: Directed elective in Architecture OR Landscape Architecture OR Open Elective approved by the directors of architecture & landscape architecture schools 3 credit hours

Spring–Third Year

Revise 3rd bullet point to remove LAR 532 and replace with: Directed elective in Architecture OR Landscape Architecture OR Open Elective approved by the directors of architecture & landscape architecture schools 3 credit hours

Rationale: Revisions to the dual degree sequences updates the requirements for the dual degree sequences. Impact on Other Academic Units: None. Financial Impact: None.

Rationale: The proposed changes formalize changes to the curriculum discussed by the faculty in the last year.

# COLLEGE OF ARTS AND SCIENCES

All changes effective Fall 2017

## I. COURSE CHANGES

### DEPARTMENT OF ANTHROPOLOGY

#### (ANTH) Anthropology

##### REVISE TITLES (SECONDARY COURSES)

##### **ANTH 442 Archaeology of the Prehistoric Aegean (3)**

*Cross-listed: (See Classics 442.)*

Formerly: Intensive Survey of the Archaeology of the Prehistoric Aegean

##### **ANTH 443 Archaeology and Art of Ancient Greece (3)**

*Cross-listed: (See Classics 443.)*

Formerly: Intensive Survey of the Archaeology of Greece

##### **ANTH 444 Archaeology and Art of Ancient Italy and Rome (3)**

*Cross-listed: (See Classics 444.)*

Formerly: Intensive Survey of the Archaeology of Etruria and Rome

Rationale: Primary department is revising titles. Likewise, secondary needs to show revision. Impact on other units: Cross listed Classics courses. Financial impact: None.

### SCHOOL OF ART

#### (ART) Art

##### REVISE TITLES

##### **ART 535 Graduate Time-Based Art I (2-6)**

Formerly: Graduate 4D Arts Design I

##### **ART 536 Graduate Time-Based Art II (2-6)**

Formerly: ART 536 Graduate 4D Arts Design II

Rationale: The School of Art is changing the name of this MFA concentration from Transmedia Design to Time-Based Art due to change in faculty teaching and change of focus. This change will allow us to target graduate recruiting in a more specific and productive way. Impact on other units: None. Financial impact: None.

#### (ARTC) Art Four-Dimensional Arts

##### ADD NEW 400-LEVEL COURSE FOR GRADUATE CREDIT

##### **ARTC 431 The Business of Cinema (3)** Advanced study of motion picture producing and of the film and video industries.

Rationale: This course has been taught under a special topics number and enrollment was very strong. It will be taught again in spring 2017 and will also satisfy requirements for Cinema Studies majors and minors. Impact on other units: Will add an elective that can be used to satisfy the Cinema Studies major/minor. Financial impact: None.

## DEPARTMENT OF BIOCHEMISTRY AND CELLULAR AND MOLECULAR BIOLOGY

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

#### ADD

**BCMB 518 Biophysical Chemistry (4)** Covers (1) thermodynamics; free energy; entropy and enthalpy; chemical equilibrium; solution chemistry; protein folding; DNA melting; protein-ligand association; phase transition; (2) enzymatics; protonation and electron transport. (3) Molecular Structure and Interaction (3a) Theory: Quantum theory, Duality principle, Wave Equation, Single atom model, (3b) Applications: Simulated Molecular Dynamics. Spectroscopy (UV-Vis, Raman, Fluorescence, Circular dichroism, NMR), X-ray diffraction and scattering.

*Recommended Background: Calculus.*

*Comment(s): Intended for graduate students in the biochemistry and cellular and molecular biology (BCMB) graduate program, but also open to majors in other concentrations.*

*Registration Restriction(s): Consent of instructor.*

Rationale: This course will address the need for coursework in biophysical chemistry for graduate students, specifically students performing research in faculty labs that utilize biophysics technologies. Impact on other units: None. Financial impact: None.

#### REVISE PRIMARY COURSES TO DELETE SECONDARY CROSS-LISTED COURSES

##### **BCMB 471 Biophysical Chemistry (3)**

Formerly: Cross-listed: (Same as Chemistry 471.)

##### **BCMB 481 Biophysical Chemistry (3)**

Formerly: Cross-listed: (Same as Chemistry 481.)

Rationale: Chemistry (secondary) is dropping these courses in their revisions. Impact on other units: Cross-listed with Chemistry. Financial impact: None.

#### REVISE GRADING RESTRICTION (FROM S/NC TO LETTER GRADE)

##### **BCMB 605 Journal Club in Neurophysiology/Physiology (1)**

Formerly: Grading Restriction: Satisfactory/No Credit grading only.

##### **BCMB 606 Journal Club in Structural Biology/Biochemistry (1)**

Formerly: Grading Restriction: Satisfactory/No Credit grading only.

##### **BCMB 607 – Journal Club in Cellular/Molecular Biology (1)**

Formerly: Grading Restriction: Satisfactory/No Credit grading only.

##### **BCMB 608 – Journal Club in Genetics/Developmental Biology (1)**

Formerly: Grading Restriction: Satisfactory/No Credit grading only.

Rationale: This will increase the number of graded 600-level credit hours offered by the department. Impact on other units: None. Financial impact: None.

## DEPARTMENT OF CHEMISTRY

### (CHEM) Chemistry

#### DROP 400-LEVEL COURSES

##### **CHEM 450 Advanced Organic Chemistry (3)**

##### **CHEM 471 Biophysical Chemistry (3)**

##### **CHEM 473 Physical Chemistry I (3)**

##### **CHEM 481 Biophysical Chemistry (3)**

##### **CHEM 483 Physical Chemistry II (3)**

##### **CHEM 489 Physical Chemistry Laboratory II (2)**

Rationale: The Department of Chemistry is doing a complete update of their major programs and courses to bring them in line with current practices. These courses are not needed in the new curriculum. Impact on other units: None. Financial impact: None.

## DEPARTMENT OF CLASSICS

### (CLAS) Classics

#### REVISE TITLE AND DESCRIPTION (PRIMARY COURSES)

**CLAS 442 Archaeology of the Prehistoric Aegean (3)** Survey of the archaeology and art of the Aegean from the earliest human presence to the end of the Mycenaean civilization (ca. 3000000 - 1050 BCE). Highlights include Early Cycladic civilization with its abstract, almost "modern" art, the rise and decline of Minoan and Mycenaean complex societies, the wall paintings of Thera (the "Pompeii" of the Bronze Age), and Troy. Emphasis on anthropological and art-historical approaches. Writing-emphasis course.

*Cross-listed: (Same as Anthropology 442.)*

Formerly: Intensive Survey of the Archaeology of the Prehistoric Aegean (3) Survey of archaeology and art of the Aegean from the earliest humans to the rise of the Greek polis in the 8th century BCE. Highlights include early Cycladic art, Minoan and Mycenaean complex societies, Thera, cultural interconnections with Egypt and the Near East, and the Trojan War. Emphasis on anthropological and modern art-historical approaches. Writing-emphasis course.

(Same as Anthropology 442.)

**CLAS 443 Archaeology and Art of Ancient Greece (3)** Survey of the archaeology and art of Greece and the Greek-speaking areas from the period of Dark Age villages through the rise of the polis, the Golden Age of Pericles, and the establishment of powerful Hellenistic kingdoms after the conquests of Alexander the Great (c. 1050–30 BCE). Achievements in architecture, sculpture, vase painting, and minor arts seen in the context of changes in society as well as developments in Greek philosophy and thought. Archaeological evidence for daily life, economy, and political institutions. Writing-emphasis course.

*Cross-listed: (Same as Anthropology 443.)*

Formerly: Intensive Survey of the Archaeology of Greece (3) Survey of the archaeology and art of Greece and the Greek-speaking areas from the Orientalizing through Hellenistic periods (c. 700–30 BCE). Developments in architecture, sculpture, and vase painting seen in the context of changes in society. Archaeological evidence for daily life, economy, and political institutions. Writing-emphasis course.

(Same as Anthropology 443.)

**CLAS 444 – Archaeology and Art of Ancient Italy and Rome (3)** Survey of the archaeology and art of ancient Italy and the Roman world from prehistoric times to the fall of the Roman Empire (ca. 1000 BCE – 476 CE). Highlights include Etruscan culture and multiculturalism in early Italy; the development of Roman architecture, art, and urban planning; art and architecture used for political propaganda; Roman cosmopolitan culture and imperialism; theory and method in Roman archaeology. Writing-emphasis course.

*Cross-listed: (Same as Anthropology 444.)*

Formerly: Intensive Survey of the Archaeology of Etruria and Rome (3) Description: Survey of the archaeology of Italy and the Roman World from prehistoric times to the fall of the Roman Empire (1000 BCE–476 CE). Highlights are the rise and decline of Etruscan culture; the development of Roman architecture, art, and urban planning; art and architecture used for political propaganda; and Roman cosmopolitan culture during the Empire. Writing-emphasis course.

Cross-listed: (Same as Anthropology 444.)

Rationale: The new titles and descriptions for these courses reflect the contents of the courses as they have been taught for several years. Impact on other units: Cross listed with Anthropology. Financial impact: None.

## DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY

### (EEB) Ecology and Evolutionary Biology

#### ADD

**EEB 587 Phylogenetic Methods (1-3)** Topics include likelihood, Bayesian, and parsimony methods of tree inference, gene tree species tree and network methods, dating trees, correlating characters, discrete and continuous character models and diversification.

Rationale: This course was proposed as part of a successful NSF Career grant. It was taught under a temporary number last but will be a yearly course which covers essential techniques in evolutionary biology for dealing with multiple species. Approximately 1/3 of faculty in the EEB department use such techniques but there is no other option for students to learn them in depth. Impact on other units: None. Financial impact: None.

#### REVISE DESCRIPTION

**EEB 433 Plant Ecology (3)** Principles, fundamental concepts and techniques in plant ecology, including topics such as plant interactions with climate, soils, microbiomes, community dynamics and plant-mediated ecosystem processes.

(RE) Prerequisite(s): Biology 260.

Formerly: Interactions between individuals, species, communities and their environment. Circulation of energy and matter in ecosystems. Includes weekly field trips or laboratory periods and at least two weekend field trips.

Rationale: The old description was outdated and inaccurate. Impact on other units: None. Financial impact: None.

## DEPARTMENT OF ENGLISH

### (ENGL) English

#### REVISE PRIMARY COURSE TO CHANGE THE ACADEMIC DISCIPLINE NAME OF THE SECONDARY CROSS-LISTED COURSE

##### ENGL 422 Women Writers in Britain (3)

*Cross-listed: (Same as Women, Gender, and Sexuality 422.)*

Formerly: Cross-listed: (Same as Women's Studies 422.)

Rationale: Cross list reference is revising to reflect the new name of the Women's Studies IDP. Impact on other units: Cross listed with Women's Studies (new name Women, Gender, and Sexuality). Financial impact: None.

#### REVISE REPEATABILITY AND COMMENT

##### ENGL 593 Independent Study (1-15)

*Repeatability: May be repeated twice.*

*Comment(s): May be taken once in the MA program and twice in the PhD program.*

Formerly: Repeatability: May be repeated once.

Comment(s): May be taken once in the MA program and once in the PhD program.

Rationale: The primary reason for this change is to prevent doctoral students from taking 400-level courses. When the department does not regularly offer 500- or 600- level courses on topics directly relevant to a student's research areas, a 400-level course, modified to meet graduate requirements, might seem to best suit a student's needs but this misrepresents the quantity and quality of work we require of doctoral students. Allowing an additional 593 allows a student to structure a PhD-appropriate Independent Study on the scaffolding of a 400-level course. Impact on other units: None. Financial impact: None.

## DEPARTMENT OF GEOGRAPHY

### (GEOG) Geography

#### DROP

##### GEOG 592 Off-Campus Study (1-15)

Rationale: No student has registered for this course during the past decade. Impact on other units: None. Financial impact: None.

#### REVISE TO DELETE (DE)PREREQUISITE AND ADD RECOMMENDED BACKGROUND:

##### GEOG 432 Environmental History from Tree Rings (4)

*Recommended Background: Introductory physical geography.*

Formerly: (DE) Prerequisite(s): 132.

Rationale: This course has been significantly revised over the years to appeal to students in both STEM and non-STEM disciplines. Impact on other units: None. Financial impact: None.

#### REVISE DESCRIPTION, DELETE (DE)PREREQUISITE, ADD RECOMMENDED BACKGROUND:

**GEOG 433 Landform Analysis and Landscape Planning (3)** Overview of Earth surface processes related to landscape planning. Topics include slope stability, water cycle, watershed and stream systems, sediment transport, soil erosion, and land use change. People as evaluators and agents of change is emphasized by case studies, discussion, and assignments.

*Recommended Background: Introductory physical geography.*

Formerly: Characteristics of surface form, water, vegetation, and surface materials, and their regional interrelationships. People as evaluators and agents of change.

(DE) Prerequisite(s): 132.

Rationale: This course has been revised over the years and the description should be revised to match. Students may have the appropriate background for the course even if they have not had GEOG 132. Impact on other units: None. Financial impact: None.

#### REVISE TO DELETE (RE)PREREQUISITE AND ADD RECOMMENDED BACKGROUND:

##### GEOG 434 Climatology (3)

*Recommended Background: Introductory physical geography or coursework in climatology, meteorology, or atmospheric science.*

Formerly: (RE) Prerequisite(s): 131.

Rationale: This course attracts students from across campus that may have suitable background for the course but not specifically GEOG 131. Impact on other units: None. Financial impact: None.

## DEPARTMENT OF HISTORY

### (HIST) History

#### ADD

**HIST 544 US History, Colonial to Reconstruction (3)** Readings seminar. Covers major historiographic debates in American history, from the colonial period to Reconstruction. Required for all American history graduate students.

**HIST 545 US History, Reconstruction to Present (3)** Readings seminar. Covers major historiographic debates in American history, from Reconstruction to the recent past. Required for all American history graduate students.

Rationale: These courses are being added to better prepare American history graduate students for their comprehensive exams and dissertations. Impact on other units: None. Financial impact: None.

## INTERDISCIPLINARY PROGRAMS

### (AFST) Africana Studies

#### REVISE PRIMARY COURSE TO CHANGE THE ACADEMIC DISCIPLINE NAME OF THE SECONDARY CROSS-LISTED COURSE

**AFST 484 African American Women in American Society (3)**

*Cross-listed: (Same as Women, Gender, and Sexuality 484.)*

Rationale: The Women's Studies IDP is being dropped and the new Women, Gender, and Sexuality IDP is being added. Impact on other units: Cross listed with WGS. Financial impact: None.

### (CNST) CINEMA STUDIES

#### DROP 400-LEVEL COURSE FOR GRADUATE CREDIT

**CNST 469 Sexuality and Cinema (3)**

*Cross-listed: (See Women's Studies 469.)*

Rationale: The primary unit is changing from Women's Studies to Women, Gender, and Sexuality. They have decided to drop their graduate program for now and revisit it later. They are also dropping graduate credit courses for which they are the primary unit. Impact on other units: Cross listed Women's Studies course. Financial impact: None.

### (JST) JUDAIC STUDIES

#### REVISE TITLE (SECONDARY CROSS LISTED COURSE)

**JST 405 Modern Jewish Studies (3)**

*Cross-listed: (See Religious Studies 405.)*

Formerly: Modern Jewish Thought

Rationale: This change was needed because the primary department revised the course. Impact on other units: Cross listed Religious Studies course. Financial impact: None.

### (LING) LINGUISTICS

#### ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

**LING 421 Phonetics (3)** Introduction to the basics of phonetics – the nature of speech sounds, speech production, and speech acoustics – as well as the International Phonetic Alphabet. The class will be taught in English, but students will examine speech sounds in many different languages. No background in any language is required.

*(DE) Prerequisite: LING 200 or permission of instructor.*

Rationale: Phonetics is a core area in linguistics and it serves as the foundation for the majority of linguistic analyses. A phonetics class that teaches students how to articulate and transcribe speech sounds in world languages will greatly strengthen students' training. Impact on other units: None. Financial impact: None.

#### REVISE TITLE AND DESCRIPTION

**LING 423 History of Linguistics (3)** Surveys the main trends in linguistic theory and philosophy of linguistics from ancient times through modern Linguistics. Provides a strong grounding in fundamental principles of scientific reasoning illustrated through examples with emphasis on the development of Linguistics into a modern science.

Formerly: The Development of Diachronic and Synchronic Linguistics (3) Development of western linguistic thought from the Hebrews and Greeks through modern times. Readings from Boas, Sapir, Bloomfield and others.

Rationale: Due to recent retirements and changes in personnel, we broadened the name description of this course to allow current linguistics faculty to teach it. Impact on other units: None. Financial impact: None.

## **(WOST) WOMEN'S STUDIES**

### **DROP ACADEMIC DISCIPLINE AND COURSES FOR GRADUATE CREDIT**

#### **WOST 400 Topics in Women's Studies 3**

#### **WOST 412 Women, Performance Art, and the Avant Garde 3**

*Cross-listed: (See Musicology 412.)*

#### **WOST 422 Women Writers in Britain 3**

*Cross-listed: (See English 422.)*

#### **WOST 434 Psychology of Gender 3**

*Cross-listed: (See Psychology 434.)*

#### **WOST 454 Gender and Crime 3**

*Cross-listed: (See Sociology 453.)*

#### **WOST 469 Sexuality and Cinema 3**

*Cross-listed: (Same as Cinema Studies 469.)*

#### **WOST 484 African American Women in American Society 3**

*Cross-listed: (See Sociology 453.)*

#### **WOST 510 Special Topics 3**

#### **WOST 543 Women, Sport, and Culture 3**

*Cross-listed: (See Sport Studies 543.)*

#### **WOST 548 Transforming Critical Thinking: Constructive Thinking and Educational Implications 3**

*Cross-listed: (See Cultural Studies in Education 548.)*

#### **WOST 593 Independent Study 1-6**

#### **WOST 609 Feminist Theories and Education 3**

*Cross-listed: (See Cultural Studies in Education 609.)*

Rationale: The Women's Studies IDP is changing to Women, Gender, and Sexuality. They have decided to only deal with the undergraduate program at this time and will revisit the graduate program and courses at a later time except for those cross listed courses that need to remain in the Graduate catalog. Impact on other units: Will impact the units that have Women's Studies cross listings. Financial impact: None.

### **+ ADD NEW ACADEMIC DISCIPLINE AND COURSES FOR GRADUATE CREDIT**

## **(WGS) Women, Gender, and Sexuality**

#### **WGS 412 Women, Performance Art, and the Avant Garde (3)**

*Cross-listed: (See Musicology 412.)*

#### **WGS 422 Women Writers in Britain (3)**

*Cross-listed: (See English 422.)*

#### **WGS 434 Psychology of Gender (3)**

*Cross-listed: (See Psychology 434.)*

#### **WGS 454 Gender and Crime (3)**

*Cross-listed: (See Sociology 453.)*

#### **WGS 484 African American Women in American Society (3)**

*Cross-listed: (See Africana Studies 484.)*

Rationale: The Women's Studies IDP is changing to Women, Gender, and Sexuality. These are the cross listed courses that need to remain in the Graduate catalog. Impact on other units: Will impact the units that have Women's Studies cross listings. Financial impact: None.

## DEPARTMENT OF MATHEMATICS

### ADD 400-LEVEL COURSES FOR GRADUATE CREDIT

**MATH 441 Advanced Calculus (3)** Introduction to the topology of  $\mathbb{R}^n$ , functions of multiple variables, and multivariable advanced calculus.

*Credit Restriction: Students who receive a grade of C or better in 447 may not subsequently receive credit for 441.*  
*(RE) Prerequisite(s): Math 341.*

Rationale: This course replaces MATH 445 which is being dropped. Impact on other units: None. Financial impact: None.

**MATH 450 Number Theory (3)** Primes, Diophantine equations, quadratic reciprocity, cryptography, and other topics in number theory.

*(RE) Prerequisite(s): Math 351.*

Rationale: This course replaces MATH 455 which is being dropped. Impact on other units: None. Financial impact: None.

**MATH 451 Abstract Algebra (3)** Topics in groups, rings, and fields.

*Credit Restriction: Students who receive a grade of C or better in 457 may not subsequently receive credit for 451.*  
*(RE) Prerequisite(s): Math 351.*

Rationale: This course replaces 456 which is being dropped. Impact on other units: None. Financial impact: None.

### ADD

**MATH 520 Internship (1-6)** Supervised off-campus experience in applications of mathematical principles and methods in business, industry, or government. Written report required.

*Grading Restriction: Satisfactory/No Credit grading only.*

*Repeatability: May be repeated. Maximum 6 hours.*

*Recommended Background: 4 courses in graduate-level mathematics, and consent of departmental director of graduate studies in consultation with advisor.*

Rationale: This course will meet the need of Math graduate students that are being offered internships through government and industry. Impact on other units: None. Financial impact: None.

### DROP 400-LEVEL COURSES

**MATH 445 Advanced Calculus I (3)**

**MATH 446 Advanced Calculus II (3)**

Rationale: These courses are no longer up to date and are being replaced by new courses being added. Impact on other units: None. Financial impact: None.

### REVISE DESCRIPTION

**MATH 443 Complex Variables (3)** Introduction to the theory of functions of a complex variable, including contour integrals and conformal mapping properties.

Formerly: Introduction to the theory of functions of a complex variable, including residue theory and contour integrals.

### REVISE TITLE AND DESCRIPTION

**MATH 447 Honors: Analysis I (3)** Honors-level introduction to the theory of sequences, series, differentiation, and integration of functions of one or more variables.

Formerly: Honors: Advanced Calculus I (3) Honors version of 445.

### REVISE TITLE

**MATH 448 Honors: Analysis II (3)**

Formerly: Honors: Advanced Calculus II

### REVISE DESCRIPTION AND (RE)PREREQUISITE

**MATH 457 Honors: Abstract Algebra I (3)** Topics in abstract algebra, including groups, rings, fields, vector spaces, and linear transformations.

*(RE) Prerequisite(s): 351 or honors concentration.*

Formerly: Honors version of 455.

*(RE) Prerequisite(s): 351.*

Rationale: Courses are being revised to bring them up to date with current practice. Impact on other units: None. Financial impact: None.



## DEPARTMENT OF MICROBIOLOGY

### (MICR) Microbiology

#### ADD

**MICR 607 Journal Club in Computational Biology (1)** Readings and discussions based on current literature.

*Repeatability: May be repeated. Maximum 18 hours.*

*Registration Restriction(s): Minimum student level – graduate.*

Rationale: A faculty member has recognized a need for this type of journal club for our graduate students. He has offered this journal club on a trial basis under the auspices of another journal club title and it has been successful. Thus, we would like to add to our catalog offerings.

Impact on other units: None. Financial impact: None.

#### REVISE SECONDARY CROSS-LISTED COURSE TO SHOW ACADEMIC DISCIPLINE REVISION TO PRIMARY

**MICR 421 Food Microbiology (3)**

*Cross-listed: (See Food Science 421.)*

(Formerly: See Food Science and Technology 421.)

Rationale: The primary department is changing its name. Impact on other units: Cross listed Food Science course. Financial impact: None.

## DEPARTMENT OF MODERN FOREIGN LANGUAGES AND LITERATURES

### FRENCH

#### REVISE COMMENT

**FREN 420 French Cinema (3)**

*Cross-listed: (Same as Cinema Studies 420.)*

*Comment(s): Open to non-majors. Credit toward a major or minor in French available with additional reading and writing in French to students who have completed French 353 or the equivalent.*

Formerly: Comment(s): Open to non-majors. Credit toward a major or minor in French available with additional reading and writing in French to students who have completed French 351, 352, 353 or the equivalent.

Rationale: French 351 and 352 were removed from the catalog some years ago so are not needed here. Impact on other units: None. Financial impact: None.

#### DROP

**FREN 501 Techniques in Literary Analysis (3)**

Rationale: This course has not been offered for several years and there are no plans to offer it in the near future. Impact on other units: None. Financial impact: None.

## SCHOOL OF MUSIC

### (MUCO) Musicology

#### ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

**MUCO 415 Introduction to Music Therapy (1-3)** Overview of the field of Music Therapy, as an allied health profession, and in the context of the history of the profession. Examines various diagnoses within populations served by music therapists and details how music therapy is utilized within each population. Addresses current research in music therapy as a means to objectively support the field of music therapy and its evidence-based practices.

Rationale: Course has been offered under a variable topics number on a regular basis in fall and spring since Fall 2013 and will be offered on the same schedule in the foreseeable future. The topics number gives the course poor visibility to the student body and is misleading, as the number is normally used for music performance courses, which this course is not. The course is offered with enough frequency and has sufficient longevity to warrant its own number. We anticipate the course's new presence in the catalog and the timetable will improve students' awareness of the course, further increasing interest and enrollment. Impact on other units: None. Financial impact: None.

#### REVISE TITLE, DESCRIPTION, AND CROSS-LISTING TO SHOW REVISION TO THE ACADEMIC DISCIPLINE

**MUCO 412 Gender, Performance Art, and the Avant Garde (3)** Explores interdisciplinary 20th-century phenomena of performance and performativity, engaging with sexuality, feminisms, social constructions of gender, and identifications and presentations of the body. Consideration of ways in which performative expressions employ and encompass aspects of music, voice, and sound, drama, spoken word, film, visual arts, movement, and dance.

*Cross-listed: (Same as Women, Gender, and Sexuality 412.)*

Formerly: Women, Performance Art, and the Avant Garde (3) Explores interdisciplinary 20th-century phenomena of performance and performativity with sexuality, feminisms, social constructions of gender, and identifications and presentations of the body. Consideration of ways in which performative expressions employ and encompass aspects of music, voice, and sound, drama, spoken word, film, visual arts, movement, and dance.

Cross-listed: (Same as Women's Studies 412.)

Rationale: Slight updates to the title and description. The Women's Studies IDP is changing its name to Women, Gender, and Sexuality.

Impact on other units: Cross listed with Women, Gender, and Sexuality. Financial impact: None.

## DEPARTMENT OF PHYSICS AND ASTRONOMY

### (PHYS) Physics

#### REVISE (RE)PREREQUISITE(S) AND ADD RECOMMENDED BACKGROUND:

##### PHYS 411 Introduction to Quantum Mechanics (3)

(RE) Prerequisite(s): 250.

Recommended Background: A course (200-level or higher) in advanced calculus.

(Formerly: 250 and Mathematics 435.)

Rationale: This change eliminates the prerequisite of MATH 435 (Partial Differential Equations) and includes a recommendation for sophistication in the application of advanced calculus. This course requires considerable application of calculus but only limited previous experience in partial differential equations. That which is needed is presented as an integral part of the course and is included in the standard textbooks. Impact on other units: Very little expected. We have been routinely overriding this prerequisite for several years. Financial impact: None.

## DEPARTMENT OF PSYCHOLOGY

### (PSYC) Psychology

#### ADD NEW 400-LEVEL COURSES FOR GRADUATE CREDIT

**PSYC 472 Psychology of Trauma (3)** Provides an overview of the psychological impact of traumatic events. Specific types of traumatic events will be discussed as well as treatment options for trauma-related disorders.

(RE) Prerequisite(s): 110 or 117.

Registration Restriction(s): Minimum student level – Junior.

Rationale: This course has been offered for several years as a special topics course and the instructor and department wish to add the course formally to the undergraduate Psychology curriculum. Impact on other units: None. Financial impact: None.

**PSYC 485 Special Topics in Psychology (3)** Intensive analysis of special topics, such as sustainability psychology or intersectionality.

Repeatability: May be repeated. Maximum 6 hours.

Credit Restriction(s): No more than 6 hours of 382, 482, 485 may be applied toward the major. An additional 6 hours of 382, 482, and 485 may count as electives.

(RE) Prerequisite(s): 110 or 117.

Registration Restriction(s): Minimum student level – Junior.

Rationale: We will seek WC designation for this course also. Having a separate special topics course for sections approved by the General Education committee for WC designation will make it easier for students to identify WC courses in our curriculum. Assessment efforts indicate that more integration of training in psychological writing is needed. Impact on other units: None. Financial impact: None.

#### REVISE DESCRIPTION AND CREDIT RESTRICTION:

**PSYC 482 Special Topics in Psychology (3)** Intensive analysis of special topics, such as sustainability psychology or intersectionality.

Credit Restriction: No more than 6 hours of 382, 482, 485 may be applied toward the major. An additional 6 hours of 382, 482, 485 may count as electives.

Formerly: Intensive analysis of special topics, such as African American psychology or evaluation of programs in the community.

Credit Restriction: No more than 6 hours of 382, 482 may be applied toward the major. An additional 6 hours of 382, 482 may count as electives.

Rationale: Updated description to reflect current offerings (e.g., African American psychology is no longer offered as a special topics course and has its own course number). Adding new special topics course to list of courses in credit restriction. Impact on other units: None. Financial impact: None.

#### REVISE CROSS-LISTING TO SHOW REVISION TO THE ACADEMIC DISCIPLINE NAME CHANGE

##### PSYC 434 Psychology of Gender (3)

Cross-listed: (Same as Women, Gender, and Sexuality 434.)

Formerly: Cross-listed: Same as Women's Studies 434

Rationale: The Women's Studies IDP is being dropped and added back as Women, Gender, and Sexuality. Impact on other units: Cross listed with Women, Gender, and Sexuality. Financial impact: None.

## DEPARTMENT OF RELIGIOUS STUDIES

### (REST) Religious Studies

#### REVISE TITLE, DESCRIPTION, AND (RE)PREREQUISITES (PRIMARY COURSE)

**REST 405 Modern Jewish Studies (3)** History, culture, and geography of the Jewish world from 1850 to present. The founding of the modern state of Israel in 1948 and the political complexities of the Middle East. Jewish culture and literature. Writing-emphasis course.

*Cross-listed: (Same as Judaic Studies 405.)*

*(RE) Prerequisite(s): English 102 118, 132, 290, or 298.*

Formerly: Modern Jewish Thought (3) History, culture, and geography of the now Israeli portion of the Levant from 1850 to present. The founding of the modern state of Israel in 1948 and the political complexities of the Middle East.

Cross-listed: (Same as Judaic Studies 405.)

(RE) Prerequisite(s): English 102 or equivalent.

Rationale: The revisions reflect recent changes in course instructor(s) and allow a more global approach to the course. Impact on other units: None. Financial impact: None.

## DEPARTMENT OF SOCIOLOGY

### (SOCl) Sociology

#### ADD

**SOCl 509 Critical Race and Sociological Foundations of Race and Ethnicity (3)** A historical and contemporary overview of race scholarship in the United States. Focuses on the most important race scholars and scholarship over the last century: evolution of race scholarship from Du Bois, to the Chicago School, to urban sociology, to contemporary theories on racial formations, systemic racism, color-blind racism, and critical race theory (CRT).

**SOCl 552 Race, Ethnicity, Crime and Justice (3)** Examines racial/ethnic disparities in criminal offending and victimization, as well as different experiences with law enforcement, judicial, and correctional agencies. Emphasis on social justice.

**SOCl 616 Advanced Topics in Race and Ethnicity (3)** Rotating topics on race and ethnicity. Examples include, environmental racism; policing and race; race, terror and genocide; intersectionality; health disparities, immigration and ethnic change; disproportionate minority contact, advanced Critical Race Theories.

**SOCl 694 Global Racism (3)** Idea of race globally. How sociological and interdisciplinary race scholars theoretically position race in different geographies. Special attention given to Latin America, Africa, Asia, Europe, the Middle East and the United States.

Rationale: These courses will meet course needs in the new graduate concentration area and recognize core faculty research and teaching strengths. Impact on other units: None. Financial impact: None.

#### REVISE TITLE AND DESCRIPTION

**SOCl 466 Special Topics in Race and Ethnicity (3)** Rotating topics on specific race and ethnicity areas. May include topics such as environmental racism, policing and race, race, terror and genocide, intersectionality, health disparities, immigration and ethnic change, and advanced Critical Race Theory.

Formerly: Issues in Race and Ethnicity (3) Survey of advanced topics in the sociological study of race and ethnicity.

Rationale: This course will be part of our new concentration area in Critical Race and Ethnic Studies that recognizes core faculty research and teaching strengths. Impact on other units: None. Financial impact: None.

## II. PROGRAM CHANGES

### SCHOOL OF ART

➤ **DROP CONCENTRATION – ART MAJOR, MFA**

Transmedia Design

➤ **ADD CONCENTRATION – ART MAJOR, MFA**

Time-Based Art

Rationale: The School of Art is changing the name of this MFA concentration from Transmedia Design to Time-Based Art due to change in faculty teaching and change of focus. This change will allow us to target graduate recruiting in a more specific and productive way. Impact on other units: None. Financial impact: None.

### DEPARTMENT OF ENGLISH

#### REVISE REQUIREMENTS - ENGLISH MAJOR MA, LITERATURE, CRITICISM, AND TEXTUAL STUDIES CONCENTRATION

In the 2017-18 Graduate Catalog, revise the first paragraph to add the following sentence (which will be the second sentence in the paragraph).

Students must take at least one course in each of the department's three historical divisions: Medieval/Renaissance; 18th- and 19th-century British and American; and modern/contemporary.

Formerly: A minimum of 24 credit hours in English beyond the BA to include 6 credit hours at the 600-level; 12 additional credit hours at the 500-600 level (only 3 credit hours of ENGL 593 may be applied toward the MA); and 6 credit hours for graduate credit at any level, including the 400-level. In this course work, students must maintain at least a 3.0 GPA.

Rationale: The professorial faculty voted to add a distribution requirement to this MA program which will help establish the degree as a generalist degree, preparing students for a range of possible teaching positions at the college and high school level. This revision should also help students prepare for the Department's required MA comprehensive examination, which requires coverage of British and American literature from the Anglo-Saxon period to the late twentieth century. Impact on other units: None. Financial impact: None.

#### REVISE REQUIREMENTS - ENGLISH MAJOR, PHD

In the 2017-18 Graduate Catalog, under Course work heading, delete first paragraph and replace with the following:

At least 54 credit hours beyond the BA (of which at least 30 credit hours must be beyond the MA) to include at least 21 credit hours at the 600-level; at least 15 credit hours at the 500-level or above (only 3 credit hours of ENGL 593 may be applied toward the MA and 6 after the MA); a 3 credit hour course in teaching composition, ENGL 505; and 15 additional credit hours at the 500- or 600-level.

Formerly: At least 54 credit hours beyond the BA (of which at least 30 credit hours must be beyond the MA) to include at least 21 credit hours at the 600-level; at least 15 credit hours at the 500-level or above (only 3 credit hours of ENGL 593 may be applied toward the MA and 3 after the MA); a 3 credit hour course in teaching composition, ENGL 505 and 15 additional credit hours at any level approved for graduate credit (including a maximum of 12 credit hours at the 400-level if approved by the Director of Graduate Studies).

Rationale: Increasing the allowable credit hours of English 593, Independent Study, to 6 allows students to pursue studies directly relevant to their research interests. It also obviates the need for doctoral students to take courses at the 400-level, which the English Graduate Office has strongly discouraged for years. Impact on other units: None. Financial impact: None.

### DEPARTMENT OF HISTORY

#### REVISE REQUIREMENTS - HISTORY MAJOR, PHD

In the 2017-18 Graduate Catalog, revise the history requirements as follows:

1. delete the third bullet and replace with the following:

Complete the minimum course requirements outlined by the Graduate School (48 hours beyond the BA, or 24 hours beyond the MA). Students with an MA from another institution should take not only the 24 post-MA hours required by the Graduate School, but also an additional 12 hours, for a total of 36 total hours at UT; if approved by the adviser, these additional 12 hours may include non-graduate-level language instruction.

Formerly: Complete the minimum course requirements outlined by the Graduate School (48 credit hours beyond the BA, or 24 credit hours beyond the MA).

2. Delete the fourth bullet and replace with the following:

Students who enter with an MA must complete 9 hours in their major doctoral field. Students who enter without an MA must complete 18 hours in their major doctoral field. All students must complete 9 hours in a teaching field, which will either be World History or an approved alternate field.

Formerly: Students who enter with an MA must complete 9 credit hours in one Group I doctoral field. Students who enter without an MA must complete 18 credit hours in one Group I doctoral field. There is no requirement for minimum credit hours for a Group II field. All students must complete 9 credit hours in the Group III field. Courses taken to fulfill MA degrees may be counted toward all field requirements.

3. Delete sixth bullet and replace with the following:

Students who enter with a non-thesis MA or without an MA must complete two 600-level research seminars. Students who enter with a thesis MA need complete only one 600-level research seminar and History 621. All 600-level course work must be completed at the University of Tennessee.

Formerly: Students who enter with a non-thesis MA must complete two 600-level research seminars. Students who enter with a thesis MA need complete only one 600-level research seminar. Students who enter without an MA must complete four 600-level research seminars. All 600-level course work must be completed at the University of Tennessee.

4. Delete eighth bullet and replace with the following:

For students who enter without an MA, a minimum of 39 of the 48 hours of course work must be graded A-F. Nine hours of course work may be taken outside the department. For students who enter with an MA from another institution, a minimum of 27 of 36 hours must be graded A-F. Up to six hours may be taken outside the department.

Formerly: For students who enter without an MA, a minimum of 39 of the 48 credit hours of course work must be graded A-F. Nine credit hours of course work may be taken outside the department. For students who enter with an MA, a minimum of 18 of the 24 credit hours must be graded A-F. Up to six credit hours may be taken outside the department.

5. Revise current heading of "Alternative Third Field" to Alternative Teaching Field and also revise the paragraph as follows:

#### Alternative Teaching Field

Students may choose an alternative teaching field. This entails three courses in a major field other than the student's own 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.

Formerly: 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.

6. Delete current text under Comprehensive Examination and replace with the following:

The comprehensive examination consists of an eight-hour written exam and a two-hour oral exam and must be taken no later than the semester following the semester in which the student completes the residence, course work, and language requirement (summer excluded). Failure to take the comprehensive examination within the required time will be counted as a failure on the examination. Only students with an overall grade point average of at least 3.0 will be allowed to take the comprehensive examination. A student who fails the exam must repeat it the following semester (summer excluded). A second failure on either exam will cause the student to be dropped from the history graduate program. A student who does not repeat a failed exam within the required time will likewise be dropped from the program.

Formerly: The comprehensive examination consists of a written exam (Group I) and an oral exam (Group II) and must be taken no later than the semester following the semester in which the student completes the residence, course work, and language requirement (summer excluded). Failure to take the comprehensive examination within the required time will be counted as a failure on the examination. Only students with an overall grade point average of at least 3.0 will be allowed to take the comprehensive examination. Qualified students will be examined in one field selected from the Group I list below and one field selected from the Group II list below. The two exams are taken in the same semester. The Group I is an eight-hour written exam. It must be passed before the Group II can be taken. The Group II is a two-hour oral exam. A student who fails either exam must repeat it the following semester (summer excluded). A second failure on either exam will cause the student to be dropped from the history graduate program. A student who does not repeat a failed exam within the required time will likewise be dropped from the program.

7. Delete current text (all three groups) under the heading Doctoral Fields, and replace with the following:

Students will select a major doctoral field in Pre-Modern Europe, Modern Europe, or American History.

Formerly:

Group I. Pre-modern Europe; Modern Europe; United States (colonial to present).

Group II. To be defined by the student's doctoral committee from within one of the following fields. United States – Colonial and Early Republic; 19th century; 20th century; Regional; Military and Foreign Relations; Social and Cultural; American Political; Gender. European – Ancient; Medieval; Early Modern; Modern; Political and Diplomatic; Intellectual and Cultural; Social and Economic; National Fields; Gender. Group III (Teaching Field). World History.

Rationale: For 3rd and 8th bullets – The department has found that students coming from other MA programs are not always as well prepared as we would like. The faculty decided that they would like to have students take more courses with UT professors before starting the dissertation, in order to ensure they have time to develop the necessary skill set to succeed. The possibility for students to include language training in these additional hours was put in the requirement in order to meet the needs of our medievalist students, who need extensive training in multiple languages for their work.

For 6th bullet – Students who enter without an MA will now only complete two 600-level research seminars instead of four. Our course offering made the previous requirement impractical, and we also do not consider it intellectually necessary. Students entering with a thesis MA are now required to take one 600-level research seminar and History 621 (a readings course for preparing for the comprehensive exams which most students take as a matter of course) in order to insure that they meet the Graduate School requirement for 600-level coursework.

Regarding exams – The department decided to change the way we label exam fields. Both faculty and students found the Group I and Group II labels confusing and oddly out-of-step with terminology most other history graduate programs employ for exam fields. The list in the catalog was also quite old and had become out-of-date with respect to the current state of our discipline. To bring our practices in line with common practice in the discipline, students will now work more closely with individual faculty to develop specific field reading lists. We are confident that this new format will be more straightforward and rigorous, and more similar in structure to other top history graduate programs. Impact on other units: None. Financial impact: None.

## **INTERDISCIPLINARY PROGRAMS**

### **WOMEN'S STUDIES**

#### **DROP CERTIFICATE – WOMEN'S STUDIES GRADUATE CERTIFICATE**

In the 2017-18 Graduate Catalog drop the Women's Studies Graduate Certificate and all associated references to Women's Studies and curricula from the graduate catalog.

Rationale: The Women's Studies program is being dropped and retooled and added back as Women, Gender, and Sexuality. They have decided to only deal with the undergraduate program at this time and wait until later to update the graduate certificate and courses. Impact on other units: All units impacted have been notified. Financial impact: None.

## **DEPARTMENT OF MODERN FOREIGN LANGUAGES AND LITERATURES**

### **REVISE REQUIREMENTS - FRENCH MAJOR, MA**

In the 2017-18 Graduate Catalog, remove current requirements for the thesis and non-thesis options and replace with the following:

#### **Thesis Option**

- Completion of a minimum of 27 hours of course work plus 6 hours of FREN 500 Thesis. A maximum of 6 hours may be taken at the 400-level; the rest at the 500-level. Under certain conditions, the student may take 600-level seminars.
- The thesis committee must be established and a formal proposal approved by the end of the second semester of course work. The thesis must be completed by the end of the fourth semester of course work. The thesis will contain 10,000 to 15,000 words. Any student who fails to receive a passing grade in FREN 500 in their third and fourth semesters will be required to complete the non-thesis option.
- A written examination covering the course work and selected items from a master reading list.
- A final oral examination covering the thesis.

#### **Non-Thesis Option**

- Completion of at least 30 hours of course work with a maximum of 9 hours at the 400-level and the rest at the 500-level. Under certain conditions, the student may take 600-level seminars. If the student chooses to have a minor (such as Italian or Portuguese), at least 24 hours must be taken in the major and 6 hours in the minor.
- A research paper from a course, which the candidate substantially expands with the approval of the committee.
- A written examination covering the course work and selected items from a master reading list.
- A final oral examination to discuss the research paper.

Formerly:

#### **Thesis Option**

Completion of a minimum of 24 graduate credit hours in course work plus at least 6 credit hours in course FREN 500 Thesis. FREN 501 is required. A maximum of 6 credit hours may be taken at the 400-level (for graduate credit); the rest at the 500-level; and under certain conditions, the student may take 600-level seminars. If the student chooses to have a minor (such as Italian or Portuguese), at least 24 credit hours (including 6 credit hours of thesis) must be taken in the major and 6 credit hours in the minor.

A thesis with a minimum of 6 credit hours in course FREN 500.

A written examination covering the course work and selected items from a master reading list.

A final oral examination covering the thesis.

#### **Non-Thesis Option**

Completion of at least 30 graduate credit hours with a maximum of 9 at the 400-level (for graduate credit) and the rest at the 500-level, including FREN 501. Under certain conditions, the student may take 600-level seminars. If the student chooses to have a minor (such as Italian

or Portuguese), at least 24 credit hours must be taken in the major and 6 credit hours in the minor.  
A research paper from a course, which the candidate substantially expands with the approval of the committee.  
A written examination covering the course work and selected items from a master reading list.  
A final oral examination to discuss the research paper.

Rationale: This clarifies the distinction between the French MA thesis and non-thesis options, reduces the number of hours for the thesis option and removes the minor option there. Change also clarifies the timing and construction of the thesis option and removes the mention of French 501, which is no longer being offered. Impact on other units: None. Financial impact: None.

## **SCHOOL OF MUSIC**

### **REVISE REQUIREMENTS - ARTIST CERTIFICATE IN MUSIC**

In the 2017-18 Graduate Catalog revise 2nd sentence, under heading Program of Study to:

To receive the artist certificate in music, the student must successfully complete an artist certificate curriculum of at least 24 hours (see School of Music Graduate Handbook, available in Natalie L. Haslam Music Center, Room 211) with a cumulative GPA of 3.0 or better.

Formerly: To receive the artist certificate in music, the student must successfully complete an artist certificate curriculum of at least 19 hours (see School of Music Graduate Handbook, available in 211 Music Building) with a cumulative GPA of 3.0 or better.

Rationale: The School of Music was instructed by the Center for International Education to make this change in order to have a two year program. Impact on other units: None. Financial impact: None.

## **DEPARTMENT OF SOCIOLOGY**

### **➤ ADD CONCENTRATION - SOCIOLOGY MAJOR, TO BOTH THE MA AND PHD**

Critical Race and Ethnic Studies

In the 2017-18 Graduate Catalog add a fourth concentration to both the MA and PhD programs.

### **REVISE REQUIREMENTS - SOCIOLOGY MAJOR, MA**

In the 2017-18 Graduate Catalog revise third paragraph, under heading "Course work Requirements" to:

Two courses (Foundations and one other) in a specialty area (Criminology, Environmental Sociology, Political Economy, or Critical Race and Ethnic Studies). Choose one from SOCI 503, SOCI 504, SOCI 505 or SOCI 509 AND choose one additional course in the same area.

Formerly: Two courses (Foundations and one other) in a specialty area (Criminology, Environmental Sociology, or Political Economy). Choose one from SOCI 503, SOCI 504 or SOCI 505 AND choose one additional course in the same area.

### **REVISE SPECIALTY AREAS TO ADD REQUIREMENTS FOR NEW CONCENTRATION**

In the 2017-18 Graduate Catalog, under heading Specialty Areas, add the requirements for the critical race and ethnic studies concentration as follows:

The critical race and ethnic studies concentration includes SOCI 509, SOCI 552, SOCI 616, and SOCI 694.

### **REVISE REQUIREMENTS SOCIOLOGY MAJOR, PHD**

In the 2017-18 Graduate Catalog revise first paragraph to increase the number of concentrations to 4 and to list the name of the new concentration.

A minimum of 51 credit hours beyond the master's degree is required for the PhD degree. These hours include 24 hours of Doctoral Research and Dissertation and a minimum of 27 hours in graduate course work (9 courses). Students must also pass two qualifying exams in theory and methods no later than the beginning of the third year of study and a comprehensive examination in one of the four areas of concentration (criminology, environmental sociology, political economy, and critical race and ethnic studies), write a dissertation based on original research, and pass a final oral examination on the dissertation.

Formerly: A minimum of 51 credit hours beyond the master's degree is required for the PhD degree. These hours include 24 hours of Doctoral Research and Dissertation and a minimum of 27 hours in graduate course work (9 courses). Students must also pass two qualifying exams in theory and methods no later than the beginning of the third year of study and a comprehensive examination in one of the three areas of concentration (criminology, environmental sociology, and political economy), write a dissertation based on original research, and pass a final oral examination on the dissertation.

In the 2017-18 Graduate Catalog under requirements, add bullet and course requirements for new concentration.

The critical race and ethnic studies concentration includes SOCI 509, SOCI 552, SOCI 616, and SOCI 694.

Rationale: For all Sociology revisions – Sociology is adding a new concentration, Critical Race and Ethnic Studies, which reflects the current faculty profile who have an expertise in race and ethnicity. The concentration has been vetted by the department and meets student demand for more focus on race and ethnicity. Impact on other units: None. Financial impact: None.



# COLLEGE OF COMMUNICATION AND INFORMATION

All changes effective Fall 2017

## I. COURSE CHANGES

NONE

## II. PROGRAM CHANGES

### COLLEGE TEXT PAGE - REVISE ACADEMIC STANDARDS TEXT,

In the 2017-18 Graduate Catalog, delete the current paragraph for Academic Standards and replace with the following:

#### **Academic Standards and Academic Probation**

A student in the College of Communication and Information whose graduate grade point average is below 3.0 after the end of 9 hours of graduate credit will be placed on academic probation. A student will be allowed to continue graduate study in subsequent semesters if each semester's grade point average is 3.0 or greater. Upon achieving a cumulative GPA of 3.0, the student will be removed from probationary status. A student must achieve a cumulative GPA of 3.0 in order to graduate.

Formerly: A student in the College of Communication and Information whose graduate grade point average, not including incomplete grades, is below 3.0 at any time after the end of 12 hours of graduate credit will be placed on probation. A student on probation will be dropped from the program unless his or her cumulative graduate grade point average is 3.0 or higher at the end of the probationary period. The probationary period is defined as the next 12 semester hours of graduate course work attempted that is specified in the student's degree program. Exceptions to this policy may be made only with the approval of the Associate Dean for Academic Programs of the College of Communication and Information on the recommendation of the student's faculty committee.

Rationale: This change brings College of Communication and Information academic probation in line with the university standards and current Graduate Catalog copy. Impact on Other Units, None. Financial Impact: None.

## SCHOOL OF INFORMATION SCIENCES

### REVISE ADMISSION REQUIREMENTS, INFORMATION SCIENCES MAJOR, MS

In the 2017-18 Graduate Catalog, under the Admissions heading,

1. Revise the first sentence to remove the words and sentence with the strikethrough as shown below:

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.~~

2. Remove second paragraph (shown below) concerning the GRE.

Formerly: The verbal, quantitative and analytical aptitude portions of the Graduate Record Examination (GRE) are required of all applicants unless twelve hours of graduate coursework has been completed prior to application for admission. Applicants should take the GRE at least one semester in advance of application for admission.

#### Rationale:

The dropping of language from the Graduate Catalog about the GRE score requirement for admissions to the MS program aligns with a practice recently adopted by SIS. The dropping of language from the Graduate Catalog about the GRE score requirement for admissions to the MS program is needed to codify the removal of a barrier that denies promising applicants admissions to the Information Sciences, MS program. Highly-ranked programs that are the School of Information Science's (SIS) competitors have removed the GRE from their admissions criteria or use the GRE score to balance GPAs that fall below a certain threshold. The Information School at the University of Washington, Seattle (#3) requires no GRE score. The School of Information Studies at the University of Wisconsin, Milwaukee (#15) requires GRE scores from applicants whose undergraduate GPAs fall below 3.0. The Department of Information & Library Science at Indiana University, Bloomington (#8) requires GRE scores from applicants whose undergraduate GPAs fall below 3.0, as well, and students with graduate school experience whose GPAs fall below 3.2.

"Research on the GRE has established that the relationship between success on the GRE and in a subsequent graduate program is 'equivocal' at best. [Halberstam, B., & Redstone, F. (2005). The Predictive Value of Admissions Materials on Objective and Subjective Measures of Graduate School Performance in Speech-Language Pathology. *Journal of Higher Education Policy and Management*, 27(2), 261–272. <http://doi.org/10.1080/13600800500120183>]; -the GRE can present a barrier for minorities and non-native English speakers, and is a poor predictor of female students' success. [Rhodes, M. L., Bullough, B., & Fulton, J. (1994). The graduate record examination as an admission

requirement for the graduate nursing program. *Journal of Professional Nursing*, 10(5), 289–296. [http://doi.org/10.1016/8755-7223\(94\)90054-X](http://doi.org/10.1016/8755-7223(94)90054-X); -the undergraduate Grade Point Average is more reliable than the GRE in predicting success. [Rhodes, M. L., Bullough, B., & Fulton, J. (1994). The graduate record examination as an admission requirement for the graduate nursing program. *Journal of Professional Nursing*, 10(5), 289–296. [http://doi.org/10.1016/8755-7223\(94\)90054-X](http://doi.org/10.1016/8755-7223(94)90054-X)].” (Personal communications from Rachel Fleming-May to Kimberly Douglass. October 16, 2016).

SIS is conducting deeper analysis of other indicators: GPAs, applicant statements, and recommendation letters.

**Impact on Other Units:**

The proposed drop (of language pertaining to admissions requirements) does not alter courses by other programs.

The proposed drop (of language pertaining to admissions requirements) does not require courses offered by other programs.

The proposed drop (of language pertaining to admissions requirements) does not pertain to a prerequisite for courses.

The proposed drop (of language pertaining to admissions requirements) does not pertain to a prerequisite for courses.

The proposed drop (of language pertaining to admissions requirements) does not pertain to a course cross-listed in other units.

**Financial Impact:** The proposed dropping of language pertaining to admissions requirements will align the Graduate Catalog language with an admissions practice recently adopted by SIS (October 12, 2016). Before adopting this practice, SIS automatically admitted applicants who had GPAs of at least 3.25 and GRE scores above the 50th percentile. Also before the new practice, the faculty admissions committee reviewed only those applications that did not meet the threshold GPA and GRE scores, to grant exceptions to admissions standards. Now, the faculty admission committee reviews all applications. The committee considers the entire package, including GPA, applicant statement, and recommendation letters, before deciding admissions. This practice requires additional faculty time for an existing service obligation. However, a change in the Graduate Catalog language, per se, will not impose additional costs.

**Additional Documentation:**

The proposed drop (of language pertaining to admissions requirements) does not require academic officer or higher approval.

The proposed drop (of language pertaining to admissions requirements) does not pertain to student learning outcomes.

The proposed drop (of language pertaining to admissions requirements) does not need to be reported to SACSCOC.

The proposed drop (of language pertaining to admissions requirements) does not pertain to learner outcomes and course proposals.

The proposed drop (of language pertaining to admissions requirements) does not pertain to learning assessments.

# HASLAM COLLEGE OF BUSINESS

All Changes Effective Fall 2017

## I. COURSE CHANGES

### DEPARTMENT OF ACCOUNTING AND INFORMATION MANAGEMENT

Learning Goals and Objectives for the PhD in Business Administration

1. Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business.
2. Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization.
3. Students will be able to discuss the implications of original research in the dissertation and in other pertinent research initiatives.
4. Students will develop and refine the processes, skills, and responsibilities necessary for teaching in higher business education.
5. Students will demonstrate the ability to make original intellectual contributions to their area of specialization.

#### (ACCT) Accounting

##### ADD

**ACCT 620 Doctoral Seminar in Accounting IV (3)** Analysis of issues reflected in accounting literature.

*Repeatability: May be repeated. Maximum 6 hours.*

*Comment(s): Or consent of PhD program advisor.*

*Registration Restriction(s): Doctor of Philosophy – Haslam College of Business. Minimum student level – graduate.*

Rationale: To enhance the quality of the PhD program, the new course will provide depth in accounting research topics and help students develop additional skills to improve dissertation research design and research program, enabling them to seek better job market placement. Staffing Impact: None Financial Impact: None. Impact on Other Academic Units: None.

Learning Outcomes Supported: Supports LO2, mastery of conceptual and methodological skills and LO3, students can discuss the implications of the original research in their dissertation.

Evidence from assessment activities: None

##### REVISE TITLE

**ACCT 611 (3) Doctoral Seminar in Accounting I**

Formerly: ACCT 611 (3) Doctoral Seminar in Accounting

Rationale: To make the title more distinctive and suggest to students the order in which PhD seminars should be taken. Staffing Impact: None Financial Impact: None. Impact on Other Academic Units: None.

Learning Outcomes Supported: None

Evidence from assessment activities: None

##### REVISE TITLE AND ADD REPEATABILITY

**ACCT 612 Doctoral Seminar in Accounting II (3)**

*Repeatability: May be repeated. Maximum 6 hours.*

Formerly: Doctoral Seminar in Accounting (3)

Rationale: To enhance the quality of the PhD program. Repeatability allows students to retake the course allowing additional research topic coverage and provides a formal mechanism where students receive guidance and support in research activities. Title change suggests order in which the PhD seminars should be taken. Staffing Impact: None Financial Impact: None. Impact on Other Academic Units: None.

Learning Outcomes Supported: LO1, increased course time on timely accounting topics to improve broader content knowledge.

Evidence from assessment activities: None

##### REVISE TITLE AND DESCRIPTION

**ACCT 619 Doctoral Seminar in Accounting III (3)** Analysis of issues reflected in accounting literature.

Formerly: Doctoral Research in Accounting (3) Study of research methodology and application of various research methods in accounting literature.

Rationale: To make the PhD course titles and descriptions distinctive but consistent, suggesting the order in which PhD students should take the course. Staffing Impact: None Financial Impact: None. Impact on Other Academic Units: None.

Learning Outcomes Supported: None.

Evidence from assessment activities: None

## DEPARTMENT OF BUSINESS ANALYTICS AND STATISTICS

Learning Goals and Objectives for the PhD in Management Science

1. Demonstrate advanced knowledge of and competence in doctoral-level statistical concepts.
2. Demonstrate advanced knowledge of and competence in doctoral-level management science concepts.
3. Demonstrate ability to conduct independent doctoral-level research in analytics.
4. Effectively communicate research through oral presentation.

### (BZAN) Business Analytics

#### REVISE (RE)PREREQUISITE

##### **BZAN 554 Customer Analytics (3)**

*(RE) Prerequisite: 542*

Formerly: (RE) Prerequisite: 535

Rationale: To better prepare students to enroll in the course by providing a more relevant prerequisite than what had been required.

Staffing Impact: None. Financial Impact: None. Impact on other academic units: None.

Learning Outcomes Supported: Change did not occur because of learning outcome results.

Evidence from Assessment Activities: None

#### DROP

##### **BZAN 547 Directed Process Studies (1.5)**

Rationale: No longer required for the MSBA degree. Staffing Impact: None. Financial Impact: None. Impact on other academic units: None.

Learning Outcomes Supported: Change did not occur because of learning outcome results.

Evidence from Assessment Activities: None

### (STAT) Statistics

#### ADD

**STAT 564 Probability and Mathematical Statistics II (3)** Maximum likelihood and method of moments estimation; large sample theory including convergence in probability, distribution and the Central Limit Theorem; properties of point estimators including efficiency; the exponential family of distributions, sufficiency, and the Cramer-Rao bound; confidence intervals based on exact, asymptotic, and bootstrap calculation; hypothesis testing using the likelihood ratio statistic; large sample properties of MLEs and likelihood ratio statistics; Bayesian inference; estimation and testing in generalized linear models (GLM).

*Recommended Background: 563 or equivalent.*

*Registration Permission: 563 or consent of instructor required.*

Rationale: Extends 563 content into a two course sequence. Revise the curriculum to make this the second in the sequence. This will also support BAS Dept. PhD program. Staffing Impact: None. Financial Impact: None. Impact on other academic units: Supports the new data science PhD program.

Learning Outcomes Supported: Change did not occur because of learning outcome results.

Evidence from Assessment Activities: None

#### REVISE DESCRIPTION

**STAT 563 - Probability and Mathematical Statistics I (3)** Introduction to probability and probabilistic reasoning, Bayes theorem, discrete and continuous random variables and their probability distributions, functions and transformations of random variables, distributions of random vectors, the multivariate normal distribution, order statistics, expectations and moments of random variables, sampling distributions of key statistics, introduction to the likelihood function and maximum likelihood estimation, and introduction to prior and posterior distributions.

Formerly: Basic probability and probability models, Bayes theorem, discrete and continuous distributions, expected values, moments and moment generating functions, functions of several variables, correlation and independence, bivariate normal distribution, order statistics, sampling distributions, the Central Limit Theorem, principles of point and interval estimation, likelihood theory and the method of maximum likelihood, principles of hypothesis testing and the generalized likelihood ratio test.

Rationale: Revise the course to make this the first in a two course sequence. This will also support BAS Dept. PhD program. Staffing Impact: None. Financial Impact: None. Impact on other academic units: Supports the new data science PhD program.

Learning Outcomes Supported: Change did not occur because of learning outcome results.

Evidence from Assessment Activities: None

## DEPARTMENT OF FINANCE

MBA Program Learning Outcomes

1. Application of Business Knowledge and Skills: Apply functional knowledge and skills developed in the first year MBA curriculum to address critical, real-world business issues
2. Ethical Decision-Making in a Global Context: Identify and effectively evaluate business problems and opportunities in a global market environment.
3. Presentation Skills Development: Demonstrate the acquisition and utilization of fundamental presentation, data analysis, and communication skills necessary to successfully influence the consideration of new business ideas in an organizational setting.
4. Collaboration: Perform effectively as a team member.

### (FINC) Finance

#### ADD

**FINC 520 Financial Statement Analysis (3)** Will focus on use of financial information rather than preparation of financial statements. Analysis is from the perspective of key users such as creditors, equity investors, financial analysts, and investment bankers.

*(RE) Prerequisite(s): Business Administration 518.*

*Comment(s): Prior knowledge may satisfy prerequisite with consent of instructor.*

Rationale: Our MBA students need a wider range of course offerings to be prepared for the job market. Many MBA students need more financial statement analysis, regardless of concentration. Adding a financial statement analysis elective that all of our MBA students can take will better meet the needs of both finance concentrators and non-finance concentrators. Our finance concentrators also need a more advanced set of offerings from which to choose. Adding the fixed income course and the derivatives course in this way allows us to provide better offerings for our best MBA students even in the presence of small class sizes that would otherwise preclude the offerings. Staffing Impact: None. Financial Impact: None. Impact on Other Academic Units: None.

Learning Outcomes Supported: This course supports LO 1 by expanding upon the principles of accounting and principles of finance courses to develop industry-standard methods of using financial statements to make business decisions. It supports LO 2 in that the purpose of financial statement analysis is to evaluate businesses and investments, both domestically and globally. It will support LO 3 by providing data analysis opportunities. It will support LO 4 through the use of group projects for some of the assignments.

Evidence from Assessment Activities: None

**FINC 540 Fixed Income Analysis and Markets (3)** Examines the markets for fixed-income securities and consists of a rigorous treatment of fixed-income securities, markets and portfolios. Topics include but are not limited to bond pricing, yield measures, duration, convexity, credit risk, bonds with embedded options, and construction of fixed-income portfolios.

*(RE) Prerequisite(s): Business Administration 518.*

*(RE) Corequisite: Finance 525.*

*Comment(s): Prior knowledge may satisfy prerequisite with consent of instructor.*

Rationale: Our MBA students need a wider range of course offerings to be prepared for the job market. Many MBA students need more financial statement analysis, regardless of concentration. Adding a financial statement analysis elective that all of our MBA students can take will better meet the needs of both finance concentrators and non-finance concentrators. Our finance concentrators also need a more advanced set of offerings from which to choose. Adding the fixed income course and the derivatives course in this way allows us to provide better offerings for our best MBA students even in the presence of small class sizes that would otherwise preclude the offerings. Staffing Impact: None. Financial Impact: None. Impact on Other Academic Units: None.

Learning Outcomes Supported: This course supports LO 1 by expanding upon the principles of finance course to develop the technical skills necessary to perform fixed income analysis in the investments industry. It supports LO 2 in that the purpose of fixed income analysis is to evaluate investments, both domestically and globally. It will support LO 3 by providing data analysis opportunities. It will support LO 4 through the use of group projects for some of the assignments.

Evidence from Assessment Activities: None

**FINC 545 Financial Derivatives (3)** Different types of derivative financial assets are the focus of this course. Emphasis will be placed on real-world applications of theoretical and conceptual material discussed in this class.

*(RE) Prerequisite(s): Business Administration 518.*

*(RE) Corequisite: Finance 525.*

*Comment(s): Prior knowledge may satisfy prerequisite with consent of instructor.*

Rationale: Our MBA students need a wider range of course offerings to be prepared for the job market. Many MBA students need more financial statement analysis, regardless of concentration. Adding a financial statement analysis elective that all of our MBA students can take will better meet the needs of both finance concentrators and non-finance concentrators. Our finance concentrators also need a more advanced set of offerings from which to choose. Adding the fixed income course and the derivatives course in this way allows us to provide better offerings for our best MBA students even in the presence of small class sizes that would otherwise preclude the offerings. Staffing Impact: None. Financial Impact: None. Impact on Other Academic Units: None.

Learning Outcomes Supported: This course supports LO 1 by expanding upon the principles of finance course to develop the technical skills necessary to perform derivative securities analysis in the investments industry. It supports LO 2 in that the purpose of derivative securities

analysis is to evaluate investments, both domestically and globally. It will support LO 3 by providing data analysis opportunities. It will support LO 4 through the use of group projects for some of the assignments.

Evidence from Assessment Activities: None

## **DEPARTMENT OF MANAGEMENT**

Learning Goals and Objectives for the PhD in Business Administration

1. Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business.
2. Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization.
3. Students will be able to discuss the implications of original research in the dissertation and in other pertinent research initiatives.
4. Students will develop and refine the processes, skills, and responsibilities necessary for teaching in higher business education.
5. Students will demonstrate the ability to make original intellectual contributions to their area of specialization.

MBA Program Learning Outcomes

1. Application of Business Knowledge and Skills: Apply functional knowledge and skills developed in the first year MBA curriculum to address critical, real-world business issues
2. Ethical Decision Making in a Global Context: Identify and effectively evaluate business problems and opportunities in a global market environment.
3. Presentation Skills Development: Demonstrate the acquisition and utilization of fundamental presentation, data analysis, and communication skills necessary to successfully influence the consideration of new business ideas in an organizational setting.
4. Collaboration: Perform effectively as a team member.

Learning objectives for the MS Degree in Management and Human Resources

1. Students will demonstrate comprehensive knowledge of HRM functions and processes.
2. Students will demonstrate ability to identify and analyze data to address important Management questions.
3. Students will develop self-awareness of personal leadership style, values, strengths, and development opportunities.
4. Students will demonstrate knowledge of business functions.

## **(HRM) Human Resource Management**

### **DROP**

#### **HRM 503 Problems in Lieu of Thesis (3)**

Rationale: The existing MS HRM program has not been formally reviewed and updated for many years. From our focus group and analysis of the program this summer, HRM 503 and HRM 592 are not needed given the change in target market for this Masters program (working employees). Impact on other units: None. Financial Impact: None.

#### **HRM 530 Employment Law and Labor Relations (3)**

Rationale: The existing Masters program had not been formally reviewed and updated for many years. From our focus groups and analysis of the program this summer, HRM 530 needed to be broadened to incorporate managerial decision making beyond just HR decisions, and to incorporate frameworks for ethical decision making into the curriculum. As noted in the ADD section, this course has been reinvented as MGT 553. Impact on other units: None. Financial impact: None.

#### **HRM 555 Strategic HRM (3)**

Rationale: The existing MS HRM program has not been formally reviewed and updated for many years. From our focus group and analysis of the program this summer, strategic issues are included in all HRM courses. Impact on other units: None. Financial Impact: None.

#### **HRM 592 Internship (3)**

Rationale: The existing MS HRM program has not been formally reviewed and updated for many years. From our focus group and analysis of the program this summer, HRM 503 and HRM 592 are not needed given the change in target market for this Masters program (working employees). Impact on other units: None. Financial Impact: None.

#### **HRM 595 Special Topics in Managerial Issues (3)**

Rationale: The existing MS HRM program has not been formally reviewed and updated for many years. From our focus group and analysis of the program this summer, current management and human resource management issues are addressed in new MGT 55X Capstone. Impact on other units: None. Financial Impact: None.

## **REVISE TITLE, HOURS, AND DESCRIPTION**

**HRM 521 Foundations of Strategic HRM (1)** Examination of human resource management functions and processes within the context of organizational mission, strategy, and culture.

Formerly: Foundations of Human Resource Management (3) Examination of the theoretical foundations, historical development, and contemporary practice of human resource management (HRM). Core human resource management areas are surveyed, including employment law, employee rights and employer responsibilities, job analysis, job design, measurement of individual differences, performance management, career development, training, and employee/management relationships.

Rationale: The existing Masters program had not been formally reviewed and updated for many years. This course change is part of the review and modernization of this program. From our focus groups and analysis of the program this summer, this course needed to be modernized in an intensive fashion because this will be the first course that students take in this Masters. Staffing Impact: None. Course will be taught by existing faculty as part of their load. The instructors for these courses are freed up by dropped courses. Financial impact: None. Impact on other units: This course will be a prerequisite for most courses in this MS-MHR program.

Learning outcome supported: This course supports Learning Outcome #1.

Evidence from Assessment Activities: None

#### **REVISE TITLE, DESCRIPTION, AND ADD (DE)PREREQUISITES**

**HRM 535 Strategic Performance Management (3)** Examination of effective approaches to the development and implementation of performance appraisal and performance management processes, and employee training and development programs, that satisfy the needs and goals of both the organization and the employee.

*(DE) Prerequisite(s): Management 520 and HRM 521.*

Formerly: Applied Training and Development (3) Examination of the strategies and techniques of training systems, including needs assessment, motivation to learn, transfer of training, evaluation, and performance improvement as such systems satisfy both organization needs and personal career goals.

Rationale: The existing Masters program had not been formally reviewed and updated for many years. This course change is part of the review and modernization of this program. From our focus groups and analysis of the program this summer, this course needed to be modernized in an intensive fashion, with updated content and pedagogy. Staffing Impact: None. Financial Impact: None. Impact on other units: None.

Learning outcome supported: This course supports Learning Outcomes #1 and #2

Evidence from Assessment Activities: None

#### **REVISE TITLE AND ADD (DE)PREREQUISITES**

**HRM 540 Strategic Talent Management (3)**

*(DE) Prerequisites or Corequisites: Management 520 and HRM 521, Management 555.*

Formerly: Staffing

Rationale: The existing Masters program had not been formally reviewed and updated for many years. This course change is part of the review and modernization of this program. From our focus groups and analysis of the program this summer, this course needed to be updated. Staffing Impact: None. Financial Impact: None. Impact on other units: None.

Learning outcome supported: This course supports Learning Outcomes #1 and #2.

Evidence from Assessment Activities: None

#### **REVISE TITLE AND (DE)PREREQUISITES**

**HRM 545 Strategic Rewards Management (3)**

*(DE) Prerequisites: Management 520 and HRM 521.*

Formerly: Compensation and Benefits

*(DE) Prerequisite: MGT 521*

Rationale: The existing Masters program had not been formally reviewed and updated for many years. This course change is part of the review and modernization of this program. From our focus groups and analysis of the program this summer, this course needed to be updated. Staffing Impact: None. Financial Impact: None. Impact on other units: None.

Learning outcome supported: This course supports Learning Outcomes #1 and #2.

Evidence from Assessment Activities: None

#### **REVISE TO ADD (DE)PREREQUISITES**

**HRM 550 Organizational Behavior and Development (3)**

*(DE) Prerequisites or Corequisites: Management 520 and HRM 521 and Management 560.*

Rationale: The existing Masters program had not been formally reviewed and updated for many years. Just prior to the review and update undertaken this summer, this course was changed from MGT 545 to HRM 550 in hopes of reducing confusion for students (prior to this change, both MGT 545 and HRM 545 were required courses). This change back to a MGT course and the addition of prerequisites reflects updated content stemming from review and modernization of this program. From our focus groups and analysis of the program this summer, this course needed to be updated. Staffing Impact: None. Financial Impact: None. Impact on other units: None.

Learning outcome supported: This course supports Learning Outcomes # 1 and #2.

Evidence from Assessment Activities: None

#### Equivalency Chart

Current Course	Equivalent Course Fall 2017
HRM 530	MGT 553

## (MGT) Management

### ADD

**MGT 520 Foundations of Management (1)** Introduction to the discipline and study of Management, through cases, discussion, assessments, and development activities.

*Registration Restriction(s): Minimum student level – graduate.*

Rationale: The existing Masters program had not been formally reviewed and updated for many years. This course change is part of the review and modernization of this program. From our focus groups and analysis of the program this summer, it was evident that the curriculum was not sufficiently addressing students' personal leadership development, or the application of knowledge to actual decision-making in organizations. Staffing Impact: Course will be taught by existing faculty as part of their load. The instructors for these courses are freed up by dropped courses. Financial Impact: None. Impact on other units: This course will be a prerequisite for most courses in the MS-MHR program.

Learning outcome supported: This course supports Learning Outcomes #3 and #4.

Evidence from Assessment Activities: None.

**MGT 553 Legal and Ethical Issues in Management (3)** Examination of the current legal environment of Management and Human Resources as it applies to effective workplace relations between the employer and employees, employment discrimination, labor relations, employee rights, the collective bargaining process, and organizational reporting and compliance responsibilities. Ethical frameworks for managerial decision making will also be examined.

*(DE) Prerequisites: Management 520 and HRM 521.*

*Registration Restriction(s): Minimum student level – graduate.*

Rationale: The existing Masters program had not been formally reviewed and updated for many years. This additional course is part of the review and modernization of this program. From our focus groups and analysis of the program this summer, it was evident that instruction on ethical decision making was not well represented in the curriculum. Staffing Impact: Course will be taught by existing faculty as part of their load. The instructors for these courses are freed up by dropped courses. Financial Impact: None. Impact on other units: None.

Learning outcome supported: This course supports Learning Outcomes # 1 and #2.

Evidence from Assessment Activities: None.

**MGT 555 Foundations of Effective Leadership (3)** An applied, skill-development course focused on personal leadership growth and development. Areas of emphasis include building your personal brand and credibility, career planning, giving effective presentations, and developing your leadership philosophy.

*(DE) Prerequisites: Management 520 and HRM 521.*

*Registration Restriction(s): Minimum student level – graduate.*

Rationale: The existing Masters program had not been formally reviewed and updated for many years. This additional course is part of the review and modernization of this program. From our focus groups and analysis of the program this summer, the topics in this course are needed to prepare students for managerial positions. Staffing Impact: None. Course will be taught by existing faculty as part of their load. The instructors for these courses are freed up by dropped courses. Financial impact: None. Impact on other units: None.

Learning outcome supported: This course supports Learning Outcome #3.

Evidence from Assessment Activities: None.

**MGT 556 Strategic Leadership (3)** An applied, skill-development course focused on group and organizational leadership competencies. Areas of emphasis include negotiation, coaching and mentoring employees, leading and managing projects, culture, and change.

*(DE) Prerequisites: Management 520 and HRM 521.*

*Registration Restriction(s): Minimum student level – graduate.*

Rationale: The existing Masters program had not been formally reviewed and updated for many years. This additional course is part of the review and modernization of this program. From our focus groups and analysis of the program this summer, the topics in this course are needed to prepare students for managerial positions. Staffing Impact: None. Course will be taught by existing faculty as part of their load. The instructors for these courses are freed up by dropped courses. Financial impact: None. Impact on other units: None.

Learning outcome supported: This course supports Learning Outcome #3.

Evidence from Assessment Activities: None.



**MGT 560 Business Fundamentals: Structure, Function, and Strategy (3)** Develop an understanding of organizational vision, mission, goal setting, strategy formulation and implementation, and roles and connections among organizational business functions.

*(DE) Prerequisites: Management 520 and HRM 521.*

*Registration Restriction(s): Minimum student level – graduate.*

Rationale: The existing Masters program had not been formally reviewed and updated for many years. This additional course is part of the review and modernization of this program. From our focus groups and analysis of the program this summer, the topics in the course are needed. Staffing Impact: None. Course will be taught by existing faculty as part of their load. The instructors for these courses are freed up by dropped courses. Financial impact: None. Impact on other units: This course will be a prerequisite or corequisite for MGT 545.

Learning outcome supported: The topics provide basic business knowledge and will support of Learning Outcome #4.

Evidence from Assessment Activities: None

**MGT 561 Finance and Accounting Essentials for Managers (3)** Develop understanding of financial statements, budgeting and basic accounting. Develop skills related to using financial and accounting data in forecasting and making decisions.

*(DE) Prerequisites: Management 520 and HRM 521.*

*Registration Restriction(s): Minimum student level – graduate.*

Rationale: The existing Masters program had not been formally reviewed and updated for many years. This additional course is part of the review and modernization of this program. From our focus groups and analysis of the program this summer, the topics in the course are needed. Staffing Impact: None. Course will be taught by existing faculty as part of their load. The instructors for these courses are freed up by dropped courses. Financial impact: None. Impact on other units: None.

Learning outcome supported: The topics provide basic business knowledge and will support Learning Outcome #4.

Evidence from Assessment Activities: None

**MGT 562 Data-Driven Decision Making (3)** Data collection, data analysis, decision making with analysis, and presenting decisions to management and other stakeholders. Covers survey design and implementation, interview skills, archival data sources. Provides statistical analysis tools and approaches for presenting recommendations.

*(DE) Prerequisites: Management 520 and HRM 521.*

*Registration Restriction(s): Minimum student level – graduate.*

Rationale: The existing Masters program had not been formally reviewed and updated for many years. This additional course is part of the review and modernization of this program. From our focus groups and analysis of the program this summer, the need to obtain knowledge of these topics was identified. Impact on other units: This course will be a prerequisite or co-requisite for HRM 540. As students in this program have previously been required to take Statistics outside of the Management Department, this new course offering could result in a slight reduction in students enrolled in STA 531 course. Staffing Impact: None. Course will be taught by existing faculty as part of their load. The instructors for these courses are freed up by dropped courses. The instructor for this course was freed up by moving one course that she was involved in completely online. Financial impact: None. Impact on other units: None.

Learning outcome supported: This course supports Learning Outcome #2.

Evidence from Assessment Activities: None

**MGT 565 Management and HR Capstone (1)** Contemporary problems and issues in organizations addressed by student teams. Application of cumulative knowledge and skills from courses to provide integrative, high-impact solutions to strategic management and human resources problems within organizations.

*(DE) Prerequisites: Management 520 and HRM 521.*

*Registration Restriction(s): Minimum student level – graduate.*

Rationale: The existing Masters program had not been formally reviewed and updated for many years. This additional course is part of the review and modernization of this program. From our focus groups and analysis of the program this summer, the need to apply knowledge to live cases was identified Staffing Impact: None. Course will be taught by existing faculty as part of their load. The instructors for these courses are freed up by dropped courses. Financial impact: None. Impact on other units: None.

Learning outcome supported: This course supports Learning Outcomes #1 and #2.

Evidence from Assessment Activities: None.

## REVISE DESCRIPTION

**MGT 625 Advanced Strategy II: Corporate Strategy (3)** First, will cover the economic theories that explain multi-market activity, such as TCE, RBV, organizational learning, real options, signaling and agency. Second, will survey the most relevant empirical work on M&A, strategic alliances, IPOs, venture capital and corporate venture capital investing.

Formerly: Delves into process research in strategic management, with a primary focus on exploratory qualitative research. Topics include strategy formation process, the practice of strategy, structural changes, the role of middle and top managers in strategic changes, merger and acquisition processes, international expansion processes, and processes related to organizational decline and death.

Rationale: The new description better describes the course content for this course. Staffing Impact: None. Financial Impact: one. Impact on other units: None.

## REVISE TITLE AND DESCRIPTION

**MGT 596 Corporate Strategy (3)** Offers an applied, problem-based approach to tackling firms' corporate strategy decisions. Students will bring together the skills and knowledge acquired through their work experience and MBA courses to engage with the course materials. Case discussions cover multinational companies operating across multiple industries and geographies. In addition to the cases, in-class lectures, research and professional articles are assigned to provide students with the theoretical foundations necessary to frame each case.

Formerly: 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.

Rationale: Modernization of course. Financial impact: None. Impact on other units: None.

Support from assessment activities: Learning Goal 2: Ethical Decision Making in a Global Context [Each student will demonstrate the ability to identify and solve business problems in a global market environment]

## DEPARTMENT OF MARKETING AND SUPPLY CHAIN MANAGEMENT

Learning Goals and Objectives for the PhD in Business Administration

1. Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business.
2. Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization.
3. Students will be able to discuss the implications of original research in the dissertation and in other pertinent research initiatives.
4. Students will develop and refine the processes, skills, and responsibilities necessary for teaching in higher business education.
5. Students will demonstrate the ability to make original intellectual contributions to their area of specialization.

### (MARK) Marketing

#### ADD

**MARK 619 Current Topics in Consumer Behavior Research (3)** This PhD seminar exposes students to current empirical research on consumer behavior appearing in the top journals of the field. The seminar's focus may vary each time it is taught, and can cover a cross-section of current research across a variety of topics or be organized around a particular topical theme. Will help students to (1) develop a critical understanding of current research in the field, (2) understand the current trajectory of consumer behavior research, and (3) identify promising opportunities for future inquiry in the consumer behavior domain.  
*Registration Restriction: PhD students only with instructor's consent.*

Rationale: The PhD program in marketing is being updated to enhance student outcomes, particularly research productivity while in the program and placement rates at R1 institutions following completion of the program. This course is being added to the curriculum to provide students with further exposure (particularly of current topics) in the consumer behavior domain. While we currently offer one seminar on consumer behavior in the program, the consumer behavior domain is very broad and is often covered via multiple seminars at peer and aspirational schools. Expanding coverage of consumer behavior topics will enhance our students' competitiveness in the marketplace, especially in light of the fact that 60-70% of jobs in the marketing field are awarded to consumer behavior scholars. Staffing Impact: None. Financial Impact: None. Impact on other academic units None.

Learning Outcomes Supported: Objective 1: Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business. Objective 2: Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization.

Evidence from Assessment Activities: An internal review of doctoral student placements over the last decade revealed very limited success in placing students at research-oriented institutions (i.e., R1 schools). An "Academic Program Review" conducted by an external panel in 2016 noted that our marketing doctoral curriculum content displays gaps versus programs at leading schools, and needs to be reconsidered due to omissions related to consumer behavior and modeling content.

**MARK 620 Professional Development Seminar (1)** This PhD seminar is intended to provide a forum for conversations among students, faculty, and invited guests on research, current topics, and trends in the field. The seminar is mandatory for all students in the marketing PhD program while they are in residence. Students must formally register for the seminar during their first two years in the program.

*Grading Restriction: Satisfactory/No Credit grading only.*

*Repeatability: May be repeated. Maximum 4 hours.*

*Registration Restriction: PhD students only with instructor's consent.*

Rationale: The PhD program in marketing is being updated to enhance student outcomes, particularly research productivity while in the program and placement rates at R1 institutions following completion of the program. This seminar series is being added to the curriculum to strengthen the program's research culture by fostering ongoing scholarly discussion within the department and providing a formal mechanism for exposing students to cutting-edge research (e.g., through brown bags or the hosting of distinguished speakers) on an ongoing basis. Staffing Impact: None. Financial Impact: The proposed change will not have a financial impact on the department or college, unless guest presenters (who charge a fee) are invited to speak in the seminar. The seminar will not require assignment of faculty resources; the doctoral coordinator will arrange for guest speakers and discussion sessions during each semester. Affect on Other Units: None.

Learning Outcomes Supported: Objective 1: Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business. Objective 2: Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization. Objective 3: Students will be able to discuss the implications of original research in the dissertation and in other pertinent research initiatives

Evidence from Assessment Activities: An internal review of doctoral student placements over the last decade revealed very limited success in placing students at research-oriented institutions (i.e., R1 schools). An "Academic Program Review" conducted by an external panel in 2016 noted that our marketing doctoral curriculum content displays gaps versus programs at leading schools, and needs to be reconsidered due to omissions related to consumer behavior and modeling content.

**MARK 621 Survey of Marketing Models Research (3)** This PhD seminar systematically exposes students to marketing research that leverages quantitative models to address a variety of marketing problems, most often concerned with market reactions to firm decisions (e.g., channel design, sales force allocations, product design, and competitive positioning). The course surveys quantitative research in marketing with the goal of (1) familiarizing students with research in the domain, (2) providing students with the training necessary to critically evaluate quantitative marketing research, and (3) affording students an alternative perspective for exploring marketing phenomena of interest.

Rationale: The PhD program in marketing is being updated to enhance student outcomes, particularly research productivity while in the program and placement rates at R1 institutions following completion of the program. This course is being added to the curriculum to provide students with exposure to "marketing models," an important domain of inquiry in the marketing field (alongside marketing strategy and consumer behavior) which is not currently taught in our program and makes our students far less competitive when they compete for jobs at R1 schools. Staffing Impact: None. Financial Impact: The seminar will be taught once every other year (fall semesters of even years). Hence, the financial impact (for the department) of adding the course to the curriculum will be equal to the cost of paying an adjunct professor to teach a section of the undergraduate course that would otherwise be taught by the faculty member during that semester. Impact on Other Units: None.

Learning Outcomes Supported: Objective 1: Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business. Objective 2: Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization.

Evidence from Assessment Activities: An internal review of doctoral student placements over the last decade revealed very limited success in placing students at research-oriented institutions (i.e., R1 schools). An "Academic Program Review" conducted by an external panel in 2016 noted that our marketing doctoral curriculum content displays gaps versus programs at leading schools, and needs to be reconsidered due to omissions related to consumer behavior and modeling content.

#### **REVISE TITLE, DESCRIPTION, AND REGISTRATION RESTRICTION (PRIMARY COURSE)**

**MARK 611 Research Foundations (3)** This PhD seminar introduces students to the craft of academic research in the business domain and, more broadly, to the philosophy of science. Will help students to (1) identify important knowledge gaps in need of inquiry, and (2) design research studies that can be used to effectively address those knowledge gaps. Toward that end, the seminar covers a variety of topics including problem definition, research design, theory construction, construct specification, measurement theory and validity, and philosophy of science.

*Cross-listed: (Same as Supply Chain Management 611).*

*Registration Restriction: PhD students only with instructor's consent.*

Formerly: MARK 611 Theoretical Foundations (3) Theoretical foundations and frameworks common to business research. Historical and philosophy of science perspectives. Registration Restriction: Minimum student level – graduate.

Rationale: The curriculum of the PhD program in marketing is being updated to enhance student outcomes, particularly research productivity while in the program and placement rates at R1 institutions following completion of the program. This course is part of the set of core seminars required in the program and is being updated to reflect an added emphasis on teaching students the critical skills necessary to identify, select, and execute impactful business research. Staffing Impact: None. Financial Impact: None. Impact on other Academic Units: None.

Learning Outcomes Supported: Objective 2: Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization. Objective 3: Students will be able to discuss the implications of original research in the dissertation and in other pertinent research initiatives. Objective 5: Students will demonstrate the ability to make original intellectual contributions to their area of specialization.

Evidence from Assessment Activities: An internal review of doctoral student placements over the last decade revealed very limited success in placing students at research-oriented institutions (i.e., R1 schools). An "Academic Program Review" conducted by an external panel in 2016 noted that our marketing doctoral curriculum content displays gaps versus programs at leading schools, and needs to be reconsidered due to omissions related to consumer behavior and modeling content.

**MARK 614 Survey of Marketing Strategy Research (3)** This PhD seminar introduces students to research that explores the influence of marketing on the strategic direction of the firm, the contribution of marketing assets, investments, and decisions to firm performance, and the management of marketing programs (product, price, place and promotion) in support of market strategies. Will help students to develop a critical understanding of (1) core areas of research in the area of strategic marketing management, and (2) important research design and data analysis considerations when conducting such research.

*Registration Restriction: PhD students only with instructor's consent.*

Formerly: MARK 614 Contemporary Marketing Thought I (3) Survey of current marketing thought and research. The contributions of past work, as well as opportunities for new knowledge creation are considered. Registration Restriction(s): Minimum student level – graduate.

Rationale: The curriculum of the PhD program in marketing is being updated to enhance student outcomes, particularly research productivity while in the program and placement rates at R1 institutions following completion of the program. This course is part of the set of core seminars required in the program and is being updated to identify key topics to be explored, and to reflect an added emphasis on research design and data analysis issues within the seminar. Staffing Impact: None. Financial Impact: None. Impact on other academic units None.

Learning Outcomes Supported: Objective 1: Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business. Objective 2: Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization

Evidence from Assessment Activities: An internal review of doctoral student placements over the last decade revealed very limited success in placing students at research-oriented institutions (i.e., R1 schools). An "Academic Program Review" conducted by an external panel in 2016 noted that our marketing doctoral curriculum content displays gaps versus programs at leading schools, and needs to be reconsidered due to omissions related to consumer behavior and modeling content.

**MARK 615 Survey of Consumer Behavior Research (3)** This PhD seminar introduces students to research that seeks to improve understanding of individuals in their roles as buyers, users, and evaluators of goods and services. Topics emphasized include buyer motivation, personality, attitude formation and change, information processing, choice, decision making, consumption, post-purchase behaviors, and socialization. Will help students to develop a critical understanding of (1) core areas of research within the consumer behavior domain, and (2) important research design and data analysis considerations when conducting such research.

*Registration Restriction: PhD students only with instructor's consent*

Formerly: MARK 615 - Consumer Behavior Research (3) Theoretical perspective and research processes describing people in their roles as buyers, users, and evaluators of goods and services. Includes coverage of both end user consumers and industrial buyers. Topics of interest include motivation, personality, attitude formation and change, information processing, choice, decision making for buying and selling activities as well as operational management decision-making processes, consumption, post-purchase consumption, cultural and demographic differences, consumer socialization, and ethical considerations. Offered every other year.

Registration Restriction(s): Minimum student level – graduate.

Rationale: The PhD program in marketing is being updated to enhance student outcomes, particularly research productivity while in the program and placement rates at R1 institutions following completion of the program. This course is part of the set of core seminars required in the program and is being updated to identify key topics to be explored, and to reflect an added emphasis on research design and data analysis issues within the seminar. Staffing Impact: None. Financial Impact: None. Impact on other academic units None.

Learning Outcomes Supported: Objective 1: Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business. Objective 2: Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization.

Evidence from Assessment Activities: An internal review of doctoral student placements over the last decade revealed very limited success in placing students at research-oriented institutions (i.e., R1 schools). An "Academic Program Review" conducted by an external panel in 2016 noted that our marketing doctoral curriculum content displays gaps versus programs at leading schools, and needs to be reconsidered due to omissions related to consumer behavior and modeling content.

**MARK 618 Current Topics in Marketing Strategy Research (3)** This PhD seminar exposes students to current empirical research on marketing strategy appearing in the top journals of the field. The seminar's focus may vary each time it is taught, and can cover a cross-section of current research across a variety of topics or be organized around a particular topical theme. Will help students to (1) develop a critical understanding of current research in the field, (2) understand the current trajectory of marketing strategy research, and (3) identify promising opportunities for future inquiry in the marketing strategy domain.

*Registration Restriction: PhD students only with instructor's consent*

Formerly: MARK 618 Contemporary Marketing Thought II (3) Continuation of 614, but can also be taken as a stand-alone offering. Continues a survey of current marketing thought and research. The contributions of past work, as well as opportunities for new knowledge creation are considered.

Registration Restriction(s): Minimum student level – graduate.

Rationale: The PhD program in marketing is being updated to enhance student outcomes, particularly research productivity while in the program and placement rates at R1 institutions following completion of the program. This course is part of the set of core seminars required in the program and is being updated to ensure coverage of emerging marketing strategy topics within the curriculum. Staffing Impact: None. Financial Impact: None. Impact on other academic units None.

Learning Outcomes Supported: Objective 1: Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business. Objective 2: Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization.

Evidence from Assessment Activities: An internal review of doctoral student placements over the last decade revealed very limited success in placing students at research-oriented institutions (i.e., R1 schools).

An "Academic Program Review" conducted by an external panel in 2016 noted that our marketing doctoral curriculum content displays gaps versus programs at leading schools, and needs to be reconsidered due to omissions related to consumer behavior and modeling content.

## **(SCM) Supply Chain Management**

### **REVISE TITLE, DESCRIPTION, AND REGISTRATION RESTRICTION (SECONDARY COURSE)**

**SCM 611 Research Foundations (3)** This PhD seminar introduces students to the craft of academic research in the business domain and, more broadly, to the philosophy of science. Will help students to (1) identify important knowledge gaps in need of inquiry, and (2) design research studies that can be used to effectively address those knowledge gaps. Toward that end, the seminar covers a variety of topics including problem definition, research design, theory construction, construct specification, measurement theory and validity, and philosophy of science.

*Cross-listed: See as Marketing 611.*

*Registration Restriction: PhD students only with instructor's consent*

Formerly: Theoretical Foundations (3) Cross-listed: (See Marketing 611).

Rationale: To provide a better description for the course for students searching under SCM 611. Staffing Impact: None. Financial Impact: None. Impact on other Academic Units: None.

Learning Outcomes Supported: None

Evidence from Assessment Activities: None

## GRADUATE AND EXECUTIVE EDUCATION

### MBA Program Learning Outcomes

1. Application of Business Knowledge and Skills: Apply functional knowledge and skills developed in the first year MBA curriculum to address critical, real-world business issues
2. Ethical Decision Making in a Global Context: Identify and effectively evaluate business problems and opportunities in a global market environment.
3. Presentation Skills Development: Demonstrate the acquisition and utilization of fundamental presentation, data analysis, and communication skills necessary to successfully influence the consideration of new business ideas in an organizational setting.
4. Collaboration: Perform effectively as a team member.

Professional MBA

## **(BUAD) Business Administration**

### REVISE DESCRIPTION AND DROP (RE)COREQUISITE

**BUAD 592 Global Business Travel (1)** Provides MBA students with the opportunity to apply their knowledge of global business through an international travel experience. Students will complete assignments on key aspects of international business as well as attend an international travel seminar.

Formerly: Taught in conjunction with BUAD 591. Provides MBA students with the opportunity to apply their knowledge of global business through an international travel experience. Students will complete assignments on key aspects of international business as well as attend an international travel seminar.  
(RE) Corequisite(s): 591.

Rationale: This travel course is optional only so usually about half the class goes on the trip. BUAD 591 is not used anymore. Staffing Impact: None. Financial Impact: None. Impact on Other Academic Units: None.

Learning Outcomes Supported: None.

Evidence from Assessment Activities: None.

## **II. PROGRAM CHANGES**

### **DEPARTMENT OF ACCOUNTING AND INFORMATION MANAGEMENT**

Learning Goals and Objectives for the PhD in Business Administration

1. Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business.
2. Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization.
3. Students will be able to discuss the implications of original research in the dissertation and in other pertinent research initiatives.
4. Students will develop and refine the processes, skills, and responsibilities necessary for teaching in higher business education.
5. Students will demonstrate the ability to make original intellectual contributions to their area of specialization.

### **REVISE DESCRIPTION ACCOUNTING CONCENTRATION, BUSINESS ADMINISTRATION MAJOR, PHD**

In the 2017-2018 Graduate Catalog, delete the current description and replace with the following;

This degree provides a research-oriented terminal qualification for those seeking entry-level faculty positions in accounting. Students take a variety of courses including a doctoral sequence designed to expose students to various areas of accounting research. Courses in accounting and other areas are selected to supplement the student's individual background and to prepare the student in an area of accounting specialization (financial, managerial, auditing, tax or systems). Minimum course requirements are 12 hours including ACCT 611 (3 hours), ACCT 612 (6 hours), ACCT 619 (3 hours).

Formerly: This degree provides a research-oriented terminal qualification for those seeking entry-level faculty positions in accounting. Students take approximately three years of course work beyond the bachelor's degree, including a doctoral sequence designed to expose students to various areas of accounting research. Courses in accounting and other areas are selected to supplement the student's individual background and to prepare the student in an area of accounting specialization (financial, managerial, auditing, tax or systems). The final year is normally spent completing the doctoral dissertation. Minimum course requirements are 12 hours including ACCT 611, ACCT 612, ACCT 619, and one other accounting course to be approved by the PhD accounting program advisor.

SUPPORTING INFORMATION: Rationale: To make the PhD catalog description more accurate regarding course requirements and hours. Staffing Impact: None. Financial Impact: None. Impact on Other Academic Units: None.

Learning Outcomes Supported: None

Evidence from Assessment Activities: None

## DEPARTMENT OF MANAGEMENT

Learning Goals and Objectives for the PhD in Business Administration

1. Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business.
2. Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization.
3. Students will be able to discuss the implications of original research in the dissertation and in other pertinent research initiatives.
4. Students will develop and refine the processes, skills, and responsibilities necessary for teaching in higher business education.
5. Students will demonstrate the ability to make original intellectual contributions to their area of specialization.

MBA Program Learning Outcomes

1. Application of Business Knowledge and Skills: Apply functional knowledge and skills developed in the first year MBA curriculum to address critical, real-world business issues
2. Ethical Decision Making in a Global Context: Identify and effectively evaluate business problems and opportunities in a global market environment.
3. Presentation Skills Development: Demonstrate the acquisition and utilization of fundamental presentation, data analysis, and communication skills necessary to successfully influence the consideration of new business ideas in an organizational setting.
4. Collaboration: Perform effectively as a team member.

### ❖ DROP MAJOR, DEGREE, AND CONCENTRATION

Business Administration Major, PhD  
Organizations and Strategy concentration

### ❖ ADD MAJOR, DEGREE, AND CONCENTRATION

Business Administration Major, PhD  
Strategy, Entrepreneurship and Organizations concentration

In the 2017-2018 Graduate Catalog, under heading, Business Administration Major, PhD, delete the dropped Organizations and Strategy concentration name and replace with the revised name of: Strategy, Entrepreneurship and Organizations in all locations.

Formerly: Organizations and Strategy Concentration, Business Administration Major, PhD

Rationale: The new title better represents the content and focus of this concentration within the Business Administration Major. It also is a better signal to attract high quality students and to place them in peer and aspirant universities Staffing Impact: None. Financial Impact: one. Impact on other units: None.

### ❖ DROP MAJOR, DEGREE, AND CONCENTRATION

Business Administration Major, MBA  
Human Resource Management concentration

In the 2017-2018 Graduate Catalog, under headings: Business Administration Major, MBA; Full Time MBA; and Concentration and Electives - remove "Human Resource Management concentration, Business Administration major, MBA" in the second paragraph and in all locations of the catalog.

Rationale: Reflects the drop of the HRM concentration from options in the MBA program. Staffing Impact: None. Financial Impact: one. Impact on other units: None.

### ❖ DROP MAJOR AND DEGREE

Human Resource Management Major, MS

In the 2017-2018 Graduate Catalog, remove the Human Resource Management Major, MS.

### ❖ ADD MAJOR AND DEGREE

Management and Human Resources Major, MS

In the 2017-2018 Graduate Catalog, add the catalog text for the Management and Human Resources Major, MS. (This is a name change from Human Resource Management major to Management and Human Resources Major for the MS).

**Management and Human Resources Major, MS**

The Master of Science degree with a major in management and human resources provides a flexible part-time or full-time evening format, allowing even fully employed students to complete the program. The program is a good fit for students from any background who want to lead and manage employees and prepare for moving into management positions in their industry or field, as well as those who plan to pursue their career in the area of human resources. Applicants are strongly encouraged to maintain employment with an organization throughout the duration of this program.

**Admission**

Students may only begin graduate course work for the Master of Science with a major in management and human resources in the fall semester. The online application deadline is May 1 (February 1 for international students). Online applications by U.S. citizens and permanent residents received after the May 1 application deadline will be considered as space allows.

There is no additional preparation for the program. In addition to the general admission requirements, MS applicants are required to take the Graduate Record Exam (GRE) or the Graduate Management Admission Test (GMAT). Applicants whose native language is not English must submit results of the Test of English as a Foreign Language (TOEFL).

The GRE/GMAT admission requirement may be waived if the applicant holds a current SHRM certification, received an undergraduate degree from the University of Tennessee’s Haslam College of Business and had a minimum 3.0 cumulative GPA at the time of graduation, or has an accredited master’s degree in another discipline. To be considered for this exemption, applicants must submit a formal request in writing. Please note that the waiver of the GRE/GMAT is not a guarantee of admission into the Management and Human Resources Master of Science degree program.

For admission to the MS program, consideration is given to:

- Applicant resume, cover letter, and/or personal statement of interest.
- Employment history.

- Applicant’s academic record with particular attention to the last two years of undergraduate work.
- Scores on the GMAT or GRE (unless waived), and TOEFL for those whose native language is not English.
- Recommendations from professors and/or work supervisors.
- Interview.

The admission decision is based on all factors that make up the total application.

Requirements	Hours Credit
Management MGT 520	1
Management MGT 553	3
Management MGT 555	3
Management MGT 556	3
Management MGT 560	3
Management MGT 561	3
Management MGT 562	3
Management MGT 565	1
Human Resource Management HRM 521	1
Human Resource Management HRM 535	3
Human Resource Management HRM 540	3
Human Resource Management HRM 545	3
Human Resource Management HRM 550	3
Total	33

Rationale: The existing MS HRM program has not been formally reviewed and updated in over 10 years. This Masters program joined the Management Department with the merger of Human Resource Development. These changes are part of the modernization of this program. The name change indicates a clearer target market focus of those individuals who are working full time and are looking to move up in management, requiring both leadership skills and knowledge of managing human resources in an organization. Conversations with Mary Albrecht during July and August, 2016, indicate that the changes to this Masters degree is not considered “substantial.” Impact on other Units: None. Financial Impact: None (see course changes; one new course is offered)

**REVISE DESCRIPTION – HASLAM COLLEGE OF BUSINESS**

In the 2017-2018 Graduate Catalog, in the main Haslam College of Business section revise language to reflect above changes:

1. the name change of the PhD concentration for the Business Administration major from Organizations and Strategy to Strategy, Entrepreneurship and Organizations.
2. the dropping of the MBA concentration (Human Resource Management) from the Business Administration major, MBA.
3. the name change of the Human Resource Management major to the new name of: Management and Human Resources.

Rationale: The existing MS HRM program has not been formally reviewed and updated in over 10 years. This Masters program joined the Management Department with the merger of Human Resource Development. These changes are part of the modernization of this program. The name change indicates a clearer target market focus of those individuals who are working full time and are looking to move up in

management, requiring both leadership skills and knowledge of managing human resources in an organization. Staffing Impact: None. Financial Impact: one. Impact on other units: None.

## REVISE DESCRIPTION OF MAJORS, DEGREES, AND CONCENTRATIONS FOR DEPARTMENT OF MANAGEMENT

In the 2017-2018 graduate catalog, the correct major, degrees, and concentrations will be as follows:

Business Administration Entrepreneurship and Innovation concentration	MBA
Management and Human Resources	MS
Business Administration Strategy, Entrepreneurship and Organizations concentration	PhD

Formerly:

Business Administration Entrepreneurship and Innovation concentration	MBA
Human Resource Management Human Resource Management concentration	MS
Business Administration Organizations and Strategy concentration	PhD

Rationale: Reflects the change in the name of the Organizations and Strategy Concentration PhD and changes from the HRM to MS-MHR and drop of HRM concentration. Staffing Impact: None. Financial Impact: one. Impact on other units: None.

## DEPARTMENT OF MARKETING AND SUPPLY CHAIN MANAGEMENT

Learning Goals and Objectives for the PhD in Business Administration

1. Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business.
2. Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization.
3. Students will be able to discuss the implications of original research in the dissertation and in other pertinent research initiatives.
4. Students will develop and refine the processes, skills, and responsibilities necessary for teaching in higher business education.
5. Students will demonstrate the ability to make original intellectual contributions to their area of specialization.

## REVISE REQUIREMENTS – MARKETING CONCENTRATION, BUSINESS ADMINISTRATION MAJOR, PHD

In the 2017-2018 Graduate Catalog, remove current text and replace with the following:

Minimum course requirements are MARK 611, MARK 614, MARK 615, MARK 618, MARK 619, and MARK 620.

The marketing concentration prepares students for careers as academics at leading research universities. Students pursuing this concentration will take a minimum of 46 hours of coursework beyond that required for an MBA. Required coursework includes 15 hours of core marketing seminars, 4 hours of professional development seminars, and departmental seminars offered on a non-regular basis (such seminars are in excess of the minimum required hours). A total of 27 hours of support courses are necessary, of which at least 15 must be in method courses and 6 in cognate area courses. Support courses are approved by the doctoral coordinator and selected to support student specialization in either marketing strategy or consumer behavior research. To advance in the program, students must successfully complete a series of research-oriented milestones during their first two years of residence. Students also complete a dissertation (minimum of 24 dissertation research credit hours are required) that must be successfully defended for the candidate to be awarded the doctoral degree.

Formerly: Minimum course requirements are MARK 611, MARK 612, MARK 613, MARK 614, MARK 615, MARK 616, and MARK 618.

The marketing concentration is a research-oriented doctoral program of instruction that provides perspectives and skills necessary for an academic career in the field of marketing. Students pursuing this major and degree will take a minimum of 42 hours of coursework (beyond that required for an MBA) that covers concepts and issues in marketing, a support field of study, and both quantitative and qualitative scholastic research methods. Students must also complete a minimum of 24 dissertation research credit hours. Upon completion of the course work and comprehensive exams, each candidate conducts dissertation research on a unique topic in marketing that adds to the knowledge base of the discipline. Successful completion and defense of the dissertation qualifies the candidate to pursue academic opportunities at research-oriented or other universities.

Rationale: The curriculum of the PhD program in marketing is being updated to enhance student outcomes, particularly research productivity while in the program and placement rates at R1 institutions following completion of the program. This revision updates the description of the program in the catalog and reflects extensive changes to the program curriculum as a result of this revision effort. Staffing Impact: None. Financial Impact: None. Impact on Other Academic Units: None.

Learning Outcomes Supported: Objective 1: Students will demonstrate acquisition and mastery of content knowledge in their specialized areas of business. Objective 2: Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization. Objective 3: Students will be able to discuss the implications of original research in the dissertation and in other pertinent research initiatives. Objective 5: Students will demonstrate the ability to make original intellectual contributions to their area of specialization



Evidence from Assessment Activities: An internal review of doctoral student placements over the last decade revealed very limited success in placing students at research-oriented institutions (i.e., R1 schools). An "Academic Program Review" conducted by an external panel in 2016 noted that our marketing doctoral curriculum content displays gaps versus programs at leading schools, and needs to be reconsidered due to omissions related to consumer behavior and modeling content.

## GRADUATE AND EXECUTIVE EDUCATION

### MBA Program Learning Outcomes

1. Application of Business Knowledge and Skills: Apply functional knowledge and skills developed in the first year MBA curriculum to address critical, real-world business issues
2. Ethical Decision Making in a Global Context: Identify and effectively evaluate business problems and opportunities in a global market environment.
3. Presentation Skills Development: Demonstrate the acquisition and utilization of fundamental presentation, data analysis, and communication skills necessary to successfully influence the consideration of new business ideas in an organizational setting.
4. Collaboration: Perform effectively as a team member.

Dual MS-MBA Program – Business Administration / Engineering

### **REVISE REQUIREMENTS – DUAL MS-MBA PROGRAM, BUSINESS ADMINISTRATION / ENGINEERING**

In the 2017-2018 Graduate Catalog, under the Requirements heading remove current text and replace with the following:

#### Requirements

All engineering and computer science students enrolled in the dual program must complete course work designed to provide them with an integrated, multidisciplinary experience. The MS – MBA curriculum consists of 36 hours of course work in the Haslam College of Business and 24 hours of course work (which may include up to 3 thesis hours) in the Tickle College of Engineering. A final examination as required by their respective Engineering Program Committee is to be taken during their final semester.

Formerly: All engineering and computer science students enrolled in the dual program must complete course work designed to provide them with an integrated, multidisciplinary experience. The MS - MBA curriculum consists of 36 hours of course work in the Haslam College of Business and 24 hours of course work in the Tickle College of Engineering. A final examination as required by their respective Engineering Program Committee is to be taken during their final semester.

Rationale: Wording is being revised to specify that the 24 hours of engineering coursework may include up to three thesis hours. Some dual degree students complete a thesis option and the inclusion of these hours on the admissions to candidacy form has created confusion for the Graduate School staff. The Graduate School has requested this catalog revision to clarify program intent. Staffing Impact: None. Financial Impact: None. Impact on Other Departments: The Tickle College of Engineering has approved this change and has included a sentence to this effect on each program showcase provided to dual degree MBA – MS Engineering students.

Learning outcome supported: None

Evidence from assessment activities: None

# COLLEGE OF EDUCATION, HEALTH, AND HUMAN SCIENCES

All changes effective Fall 2017

## I. COURSE CHANGES

### DEPARTMENT OF CHILD AND FAMILY STUDIES

Learning objectives for the MS Degree in Child and Family Studies

Learning objectives for the PhD Degree in Child and Family Studies

1. Students will be able to write a well-organized, logical, scientifically sound research paper
2. Students will demonstrate proficiency in analyzing and critiquing ideas in their field of interest from published texts, reports, and research proceedings.
3. Students will construct original arguments through written work that incorporate consideration of the relevant issues from the field and the theory that informs it.

### (CFS) Child and Family Studies

#### REVISE TITLE AND DESCRIPTION

**CFS 569 Practice-based Research in Early Childhood Education (3)** Principles and methodologies of practice-based research for practitioners in early childhood and school settings.

Formerly: Action Research in Early Childhood Education (3) Principles and methodologies of action research for practitioners in early childhood and school settings.

Rationale: Revised title and description better reflects the content of this course. This course is restricted to teacher licensure graduate students and includes components connected to their required Practice-based Research Review, which is a University Teacher Licensure requirement. Course Format: Course will be taught on campus as a traditional lecture/seminar course. Impact on other units: None. Financial Impact: None.

Learning outcomes supported: This minor revision is not related to student learner outcomes, as it does not relate to any revision of the content of the course.

Support from assessment activities: New licensure and degree requirements require teacher licensure graduate students to complete a Practice-based Research Review rather than an action research project.

#### REVISE TO REMOVE CREDIT RESTRICTION

**CFS 581 Directed Study in Child and Family Studies (1-3)**

Formerly: Credit Restriction: May not be applied to child and family studies specialization electives for the master's degree.

Rationale: Removing the credit restriction for the master's degree will make this consistent with the CFS master's program requirements, which do not restrict the use of CFS 581 in the specialization electives. Thus, this fixes an inconsistency between the program requirements and the course description for CFS 581. Impact on other units: None. Financial Impact: None.

Learning outcomes supported: Does not impact student learner outcomes.

Support from assessment activities: No assessment activities were conducted because this change is intended to fix an inconsistency between the MS program requirements and the CFS 581 course description.

### DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

Learning objectives for the MS Degree in Educational Administration

1. As student matriculates through program, student will design and present original research at national and/or regional venue and publish at least one scholarly article.
2. Students will propose independent research, demonstrating the ability to design and defend research proposals.
3. As students develop greater knowledge and deeper insight into political theory, research and literature related to education, they will be better positioned to develop, execute and present their own research in the field of educational leadership.
4. As students develop greater knowledge and deeper insight into change management theory, research and literature, they will be better positioned to develop, execute and present their own research in the field of educational leadership.
5. As students develop greater knowledge and deeper insight into the theory, research and literature associated with effectively leading at the district-level they will be better positioned to develop, execute and present their own research in the field of educational leadership.

## (EDAM) Educational Administration

### ADD

**EDAM 630 Politics of Education (3)** An introduction to the complex and often contested field of the politics of education. Will provide students with an understanding of the interplay of groups that shape educational decision making, with an emphasis on governance structures, stakeholders, and public engagement.

*Registration Restriction(s) Minimum student level – graduate. Registration is limited to graduate students in Educational Leadership and Policy Studies' Programs*

**Rationale:** The course will provide students the opportunity for in-depth study of the roles of different political actors in the field of education. Currently, there is no advanced course specifically addressing the politics of education, separate from the study of policy, here at UTK; this course fills that gap. **Impact on Other Units:** No projected impact on other units and/or courses. **Format and Course Location:** Lecture / on campus. **Financial Impact Statement:** The addition of this course should not have any material impact on finances or other resources. This course should be able to be offered within the budgeted faculty and available facilities of the Educational Leadership and Policy Studies Department.

**Learning Outcomes:** The Ph.D. in Educational Leadership has two learner outcomes: 1. As student matriculates through program, student will design and present original research at national and/or regional venue and publish at least one scholarly article, and 2. Students will propose independent research, demonstrating the ability to design and defend research proposals. The proposed course will support both Learning Outcomes of the Ph.D. program in Educational Leadership. As students develop greater knowledge and deeper insight into political theory, research and literature related to education, they will be better positioned to develop, execute and present their own research in the field of educational leadership.

**Assessment Activities:** No assessment activities specifically pointed to the development of this course. Informal discussions with faculty and students suggested such a course would be valuable and necessary. This course was developed with the support of the Department Head of Educational Leadership and Policy Studies Department.

**EDAM 631 Education Change Management (3)** Over the past several decades, public education has experienced what might be characterized as seismic changes. Educational reform and improvement efforts have guaranteed a dynamic policy and instructional environment in school districts and in schools. In order for these changes to be productive and positive rather than overwhelming and distracting, change must be carefully introduced and effectively managed, and faculty and staff must be adequately supported throughout the process. Will explore challenges and strategies associated with successful change management in the educational setting.

*Registration Restriction(s): Minimum student level – graduate.*

**Rationale:** Not only has change been a constant in the K-12 educational setting in recent years, but effectively managing change can be the difference between tremendous academic success and stagnation or failure. This course will fill a critical need in the field by equipping education leadership students with important knowledge, skills and strategies to become successful and effective managers of necessary change in schools and school districts, ultimately leading to greater pupil learning and achievement. **Impact on Other Units:** No projected impact on other units and/or courses. **Format and Course Location:** Lecture / on campus. **Financial Impact Statement:** The addition of this course should not have any material impact on finances or other resources. This course should be able to be offered within the budgeted faculty and available facilities of the Educational Leadership and Policy Studies Department.

**Learning Outcomes:** The Ph.D. in Educational Leadership has two learner outcomes: 1. As student matriculates through program, student will design and present original research at national and/or regional venue and publish at least one scholarly article, and 2. Students will propose independent research, demonstrating the ability to design and defend research proposals. The proposed course will support both Learning Outcomes of the Ph.D. program in Educational Leadership. As students develop greater knowledge and deeper insight into change management theory, research and literature, they will be better positioned to develop, execute and present their own research in the field of educational leadership.

**Assessment Activities:** No formal assessment activities specifically pointed to the development of this course. Informal discussions with faculty and students suggested such a course would be valuable and necessary. This course was developed with the support of the Department Head of Educational Leadership and Policy Studies Department.

**EDAM 632 School District Leadership (3)** Will thoroughly examine the complex role and potentially significant impact of today's school district superintendent (as well as their Charter Management Organization leader counterparts). Particular attention will be paid to the challenges of instructional leadership in today's complex education organizations that operate in a resource constrained, politically charged, and publicly scrutinized environment.

*Registration Restriction(s): Minimum student level – graduate.*

**Rationale:** Leadership matters. Numerous studies have highlighted the critical importance of effective leadership in the academic success of schools and school districts. This course will address a substantial need by providing educational leadership students with an extensive grounding in the theory and research behind outstanding district-level leadership, as well as a deep understanding of the practical realities and successful strategies of leading a complex educational enterprise to ensure consistently rigorous instructional quality and achieve high-level pupil learning outcomes. **Impact on Other Units:** No projected impact on other units and/or courses. **Format and Course Location:** Lecture / on campus. **Financial Impact Statement:** The addition of this course should not have any material impact on finances or other resources. This course should be able to be offered within the budgeted faculty and available facilities of the Educational Leadership and Policy Studies Department.

**Learning Outcomes:** The Ph.D. in Educational Leadership has two learner outcomes: 1. As student matriculates through program, student will design and present original research at national and/or regional venue and publish at least one scholarly article, and 2. Students will propose independent research, demonstrating the ability to design and defend research proposals. The proposed course will support both Learning Outcomes of the Ph.D. program in Educational Leadership. As students develop greater knowledge and deeper insight into the theory, research and literature associated with effectively leading at the district-level they will be better positioned to develop, execute and present their own research in the field of educational leadership.

Assessment Activities: No formal assessment activities specifically pointed to the development of this course. Informal discussions with faculty and students suggested such a course would be valuable and necessary. This course was developed with the support of the Department Head of Educational Leadership and Policy Studies Department.

## **DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING**

(COUN) Counselor Education

Learning objectives for the MS Degree in Counselor Education

1. Students will demonstrate skills for individual counseling
2. Students will demonstrate skills for group counseling
3. Students will demonstrate an understanding of a theoretical orientation

(CSE) Cultural Studies of Education

Learning objectives for the MS Degree in Cultural Studies of Educational Foundations concentration

Learning objectives for the Graduate Certificate in Cultural Studies in Education

1. Students will master core knowledge in the discipline. Completing the reflective journal in the core course, CS 591.
2. Students will demonstrate the ability to think critically and application of knowledge and skills. Completing the service learning final paper/report in the core course, CS 591.
3. Students will demonstrate the integration of knowledge and research. Students who do the thesis option will complete a master's thesis and successfully defend it. The thesis committee will evaluate the student's final project.

### **EVALUATION, STATISTICS, AND MEASUREMENT GRADUATE CERTIFICATE**

Learning objectives for the Graduate Certificate in Evaluation, Statistics, and Measurement

1. Students will demonstrate the ability to design a responsive evaluation, statistics, or measurement study addressing the specific needs of a public program or client
2. Students will demonstrate the ability to conduct a responsive applied evaluation, statistics, or measurement study leading to a report of study findings and conclusions for submission to an actual client

### **QUALITATIVE RESEARCH METHODS IN EDUCATION (QUAL CERTIFICATE)**

Learning objectives for the Graduate Certificate in Qualitative Research Methods in Education

1. Students will demonstrate the ability to design ethical, naturalistic qualitative research addressing needs based on a literature gap or client interest.
2. Students will demonstrate the ability to conduct naturalistic qualitative research leading to a report of study findings, conclusions, and implications for submission to a conference, journal, or client.

## **MOVE ACADEMIC DISCIPLINE (CSE) AND ALL COURSES FROM THE DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING TO THE DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION**

### **(CSE) Cultural Studies of Education**

- CSE 500 Thesis (1–15)
- CSE 502 Registration for Use of Facilities (1–15)
- CSE 503 Problems in Lieu of Thesis (2–3)
- CSE 504 Teachers, School, and Society (3)
- CSE 511 History of American Education (3)
- CSE 526 Philosophy of Education: Theory Writing (3)
- CSE 539 Development of Education Thought (3)
- CSE 545 Sociology of Education (3)
- CSE 548 Transforming Critical Thinking: Constructive Thinking and Educational Implications (3)
- CSE 549 Topics in International Education (3)
- CSE 550 Multicultural Education (3)
- CSE 591 Issues in Cultural Studies (3)
- CSE 592 Social Justice and Education (3)
- CSE 593 Independent Study (1–3)
- CSE 594 Supervised Readings (1–3)
- CSE 595 Special Topics (1–3)
- CSE 600 Doctoral Research and Dissertation (3–15)
- CSE 607 Advanced Seminar in Educational Studies (3)
- CSE 609 Feminist Theories and Education (3)
- CSE 639 Contemporary Philosophies in Education (3)
- CSE 645 Advanced Sociology of Education (3)
- CSE 660 Ethnographic Research Methods in Education (3)
- CSE 693 Independent Study (1–3)
- CSE 694 Supervised Readings (1–3)
- CSE 695 Special Topics (1–3)

Rationale: The CSE courses, major, degree and concentration are being moved to the Department of Theory and Practice in Teacher Education. Impact on other units: Will impact Department of Theory and Practice in Teacher Education. Financial Impact: None.

Learning outcomes supported: No change in support for learning outcomes.

Support from Assessment Activities: Department Heads and Dean decided the most fitting departmental placement for CSE.

## **(EDPY) Educational Psychology**

Learning objectives for the PhD Degree in Educational Psychology and Research – Evaluation, Statistics and Measurement Concentration

1. Scholarly Writing: Students will write a scholarly review of the literature that seamlessly integrates references.
2. Content Mastery: Students will demonstrate mastery of the content in their area of academic concentration and how to apply the content in a practice setting.
3. Students will be actively engaged in their profession.

### **ADD**

**EDPY 680 Advanced Educational Measurement (3)** Topics on Classical Test Theory (CTT) as well as contemporary psychometric theories (e.g., Item Response Theory, Rasch Modeling) will be reviewed. Application of psychometric theory to the construction and score validation of measurement instruments in education and the social sciences will be emphasized.  
*Registration Restriction(s): Minimum student level – graduate.*

Rationale: This course has been offered under the EDPY 667 Special Topics course (Title: Psychometric Theory and Methods) three times: Summer 2012 (11 students), Fall 2013 (17 students), and Fall 2015 (6 students). This course will be of interest to students in the ESM doctoral program, the ESM certificate program, and many other doctoral students at UT who are looking for an advanced quantitative research course. Impact on other units: None. Financial Impact: None. This change does not change the existing faculty load.

Learner Outcomes Supported: This course provides an option supporting the ESM doctoral program's SLO #2: Outcome # 2 – (Content Mastery) – DIRECT ASSESSMENT Students will demonstrate mastery of the content in their area of academic concentration and how to apply the content in a practice setting. Having students take a course in Advanced Educational Measurement will enhance students' ability to meet this SLO.

Support from assessment activities: This change addresses assessment feedback (SAIS, SACS end of year surveys, and ESM program Needs Assessment) that discusses the importance of having advanced measurement training and additional quantitative research courses as part of this program.

## **DEPARTMENT OF KINESIOLOGY, RECREATION, AND SPORT STUDIES**

Learning objectives for the MS Degree in Kinesiology

1. Students will demonstrate an understanding of key disciplinary knowledge.
2. Students will demonstrate the capability to communicate information effectively using disciplinary-appropriate mechanisms.

Learning objectives for the PhD Degree in Kinesiology

1. Students will demonstrate the ability to conduct and disseminate research.
2. Students will demonstrate mastery of discipline-specific knowledge.
3. Students will demonstrate teaching proficiency.

(RSM) Recreation and Sport Management

Learning objectives for the MS Degree in Recreation and Sport Management

1. Students will apply sport management and therapeutic recreation principles in professional settings.
2. Students will demonstrate an understanding of the foundational knowledge and skills needed in the sport management and therapeutic recreation fields.
3. Students will be able to conduct research and understand its importance in the decision-making process.

Learning objectives for the PhD Degree in Recreation and Sport Management

1. Students will demonstrate the ability to conduct and disseminate research.
2. Students will demonstrate mastery of discipline-specific knowledge.
3. Students will demonstrate teaching proficiency.

## **(KNS) Kinesiology**

**REVISE PRIMARY COURSE TO DROP THE SECONDARY CROSS-LISTING (COURSE WILL NO LONGER BE CROSS-LISTED)**

**KNS 508 Research Methods (3)**

Formerly: 508 Research Methods (3)

Cross-listed: (Same as Recreation and Sport Management 508.)

Rationale: The research approach in Recreation and Sport Management is social-science based. The research approach in Kinesiology is laboratory based. The curriculum and teaching approach in the classes are not the same thus the cross-listing needs to be removed. Impact on other units: Yes, the proposed change require courses offered by other programs, RSM 508 has a cross-listing of KNS 508. Financial impact: none.

Support from assessment activities: Faculty review of the curriculum.

## REVISE TO DROP SECONDARY CROSS LISTING

### **KNS 543 Women, Sport and Culture (3)**

Cross-listed: (See Sport Studies 543).

Rationale: Women's Studies asked for the cross-listing to be removed as they are dropping all graduate courses. Impact on other units: The request was initiated by Women's Studies. Financial impact: None.

Support from assessment activities Women's Studies is dropping all graduate classes so the remove of this cross-listing is needed because of that decision.

## **(RSM) Recreation and Sport Management**

### **ADD**

**RSM 594 Therapeutic Recreation Practicum (3)** Supervised part-time experience (minimum of 120 clock hours) at an approved site.

*Repeatability: May be repeated. Maximum 9 hours.*

*Registration Restriction(s): Recreation and Sport Management major – Therapeutic recreation concentration.*

Rationale: Course content of RSM 554 has changed and no longer meets the educational needs of our students. Student will now be responsible for completing a Practicum in the schools setting which affords our student practical hands on experience prior to their final internship. Impact on other units: none. Financial impact: none.

Support from assessment activities: Faculty review of the curriculum and recommendations from the Academic Program Review.

**RSM 596 Therapeutic Recreation Internship (6)** Full-time work experience at an approved site supervised by a CTRS (Certified Therapeutic Recreation Specialist). Emphasis on all the NCTRC Job Tasks.

*Comment(s): Therapeutic Recreation site must meet the National Council for Therapeutic Recreation Certification (NCTC) standards. Students must have a minimum of required GPA of 3.0 for enrollment in this course. Agency affiliation agreements must be submitted four months prior to the first day of the semester student is enrolled in internship. Affiliation agreement should be approved by legal counsel for UTK and Agency two months prior to the first day of the semester student is enrolled in internship.*

*Registration Restriction(s): Recreation and Sport Management major - Therapeutic recreation concentration.*

Rationale: Curricular revision needed to differentiate between Sport Management and Therapeutic Recreation field placements.

Impact on other units: None. Financial impact: None.

Support from assessment activities: 90% of the Therapeutic Recreation Concentration students will receive an overall evaluation of 4.0- 5.0 on their final evaluation of all student learning outcomes. 2016 RSM Program accreditation evaluation by COAPRT found there needed to be differentiation between Sport Management and Therapeutic Recreation field placements requirements/supervision.

### **DROP**

### **RSM 520 Program Design and Evaluation in Therapeutic Recreation (3)**

Rationale: The material covered in RSM 520 closely mirrors that of the material covered in RSM 420. By dropping RSM 520 and having students take RSM 420 as supplemental course work would reduce the redundancy in course offerings and be a better use of our resources. Impact on other units: none. Financial impact: none.

Support from assessment activities: Faculty review of the curriculum and recommendations from the Academic Program Review.

### **REVISE TITLE**

### **RSM 590 Sport Management Practicum (3)**

Formerly: RSM 590 Practicum (3)

Rationale: The Sport Management and Therapeutic Recreation graduate practicums are becoming two separate classes. The title change reflects this course as specific to Sport Management. A separate Therapeutic Recreation Practicum (RSM 594) has been added. Impact on other units: none. Financial impact: none.

Support from assessment activities: Faculty review of the curriculum and feedback from accreditation process.

## REVISE DESCRIPTION

**RSM 501 Project (3)** Culminating experience under the supervision of a faculty member.

Formerly: RSM 501 Project (3) Research study under the supervision of a faculty member.

Rationale: Changing Research to Culminating Experience provides more flexibility for options for students complete their final project. Impact on other units: none. Financial impact: none.

Support from assessment activities: Curriculum review by the faculty and recommendations from academic program review.

## REVISE TO DROP AS SECONDARY CROSS-LISTED COURSE AND REVISE TO RETAIN NUMBER AND BECOME A STAND ALONE RSM COURSE

**RSM 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.

Formerly: Cross-listed: (See Kinesiology 508).

Rationale: The research approach in Recreation and Sport Management is social-science based. The research approach in Kinesiology is laboratory based. The curriculum and teaching approach in the classes are not the same thus the cross-listing needs to be removed. Impact on other units: Yes, the proposed change require courses offered by other programs, KNS 508 has a cross-listing of RSM 508. Financial impact: none.

Support from assessment activities: No assessment activities were conducted.

## REVISE TITLE, DESCRIPTION, AND REMOVE REPEATABILITY

**RSM 554 Environmental Sustainability in Sport (3)** Will provides a holistic examination of the relationships between sport organization operations and the natural environment. Sport, in its participative and experiential forms, works with and within, the natural environment. The physical environmental footprint made by sport-related activities demands attention as with any other form of human activity. The social and cultural position of sport makes it an important example of natural environment responsibilities. Sport is a platform for bringing education and behavioral change to those who participate in as well as those who support it.

Formerly: Issues and Trends 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.

Rationale: Due to current and important trends in the sport industry related to environmental sustainability, the course content needs to be modified to address these trends and prepare our students to be better leaders in the industry. The course description will be changed. Impact on other units: none. Financial impact: none.

Support from assessment activities: List of student learning outcomes for the course:

Articulate key issues facing sport organizations related to the natural environment.

Demonstrate mastery of key terminology related to the natural environment.

Articulate the linkages between each facet of a sport organization's operations and the natural environment.

Demonstrate critical analysis of situations related to the natural environment and sport organization operations.

Demonstrate critical analysis of issues related to the natural environment.

Propose viable strategies to solve environmental issues facing a sport organization.

Articulate a personal perspective of the relationship between sport and the natural environment.

Assessment activities support the need for this change because we need to better educate and prepare our students for a career in an industry that is increasingly emphasizing sustainability.

## (SPST) Sport Studies

### REVISE PRIMARY COURSE TO REMOVE ONE OF SECONDARY CROSS-LISTINGS

**SPST 543 Women, Sport, and Culture (3)**

*Cross-listed: (Same as Kinesiology 543)*

Formerly: SPST 543 Women, Sport, and Culture (3)

Cross-listed: (Same as Kinesiology 543 and Women's Studies 543.)

Rationale: Women's Studies asked for the cross-listing to be removed as they are dropping all graduate courses. Impact on other units: The request was initiated by Women's Studies. Financial impact: None.

Support from assessment activities: No assessment activities were conducted.

## DEPARTMENT OF PUBLIC HEALTH

(PUBH) Public Health

Learning objectives for the MS Degree in Public Health

1. Students will demonstrate readiness for professional practice in health-related settings.
2. Students will demonstrate critical thinking & problem-solving abilities reflecting the integration of public health competencies.
3. Students will develop effective presentation skills.
4. Students will appraise mastery of 12 core public health competencies.

Learning objectives for the PhD Degree in Public Health

1. Demonstrate a high level of thinking and practice skill in recognizing, defining, and addressing public health problems and needs;
2. Demonstrate competence in the five core areas of public health: biostatistics; epidemiology; environmental health; health planning, policy, and administration; and social and behavioral sciences;
3. Demonstrate professionalism, advocacy, leadership, ethical principles, and scientific integrity in advanced public health practice;
4. Provide collaborative leadership in the development of public health practice models for diverse populations.

### REVISE TO ADD REGISTRATION RESTRICTION(S)

#### **PUBH 525 Financial Management of Health Programs (3)**

*Registration Restriction(s): Minimum student level – graduate.*

Formerly: PUBH 525 Financial Management of Health Programs (3)

Rationale: Revised course to add registration restriction that limits registration to graduate level students. Impact on other units: None. This change prevents undergraduate students from enrolling in a class that is not appropriate for their grade level. Financial impact: None. This is just an enrollment restriction.

Student learner objectives impacted: None. This is just an enrollment restriction to prevent undergraduate students from enrolling in a class that is not appropriate for their grade level.

Support from assessment activities: Periodic curricular review by the faculty.

### REVISE (RE) PREREQUISITE(S)

#### **PUBH 636 Advanced Research Methods (3)**

*(RE) Prerequisite(s): Two courses from the following list: (1) PUBH 530, SOWK 605, or STAT537 and (2) SOWK 606 or STAT 538; one additional graduate level statistics course selected in consultation with faculty advisor.*

Formerly: PUBH 636 Advanced Research Methods (3)

(RE) Prerequisite(s): 536, and Statistics 531 and Statistics 532, or Statistics 537 and Statistics 538.

Rationale: To promote student success in PUBH 636, the advanced course content requires an additional prerequisite in graduate level statistics. The third course will be selected in consultation with faculty advisors in order to ensure that the course serves as a foundational asset to PUBH 636 and is also applicable to the students' academic pursuits. Impact on other units: Given that Public Health does not offer additional graduate level statistics courses other than PUBH 530, which is already reflected in the prerequisites, other departments will receive enrollment from public health doctoral students. To date this has not been a challenge for doctoral students or the departments offering graduate statistics courses. Financial impact: The total number of units for the DrPH degree remains the same, therefore there is no associated student financial impact.

Student learner objectives impacted: The additional graduate statistics course should enhance the level of accomplishment for learning objectives 2, which includes competencies in the area of biostatistics.

Support from assessment activities: In a discussion group current doctoral students in Public Health expressed the desire to have more flexibility regarding electives and also emphasized the importance of statistical training. The addition of the graduate statistics prerequisite meets both of these wishes. In addition, per the Public Health bylaws, the faculty unanimously approved the adoption of this additional prerequisite.

#### **PUBH 637 Applications in Program Evaluation (3)**

*(RE) Prerequisite(s): Two courses from the following list: (1) PUBH 530, SOWK 605, or STAT 537 and (2) SOWK 606 or STAT 538; one graduate level statistics course selected in consultation with faculty advisor.*

Formerly: PUBH 637 Applications in Program Evaluation (3)

(RE) Prerequisite(s): 537, and Statistics 531 and Statistics 532, or Statistics 537 and Statistics 538.

Rationale: To promote student success in PUBH637, the advanced course content requires an additional prerequisite in graduate level statistics. The third course will be selected in consultation with faculty advisors in order to ensure that the course serves as a foundational asset to PUBH637 and is also applicable to the students' academic pursuits. Impact on other units: Given that Public Health does not offer additional graduate level statistics courses other than PUBH530, which is already reflected in the prerequisites, other departments will receive enrollment from public health doctoral students. To date this has not been a challenge for doctoral students or the departments offering graduate statistics courses. Financial impact: The total number of units for the DrPH degree remains the same, therefore there is no associated student financial impact.



Student learner objectives impacted: The additional graduate statistics course should enhance the level of accomplishment for learning objectives 2, which includes competencies in the area of biostatistics.

Support from assessment activities: In a discussion group current doctoral students in Public Health expressed the desire to have more flexibility regarding electives and also emphasized the importance of statistical training. The addition of the graduate statistics prerequisite meets both of these wishes. In addition, per the Public Health bylaws, the faculty unanimously approved the adoption of this additional prerequisite.

## **DEPARTMENT OF RETAIL, HOSPITALITY, AND TOURISM MANAGEMENT**

Learning objectives for the PhD Degree in Retail, Hospitality, and Tourism Management

1. Demonstrate in-depth knowledge of key theories in their field.
2. Source relevant literature information.
3. Employ appropriate methods for research.
4. Demonstrate the ability to conduct, present and publish their research.

### **(RHTM) Retail, Hospitality, and Tourism Management**

#### **REVISE REPEATABILITY**

##### **RHTM 590 Research Seminar (1)**

*Repeatability: May be repeated. Maximum 3 hours.*

Formerly: RHTM 590 Research Seminar (1)

Repeatability: May be repeated. Maximum 2 hours.

Rationale: This change fixes an inconsistency between the PhD program requirements and the course description for RHTM 590. Impact on Other Units: None. Financial Impact: None.

Learning Outcomes Supported: Does not impact student learner outcomes

Support from Assessment Activities: This course covers diverse topics enhancing students' knowledge of research trends/resources and professionalism. Faculty identified that taking this course for three years benefits doctoral students who are pursuing academic jobs in RHTM.

## **DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION**

(CSE) Cultural Studies of Education

Learning objectives for the MS Degree in Cultural Studies of Educational Foundations Concentration

Learning objectives for the Graduate Certificate in Cultural Studies in Education

1. Students will master core knowledge in the discipline. Completing the reflective journal in the core course, CS 591.
2. Students will demonstrate the ability to think critically and application of knowledge and skills. Completing the service learning final paper/report in the core course, CS 591.
3. Students will demonstrate the integration of knowledge and research. Students who do the thesis option will complete a master's thesis and successfully defend it. The thesis committee will evaluate the student's final project.

(SPED) Special Education

Learning objectives for the BS Degree in Special Education

1. Planning (for Modified/Comprehensive and Deaf/Hard of Hearing Concentrations)  
Proposes appropriate curricular objectives based on State and/or Common Core Standards.
2. Instruction (for Modified/Comprehensive and Deaf/Hard of Hearing Concentrations)  
Develops instructional activities that take into account students' strengths, interests, and needs to enable each student to advance and accelerate his/her learning.
3. Assessment (for Modified/Comprehensive and Deaf/Hard of Hearing Concentrations)  
Combines formative and summative assessment as appropriate to support, verify, and document learning.
4. (For Modified/Comprehensive; Deaf/Hard of Hearing; and Educational Interpreting Concentrations) Uses current technologies to maximize content learning in varied contexts.
5. Learning Environments (for Modified/Comprehensive; Deaf/Hard of Hearing; and Educational Interpreting Concentrations) Designs a safe, positive learning climate of openness, mutual respect, support, and inquiry.
6. (For Educational Interpreting and Communication Disorders Majors) (From InTASC Standard 2) Uses understanding of individual differences and diverse cultures and communities to promote inclusive learning and/or social environments that enable all individuals to meet high standards.
7. (For Educational Interpreting Majors) (from InTASC Standard 10) Seeks appropriate roles and opportunities to take responsibility for well-being of individuals with disabilities, to collaborate with students, families, colleagues, school professionals, and community members to ensure individual learner growth, and to advance well-being of individuals with disabilities.

(TPTE) Theory and Practice in Teacher Education

Learning objectives for the MS Degree in Teacher Education – Track I

1. Demonstrates rich understanding of subject(s) taught and appreciation of how knowledge in subject area(s) is created, organized, and linked to real-world settings.

2. Demonstrates the ability to reason and to take multiple perspectives
3. Demonstrates quality of writing that is expected of advanced graduate students

Learning objectives for the MS Degree in Teacher Education – Track II

1. The candidate understands the central concepts, tools of inquiry, structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students. (Corresponds to InTASC Standard 1)
2. The candidate understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners. (Corresponds to InTASC Standard 3)
3. The candidate understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills. (Corresponds to InTASC Standard 4)

Learning objectives for the PhD Degree in Teacher Education

1. Demonstrates college-level teaching proficiency
2. Effectively supervises pre-service teacher candidates and collaborate with school-based partners
3. Demonstrates a rich knowledge of current literature in his/her field sufficient to utilize such information for the improvement of practice.
4. Demonstrates the ability to do independent and/or collaborative research and the capacity to advance the knowledge base in his/her field

## **MOVE ACADEMIC DISCIPLINE (CSE) AND ALL COURSES FROM THE DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING TO THE DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION**

### **CSE 500 Thesis (1-15)**

*Grading Restriction: P/NP only.*

*Repeatability: May be repeated.*

*Credit Level Restriction: Graduate credit only.*

*Registration Restriction(s): Minimum student level – graduate.*

**CSE 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 complete.

*Grading Restriction: Satisfactory/No Credit grading only.*

*Repeatability: May be repeated.*

*Credit Restriction: May not be used toward degree requirements.*

*Registration Restriction(s): Minimum student level – graduate.*

### **CSE 503 Problems in Lieu of Thesis (2-3)**

*Grading Restriction: Satisfactory/No Credit grading only.*

*Repeatability: Maximum 9 hours.*

*Credit Level Restriction: Graduate credit only.*

*Registration Restriction(s): Minimum student level – graduate.*

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

**CSE 511 History of American Education (3)** Changing goals and processes in education. Differing historical interpretations of role of school and its relationship to American society – colonial to present.

**CSE 526 Philosophy of Education: Theory Writing (3)** Description, interpretation, and critique of philosophical/theoretical arguments: truths, knowledge, and values in relation to education.

**CSE 539 Development of Education Thought (3)** Historic and philosophic approach to lives and writing of influential educators: Plato, Quintilian, Comenius, Rosseau, Pestalozzi, Froebel, Dewey.

**CSE 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.

**CSE 548 Transforming Critical Thinking: Constructive Thinking and Educational Implications (3)** Critique and transformation of critical thinking to more holistic, relational, and aesthetic model of multicultural and gender-sensitive constructive thinking; confronting power and addressing educational implications.

*Cross-listed: (Same as Women's Studies 548.)*

**CSE 549 Topics in International Education (3)** Historical, philosophical, and sociological foundations; selected nations and their cultures.

*Repeatability: May be repeated. Maximum 9 hours.*

**CSE 550 Multicultural Education (3)** Introduction to history, varieties, theory and practice of multiculturalism and multicultural education. Addresses the promotion and critique of multicultural education and related concepts in theory and educational practice.

**CSE 591 Issues in Cultural Studies (3)** Combination of theoretical readings in cultural studies and service learning for social justice project. Discussion of interdisciplinary, social justice and activism. Links between theory and practice of cultural studies.

**CSE 592 Social Justice and Education (3)** Social justice issues: education practices. Social justice, moral commitments to others in educational settings, and equal opportunity to acquire social goods and benefits.

**CSE 593 Independent Study (1-3)**

*Grading Restriction: Satisfactory/No Credit or letter grade.*

*Repeatability: May be repeated. Maximum 12 hours.*

**CSE 594 Supervised Readings (1-3)**

*Grading Restriction: Satisfactory/No Credit or letter grade.*

*Repeatability: May be repeated. Maximum 12 hours.*

**CSE 595 Special Topics (1-3)**

*Grading Restriction: Satisfactory/No Credit or letter grade.*

*Repeatability: May be repeated. Maximum 12 hours.*

**CSE 600 Doctoral Research and Dissertation (3-15)**

*Grading Restriction: P/NP only.*

*Repeatability: May be repeated.*

*Registration Restriction(s): Minimum student level – graduate.*

**CSE 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.

*Registration Restriction(s): Minimum student level – graduate.*

**CSE 609 Feminist Theories and Education (3)** Theoretical research currently presented by feminist scholars questioning traditional (male) theories; application of these feminist theories to current feminist work in education.

*Cross-listed: (Same as Women's Studies 609.)*

*Registration Restriction(s): Minimum student level – graduate.*

**CSE 639 Contemporary Philosophies in Education (3)** An examination of current debates within various philosophical fields of study as they relate to education.

*Registration Restriction(s): Minimum student level – graduate.*

**CSE 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.

*Registration Restriction(s): Minimum student level – graduate.*

**CSE 660 Ethnographic Research Methods in Education (3)** Design, implementation and analysis of ethnographic research in education. Critical reading and evaluation of ethnographic studies. Exploration of ethical issues in ethnographic research.

*(RE) Prerequisite(s): 560.*

*Registration Restriction(s): Minimum student level – graduate.*

**CSE 693 Independent Study (1-3)**

*Grading Restriction: Satisfactory/No Credit or letter grade.*

*Repeatability: May be repeated. Maximum 9 hours.*

*Registration Restriction(s): Minimum student level – graduate.*

**CSE 694 Supervised Readings (1-3)**

*Grading Restriction: Satisfactory/No Credit or letter grade.*

*Repeatability: May be repeated. Maximum 9 hours.*

*Registration Restriction(s): Minimum student level – graduate.*

**CSE 695 Special Topics (1-3)**

*Grading Restriction: Satisfactory/No Credit or letter grade.*

*Repeatability: May be repeated. Maximum 9 hours.*

*Registration Restriction(s): Minimum student level – graduate.*

Rationale: Cultural Studies faculty, programs, and courses are moving from Educational Psychology and Counseling (EPC) to Theory and Practice in Teacher Education (TPTE) effective in 2017. Cultural Studies content is better aligned with the mission of TPTE than EPC. Impact on other units: None. Course format and location: Traditional on-campus. Financial impact: None. All of the resources will be moving as well to support this change.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support from assessment activities: The Department Heads and Dean decided TPTE was the most fitting departmental placement for CSE.

## (EDDE) EDUCATION OF THE DEAF AND HARD OF HEARING

### REVISE TITLE AND DESCRIPTION

**EDDE 601 Seminar in Education of Exceptional, Diverse and At-risk Learners (3)** Focus will be on becoming an informed researcher, teacher educator, and/or leader in the field of education. The goals of this course are: a) to ensure students' awareness and understanding of content that is grounded in the foundational literature of the field of special education (including deaf education and interpreter education); b) to develop awareness of the historical, legal, and philosophical underpinnings of special education and its current status within the United States and internationally; c) to develop awareness of the intersection of special education with poverty, race, culture, and language; and d) to become cognizant of foundational and current research and evidence-based instructional and assessment practices that characterize special education as a discipline.

Formerly: Reading and Applying Research for Diverse Learners: Group and Correlational Approaches I (3) Will focus on seminal readings in policy and research related to education of diverse learners using group experimental and quasi-experimental and correlational research designs. Goals of the course are: (1) to increase students' familiarity with policy and seminal readings in educational research focusing on diverse learners, (2) to increase students' understanding of educational research focusing on diverse learners, (3) to develop students' skills for analyzing and critiquing educational research with diverse populations, and (4) to begin development of a research agenda by honing skills in preparing research proposals targeting needs of diverse learners. Course 601 is Part 1 of a two course sequence.

Rationale: this course is revised to update current knowledge and skills for doctoral students in the Special Education/Deaf Education/Interpreter Education PhD concentration with knowledge of important policy, prominent arguments/theory and seminal readings, and experience in (1) to ensure students' awareness and understanding of content that is grounded in the foundational literature of the field of special education (including deaf education and interpreter education); b) develop awareness of the historical, legal, and philosophical underpinnings of special education and its current status within the United States and internationally; c) develop awareness of the intersection of special education with poverty, race, culture, and language; and d) become cognizant of foundational and current research and evidence-based instructional and assessment practices that characterize special education as a discipline. Impact on other units: no impact on other units. This course is cross-listed with SPED 601. This course will be used to satisfy requirements for the PhD Education Major - Special Education/Deaf Education/Interpreter Education concentration. This course is one of a series that has been previously taught in the concentration. Financial impact: none as this course is already being taught by current faculty.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: Periodic curricular review by the Faculty.

**EDDE 603 Reading and Applying Research for Diverse Learners: Single-Subject Approaches (3)** This course has four goals: (1) to increase students' familiarity with policy and seminal readings in educational research focusing on diverse learners (2) to increase students' understanding of educational research concepts and procedures in the context of education of diverse learners, (3) to develop students' skills for analyzing and critiquing educational research related to diverse learners, and (4) to develop skills in preparing research proposals and manuscripts. Specifically, this course is designed to help students build a research agenda by preparing them to conduct research using single subject methodologies designs within the context of current and/or promising, theoretical, applied and/or evidence-based practices in instruction and/or curriculum related to diverse learners.

Formerly: EDDE 603 Reading and Applying Research for Diverse Learners: Single-Subject Approaches I (3) Four goals of course are: (1) to increase students' familiarity with policy and seminal readings in educational research focusing on diverse learners (2) to increase students' understanding of educational research concepts and procedures in the context of education of diverse learners, (3) to develop students' skills for analyzing and critiquing educational research related to diverse learners, and (4) to develop skills in preparing research proposals and manuscripts. Specifically, this course is designed to help students build a research agenda by preparing them to conduct research using single subject methodologies designs within the context of current and/or promising, theoretical, applied and/or evidence-based practices in instruction and/or curriculum related to diverse learners. This course is Part 1 of a two course sequence.

Rationale: This course is revised to update current knowledge and skills for doctoral students in the Special Education/Deaf Education/Interpreter Education PhD concentration with knowledge of important policy, prominent arguments/theory, seminal readings, and experience in conducting single-subject methodological research designs often used in applied educational research related to diverse learners. Impact on other units: no impact on other units. This course is cross-listed with SPED 603. This course will be used to satisfy requirements for the PhD Education Major - Special Education/Deaf Education/Interpreter Education concentration. This course is one of a series that has been previously taught in the concentration. It is not designed to be used to meet the research component of TPTE's PhD in Education and thus will not negatively impact the enrollment in required research courses in other units (e.g., statistics or research design courses in Educational Psychology and Counseling or Statistics). Financial impact: none. this course is already being offered.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: Periodic curricular review by the faculty.

**EDDE 605 Reading and Applying Research for Diverse Learners: Secondary Data Analyses (3)** Designed to provide doctoral students with an opportunity to explore a wide range of trends in the field of educating diverse learners and introduces students to methods for transferring and processing existing data sources in the social science field. This course is intended to help students solidify their knowledge, skills, and dispositions related to research design, research methods, and scholarly writing by applying and expanding these skills in the context of educational research, particularly as concerning diverse learners, through the secondary data sources. This course will also provide students with the background necessary to develop skills in conducting research and writing scholarly manuscripts.

Formerly: EDDE 605 Trends and Inquiry in Diverse Learners: Research Proposal and Grant Writing (3) Designed to provide doctoral students with an opportunity to explore a wide range of trends in the field of educating diverse learners and develop effective grant writing skills that are essential to acquire competitive funding from government agencies and private foundations. This course is intended to help students solidify their knowledge, skills, and dispositions related to research design, research methods, and scholarly writing by applying and

expanding them in the context of educational research, particularly diverse learners, through grant writing process. This course will also provide students with the background necessary to develop a competitive research funding proposal. This class will focus on the following three parts: Analysis of the literature, research methodologies, and grant writing process.

Rationale: This course is revised to update current knowledge and skills for doctoral students in the Special Education/Deaf Education/Interpreter Education PhD concentration to develop methods for transferring and processing existing data sources in the social science field. Impact on other units: No impact on other units. This course will be cross-listed with SPED 605. This course will be used to satisfy requirements for the PhD Education Major - Special Education/Deaf Education/Interpreter Education concentration. This course is one of a series that has been previously taught in the concentration. It is not designed to be used to meet the research component of TPTE's PhD in Education and thus will not negatively impact the enrollment in required research courses in other units (e.g., statistics or research design courses in Educational Psychology and Counseling or Statistics). Financial impact: none. This course is currently being offered.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: Periodic curricular review by the faculty.

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

**EDDE 602 Reading and Applying Research for Diverse Learners: Group and Correlational Approaches (3)** Will focus on seminal readings in policy and research related to education of diverse learners using group experimental and quasi-experimental and correlational research designs. The goals of this course are: (1) to increase students' familiarity with seminal readings in educational research focusing on diverse learners, (2) to increase students' understanding of educational research focusing on diverse learners, (3) to develop students' skills for analyzing and critiquing educational research with diverse populations, and (4) to further development of a research agenda by honing skills in preparing research proposals targeting needs of diverse learners.

Formerly: EDDE 602 Reading and Applying Research for Diverse Learners: Group and Correlational Approaches II (3) Will focus on seminal readings in policy and research related to education of diverse learners using group experimental and quasi-experimental and correlational research designs. The goals of this course are: (1) to increase students' familiarity with seminal readings in educational research focusing on diverse learners, (2) to increase students' understanding of educational research focusing on diverse learners, (3) to develop students' skills for analyzing and critiquing educational research with diverse populations, and (4) to further development of a research agenda by honing skills in preparing research proposals targeting needs of diverse learners. This course is Part 2 of a two course sequence. (DE) Prerequisite(s): 601.

Rationale: This course is revised to update current knowledge and skills for doctoral students in the Special Education/Deaf Education/Interpreter Education PhD concentration with knowledge of important policy, prominent arguments/theory, seminal readings and experience in conducting group (experimental and quasi-experimental) and correlational research designs often used in applied educational research related to diverse learners. Impact on other units: no impact on other units. This course is cross-listed with SPED 602. This course will be used to satisfy requirements for the PhD Education Major - Special Education/Deaf Education/Interpreter Education concentration. This course is one of a series that has been previously taught in the concentration. It is not designed to be used to meet the research component of TPTE's PhD in Education and thus will not negatively impact the enrollment in required research courses in other units (e.g., statistics or research design courses in Educational Psychology and Counseling or Statistics). Financial impact: none. This course is already being offered.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: Periodic curricular review by the Faculty.

**EDDE 604 Reading and Applying Research for Diverse Learners: Meta-Analytic Methodology (3)** Introduces methods for conducting a quantitative research synthesis using meta-analysis. Will focus on (a) statistical methods for meta-analysis (summarization of data from multiple existing studies to make an overall conclusion) and (b) strategies for interpretation of meta-analysis results. Settings will include studies with continuous, binary and correlations coefficient outcomes. The focus of the course is both practical and methodological and includes background on all parts of the research synthesis process, including: problem formulation, conducting a literature search, data evaluation, effect size coding, data analysis, and reporting the results. Statistical methods will include fixed-effects, random-effects models, measures of heterogeneity, prediction intervals, meta regression and power assessment. Strategies for interpretation will include subgroup analysis and assessment of publication bias. The course will emphasize basic theory and underlying statistical methods, computational approaches, and the interpretation of results from published studies.

Formerly: EDDE 604 Reading and Applying Research for Diverse Learners: Single-Subject Approaches II (3) The purpose of this course is: (1) to increase students' familiarity with policy and seminal readings in educational research focusing on diverse learners, (2) increase students' understanding of educational research concepts and procedures in the context of education of diverse learners, (3) develop students' skills for analyzing and critiquing educational research related to diverse learners, (4) develop skills in preparing research proposals and manuscripts, (5) conduct a single-subject study, and (6) disseminate its findings. Specifically, this course is designed to prepare learners to build a research agenda by conducting research using single subject methodologies designs within the context of current and/or promising, theoretical, applied and/or evidence-based practices in instruction and/or curriculum related to diverse learners. This course is Part 2 of a two course sequence. (DE) Prerequisite(s): 603.

Rationale: This course is revised to update current knowledge and skills for doctoral students in the Special Education/Deaf Education/Interpreter Education PhD concentration with knowledge of important policy, prominent arguments/theory, and seminal readings, and experience in designing and conducting research using quantitative research synthesis meta-analysis procedures within the context of current and/or promising, theoretical, applied and/or evidence-based practices in instruction and/or curriculum for diverse learners and/or P-12 students or adults with disabilities. Impact on other units: no impact on other units. This course is cross-listed with SPED 604. This course will be used to satisfy requirements for the PhD Education Major - Special Education/Deaf Education/Interpreter Education concentration. This course is one of a series that has been previously taught in the concentration. It is not designed to be used to meet the research component of

TPTE's PhD in Education and thus will not negatively impact the enrollment in required research courses in other units (e.g., statistics or research design courses in Educational Psychology and Counseling or Statistics). Financial impact: none. This course is already offered.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: Periodic curricular review by the Faculty.

#### **REVISE TO ADD (RE) PREREQUISITE, COMMENT, AND REGISTRATION RESTRICTION(S)**

##### **EDDE 523 Practicum with the Deaf and Hard of Hearing (3)**

*(RE) Prerequisite: ASL 212.*

*Comment: Taught in American Sign Language.*

*Registration Restriction(s): Admission to teacher education.*

Rationale: EDDE 523 is taken in the final semester prior to internship. Students should have completed ASL 212 and have been admitted to teacher education. The course is fully taught in ASL. Impact on other units: none. Financial impact: none.

Learner outcomes supported by this change: No learner outcomes are affected by this change.

Support for this change from assessment activities: instructor observation.

#### **REVISE TO ADD REGISTRATION RESTRICTION(S)**

##### **EDDE 419 Speech Development and Aural Habilitation/Rehabilitation of the Deaf and Hard of Hearing (3)**

*Registration Restriction(s): Admission to teacher education or instructor permission.*

Rationale: students taking this course have been admitted to teacher education. Impact on other units: none. Financial impact: none.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: Team review of the program.

#### **REVISE TO REMOVE RECOMMENDED BACKGROUND AND ADD COMMENT AND REGISTRATION RESTRICTION(S)**

##### **EDDE 415 Language Development of the Deaf and Hard of Hearing I (3)**

*Comment: Taught in American Sign Language.*

*Registration Restriction(s): Admission to teacher education or instructor permission.*

Formerly:) Recommended Background: Portion of class is delivered in American Sign Language (ASL). Students must have at least intermediate ASL skills to enroll.

##### **EDDE 416 Language Development of the Deaf and Hard of Hearing II (3)**

*Comment: Taught in American Sign Language.*

*Registration Restriction(s): Admission to teacher education or instructor permission.*

Formerly: EDDE 416 Language Development of the Deaf and Hard of Hearing II (3) Recommended Background: Portion of class is delivered in American Sign Language (ASL). Students must have at least intermediate ASL skills to enroll.

Rationale: These courses are taken by students who have been admitted to teacher education. The classes are fully taught in American Sign Language. Impact on other units: none. Financial impact: none.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: Team review of the program.

### **(ENED) ENGLISH EDUCATION**

#### **REVISE TITLE**

##### **ENED 592 Sociolinguistics and the Teaching of English (3)**

Formerly: ENED 592 Linguistics and the Teaching of English (3)

Rationale: This course is being used to satisfy completion of the new English Education/ESL Education program. State licensure requirements include a course in "sociolinguistics." The content of this course is not changing. The name just needs to be changed so that "sociolinguistics" appears on student transcripts. Impact on other units: none. Financial impact: none.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: no assessment activities done. This change is necessary to comply with state licensing requirements.

## (MEDU) MATHEMATICS EDUCATION

### REVISE TITLE, DESCRIPTION, AND ADD RECOMMENDED BACKGROUND

**MEDU 522 Using Programs and Materials to Differentiate Mathematics Instruction (3)** Strategies for differentiating mathematics instruction, including the examination and use of programs and materials (manipulatives, software, apps, etc.) to meet the needs of diverse learners.

*Recommended Background: MEDU 485, 530, 543, OR 583.*

Formerly: MEDU 522 Programs and Materials in School Mathematics (3) Examination, development and use of materials for creating an active learning environment for learning mathematics for all ages.

Rationale: This change updates the content to align with current research trends in mathematics education that focus on meeting the needs of a diverse population and reflects the way the course is currently taught. Impact on other units: none. Financial impact: none.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: This is a minor wording change to better reflect the course content and to increase enrollment.

## (SCED) SOCIAL SCIENCE EDUCATION

### REVISE TITLE AND DESCRIPTION

**SSCE 543 Teaching Middle and Secondary Social Studies (3)** Activities in this class are intended to promote the professional growth of pre-service and in-service social studies teachers through study, design, and implementation of social studies curriculum and instructional strategies. In particular, methods of teaching contemporary social science content in middle and secondary classrooms will be explored.

Formerly: SSCE 543 Teaching Social Studies in Middle Grades (3) Activities in this class are intended to promote the professional growth of pre-service and in-service social studies teachers through study, design, and implementation of social studies curriculum and instructional strategies. In particular, methods of teaching contemporary social science content in middle grade level classrooms will be explored.

Rationale: In order to maintain consistency with the new ENED/ESL program, the number of hours to complete the Secondary Education Minor needs to change to 19. Therefore, we are proposing the SSCE 454: Teaching Strategies and Issues in Secondary Social Studies Education to be taken in the Spring semester prior to the internship year for undergraduate credit to complete the 19-hour minor. The newly revised SSCE 543: Teaching Middle and Secondary Social Studies, would now become the graduate level methods course that interns would take during the Fall semester of their internship year. This will not affect students in any way, as the former SSCE 543: Teaching Social Studies in Middle Grades was designed for the middle grades program that no longer exist due to state licensure changes. Impact on other units: none. Financial impact: none.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: No assessment activities were conducted. This is a minor change that will offer students in our program a more comprehensive social science education experience.

## (SPED) SPECIAL EDUCATION

### REVISE TITLE, DESCRIPTION (PRIMARY COURSES)

**SPED 601 Seminar in Education of Exceptional, Diverse and At-risk Learners (3)** The purpose of this course is becoming an informed researcher, teacher educator, and/or leader in the field of education, the goals of this course are: a) to ensure students' awareness and understanding of content that is grounded in the foundational literature of the field of special education (including deaf education and interpreter education); b) to develop awareness of the historical, legal, and philosophical underpinnings of special education and its current status within the United States and internationally; c) to develop awareness of the intersection of special education with poverty, race, culture, and language; and d) to become cognizant of foundational and current research and evidence-based instructional and assessment practices that characterize special education as a discipline. *Cross-listed: (Same as Education of the Deaf and Hard of Hearing 601.)*

Formerly: SPED 601 Reading and Applying Research for Diverse Learners: Group and Correlational Approaches I (3) Will focus on seminal readings in policy and research related to education of diverse learners using group experimental and quasi-experimental and correlational research designs. Goals of the course are: (1) to increase students' familiarity with policy and seminal readings in educational research focusing on diverse learners, (2) to increase students' understanding of educational research focusing on diverse learners, (3) to develop students' skills for analyzing and critiquing educational research with diverse populations, and (4) to begin development of a research agenda by honing skills in preparing research proposals targeting needs of diverse learners. Course 601 is Part 1 of a two course sequence.

Rationale: this course is revised to update current knowledge and skills for doctoral students in the Special Education/Deaf Education/Interpreter Education PhD concentration with knowledge of important policy, prominent arguments/theory and seminal readings, and experience in (1) to ensure students' awareness and understanding of content that is grounded in the foundational literature of the field of special education (including deaf education and interpreter education); b) develop awareness of the historical, legal, and philosophical underpinnings of special education and its current status within the United States and internationally; c) develop awareness of the intersection of special education with poverty, race, culture, and language; and d) become cognizant of foundational and current research and evidence-based instructional and assessment practices that characterize special education as a discipline. Impact on other units: no impact on other units. This course is cross-listed with EDDE 601. This course will be used to satisfy requirements for the PhD Education Major - Special

Education/Deaf Education/Interpreter Education concentration. This course is one of a series that has been previously taught in the concentration. Financial impact: none as this course is already being taught by current faculty.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: Periodic curricular review by the Faculty.

**SPED 603 Reading and Applying Research for Diverse Learners: Single-Subject Approaches (3)** This course has four goals: (1) to increase students' familiarity with policy and seminal readings in educational research focusing on diverse learners (2) to increase students' understanding of educational research concepts and procedures in the context of education of diverse learners, (3) to develop students' skills for analyzing and critiquing educational research related to diverse learners, and (4) to develop skills in preparing research proposals and manuscripts. Specifically, this course is designed to help students build a research agenda by preparing them to conduct research using single subject methodologies designs within the context of current and/or promising, theoretical, applied and/or evidence-based practices in instruction and/or curriculum related to diverse learners.

*Cross-listed: (Same as Education of the Deaf and Hard of Hearing 603.)*

Formerly: SPED 603 Reading and Applying Research for Diverse Learners: Single-Subject Approaches I (3) Four goals of course are: (1) to increase students' familiarity with policy and seminal readings in educational research focusing on diverse learners (2) to increase students' understanding of educational research concepts and procedures in the context of education of diverse learners, (3) to develop students' skills for analyzing and critiquing educational research related to diverse learners, and (4) to develop skills in preparing research proposals and manuscripts. Specifically, this course is designed to help students build a research agenda by preparing them to conduct research using single subject methodologies designs within the context of current and/or promising, theoretical, applied and/or evidence-based practices in instruction and/or curriculum related to diverse learners. This course is Part 1 of a two course sequence.

Rationale: This course is revised to update current knowledge and skills for doctoral students in the Special Education/Deaf Education/Interpreter Education PhD concentration with knowledge of important policy, prominent arguments/theory, seminal readings, and experience in conducting single-subject methodological research designs often used in applied educational research related to diverse learners. Impact on other units: no impact on other units. This course is cross-listed with EDDE 603. This course will be used to satisfy requirements for the PhD Education Major - Special Education/Deaf Education/Interpreter Education concentration. This course is one of a series that has been previously taught in the concentration. It is not designed to be used to meet the research component of TPTE's PhD in Education and thus will not negatively impact the enrollment in required research courses in other units (e.g., statistics or research design courses in Educational Psychology and Counseling or Statistics). Financial impact: none. this course is already being offered.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: Periodic curricular review by the Faculty.

**SPED 605 Reading and Applying Research for Diverse Learners: Secondary Data Analyses (3)** Designed to provide doctoral students with an opportunity to explore a wide range of trends in the field of educating diverse learners and introduces students to methods for transferring and processing existing data sources in the social science field. This course is intended to help students solidify their knowledge, skills, and dispositions related to research design, research methods, and scholarly writing by applying and expanding these skills in the context of educational research, particularly as concerning diverse learners, through the secondary data sources. This course will also provide students with the background necessary to develop skills in conducting research and writing scholarly manuscripts.

*Cross-listed: (Same as Education of the Deaf and Hard of Hearing 605.)*

Formerly: SPED 605 Trends and Inquiry in Diverse Learners: Research Proposal and Grant Writing (3) Designed to provide doctoral students with an opportunity to explore a wide range of trends in the field of educating diverse learners and develop effective grant writing skills that are essential to acquire competitive funding from government agencies and private foundations. This course is intended to help students solidify their knowledge, skills, and dispositions related to research design, research methods, and scholarly writing by applying and expanding them in the context of educational research, particularly diverse learners, through grant writing process. This course will also provide students with the background necessary to develop a competitive research funding proposal. This class will focus on the following three parts: Analysis of the literature, research methodologies, and grant writing process.

Rationale: This course is revised to update current knowledge and skills for doctoral students in the Special Education/Deaf Education/Interpreter Education PhD concentration to develop methods for transferring and processing existing data sources in the social science field. Impact on other units: No impact on other units. This course will be cross-listed with EDDE 605. This course will be used to satisfy requirements for the PhD Education Major - Special Education/Deaf Education/Interpreter Education concentration. This course is one of a series that has been previously taught in the concentration. It is not designed to be used to meet the research component of TPTE's PhD in Education and thus will not negatively impact the enrollment in required research courses in other units (e.g., statistics or research design courses in Educational Psychology and Counseling or Statistics). Financial impact: none. This course is currently being offered.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: Periodic curricular review by the Faculty.

## **REVISE TITLE, DESCRIPTION, AND DROP (DE) PREREQUISITE (PRIMARY COURSES)**

**SPED 602 Reading and Applying Research for Diverse Learners: Group and Correlational Approaches (3)** Will focus on seminal readings in policy and research related to education of diverse learners using group experimental and quasi-experimental and correlational research designs. The goals of this course are: (1) to increase students' familiarity with seminal readings in educational research focusing on diverse learners, (2) to increase students' understanding of educational research focusing on diverse learners, (3) to develop students' skills for analyzing and critiquing educational research with diverse



populations, and (4) to further development of a research agenda by honing skills in preparing research proposals targeting needs of diverse learners.

*Cross-listed: (Same as Education of the Deaf and Hard of Hearing 602.)*

Formerly: SPED 602 Reading and Applying Research for Diverse Learners: Group and Correlational Approaches II (3) Will focus on seminal readings in policy and research related to education of diverse learners using group experimental and quasi-experimental and correlational research designs. The goals of this course are: (1) to increase students' familiarity with seminal readings in educational research focusing on diverse learners, (2) to increase students' understanding of educational research focusing on diverse learners, (3) to develop students' skills for analyzing and critiquing educational research with diverse populations, and (4) to further development of a research agenda by honing skills in preparing research proposals targeting needs of diverse learners. This course is Part 2 of a two course sequence.  
(DE) Prerequisite(s): 601.

Rationale: This course is revised to update current knowledge and skills for doctoral students in the Special Education/Deaf Education/Interpreter Education PhD concentration with knowledge of important policy, prominent arguments/theory, seminal readings and experience in conducting group (experimental and quasi-experimental) and correlational research designs often used in applied educational research related to diverse learners. Impact on other units: no impact on other units. This course is cross-listed with EDDE 602. This course will be used to satisfy requirements for the PhD Education Major - Special Education/Deaf Education/Interpreter Education concentration. This course is one of a series that has been previously taught in the concentration. It is not designed to be used to meet the research component of TPTE's PhD in Education and thus will not negatively impact the enrollment in required research courses in other units (e.g., statistics or research design courses in Educational Psychology and Counseling or Statistics). Financial impact: none. This course is already being offered.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: Periodic curricular review by the Faculty.

**SPED 604 Reading and Applying Research for Diverse Learners: Meta-Analytic Methodology (3)** Introduces methods for conducting a quantitative research synthesis using meta-analysis. This course will focus on (a) statistical methods for meta-analysis (summarization of data from multiple existing studies to make an overall conclusion) and (b) strategies for interpretation of meta-analysis results. Settings will include studies with continuous, binary and correlations coefficient outcomes. The focus of the course is both practical and methodological and includes background on all parts of the research synthesis process, including: problem formulation, conducting a literature search, data evaluation, effect size coding, data analysis, and reporting the results. Statistical methods will include fixed-effects, random-effects models, measures of heterogeneity, prediction intervals, meta regression and power assessment. Strategies for interpretation will include subgroup analysis and assessment of publication bias. The course will emphasize basic theory and underlying statistical methods, computational approaches, and the interpretation of results from published studies.

*Cross-listed: (Same as Education of the Deaf and Hard of Hearing 604.)*

Formerly: SPED 604 Reading and Applying Research for Diverse Learners: Single-Subject Designs II (3) The purpose of this course is: (1) to increase students' familiarity with policy and seminal readings in educational research focusing on diverse learners. (2) increase students' understanding of educational research concepts and procedures in the context of education of diverse learners, (3) develop students' skills for analyzing and critiquing educational research related to diverse learners, (4) develop skills in preparing research proposals and manuscripts, (5) conduct a single-subject study, and (6) disseminate its findings. Specifically, this course is designed to prepare learners to build a research agenda by conducting research using single subject methodologies designs within the context of current and/or promising, theoretical, applied and/or evidence-based practices in instruction and/or curriculum related to diverse learners. This course is Part 2 of a two course sequence.  
(DE) Prerequisite(s): 603.

Rationale: This course is revised to update current knowledge and skills for doctoral students in the Special Education/Deaf Education/Interpreter Education PhD concentration with knowledge of important policy, prominent arguments/theory, and seminal readings and experience in conducting group (experimental and quasi-experimental) and correlational research designs often used in applied educational research related to diverse learners. Impact on other units: no impact on other units. This course is cross-listed with EDDE 604. This course will be used to satisfy requirements for the PhD Education Major - Special Education/Deaf Education/Interpreter Education concentration. This course is one of a series that has been previously taught in the concentration. It is not designed to be used to meet the research component of TPTE's PhD in Education and thus will not negatively impact the enrollment in required research courses in other units (e.g., statistics or research design courses in Educational Psychology and Counseling or Statistics). Financial impact: none. This course is already offered.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: Periodic curricular review by the Faculty.

## **(WLEL) WORLD LANGUAGE/ENGLISH AS A SECOND LANGUAGE EDUCATION**

### **ADD 400-LEVEL COURSES FOR GRADUATE CREDIT**

**WLEL 445 Teaching World Languages: Grades PreK-5 (3)** ACTFL standards-based pedagogy, curricula, research and instructional resources focused on the PreK-5 WL classroom.

*Recommended Background: Completion or near completion of world language hours for certification.*

*Registration Restriction(s): Admission to teacher education or consent of instructor.*

Rationale: the state of Tennessee now offers PreK-12 licensure in world languages. Teaching WL: Grades PreK-5 has been offered as a TPTE 593 or 595 course for several years and it is now time to give it a WLEL course number. This course will be offered for both UG and Grad credit and will be submitted to the UG CRC at the Oct 2016 meeting. Impact on other units: none. Format and course location: this course is offered online with regular virtual real-time class meetings. Financial impact: none. This course is already being taught by current WLEL faculty.

Learner outcomes supported by this change: no learner outcomes are impacted by this change.

Support for this change from assessment activities: This change is necessary to comply with state licensing requirements in world languages

**WLEL 475 Grammar for ESL Teachers (3)** Pedagogical approaches, second language acquisition research and resources for teaching English grammar to English language learners. Required for PreK-12 ESL licensure.

*Recommended Background: Completion or near completion of hours for ESL certification.*

Rationale: the state of Tennessee requires a pedagogical grammar class for PreK-12 ESL licensure. In recent years, TPTE 595 was the course number assigned to this class. It is now time to give it a WLEL course number. This course will be offered for both UG and Grad credit and will be submitted to the UG CRC at the Oct 2016 meeting. Impact on other units: none. Course format and location: this class is offered in a traditional on-campus format. Financial impact: none. this course is already being taught by current WLEL faculty.

Learner outcomes supported by this change: no learner outcomes are impacted by this change.

Support for this change from assessment activities: this change is necessary to comply with state licensing requirements in English as a Second Language.

## ADD

**WLEL 550 Second Language Assessment and Standards-Based instruction (3)** Will focus on how to develop, use, score and interpret a variety of second language assessments, give constructive feedback to students and use the results of the assessments to inform standards-based language instruction.

Rationale: the proposed course would enrich the current menu of world language education offerings, enhancing all graduate programs in world language education in general and offering a class focused on language assessment issues in particular, that inform standards-based instruction. Impact on other units: none. Format and course location: this course is offered online with regular virtual real-time class meetings. Financial impact: none. Existing WL faculty will teach the course.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: no assessment activities done. This course addition will enhance all world language graduate degree and licensure programs.

## II. PROGRAM CHANGES

### DEPARTMENT OF CHILD AND FAMILY STUDIES

#### ❖ ADD CERTIFICATE – INTERNATIONAL, CHILDREN, YOUTH, AND FAMILIES

In the 2017-2018 Graduate Catalog, add heading, text and requirements for new certificate: International, Children, Youth, and Families as follows:

#### **International Children, Youth, and Families Graduate Certificate**

The 12-hour graduate certificate in International Children, Youth, and Families is intended for currently admitted graduate students wishing to develop knowledge and skills necessary for studying and working with children, youth, or families from diverse cultural backgrounds internationally and in the U.S. Certificate candidates must currently be admitted to a graduate program at the university or hold a terminal degree and be admitted to the graduate school. Course work for the certificate must be completed at the University of Tennessee within a five-year period. A minimum 3.5 GPA must be earned in all certificate courses. All courses must be selected from the list below. Other courses may, where appropriate, be substituted for the courses listed below with the permission of the program coordinator.

#### Requirements

- CFS 635
- At least one of the following: CFS 560 or CFS 555.
- At least two of the following: CFS 552, CSE 591, CSE 550, CSE 592, CSE 549, SPST 504, ANTH 531, ANTH 421.
- Attainment of a minimum 3.5 grade point average in the certificate coursework.

Rationale: The new certificate program will support graduate students who intend to work with or study children/youth and families from diverse cultural backgrounds. CFS has four existing courses that relate to this content (CFS 635, CFS 560, CFS 555, and CFS 552) and six faculty members with expertise in international children/youth and families. The certificate program will allow students to exemplify unique training in international children/youth and families and will enhance their preparation for entering CFS-related careers, which increasingly request or require preparation for working with diverse populations. There are no topically equivalent certificate programs at the university. Impact on other units: None. Financial Impact: None; utilizes classes already in the graduate catalog. The CFS required courses will be taught by existing faculty as part of their normal teaching loads. The inclusion of optional courses from other departments will not have a financial impact and permission from each department was gained.

Learning outcomes supported: Supports Learner Outcomes #1-3 in the M.S. and PhD programs.

Support from assessment activities: Available offerings of certificates were assessed and no topically equivalent certificate exists. Due to the existing CFS faculty expertise and course offerings related to children/youth and families in international contexts, the faculty deemed that this certificate is warranted and will help students specialize in this content area. With growing interest in international research/experience in CFS-related disciplines this will enhance student preparation for entering CFS-related careers.

\*Supplemental information: Permission was gained from departments to include their courses in the list of options for the certificate. Documentation of permission is included as a supplemental attachment.

## DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING

### ❖ DROP MAJOR, DEGREE AND CONCENTRATION

Education major, MS  
Cultural Studies of Educational Foundations concentration

The concentration of Cultural Studies of Educational Foundations is moving from under the Department of Educational Psychology and Counseling to the Department of Theory and Practice in Teacher Education. However, the name of the major will change from Education to Teacher Education for the MS degree.

Rationale: The major, degree and concentration are being moved to the Department of Theory and Practice in Teacher Education. Impact on other units: Will impact Department of Theory and Practice in Teacher Education. Financial Impact: None.

Learning outcomes supported: No change in support for learning outcomes

Support from Assessment Activities: Department Heads and Dean decided the most fitting departmental placement for CSE.

### MOVE GRADUATE CERTIFICATE – CULTURAL STUDIES IN EDUCATION – FROM THE DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING TO THE DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

In the 2017-2018 Graduate Catalog, move the Cultural Studies in Education Graduate Certificate from Department of Educational Psychology and Counseling to the Department of Theory and Practice in Teacher Education

Rationale: The Cultural Studies Program is being moved to the Department of Theory and Practice in Teacher Education. Impact on other units: Will impact Department of Theory and Practice in Teacher Education. Financial Impact: None. Learning outcomes supported: No change in support for learning outcomes

Support from Assessment Activities: Department Heads and Dean decided the most fitting departmental placement for CSE.

### REVISE REQUIREMENTS – COUNSELING MAJOR, MS (CLINICAL MENTAL HEALTH COUNSELING CONCENTRATION)

In the 2017-2018 Graduate Catalog, revise the showcase to add course COUN 545 to the list of required courses and to remove the human development course. Total hours remain the same. The showcase will look as follows:

Requirements	Hours	Credit
COUN 480, COUN 535, COUN 551, COUN 554, COUN 555, COUN 525, COUN 545, COUN 552, COUN 540, COUN 559 (9 hours across an academic or calendar year), COUN 556, COUN 570		42
SCHP 690		3
EDPY 550 – Research Course		3
Four electives or a thesis (COUN 500 for 6 hours and two electives)		12
Total Hours		60

Rationale: Clarifying requirements to guide students to faculty identified best option, rather than “by advisement” course area

Impact on other units: None. Financial Impact: None; the specified course, COUN 545, is currently taught once per year and can accommodate the numbers of students from the Clinical Mental Health Counseling Concentration of the Counseling, MS.

Learning Outcomes Supported: SACS SLOs for the Counseling MS major are not directly supported by this change.

Support from assessment activities: Faculty reviewed course options and identified course to be specified.

## REVISE REQUIREMENTS – EVALUATION STATISTICS AND MEASUREMENT GRADUATE CERTIFICATE

In the 2017-2018 Graduate Catalog, revise the requirements for the Evaluation Statistics and Measurement Certificate as follows:

- 1) To add course EDPY 533 to the course listings
- 2) To add the coordinators name and email as the last sentence/paragraph of the description: as shown below

Contact the ESM Certificate Coordinator, Dr. Jennifer Ann Morrow, at jamorrow@utk.edu for questions.

Rationale: EDPY 533 was inadvertently left off the list of courses when changes were made for fall 2012. EDPY 533 is a prerequisite course for EDPY 534. In the past 4 years the requests for substitutions for EDPY 678 have been minimal and typically are students requesting independent studies courses that do not contain the same skill sets as EDPY 678 as replacements. The ESM faculty believe students should show competence in the skills taught in EDPY 678 in order to earn a certificate in ESM. The coordinators name is added with email so that students can know where to find the certificate and who to contact. Impact on other units: None. This is only a housekeeping change. Financial Impact: None. This change does not change the existing faculty load.

Learner Outcomes Supported: This change addresses SLO #2: Students will demonstrate the ability to conduct a responsive applied evaluation, statistics, or measurement study leading to a report of study findings and conclusions for submission to an actual client. Having students take EDPY 678 will enhance students' ability to meet this SLO.

Support from assessment activities: This change addresses assessment feedback (SAIS, SACS end of year surveys, and ESM program Needs Assessment) that discusses the usefulness of the skills learned in EDPY 678 and the importance of having advanced statistics training as part of this program.

## REVISE REQUIREMENTS – QUALITATIVE RESEARCH METHODS IN EDUCATION GRADUATE CERTIFICATE

In the 2017-2018 Graduate Catalog, remove current catalog text and replace with the following:

The 15-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 University of Tennessee doctoral students (or individuals who have already earned a doctoral degree) wishing to develop their skills in conducting qualitative research studies. Certificate candidates must currently be admitted to a doctoral program at the university or hold a terminal research degree.

### Requirements

- EDPY 559 and EDPY 659.
- At least three upper-level qualitative courses such as: ANTH 531, CCI 643, CFS 650, CMST 542, CSE 660, CSE 526, EDPY 631, ELPS 617, ELPS 618, GEOG 516, LEES 659, NURS 607, SOCI 640.
- Attainment of a minimum 3.5 grade point average in the certificate coursework.
- Other courses may, where appropriate, be substituted for the courses listed above with the written permission of the certificate coordinator.
- Individuals must submit an appropriate work sample (e.g., completed qualitative research report, completed qualitative research paper) that showcases their skills in qualitative research methods in education. This work sample will be reviewed by the ESM faculty.
- 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 15 credits of the courses listed above.
- All courses must be completed within the five years of applying for a certificate.

Contact the ESM Qualitative Research Certificate Coordinator, Dr. Lauren Moret, at lmoret@utk.edu for questions.

Formerly: The 15-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

- EDPY 559.
- At least one of the following: EDPY 659, CFS 650, ELPS 618.
- At least three of the following: EDPY 631, ELPS 617, CSE 660, CSE 526.
- Attainment of a minimum 3.5 grade point average in the certificate coursework.
- Completed peer-reviewed qualitative research study: such as a conference presentation, completed qualitative dissertation, or qualitative research presentation.

Other courses may, where appropriate, be substituted for the courses listed above with the permission of the program coordinator.

Rationale: Several courses in the current listing are no longer offered. Several courses are not offered every year (CFS 650: 3yr cycle; EDPY 659: 2yr cycle), making it necessary to offer more options for advanced level learning. There are more qualitative research courses being offered across campus and it is important to make the students aware of these options. Independent study courses do not contain the same skill sets as EDPY 659 and other advanced level courses with focused syllabi, therefore those type of classes should not act as replacements. The Qualitative Certificate faculty believe students should show competence in the skills taught in EDPY 659 in order to earn a certificate in QUAL. The coordinator is named with email so that students can know where to find the certificate & who to contact. Impact on other units: None. This is only a housekeeping change. Financial Impact: None. This change does not change the existing faculty load.

Learner Outcomes Supported: These changes support SACS SLO #1 - Students will demonstrate the ability to design ethical, naturalistic qualitative research addressing needs based on a literature gap or client interest and SLO #2 - Students will demonstrate the ability to conduct naturalistic qualitative research leading to a report of study findings, conclusions, and implications for submission to a conference, journal, or client.

Support from assessment activities: These changes address assessment feedback (2015 College Feedback Form) that discusses the usefulness of the tools used to supply faculty with feedback and greater aligns with the new SACS rubrics.

## DEPARTMENT OF KINESIOLOGY, RECREATION, AND SPORT STUDIES

### REVISE REQUIREMENTS – KINESIOLOGY MAJOR, MS (EXERCISE PHYSIOLOGY CONCENTRATION)

In the 2017-2018 Graduate Catalog, revise the list under the heading, “Recommended Electives” as follows:  
for course KNS 533 – remove the wording “or STAT 531” next to course. Course should now list as follows:

KNS 533 - Psychology of Sport

Formerly: KNS 533 Psychology of Sport (or STAT 531)

Rationale: These changes reflect the current KNS curriculum. STAT 531 is not an acceptable substitution for KNS 533 (Psychology of Sport).  
Impact on other units: None. Financial impact: None.

Support from assessment activities: Faculty review of showcase.

### REVISE THE RECREATION AND SPORT MANAGEMENT MAJOR, MS DESCRIPTION TEXT

In the 2017-2018 Graduate Catalog, revise the first paragraph, third sentence as follows:

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.

Rationale: revision of grammatical error. Impact on other units: none. Financial impact: none.

Support from assessment activities: none.

### REVISE REQUIREMENTS – RECREATION AND SPORT MANAGEMENT MAJOR, MS – SPORT MANAGEMENT CONCENTRATION (FOR BOTH THESIS AND NON-THESIS OPTIONS)

In the 2017-2018 Graduate Catalog, revise the showcase and footnote 3 as follows. The revision increases the required hours from 33 to 36.

Sport Management concentration (Non-Thesis Option)	Credit Hours
RSM 508, RSM 511, RSM 535	9
<sup>1</sup> Recreation and Sport Management Electives	12
<sup>2</sup> Sport Studies Elective or RSM 556	3
<sup>3</sup> Electives	9
RSM 501 – Project	<u>3</u>
Total Hours	<b>36</b>

Sport Management concentration (Thesis Option)	Credit Hours
RSM 508, RSM 511, RSM 535	9
<sup>1</sup> Recreation and Sport Management Electives	12
<sup>2</sup> Sport Studies Elective or RSM 556	3
<sup>3</sup> Electives	6
RSM 500 – Thesis	<u>6</u>
Total Hours	<b>36</b>

<sup>3</sup> These courses can be taken within the department. A total of three (3) hours may be earned in RSM 590 and six (6) hours RSM 595 combined. Students cannot earn hours toward graduation in both.

Formerly:

Sport Management concentration (Non-Thesis Option)	Credit Hours
RSM 508, RSM 511, RSM 535	9
<sup>1</sup> Recreation and Sport Management Electives	6
<sup>2</sup> Sport Studies Elective or RSM 556	3
<sup>3</sup> Electives	12
RSM 501 – Project	3
Total credit hours	33

Sport Management concentration (Thesis Option)	Credit Hours
RSM 508, RSM 511, RSM 535	9
<sup>1</sup> Recreation and Sport Management Electives	6
<sup>2</sup> Sport Studies Elective or RSM 556	3

<sup>3</sup> Electives	9
RSM 500 – Thesis	6
Total credit hours	33

<sup>3</sup> These courses can be taken within the department. A total of six (6) hours may be earned in RSM 590 or RSM 595 combined.

Rationale: (1) The change in the curriculum requirements for the Sport Management Master's is a result of the recently completed Academic Program Review and preparation for the accreditation for the Commission on Sport Management Accreditation. The changes will bring the total number of hours required for graduation to 36 and also put more emphasis on classes in the RSM curriculum. (2) RSM 554 was replaced with RSM 594 in the Therapeutic Recreation Concentration curriculum because the course content of RSM 554 has changed and no longer meets the educational needs of our students. Student will now be responsible for completing a Practicum in the schools setting which affords our student practical hands on experience prior to their final internship. (3) RSM 520 was replaced with RSM 511 in the Therapeutic Recreation Concentration curriculum. Having students take RSM 511 as a required course more accurately reflects what is currently in practice. Impact on other units: none. Financial impact: none.

Support from assessment activities: Academic program review of curriculum.

### **REVISE REQUIREMENTS – RECREATION AND SPORT MANAGEMENT MAJOR, MS – THERAPEUTIC RECREATION CONCENTRATION (FOR BOTH THESIS AND NON-THESIS OPTIONS)**

In the 2017-2018 Graduate Catalog, revise as shown below:

- 1) Revise paragraph under the heading Application Process. Remove current paragraph and replace as follows:

Applications are reviewed prior to beginning of the fall semester. Application deadline for fall admission is August 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 Graduate School as a graduate student, and then be admitted to the Recreation and Sport Management Graduate Program, Therapeutic Recreation concentration.

Formerly: 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 Graduate School as a graduate student, and then be admitted to the Recreation and Sport Management Graduate Program, Therapeutic Recreation concentration.

- 2) Revise lines 1 and 2 of the showcase as shown below. Hours in program did not change. Revision is to courses listed.

RSM 511, RSM 515, RSM 521, RSM 522, RSM 525, RSM 594	18
<sup>1</sup> RSM 596	6

Rationale: (1) The change in the curriculum requirements for the Sport Management Master's is a result of the recently completed Academic Program Review and preparation for the accreditation for the Commission on Sport Management Accreditation. The changes will bring the total number of hours required for graduation to 36 and also put more emphasis on classes in the RSM curriculum. (2) RSM 554 was replaced with RSM 594 in the Therapeutic Recreation concentration curriculum because the course content of RSM 554 has changed and no longer meets the educational needs of our students. Student will now be responsible for completing a Practicum in the schools setting which affords our student practical hands on experience prior to their final internship. (3) RSM 520 was replaced with RSM 511 in the Therapeutic Recreation concentration curriculum. Having students take RSM 511 as a required course more accurately reflects what is currently in practice. Impact on other units: none. Financial impact: none.

Support from assessment activities: Academic program review of curriculum.

## **DEPARTMENT OF PUBLIC HEALTH**

### **➤ DROP CONCENTRATIONS – PUBLIC HEALTH MAJOR, DOCTOR OF PUBLIC HEALTH (DRPH)**

Community Health Education concentration  
Epidemiology concentration

Rationale: Creating a degree with cognates rather than concentrations allows us to fully utilize all Department of Public Health faculty in mentoring doctoral students. With concentrations, only faculty in those concentrations would have been appropriate to serve as doctoral advisors. Allowing for cognates creates the possibility that other faculty (e.g., representing epidemiology and environmental health) will be able to advise doctoral students. Impact on other units: Minimal. Over time DrPH students will take courses outside of the Department of Public Health to fulfill cognate requirements. Financial impact: Lowers the cost slightly for DrPH students by changing from 90 to 89 hours.

Student learner objectives impacted: Modifying the student learner objectives is one of the main changes in this submission, as noted above.

Support from assessment activities: In a discussion group, current doctoral students in Public Health expressed the desire to have more flexibility regarding electives and also emphasized the importance of statistical training. Together, the addition of the cognate, the elimination of prescribed courses in the concentration, and the addition of the one graduate statistics elective address the students' concern. In addition, per the Public Health bylaws, the faculty unanimously approved the adoption of this additional prerequisite. There has been no SACS assessment to date as the DrPH has not produced graduates to date.

## REVISE REQUIREMENTS – PUBLIC HEALTH MAJOR, DPH

In the 2017-2018 Graduate Catalog, remove current catalog text and replace with the following:

The Doctor of Public Health (DrPH program) is the terminal degree in public health, designed for students who have already earned the MPH degree; however, exceptional students without the MPH may be admitted to the DrPH program. The DrPH is the professional doctoral degree in public health, designed to produce transformative academic and practice leaders with expertise in evidence-based public health practice and research. At the completion of the DrPH program, students will be able to:

- Apply qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues
- Influence behavior and policies by communicating public health science to diverse stakeholders
- Create, implement, and evaluate strategic plans and organizational change strategies
- Design system-level interventions that influence population health outcomes in transdisciplinary team approaches that promote health equity and disease prevention
- Integrate knowledge of cultural values and practices in the design or implementation of public health programs
- Integrate scientific information, legal and regulatory approaches, ethical frameworks and varied stakeholder interests in policy development and analysis
- Assess a population's knowledge and learning needs
- Deliver training or educational experiences that promote learning in academic, organizational and community settings
- Use best practice modalities in pedagogical practices

### Admission

- Meet requirements for admission to the University of Tennessee, Graduate School.
- GPA of at least 3.2 (on a 4.0 scale) on master's degree coursework, shown in official transcripts. For students without a Master's degree or coursework, a required GPA of 3.2 for the undergraduate degree.
- A minimum of 40th percentile on all sections of the Graduate Record Examination (GRE); for international students, a satisfactory score on the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).
- Three letters of reference completed within the past 12 months by faculty members, academic advisors, or employers or professional colleagues. At least two letters must be from persons able to assess academic capacity.
- Ability to express complex concepts and ideas in writing as evidenced in a 600-word essay.
- Demonstrated skill in a professional, research, or academic writing sample.
- Ability to clearly articulate a defined career pathway, which incorporates practice and research experience and skills, upon interview.
- In addition, students will be selected for the program based on extent of public health practice experience, other prior work and volunteer experience, and demonstration of a commitment to public health. Students will be admitted on a space available basis. Students eligible for admission but not admitted due to space will be placed on a waiting list and will be eligible to apply for the program in subsequent years. Appropriate academic background and professional and volunteer experience, as evidenced on a curriculum vitae.
- An online application must be submitted to the Graduate Admissions Office. Admission forms are available at <http://graduateadmissions.utk.edu/apply.html> and <http://publichealth.utk.edu/prospective/apply/>.

The DrPH will allow cognates to include higher-level public health doctoral courses through Independent Study with public health faculty, but students will be guided to select cognates that will necessitate coursework from other academic units. The DrPH requires a cognate to include 9 semester hours, usually amounting to three 3-hour courses.

Requirements:	Hours Credit
<sup>1</sup> Foundations	20
<sup>2</sup> Core DrPH	36
<sup>3</sup> Cognate	9
Dissertation (PUBH 600)	24
Total Hours	89

<sup>1</sup> PUBH 509 (2 semesters) PUBH 510, PUBH 520, PUBH 530, PUBH 537, PUBH 540, and PUBH 555 equivalent courses if taken outside of the University of Tennessee, approved by the Department Head.

<sup>2</sup> PUBH 536, PUBH 552, PUBH 609 (2 semesters), PUBH 610, PUBH 611, PUBH 613, PUBH 636, PUBH 637, PUBH 656, PUBH 687 (total of 6 hours over one or two semesters), STAT 537 and STAT 538 OR SOWK 605 and SOWK 606, and one additional graduate statistics course selected in consultation with faculty advisor.

<sup>3</sup> Cognate courses must be approved by faculty advisor and the chair of the DrPH Committee

Note: PUBH 530 or its equivalent may serve in lieu of STAT 537 or SOWK 605. Please confer with the instructors of STAT 538 or SOWK 606.

Rationale: There are four main changes to the DrPH catalog description, with the rationale for each described below:

1. Learning objectives. Rationale: the new learning objectives are the revised learning objectives for the DrPH from our accrediting body, the Council on Education for Public Health.
2. Changing qualifications regarding GRE scores. Rationale: the requirement for a minimum of 40th percentile on all sections of the GRE creates a uniform admissions standard, as opposed to the previous criteria that were different for different sections.

3. Dropping of concentrations (Community Health Education and Epidemiology) and instituting cognates. Rationale: Creating a degree with cognates rather than concentrations allows us to fully utilize all Department of Public Health faculty in mentoring doctoral students. With concentrations, only faculty in those concentrations would have been appropriate to serve as doctoral advisors. Allowing for cognates creates the possibility that other faculty (e.g., representing epidemiology and environmental health) will be able to advise doctoral students.
4. Total hours. Rationale: decreasing the total number of hours from 90 to 89 comes from decreasing PUBH687 (Advanced Field Placement) from 9 to 6 hours, changing the 10 concentration hours to 9 cognate hours, and adding an additional graduate statistics course (3 units). The decrease in PUBH687 is more in line with other DrPH programs and our accrediting body's guidelines, which require 86 units.

Footnote 1 was revised to put the courses in numerical sequence. Footnote 2 was revised to eliminate PUBH 550, a MPH course. Footnote 3 was revised to incorporate the cognate and eliminate the 2 concentrations. This resulted in the elimination of PUBH 527, PUBH 541, KNS 521, CEM 602. These courses may serve as cognate courses if approved by the faculty advisor and Director of the DrPH committee.

Footnote 4 has been eliminated as the elective course is no longer reflected in the curriculum outside of the cognate area and the one additional graduate statistics course. The note regarding the statistics courses was added to help ensure the students do not take duplicative courses (e.g., PUBH 530, SOWK 605, and STAT 537).

Impact on other units: Minimal; over time DrPH students will take courses outside of the Department of Public Health to fulfill cognate requirements. Financial impact: Lowers the cost slightly for DrPH students by changing from 90 to 89 hours.

Student learner objectives impacted: Modifying the student learner objectives is one of the main changes in this submission, as noted above.

Support from assessment activities: In a discussion group, current doctoral students in Public Health expressed the desire to have more flexibility regarding electives and also emphasized the importance of statistical training. Together, the addition of the cognate, the elimination of prescribed courses in the concentration, and the addition of the one graduate statistics elective address the students' concern. In addition, per the Public Health bylaws, the faculty unanimously approved the adoption of this additional prerequisite. There has been no SACS assessment to date as the DrPH has not produced graduates to date.

## DEPARTMENT OF RETAIL, HOSPITALITY, AND TOURISM MANAGEMENT

### REVISE REQUIREMENTS – RETAIL, HOSPITALITY, AND TOURISM MANAGEMENT MAJOR, PHD

In the 2017-2018 Graduate Catalog, revise the hours for Instructional Methods (from 3 to 2) and Electives (from 20 to 21) as shown below.

<sup>5</sup> Instructional Methods	2
Electives	21

Rationale: The course that has been recommended by faculty as a useful course for Instructional Methods in our academic field is a 2-credit course. Revision fixes the credit hours information accordingly. And this 1 credit eliminated from a revision in Instructional Methods is added to Electives. Impact on Other Units: None. Financial Impact: None.

Learning Outcomes Supported: Does not impact student learner outcomes

Support from assessment activities: The revision reflects changing needs of the RHTM graduate program.

## DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

### REVISE REQUIREMENTS – EDUCATION MAJOR, PHD (LITERACY STUDIES CONCENTRATION)

In the 2017-2018 Graduate Catalog, revise requirements and footnotes as follows:

<sup>1</sup> Research Area	15
<sup>2</sup> Core Requirements	12
Concentration/Specialization	15
Cognate	6
Dissertation	24

<sup>1</sup> Must include TPTE 640 (3)

<sup>2</sup> Seminar in each of the three department primary concentrations (TPTE 617, REED 602, SPED/EDDE 601, or other course from each of the three departmental PhD concentrations as approved by doctoral committee) (9); TPTE 604 (1), TPTE 605 (1), TPTE 612 (minimum of 1).

Note: Please contact the academic department for additional information on course requirements in each of these areas.

Formerly:

1 Research Area	15
2 Core Requirements	8
Concentration/Specialization	15
Cognate	6
Dissertation	24

<sup>1</sup> Must include TPTE 640 (3) or ELPS 615 (3).

<sup>2</sup> Seminar in primary concentration (3); TPTE 604, TPTE 605, TPTE 617.

Note: Please contact the academic department for additional information on course requirements in each of these areas.



Rationale: ELPS 615 was added when Educational Administration was a part of TPTE. Now that Educational Administration is housed in a separate department (ELPS), it is no longer appropriate to allow this course to serve as the single commonly required research course for TPTE. TPTE doctoral students have not used ELPS 615 to meet this requirement for several years, so this deletion is needed for accuracy. Currently the TPTE doctoral program of study is 4 hours short of the Graduate School requirements so we have changed the core requirements and footnote 2. These changes/additions will meet the minimum credit hour requirements and will result in a stronger, better defined PhD in Education Curriculum. TPTE doctoral students (across all three concentrations) will each take one course from each concentration. Impact on other units: none. Financial impact: none.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: these changes were based on the recommendations of our Academic Program Review and responses from our doctoral student surveys.

### REVISE REQUIREMENTS – EDUCATION MAJOR, PHD (SPECIAL EDUCATION, DEAF EDUCATION, AND INTERPRETER EDUCATION)

In the 2017-2018 Graduate Catalog, revise requirements and footnotes as follows:

<sup>1</sup> Research Area	15
<sup>2</sup> Core Requirements	12
Concentration/Specialization	15
Cognate	6
Dissertation	24

<sup>1</sup> Must include TPTE 640 (3)

<sup>2</sup> Seminar in each of the three department primary concentrations (TPTE 617, REED 602, SPED/EDDE 601, or other course from each of the three departmental PhD concentrations as approved by doctoral committee) (9); TPTE 604 (1), TPTE 605 (1), TPTE 612 (minimum of 1).

Note: Please contact the academic department for additional information on course requirements in each of these areas.

Formerly:

<sup>1</sup> Research Area	15
<sup>2</sup> Core Requirements	8
Concentration/Specialization	15
Cognate	6
Dissertation	24

<sup>1</sup> Must include TPTE 640 (3) or ELPS 615 (3).

<sup>2</sup> Seminar in primary concentration (3); TPTE 604, TPTE 605, TPTE 617.

Note: Please contact the academic department for additional information on course requirements in each of these areas.

Rationale: ELPS 615 was added when Educational Administration was a part of TPTE. Now that Educational Administration is housed in a separate department (ELPS), it is no longer appropriate to allow this course to serve as the single commonly required research course for TPTE. TPTE doctoral students have not used ELPS 615 to meet this requirement for several years, so this deletion is needed for accuracy. Currently the TPTE doctoral program of study is 4 hours short of the Graduate School requirements so we have changed the core requirements and footnote 2. These changes/additions will meet the minimum credit hour requirements and will result in a stronger, better defined PhD in Education Curriculum. TPTE doctoral students (across all three concentrations) will each take one course from each concentration. Impact on other units: none. Financial impact: none.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: these changes were based on the recommendations of our Academic Program Review and responses from our doctoral student surveys.

### REVISE REQUIREMENTS – EDUCATION MAJOR, PHD (TEACHER EDUCATION CONCENTRATION)

In the 2017-2018 Graduate Catalog, add a new first paragraph and revise requirements and footnotes as follows:

Teacher Education concentration offers specializations in Cultural Studies in Educational Foundations, Elementary Education, English Education, Mathematics Education, Science Education, and Social Science Education.

<sup>1</sup> Research Area	15
<sup>2</sup> Core Requirements	12
Concentration/Specialization	15
Cognate	6
Dissertation	24

<sup>1</sup> Must include TPTE 640 (3)

<sup>2</sup> Seminar in each of the three department primary concentrations (TPTE 617, REED 602, SPED/EDDE 601, or other course from each of the three departmental PhD concentrations as approved by doctoral committee) (9); TPTE 604 (1), TPTE 605 (1), TPTE 612 (minimum of 1).

Note: Please contact the academic department for additional information on course requirements in each of these areas.

Formerly:

<sup>1</sup> Research Area	15
<sup>2</sup> Core Requirements	8
Concentration/Specialization	15

Cognate	6
Dissertation	24

<sup>1</sup> Must include TPTE 640 (3) or ELPS 615 (3).

<sup>2</sup> Seminar in primary concentration (3); TPTE 604, TPTE 605, TPTE 617.

Rationale: ELPS 615 was added when Educational Administration was a part of TPTE. Now that Educational Administration is housed in a separate department (ELPS), it is no longer appropriate to allow this course to serve as the single commonly required research course for TPTE. TPTE doctoral students have not used ELPS 615 to meet this requirement for several years, so this deletion is needed for accuracy. Currently the TPTE doctoral program of study is 4 hours short of the Graduate School requirements so we have changed the core requirements and footnote 2. These changes/additions will meet the minimum credit hour requirements and will result in a stronger, better defined PhD in Education Curriculum. TPTE doctoral students (across all three concentrations) will each take one course from each concentration. Impact on other units: none. Financial impact: none.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: these changes were based on the recommendations of our Academic Program Review and responses from our doctoral student surveys.

### **REVISE REQUIREMENTS – TEACHER EDUCATION MAJOR, MS – LICENSURE TRACK 2 (WORLD LANGUAGE EDUCATION CONCENTRATION)**

In the 2017-2018 Graduate Catalog, revise the requirements as follows:

Remove courses TPTE 593 and TPTE 595 and replace with courses WLEL 455; WLEL 445.

Rationale: The WL licensure concentration has recently changed from a 7-12 license to a PreK-12 license in order to accommodate the recent change in Tennessee licensure for world languages. Adding an additional World Language methods class (WLEL 445, Teaching WL, PreK-5) will address this state licensure change. Additionally, WLEL 455, Teaching World Languages, was inadvertently left off in the Track 2 in WLED concentration in last year's catalog change. Therefore, course needs to be added in the catalog. Impact on other units: none. Financial impact: none.

Learner outcomes supported by this change: no learner outcomes are affected by this change.

Support for this change from assessment activities: no assessment activities conducted.

### **REVISE TEACHER EDUCATION MAJOR, MS, NON-LICENSURE TRACK 1 DESCRIPTION**

In the 2017-2018 Graduate Catalog, under the heading "Non-Licensure Track 1, revise description to include the concentration (cultural studies of education foundations) that was moved from EPC to TPTE.

Rationale: The Cultural Studies courses and programs are moving to TPTE from EPC because the content is a better fit with TPTE's goals and mission. Impact on other units: TPTE will gain several courses, a concentration in its Track 1 Master's in Teacher Education program, a specialization in its PhD in Education major, Teacher Education concentration program, and it will house the CSE graduate certificate. EPC will no longer offer the CSE programs and courses. Students currently admitted to the Education major, LEEDS concentration with a Cultural Studies in Education focus will be allowed to complete their programs of study. Financial impact: No negative financial impact is anticipated. The two faculty with CSE affiliation will move to TPTE. Three graduate assistant positions will move to TPTE; these positions are filled by doctoral students studying CSE and they teach undergraduate CSE courses. Neither EPC nor TPTE will be negatively financially impacted by the move.

Learner outcomes supported by this change: No learner outcomes are affected by this change.

Support for this change from assessment activities: no assessment activities were conducted.

### **❖ ADD MAJOR, DEGREE AND CONCENTRATION**

Teacher Education major, MS  
Cultural Studies of Educational Foundations concentration

The concentration of Cultural Studies of Educational Foundations is moving from under the Department of Educational Psychology and Counseling to the Department of Theory and Practice in Teacher Education. The name of the major is changing from Education to Teacher Education for the MS degree.

In the 2017-2018 Graduate Catalog, add name, text, and requirements to the Cultural Studies of Educational Foundations concentration that is moving from the department of EPC to TPTE. The name of the major in EPC was Education (MS). The name of the major in TPTE is Teacher Education (MS) (under the Non-Licensure Track 1 program).

### **Teacher Education Major, MS – Cultural Studies of Educational Foundations concentration**

The concentration's intellectual identity emerges from a post-disciplinary orientation which includes coursework and research across the traditions of anthropology, history, philosophy, psychology, sociology, and women's studies. Academically based community service, community based participatory research, and philosophical, ethnographic, and feminist inquiry in the program coursework address fundamental issues in education and relations of power.

Requirements	Hours	Credit
<sup>1</sup> Concentration	15	
<sup>2</sup> Specialization choose one	9	

<sup>3</sup> Research	6
<sup>4</sup> Thesis or Problems in Lieu of Thesis	<u>6</u>
Total	36

<sup>1</sup> CSE 591, CSE 592. Select two from CSE 504, CSE 511, CSE 539, CSE 545, CSE 549, CSE 550 OR CSE 639.

<sup>2</sup> Students can design their own specialization area such as gender studies in education; multicultural education; rural education; or religion, ethics and morality.

<sup>3</sup> Select two courses from CSE 526, EDPY 559, EDPY 506, EDPY 682, or advisor approved substitute.

<sup>4</sup> CSE 500 or CSE 503.

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

Rationale: The Cultural Studies courses and programs are moving to TPTE from EPC because the content is a better fit with TPTE's goals and mission. Impact on other units: TPTE will gain several courses, a concentration in its Track 1 Master's in Teacher Education program, a specialization in its PhD in Education major, Teacher Education concentration program, and it will house the CSE graduate certificate. EPC will no longer offer the CSE programs and courses. Students currently admitted to the Education major, LEEDS concentration with a Cultural Studies in Education focus will be allowed to complete their programs of study. Financial impact: No negative financial impact is anticipated. The two faculty with CSE affiliation will move to TPTE. Three graduate assistant positions will move to TPTE; these positions are filled by doctoral students studying CSE and they teach undergraduate CSE courses. Neither EPC nor TPTE will be negatively financially impacted by the move.

Learner outcomes supported by this change: No learner outcomes are affected by this change.

Support for this change from assessment activities: no assessment activities were conducted.

### MOVE CERTIFICATE – CULTURAL STUDIES IN EDUCATION

In the 2017-2018 Graduate Catalog, move the heading, text, and requirements for the Cultural Studies in Education Graduate Certificate from the Department of EPC to the department of TPTE.

#### Cultural Studies in Education Graduate Certificate

The 15-hour graduate certificate in cultural studies in education is intended for currently admitted graduate students seeking to develop skills necessary when working with diverse populations, especially targeted, minority populations. Students currently enrolled in many of the graduate programs on our campus are seeking to understand their different fields of study through a cultural studies lens. A certificate in cultural studies in education will offer students a way to bundle the courses they are already taking so that they can present to future employers their skills in a way that is easily recognized. This certificate will also further prepare students to be able to apply a cultural studies focus to the work they do in their various fields of study. Certificate candidates must currently be admitted to a graduate program at the university or hold a terminal degree and be admitted to the graduate school in the certificate. All 15 hours of coursework must be completed at the University of Tennessee within five years of applying for a certificate. A 3.5 GPA must be earned in all certificate courses. All courses must be selected from the list below.

#### Requirements

- CSE 591.
- At least one of the following: CSE 550 or CSE 592.
- At least two of the following: CSE 539, CSE 545, CSE 548, CSE 549, CSE 607, CSE 609, CSE 639, EDPY 573, RHCO 538, SPST 515, SPST 542, SPST 543, TPTE 517.
- An additional 3-hour course can be taken from the above list.

Rationale: The Cultural Studies courses and programs are moving to TPTE from EPC because the content is a better fit with TPTE's goals and mission. Impact on other units: TPTE will gain several courses, a concentration in its Track 1 Master's in Teacher Education program, a specialization in its PhD in Education major, Teacher Education concentration program, and it will house the CSE graduate certificate. EPC will no longer offer the CSE programs and courses. Students currently admitted to the Education major, LEEDS concentration with a Cultural Studies in Education focus will be allowed to complete their programs of study. Financial impact: No negative financial impact is anticipated. The two faculty with CSE affiliation will move to TPTE. Three graduate assistant positions will move to TPTE; these positions are filled by doctoral students studying CSE and they teach undergraduate CSE courses. Neither EPC nor TPTE will be negatively financially impacted by the move.

Learner outcomes supported by this change: No learner outcomes are affected by this change.

Support for this change from assessment activities: no assessment activities were conducted.

### REVISE INTRODUCTORY TEXT – EDUCATION MAJOR

In the 2017-2018 Graduate Catalog, on the department information page, under the heading "Education Major" revise paragraph to include the Cultural Studies of Educational Foundations concentration/specialization as follows:

#### Education Major

Faculty from the department participate in the delivery of the PhD with a major in education. Concentrations and specializations are available in literacy studies concentration (specialization in children's and young adult literature, ESL or literacy education); special education, deaf education, and interpreter education concentrations; and teacher education concentration

(specializations in cultural studies of educational foundations, early childhood education, elementary education, English education, mathematics education, science education, or social science education).

Rationale: The Cultural Studies courses and programs are moving to TPTE from EPC because the content is a better fit with TPTE's goals and mission. Impact on other units: TPTE will gain several courses, a concentration in its Track 1 Master's in Teacher Education program, a specialization in its PhD in Education major, Teacher Education concentration program, and it will house the CSE graduate certificate. EPC will no longer offer the CSE programs and courses. Students currently admitted to the Education major, LEEDS concentration with a Cultural Studies in Education focus will be allowed to complete their programs of study. Financial impact: No negative financial impact is anticipated. The two faculty with CSE affiliation will move to TPTE. Three graduate assistant positions will move to TPTE; these positions are filled by doctoral students studying CSE and they teach undergraduate CSE courses. Neither EPC nor TPTE will be negatively financially impacted by the move.

Learner outcomes supported by this change: No learner outcomes are affected by this change.

Support for this change from assessment activities: no assessment activities were conducted.

# TICKLE COLLEGE OF ENGINEERING

All changes effective Fall 2017.

## I. COURSE CHANGES

### DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING

#### (CBE) Chemical and Biomolecular Engineering

##### ADD

**560 Electrochemical Technology (3)** Designed to introduce electrochemical engineering. Based on an introduction to the physical underpinnings, methods and language of electrochemistry, the course will explore the design and operation of various electrochemical devices and the materials from which they are made. Devices such as fuel cells, batteries, electro-organic reactors and electrochemical sensors will be explored with discussion at the device and system levels. Laboratory exercises will be included to illustrate test methods and device properties. Several team modeling projects will be assigned.

*Recommended Background: Broad understanding of simple chemical concepts, basic mathematical proficiency consistent with graduate or upper-division standing in Engineering or Sciences, some computational capability.*

*Registration Permission: Consent of instructor.*

Rationale: Course is one new offering among many designed to answer the broad need for formal training in electrochemistry driven by the presence of multiple new faculty practicing in this area as well as in areas related to energy and environment as well as health applications. This course has been taught four times since 2011 as variable title course CBE 590 (under title Electrochemical Methods) with combined enrollment of 40 students across the four offerings. Course location and format: Course offered on campus. Course offered in standard format. Impact on other academic units: New course does not change or alter other courses required by other programs. New course does not require changes in courses offered by other programs. Financial impact: None.

### DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

#### (CE) Civil Engineering

##### ADD

**CE 548 Sustainable Transportation (3)** Sustainability in the context of the transportation system including all aspects of sustainability that focus on environment, equity, and economy. Relative merits of transportation demand management, technologies, land use, and alternative fuels are compared. For the environmental analysis, a full life cycle accounting approach, teaching specific approaches, data, and tools to assess environmental impacts through all phases of vehicles, fuels, and infrastructure life cycles.

*Registration Restriction(s): Graduate or senior undergraduate standing.*

**CE 557 Transportation Policy and Economics (3)** An overview of US transportation policy development, regulations, institutions, and finance mechanisms for surface transportation. Behavioral and microeconomic concepts related to transportation, including firm and consumer behavioral theory and application, pricing and regulatory strategies to shift behavior to meet welfare objectives. How transportation policy is developed and how economic principles shape transportation systems.

*Recommended Background: Economics 201 or equivalent.*

*Registration Restriction(s): Graduate or senior undergraduate standing.*

**CE 559 Transportation Safety (3)** Transportation safety defined from a multi-disciplinary perspective and characterized by crashes, injuries and deaths. Significant challenges to transportation safety are identified. Environmental, roadway, vehicle, and human factors involved in crashes are explored using descriptive analysis and advanced modeling/simulation techniques. Discussion of current state-of-the-practice in Highway Safety Manual.

*(RE) Prerequisite(s): 355 or equivalent.*

*Registration Restriction(s): Engineering graduate or senior undergraduate standing.*

Rationale: The (3) course additions are necessary to address the market needs in transportation, offer more technical courses for senior undergraduate and graduate students. For these purposes, the transportation specialization in CEE has hired two new faculty members in the last 3 years. The course has been recently offered as CE 595. Impact on Other Units: None. Financial Impact: None.

**CE 560 Advanced Structural Mechanics (3)** Fundamentals of solid and structural mechanics. The tensorial nature of stress and strain and their principal governing equations. Description of boundary value problems and basic analytical solution techniques for two dimensional problems (planar elasticity). Failure theories. Energy principles relevant to the finite element method. Selected applications and advanced topics for structural materials.

*(RE) Prerequisite(s): 262 or equivalent.*

*Recommended Background: Calculus, differential equations*

*Registration Restriction(s): Graduate student standing or permission of instructor.*

Rationale: Current graduate courses in the department do not cover the material described in this course. Students taking finite element courses CE538 and CE561 in the department have desired additional preparation in mechanics before taking the course. Research areas

related to mechanics and materials are growing. This course provides introductory knowledge beneficial to fracture mechanics, soil mechanics, and plasticity courses. Impact on Other Units: The course is similar to the courses ME559 and ME659. However, these courses have not been taught in the last 2 years. Financial Impact: None.

**CE 653 Intelligent Transportation Systems (3)** Examine how Intelligent Transportation Systems (ITS), including connected and automated vehicles, can enhance mobility, safety, and the environment. ITS apply information and communication technologies in transportation. Systems engineering approach and modeling/simulation methodologies applied to ITS, connectivity and automation, ITS deployment and transportation operations, transportation system management, traveler response to technologies and information, ITS planning, evaluation, and institutional issues.

*(RE) Prerequisite(s): 355 or equivalent.*

*Registration Restriction(s): Engineering graduate or senior undergraduate standing.*

Rationale: The proposed course addition is necessary to address the market needs in transportation, offer more technical courses for senior undergraduate and graduate students. For these purposes, the transportation specialization in CEE has hired two new faculty members in the last 3 years. The course has been recently offered as CE 595. Impact on Other Units: None. Financial Impact: None.

## **DROP**

### **CE 549 Air Transportation (3)**

Rationale: The course has not been offered in several years and does not represent the direction of transportation group in civil and environmental engineering. Graduate transportation students have diverse course choices available and this course does not represent the current and future needs for graduating transportation students. Impact on Other Units: None. Financial Impact: None.

## **REVISE TITLE, DESCRIPTION AND ADD (RE)PREREQUISITE AND REGISTRATION RESTRICTION**

**CE 558 Transportation Planning Models (3)** Transportation planning process and travel patterns, data collection, trip generation, trip distribution, mode split, and traffic assignment. Applications of travel demand modeling. Proposing transportation alternatives and evaluation. Social, economic, and environmental impacts of transportation. Innovative travel demand modeling techniques.

*(RE) Prerequisite(s): 355 or equivalent.*

*Registration Restriction(s): Engineering graduate or senior undergraduate standing.*

Formerly: Planning and Transportation (3) Preparation of transportation as elements of comprehensive development plans. Analysis of relationship between various transportation modes and between transportation and other community features. Use of planning process to establish existing travel patterns, modeling of demand, proposing alternatives and evaluation.

Comment(s): Enrollment limited to students with graduate standing.

Rationale: A change in course description is necessary to account for new developments in transportation, align it with faculty expertise, and give students transportation modeling skills needed for the marketplace. Impact on Other Units: None. The courses may be of interest to graduate students from other colleges. Financial Impact: The course does not require additional resources or workload for faculty.

## **DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE**

### **(COSC) Computer Science**

#### **DROP 400 LEVEL COURSES FOR GRADUATE CREDIT**

**COSC 420 Biologically-Inspired Computation (3)**

**COSC 434 Network Security (3)**

**COSC 445 Fundamentals of Digital Archeology (3)**

**COSC 465 Databases and Scripting Languages (3)**

**COSC 466 Web Security (3)**

**COSC 483 Applied Cryptography (3)**

Rationale: Many 4xx/5xx courses are taught with shared lecture but differential workload (assignments, exams, etc.) for students in each section. Occasionally, students use the 4xx version of such a course to count toward a graduate degree. Removing these from the graduate catalog will ensure that student seeking graduate credit to enroll in the 5xx version of the class. Impact on other units: None. Financial impact: None.

#### **REVISE TITLE AND DESCRIPTION**

**COSC 565 Databases and Scripting Languages (3)** Introduction to database theory, models, and query formation. Survey of scripting languages, their uses, and their interconnectivity with databases.

Formerly: 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.

Rationale: Updated description more accurately represents the course content. Impact on other units: None. Financial impact: None.

## **(ECE) Electrical and Computer Engineering**

### **ADD 400 LEVEL HONORS COURSES FOR GRADUATE CREDIT**

**ECE 417 Honors: Computer Control Systems (3)** Same as 416 with additional honors project.  
*(RE) Prerequisite(s): 316.*

**ECE 427 Honors: Electric Energy Systems (3)** Same as 421 with additional honors project.  
*(RE) Prerequisite(s): 316 and 325.*

**ECE 457 Honors: Computer Systems Architecture (3)** Same as 451 with additional honors project.  
*(RE) Prerequisite(s): 255 and Computer Science 160.*

**ECE 487 Honors: Power Electronics (3)** Same as 481 with additional honors project.  
*(RE) Prerequisite(s): 316 and 325.*  
*(DE) Prerequisite(s): 336.*

Rationale: This allows graduate students who wish to do so the option of taking the honors version of an undergraduate course. Impact on other units: None. Financial impact: None.

### **ADD 400 LEVEL COURSES FOR GRADUATE CREDIT**

**ECE 461 Introduction to Computer Security (3)** Introduction to security concepts, concerns, common vulnerabilities, solutions and techniques, and good security practices. Hands-on experience analyzing computer security vulnerabilities and designing secure computer systems and applications.  
*(RE) Prerequisite(s): 313 or equivalent; and Computer Science 102 or equivalent.*  
*Registration Restriction(s): Junior standing or consent of the instructor.*

**ECE 462 Cyber-Physical Systems Security (3)** Introduction to security challenges and techniques at both the physical layer and the cyber layer of important cyber-physical systems, including transportation systems, avionics, industrial automation systems, vehicular systems, medical systems, power systems, SCADA, nuclear plants, etc.  
*(RE) Prerequisite(s): Computer Science 102 or equivalent, 313 or equivalent.*  
*Registration Restriction(s): Junior standing or consent of the instructor.*

**ECE 463 Introduction to Datacenters (3)** Technologies and best practices in data center structure, management and maintenance. Topics include datacenter structure and design, requirements, performance, security, power & cooling, storage systems, networking, capacity/workload management, testing and analysis. Students from engineering disciplines that can take this course include electrical, computer, industrial, mechanical, and nuclear engineering, and computer science.  
*(RE) Prerequisite(s): Computer Science 130.*

Rationale: Adding three 400-level courses for GR credit that were inadvertently left out of the graduate catalog. Impact on other units: None. Financial impact: None.

### **ADD**

**ECE 582 Power Electronic Circuits (3)** A design-oriented introduction course to the analysis, design, modeling, and testing of power electronics systems. Through laboratory experiments, students are guided through the fabrication of the multiple switched-mode power converters and associated analog and digital control systems. The course culminates with a design exposition/competition of the constructed circuits.  
*Recommended Background: ECE 481 or equivalent.*  
*Registration Permission: Consent of instructor.*

Rationale: Due to the inclusion of design-oriented, hands-on lab work in power electronics, it is included in the upcoming wide bandgap traineeship certificate, which requires a dedicated course number. This course has been taught each spring, 2014-2017, as a special topics course. Impact on other units: None. Financial impact: None.

**ECE 681 Power Electronics Technologies I (3)** Survey of practical design details in the realization of power electronic circuits. Topics covered include design of auxiliary circuitry, advanced control concepts, usage of design tools, and experimental techniques.  
*Registration Permission: Consent of instructor.*

**ECE 682 Power Electronics Technologies II (3)** Design-oriented, hands-on laboratory work in the realization of advanced power electronics. Topics include topology investigation, power transistor selection and characterization, modulation schemes, control realization, and EMI compliance. Topics covered through design and realization of a functioning power conversion system.  
*Registration Permission: Consent of instructor.*

Rationale: These (2) new courses have been taught previously as a special topics course. Due to the inclusion of design-oriented, hands-on lab work in power electronics, it is included in the upcoming wide bandgap traineeship certificate, which requires a dedicated course number. Impact on other units: None. Financial impact: None.

## DROP 400 LEVEL COURSES FOR GRADUATE CREDIT

**ECE 406 Introduction to Real-time Digital Signal Processing (3)**

**ECE 433 Introduction to VLSI (3)**

**ECE 443 Antenna Systems Engineering (3)**

**ECE 444 Microwave Circuits (3)**

**ECE 453 Introduction to Computer Networks (3)**

**ECE 455 Embedded Systems Design (3)**

**ECE 471 Introduction to Pattern Recognition (3)**

**ECE 472 Introduction to Digital Image Processing (3)**

Rationale: Many 4xx/5xx courses are taught with shared lecture but differential workload (assignments, exams, etc.) for students in each section. Occasionally, students use the 4xx version of such a course to count toward a graduate degree. Removing these from the graduate catalog will ensure that student seeking graduate credit will enroll in the 5xx version of the class. Impact on other units: None. Financial impact: None.

## REVISE TITLE

**ECE 531 Semiconductor Devices (3)**

Formerly: Advanced Analog Electronics I

**ECE 532 Intro to Analog Integrated Circuit Design (3)**

Formerly: Advanced Analog Electronics II

Rationale: Two updated titles more accurately represent the course content. Impact on other units: None. Financial impact: None.

## DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING

### (IE) Industrial Engineering

#### ADD AS SECONDARY CROSS-LIST COURSES

**IE 575 Equipment and Systems Prognostics (3)**

*Cross-listed: (See Nuclear 575)*

**IE 579 Empirical Models for Monitoring and Diagnostics (3)**

*Cross-listed: (See Nuclear 579)*

Rationale: We have a number of graduate students in ISE that are performing reliability and maintainability engineering research. These students are interested in taking these courses and they will benefit from the materials presented in these course. Impact on other units: None. Financial impact: None.

#### REVISE SECONDARY CROSS-LISTED COURSE TO REMOVE AS SECONDARY AND BECOME PRIMARY OWNER (CROSS-LISTING IS BEING DROPPED)

**IE 602 Nonlinear Optimization (3)** Kuhn-Tucker theory in nonlinear programming, solution procedures for constrained and unconstrained nonlinear programs, search techniques, quadratic programming, duality and sensitivity analysis.

*Recommended Background: Differential equation and proficiency in computer programming.*

*Registration Restriction(s): Minimum student level – graduate.*

Formerly: Cross-listed: (See Management Science 651.)

Rationale: Currently, this is a cross-listed course and the primary owner is Management Science 651. The Business Analytics and Statistics (BAS) Department has not taught the course for a long time and does not plan to offer it. The Industrial and Systems Engineering Department offers it regularly, once every year. MGSC 651 dropped this course in the Courses Not Taught in 4 or More Year Report and ISE, listed as secondary cross-list wants to retain the course and become primary owner. Impact on other units: Business Analytics and Statistics agrees with the change. Financial Impact: None.

## DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

### (MSE) Materials Science and Engineering

#### ADD AS A SECONDARY CROSS-LIST COURSE

**MSE 660 Defect Physics in Materials Exposed to Extreme Environments (3)**

*Cross-listed: (See Nuclear Engineering 660.)*



Rationale: We have a number of graduate students in MSE that are performing nuclear materials research. These students are interested in taking this course and they will benefit from the material presented in this course. Impact on other units: None. Financial impact: None.

## DEPARTMENT OF MECHANICAL, AEROSPACE, AND BIOMEDICAL ENGINEERING

### (BME) Biomedical Engineering

#### ADD

**BME 530 Thin Film Enhancement of Biomedical Devices (3)** Overview of the fundamentals of selected thin film deposition techniques and pertinent instrumentation with an emphasis on applications to biomaterials. Structural characterization and tailoring of thin films for implant-specific applications. Growth of thin films on biomaterial surfaces, the biological interface and biocompatibility. Uniformity, adhesion, cytotoxicity and bacterial reduction synergy. Application of thin films in tissue engineering and stem cell technologies.

*Recommended background: Biomaterials and cell and tissue-biomaterials interaction.*

*Registration permission: Consent of instructor.*

Rationale: Gives permanent number to a course with consistent enrollment that has been taught as "special topics" for several years. Impact on other units: None. Financial impact: None.

#### DROP

### BME 409 Cell and Tissue Engineering (3)

Rationale: Course is now required for BME undergraduate degree and should not be available for graduate credit. Course remains in Undergraduate Catalog. Impact on other units: None. Financial impact: None.

#### DROP SECONDARY COURSE

### BME 474 Biomaterials (3)

*Cross-listed (See Materials Science and Engineering 474)*

Rationale: Course is now required for BME undergraduate degree and should not be available for graduate credit. Course remains in Undergraduate Catalog. Impact on other units: None. Financial impact: None.

### (ME) Mechanical Engineering

#### ADD

**ME 583 Vehicle Modeling and Simulation (3)** Advanced vehicle level modeling, fundamental approaches and processes for vehicle modeling, tools for developing complete vehicle-level models, advanced powertrain architectures, introductory vehicle supervisory control principles.

*Recommended background: Dynamics, control systems and numerical analysis.*

*Registration permission: Consent of instructor.*

Rationale: Gives permanent number to a course with consistent enrollment that has been taught as "special topics" for many years. Impact on other units: None. Financial impact: None.

## DEPARTMENT OF NUCLEAR ENGINEERING

### (NE) Nuclear Engineering

#### ADD 400 LEVEL HONORS COURSE FOR GRADUATE CREDIT

**NE 447 Honors: Nuclear Fuel Cycle (3)** Students will attend 404 classes with supplementary assignments and/or class meetings.

*Registration Restriction: Minimum student level – junior.*

*Registration Permission: Consent of instructor.*

Rationale: NE 447 is the honors version of NE 404 Nuclear Fuel Cycle. NE 404 is in the graduate catalog and therefore, can be taken by an undergraduate for graduate credit if the student is using "seniors eligible for graduate credit" privilege for our BS/MS program. Some of these students may be in the honors program and may want to take the honors version of the course; therefore, the honors version needs to be in the graduate catalog too. Additional work is always given for the graduate version of undergraduate courses. Impact on other units: None. Financial impact: None.

~~NE 467 Honors: Radiation Shielding (3)~~ **Remove:** Department does NOT want to add NE 467 to the Graduate Catalog.  
~~(RE) Prerequisite(s): 233 or 433, Physics 232, or Consent of instructor.~~

## REVISE PRIMARY COURSES TO ADD A SECONDARY CROSS-LISTING

### NE 575 Equipment and Systems Prognostics (3)

*Cross-listed: (Same as Industrial Engineering 575)*

### NE 579 Empirical Models for Monitoring and Diagnostics (3)

*Cross-listed: (Same as Industrial Engineering 579)*

Rationale: Industrial Engineering has a number of graduate students that are performing reliability and maintainability engineering research. These students are interested in taking these courses and they will benefit from the materials presented in these course. Impact on other units: None. Financial impact: None.

## REVISE DESCRIPTION, DROP (RE)PREREQUISITE, AND ADD REGISTRATION RESTRICTION (SAME AS UG)

**NE 404 Nuclear Fuel Cycle (3)** Covers all relevant components of the commercial nuclear fuel cycle, including methods for mining and milling, physics of uranium enrichment, fuel fabrication, in-core fuel management strategies, reactor physics, spent fuel storage, reprocessing, and disposal of high-level radioactive wastes. Additional topics include decommissioning of nuclear facilities and the economics of electric power production as they apply to nuclear energy systems. Discussions of relevant issues in nuclear material accountancy and international safeguards for fuel cycle facilities.

*Registration Restriction: Minimum student level – junior.*

Formerly: 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.

(RE) Prerequisite(s): NE 470.

Registration Restriction: None.

Rationale: The catalog description is being changed to more accurately reflect the topics covered in the course. The prerequisite is being eliminated due to the fact that necessary reactor physics content is reviewed in the class; additionally, as part of the nuclear facilities decommissioning minor, the prerequisite was causing difficulty for non-NE students wishing to enroll in the course. Impact on other units: None. Financial Impact: None.

## REVISE (RE) PREREQUISITE

### NE 406 Radiation Shielding (3)

*(RE) Prerequisite(s): 233 or 433, Physics 232, or consent of instructor.*

Formerly: Prerequisite(s): Physics 232.

Rationale: We have decided to make the graduate and undergraduate listings consistent with each other. Impact on other units: None. Financial impact: None.

## REVISE PRIMARY COURSE TO REMOVE (RE)PREREQUISITES AND REVISE (RE)COREQUISITES

### NE 440 Introduction to Nuclear Fuels and Materials (3)

*Cross-listed: (Same as Materials Science and Engineering 450.)*

*(RE) Corequisite(s): Materials Science and Engineering 201 or 207; and Mechanical Engineering 321 or Materials Science and Engineering 302.*

Formerly: (RE) Prerequisite(s): ME 331 or MSE 260.

(RE) Corequisite(s): MSE 201; and ME 321 or MSE 302.

Rationale: The prerequisites for NE440 (co-listed as MSE450) should be deleted. The students in this class are a mixture of undergraduate students from NE or MSE, and NE/MSE graduate students. The prerequisite for ME331 or MSE260 (thermodynamics) is not needed, since sufficient exposure to the key thermodynamic concepts of Gibbs free energy, etc. are obtained by NE and MSE students in several courses before they enroll in this senior-level class. Most graduate students are coming from institutions outside of UT and they similarly have sufficient exposure to thermodynamics from their undergraduate coursework. Impact on other units: Prerequisite for MSE 450 listing should also be removed. Financial Impact: None.

## REVISE (RE)PREREQUISITES

### NE 470 Nuclear Reactor Theory (3)

*(RE) Prerequisite(s): 362 or consent of instructor or graduate standing.*

Formerly: (RE) Prerequisite(s): 362 or consent of instructor.

Rationale: This class is a required class for new graduate students that do not have an undergraduate degree in Nuclear Engineering. The addition of graduate standing makes it possible for graduate students who do not have an NE undergraduate degree to be able to take 470 without taking 362. Impact on other units: None. Financial impact: None.

### NE 663 Diagnostics for Boundary Plasma Physics and Plasma-Material Interactions (3)

*(RE) Prerequisite(s): 563.*

Formerly: (RE) Prerequisite(s): 560.

Rationale: Since the NE 560 course number no longer exists, because it was changed to NE 563, students cannot register into NE 663 without an override. Therefore, the current prerequisite is incorrectly listed. Impact on other units: none. Financial Impact: none.

#### REVISE TITLE AND DESCRIPTION

**NE 521 Nuclear Plant Instrumentation and Control Systems (3)** Overview of instrumentation and control systems for nuclear power plants and introduction to challenges and opportunities associated with the transition to digital technology.

Formerly: Nuclear Reactor Dynamics, Instrumentation, and Controls (3) Introduction to state variable methods for system dynamics and control analysis and application of these methods to nuclear plant dynamics, simulation and control problems.

Rationale: The prior NE 521 and NE 522 graduate sequence on reactor dynamics, instrumentation, and controls is being restructured into a modified two-semester sequence on instrumentation and control (I&C) systems and reactor dynamics and controls. The revised NE 521 will serve as an overview for the I&C systems of nuclear power plants and will ensure students have awareness of the primary safety and control systems at nuclear reactors. It will retain existing material on nuclear plant I&C systems from the prior version of the course and will incorporate material from the special topics course (NE 597) on digital I&C systems. As in the past, this course is a prerequisite for NE 522. Impact on other units: None. Financial Impact: None.

**NE 522 Nuclear Reactor Dynamics and Controls (3)** Introduction to state variable methods for system dynamics and control analysis and application of these methods to nuclear plant dynamics, simulation and control problems.

Formerly: Experimental Methods in Reactor Dynamics (3) Introduction to time domain and frequency domain techniques. Measurement, analysis, and interpretation of process signals for reactor surveillance and diagnostics. Introduction to time-series modeling.

Rationale: The prior NE 521 and NE 522 graduate sequence on reactor dynamics, instrumentation, and controls is being restructured into a modified two-semester sequence on instrumentation and control systems and reactor dynamics and controls. The revised NE 522 will serve as an introduction to system dynamics and control analysis for nuclear power plants. It will retain existing material on reactor dynamics and controls from the prior version of NE 521 and include coverage of special topics from the prior version of NE522. Impact on other units: None. Financial Impact: None.

**NE 532 Detection, Localization, and Nondestructive Assay of Nuclear and Radiological Materials (3)** Introduces nuclear material and nondestructive assay of nuclear material. Students learn about radiation background, its variance, and methods for detection of radiological and nuclear threats in the presence of background. Localization and imaging of nuclear and radiological materials are discussed. Methods for detailed characterization of nuclear materials are explored. Students complete simulation-based assignments to demonstrate their understanding of how nuclear materials may be detected in the presence of radiation background, and they write a journal quality review paper that is relevant to the subject of the course.

Formerly: 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.

Rationale: The current name and description were originally designed with a sponsor in mind. Updates reflect the changes for when the course has been fully developed. Impact on other units: none. Financial Impact: none.

#### REVISE (RE) PREREQUISITE AND TO ADD A SECONDARY CROSS-LIST

**NE 660 Defect Physics in Materials Exposed to Extreme Environments (3)**

*Cross-listed: (Same as Materials Science and Engineering 660).*

*(RE) Prerequisite(s): 540 or Materials Science and Engineering 573.*

Formerly: (RE) Prerequisite(s): 540.

Rationale: Materials Science and Engineering 573 is cross-listed with NE 540, therefore, it should be listed as an alternative prerequisite. Impact on other units: none. Financial Impact: none.

## II. PROGRAM CHANGES

### DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING

#### REVISE REQUIREMENTS DUAL MS-MBA PROGRAM – CHEMICAL ENGINEERING MAJOR TO ALLOW THESIS OPTION

In the 2017-2018 Graduate Catalog revise the dual MS-MBA program requirements to:

- 1) add the thesis option.
- 2) We are also requesting that for the thesis option, students be allowed to count three credit hours of thesis toward one of the engineering courses.

With the above revisions, the program requirements for the thesis option will increase to 63 hours (to include the minimum 6 credit hours of thesis). The non-thesis option will remain at 60 credit hours

#### REVISE FOOTNOTE 1 IN THE MS-MBA PROGRAM REQUIREMENTS TO REFLECT THE ABOVE REVISIONS

<sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Chemical Engineering major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

Formerly: <sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Chemical Engineering major.

Rationale: To allow MS thesis option to be used in the MS-MBA Program. Impact on other units: None. Financial impact: None.

### DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

#### REVISE REQUIREMENTS DUAL MS-MBA PROGRAM – CIVIL ENGINEERING MAJOR TO ALLOW THESIS OPTION

In the 2017-2018 Graduate Catalog revise the dual MS-MBA program requirements to:

- 1) add the thesis option.
- 2) We are also requesting that for the thesis option, students be allowed to count three credit hours of thesis toward one of the engineering courses.

With the above revisions, the program requirements for the thesis option will increase to 63 hours (to include the minimum 6 credit hours of thesis). The non-thesis option will remain at 60 credit hours

#### REVISE FOOTNOTE 1 IN THE MS-MBA PROGRAM REQUIREMENTS TO REFLECT THE ABOVE REVISIONS

<sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Civil Engineering major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

Formerly: <sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Civil Engineering major.

Rationale: To allow MS thesis option to be used in the MS-MBA Program. Impact on other units: None. Financial impact: None.

#### REVISE REQUIREMENTS DUAL MS-MBA PROGRAM – ENVIRONMENTAL ENGINEERING MAJOR TO ALLOW THESIS OPTION

In the 2017-2018 Graduate Catalog revise the dual MS-MBA program requirements to:

- 1) add the thesis option.
- 2) We are also requesting that for the thesis option, students be allowed to count three credit hours of thesis toward one of the engineering courses.

With the above revisions, the program requirements for the thesis option will increase to 63 hours (to include the minimum 6 credit hours of thesis). The non-thesis option will remain at 60 credit hours

#### REVISE FOOTNOTE 1 IN THE MS-MBA PROGRAM REQUIREMENTS TO REFLECT THE ABOVE REVISIONS

<sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Environmental Engineering major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

Formerly: <sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Environmental Engineering major.

Rationale: To allow MS thesis option to be used in the MS-MBA Program. Impact on other units: None. Financial impact: None.

## DEPARTMENTAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

### ➤ ADD CONCENTRATION – COMPUTER ENGINEERING MAJOR, FOR BOTH MS AND PHD

Signal Processing concentration

In the 2017-2018 Graduate Catalog, add Signal Processing concentration to the Computer Engineering major for both the MS and PhD.

Rationale: Signal Processing concentration was missed when concentrations were revised last year. Currently, the department has active research students and faculty in this area. Impact on other units: None. Financial impact: None.

### REVISE DEGREE REQUIREMENTS, COMPUTER ENGINEERING MAJOR, MS

In the 2017-2018 Graduate Catalog, under the Requirements Heading, revise first paragraph to delete the fourth and fifth sentences (which are shown below with strikethrough).

A student who receives financial support under a research assistantship is enrolled in the thesis option by default. Students who have held a research assistantship will require approval from the departmental graduate committee to change to one of the non-thesis options.

Formerly: Students may choose between a thesis option, a non-thesis course-only option, and a non-thesis project option. All students must file a Master's Program Plan with the departmental graduate committee specifying which option they have selected, a semester-by-semester schedule of the courses they intend to take, and the members of the student's master's committee. Students may change between options one time by filing an amended Master's Program Plan and with approval of the departmental graduate committee. ~~A student who receives financial support under a research assistantship is enrolled in the thesis option by default. Students who have held a research assistantship will require approval from the departmental graduate committee to change to one of the non-thesis options.~~

Rationale: At the moment, there is not an existing mechanism for enforcing this requirement prior to admission to candidacy. The decision for degree option for MS students receiving a research assistantship will be left to the student and advising faculty. Impact on other units: None. Financial impact: None.

### REVISE 600-LEVEL COURSE REQUIREMENTS FOR COMPUTER ENGINEERING MAJOR, PHD

In the 2017-2018 Graduate Catalog, under the Requirements Heading, revise the second paragraph, item "a" as follows:

- a. A minimum of 6 credit hours of work must be ECE or COSC courses numbered at or above the 600 level.

Formerly: a. A minimum of 9 credit hours of work must be ECE or COSC courses numbered at or above the 600 level.

Rationale: Improves consistency across programs. Allows a broader selection of 600 level courses for Ph.D. students that may be more appropriate for their research specialty. Impact on other units: None. Financial impact: None.

### REVISE DEGREE REQUIREMENTS, COMPUTER SCIENCE MAJOR, MS

In the 2017-2018 Graduate Catalog, under the Requirements Heading, revise first paragraph to delete the fourth and fifth sentences (which are shown below with strikethrough).

A student who receives financial support under a research assistantship is enrolled in the thesis option by default. Students who have held a research assistantship will require approval from the departmental graduate committee to change to one of the non-thesis options.

Formerly: Students may choose between a thesis option, a non-thesis course-only option, and a non-thesis project option. All students must file a Master's Program Plan with the departmental graduate committee specifying which option they have selected, a semester-by-semester schedule of the courses they intend to take, and the members of the student's master's committee. Students may change between options one time by filing an amended Master's Program Plan and with approval of the departmental graduate committee. ~~A student who receives financial support under a research assistantship is enrolled in the thesis option by default. Students who have held a research assistantship will require approval from the departmental graduate committee to change to one of the non-thesis options.~~

Rationale: At the moment, there is not an existing mechanism for enforcing this requirement prior to admission to candidacy. The decision for degree option for MS students receiving a research assistantship will be left to the student and advising faculty. Impact on other units: None. Financial impact: None.

### REVISE 600 LEVEL COURSE REQUIREMENTS FOR COMPUTER SCIENCE MAJOR, PHD

In the 2017-2018 Graduate Catalog, revise the 600-level course Requirements [2<sup>nd</sup> paragraph, revise (a.)] as follows:

- a. A minimum of 6 credit hours of work must be ECE or COSC courses numbered at or above the 600 level.

Formerly: A minimum of 6 credit hours of course work must be COSC or ECE courses numbered at the 600-level.

Rationale: Improves consistency across programs. Allows a broader selection of 600 level courses for Ph.D. students that may be more appropriate for their research specialty. Impact on other units: None. Financial impact: None.

#### ➤ **ADD CONCENTRATION – ELECTRICAL ENGINEERING MAJOR, FOR BOTH MS AND PHD**

Signal Processing concentration

In the 2017-2018 Graduate Catalog, add Signal Processing concentration to the Electrical Engineering major for both the MS and PhD.

Rationale: Signal Processing concentration was missed when concentrations were revised last year. Currently, the department has active research students and faculty in this area. Impact on other units: None. Financial impact: None.

#### **REVISE DEGREE REQUIREMENTS, ELECTRICAL ENGINEERING MAJOR, MS**

In the 2017-2018 Graduate Catalog, under the Requirements heading, first paragraph, delete the fourth and fifth sentences (as indicated below with strikethrough).

A student who receives financial support under a research assistantship is enrolled in the thesis option by default. Students who have held a research assistantship will require approval from the departmental graduate committee to change to one of the non-thesis options.

Formerly: Students may choose between a thesis option, a non-thesis course-only option, and a non-thesis project option. All students must file a Master's Program Plan with the departmental graduate committee specifying which option they have selected, a semester-by-semester schedule of the courses they intend to take, and the members of the student's master's committee. Students may change between options one time by filing an amended Master's Program Plan and with approval of the departmental graduate committee. ~~A student who receives financial support under a research assistantship is enrolled in the thesis option by default. Students who have held a research assistantship will require approval from the departmental graduate committee to change to one of the non-thesis options.~~

#### **REVISE 600 LEVEL COURSE REQUIREMENTS FOR ELECTRICAL ENGINEERING MAJOR, PHD**

In the 2017-2018 Graduate Catalog, revise the 600-level course requirements [2<sup>nd</sup> paragraph, revise (a.)] as follows:

- a. A minimum of 6 credit hours of work must be ECE or COSC courses numbered at or above the 600 level.

Formerly: A minimum of 9 credit hours of work must be ECE courses numbered at or above the 600 level.

Rationale: Improves consistency across programs. Allows a broader selection of 600 level courses for Ph.D. students that may be more appropriate for their research specialty. Impact on other units: None. Financial impact: None.

#### **REVISE REQUIREMENTS DUAL MS-MBA PROGRAM – COMPUTER ENGINEERING MAJOR TO ALLOW THESIS OPTION**

In the 2017-2018 Graduate Catalog revise the dual MS-MBA program requirements to:

- 1) add the thesis option.
- 2) We are also requesting that for the thesis option, students be allowed to count three credit hours of thesis toward one of the engineering courses.

With the above revisions, the program requirements for the thesis option will increase to 63 hours (to include the minimum 6 credit hours of thesis). The non-thesis option will remain at 60 credit hours

#### **REVISE FOOTNOTE 1 IN THE MS-MBA PROGRAM REQUIREMENTS TO REFLECT THE ABOVE REVISIONS**

<sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Computer Engineering major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

<sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Computer Engineering major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

Formerly: <sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Computer Engineering major.

Rationale: To allow MS thesis option to be used in the MS-MBA Program. Impact on other units: None. Financial impact: None.

#### **REVISE REQUIREMENTS DUAL MS-MBA PROGRAM – COMPUTER SCIENCE MAJOR TO ALLOW THESIS OPTION**

In the 2017-2018 Graduate Catalog revise the dual MS-MBA program requirements to:

- 1) add the thesis option.

- 2) We are also requesting that for the thesis option, students be allowed to count three credit hours of thesis toward one of the engineering courses.

With the above revisions, the program requirements for the thesis option will increase to 63 hours (to include the minimum 6 credit hours of thesis). The non-thesis option will remain at 60 credit hours

**REVISE FOOTNOTE 1 IN THE MS-MBA PROGRAM REQUIREMENTS TO REFLECT THE ABOVE REVISIONS**

<sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Computer Science major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

<sup>1</sup>The Computer Science courses taken for the dual MS-MBA degree must include Computer Science COSC 530, COSC 560, and either COSC 580 COSC 581. The engineering courses selected must satisfy the degree requirements for the Computer Science major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

Formerly: <sup>1</sup>The Computer Science courses taken for the dual MS-MBA degree must include Computer Science COSC 530, COSC 560, and either COSC 580 COSC 581.

Rationale: To allow MS thesis option to be used in the MS-MBA Program. Impact on other units: None. Financial impact: None.

**REVISE REQUIREMENTS DUAL MS-MBA PROGRAM – ELECTRICAL ENGINEERING MAJOR TO ALLOW THESIS OPTION**

In the 2017-2018 Graduate Catalog revise the dual MS-MBA program requirements to:

- 1) add the thesis option.
- 2) We are also requesting that for the thesis option, students be allowed to count three credit hours of thesis toward one of the engineering courses.

With the above revisions, the program requirements for the thesis option will increase to 63 hours (to include the minimum 6 credit hours of thesis). The non-thesis option will remain at 60 credit hours

<sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Electrical Engineering major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

Formerly: <sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Electrical Engineering major.

Rationale: To allow MS thesis option to be used in the MS-MBA Program. Impact on other units: None. Financial impact: None.

❖ **ADD GRADUATE CERTIFICATE: WIDE BANDGAP (WBG) POWER ELECTRONICS**

In the 2017-2018 Graduate Catalog add heading, text and requirements for new certificate: Wide Bandgap (WBG) Power Electronics.

Wide Bandgap (WBG) Power Electronics Graduate Certificate

The Wide Bandgap (WBG) Power Electronics graduate certificate is granted to students who have demonstrated mastery of knowledge in WBG power electronics, and preparation for industry or academic positions as a leader in the field. This certificate is for enrolled MS (thesis option) and PhD students in the EECS Department. The program consists of a minimum of 16 graduate credit hours. The certificate requirements are as follows:

1. Technical concentration in WBG Power Electronics

Select at least four courses from:

- ECE 523: Power Electronics and Drives .....(3)
- ECE 531: Semiconductor Devices.....(3)
- ECE 581: High Frequency Power Electronics .....(3)
- ECE 582: Power Electronic Circuits .....(3)
- ECE 626: Solid State Power Semiconductors .....(3)
- ECE 681: Power Electronics Technologies I .....(3)
- ECE 623: Advanced Power Electronics and Drives .....(3)
- ECE 682: Power Electronics Technologies II .....(3)

2. Broadening Knowledge of Power Electronics

Required Course:

- ECE 691: Advanced Graduate Seminar .....(1)

3. Professional Development

Select one course from:

IE 405: Engineering Economic Analysis	(3)
IE 518: Advanced Engineering Economic Analysis	(3)
ME 519: Technology Product Development and Entrepreneurship	(3)
GEOL 690: Seminar in Earth and Environmental Science	(3)

#### 4. Research Contribution

This certificate is for enrolled MS (thesis option) and PhD students in the EECS Department. The MS students are required to complete their MS thesis. The PhD students are required to complete their dissertation.

Rationale: UTK recently received a DOE-sponsored Traineeship program in WBG Power Electronics. As part of the proposal, this certificate was designed for both participants in the traineeship program and non-trainee graduate students in the EECS department. This certificate requires students in MS program to complete their thesis. For students in the PhD program, it requires completion of their dissertation. Impact on other units: None. Financial impact: None, as all courses in the certificate are already regularly taught.

## DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING

### ➤ ADD CONCENTRATIONS – INDUSTRIAL ENGINEERING MAJOR, MS

Automotive Manufacturing concentration  
Systems Engineering concentration

In the 2017-2018 Graduate Catalog, add two concentrations to the Industrial Engineering Major, MS:

Rationale: The department approved the addition of Automotive Manufacturing concentration, in order to prepare our graduate students for the national strategic goals in advanced manufacturing and smart manufacturing, also for the state strategic goals in automotive industry. The department requests a Systems Engineering concentration because of current trends in demand and alignment with the name of the department, Industrial and Systems Engineering. This will allow the department to develop courses and conduct MS based research in systems with Y12, ORNL, and other industry. Many companies presently look at systems engineering as a separate field and have formalized the position of systems engineers. Offering a systems concentration provides students an additional opportunity to expand their career options while satisfying a need that industry has for systems engineers. Impact on other units: None. Financial impact: None.

### REVISE REQUIREMENTS – INDUSTRIAL ENGINEERING MAJOR, MS

In the 2017-2018 Graduate Catalog, Industrial Engineering Major, MS, revise degree requirements text to read as follows:

#### Industrial Engineering Major, MS

Students who enroll in the Master of Science program may select a concentration in engineering management, automotive manufacturing or systems engineering. The student may select either a thesis or non-thesis option. The thesis option requires 24 credit hours of graduate course work, 2 credit hours of IE 550 Graduate Seminar, and 6 credit hours of thesis. The non-thesis option requires 30 credit hours of graduate course work and 2 credit hours of IE 550 Graduate Seminar. Prerequisites are required for all specialties if the previous undergraduate degree is not an engineering discipline. The automotive manufacturing concentration requires two courses from the approved automotive manufacturing specialization. The systems engineering concentration requires two courses from the approved systems engineering specialization. Refer to the department's MS handbook for specific requirements.

Formerly: Students who enroll in the Master of Science program may select a concentration in engineering management. The student may select either a thesis or non-thesis option. The thesis option requires 24 credit hours of graduate course work, 2 credit hours of IE 550 Graduate Seminar, and 6 credit hours of thesis. The non-thesis option requires 27 credit hours of graduate course work, 2 credit hours of IE 550 Graduate Seminar, and a 3-credit hour design project. Prerequisites are required for all specialties if the previous undergraduate degree is not an engineering discipline. Refer to the department's MS handbook for specific requirements.

Rationale: We added a line, "The automotive manufacturing concentration requires two courses from the approved automotive manufacturing" for the proposed addition of automotive manufacturing concentration to IE program. We are also requesting a Systems Engineering concentration because of current trends are in demand and aligned with the name of the department. We added one line "The systems engineering concentration requires two courses from the approved systems engineering specialization" for the new proposed Systems Engineering Concentration. This will allow the department to develop courses and conduct MS based research with Y12, ORNL and other industry in systems. Many companies presently look at systems engineering as a separate field and have formalized the position of systems engineer offering a systems concentration provides students an additional opportunity to expand their career options while satisfying a need that industry has for systems engineers. We are anticipating new courses to support the two added concentrations. We drop the requirement of a 3-credit hour design project for the non-thesis option to make it consistent to all other engineering programs. Impact on other units: None. Financial impact: None.

### REVISE REQUIREMENTS DUAL MS-MBA PROGRAM – INDUSTRIAL ENGINEERING MAJOR TO ALLOW THESIS OPTION

In the 2017-2018 Graduate Catalog revise the dual MS-MBA program requirements to:

- 1) add the thesis option.
- 2) We are also requesting that for the thesis option, students be also allowed to count three credit hours of thesis toward one of the engineering courses.



With the above revisions, the program requirements for the thesis option will increase to 63 hours (to include the minimum 6 credit hours of thesis). The non-thesis option will remain at 60 credit hours

#### **ADD FOOTNOTE IN THE MS-MBA PROGRAM REQUIREMENTS TO REFLECT THE ABOVE REVISIONS**

<sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Industrial Engineering major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

Formerly: No footnote.

Rationale: To allow MS thesis option to be used in the MS-MBA Program. Impact on other units: None. Financial impact: None.

### **DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING**

#### **REVISE REQUIREMENTS DUAL MS-MBA PROGRAM – MATERIALS SCIENCE AND ENGINEERING MAJOR TO ALLOW THESIS OPTION**

In the 2017-2018 Graduate Catalog revise the dual MS-MBA program requirements to:

- 1) add the thesis option.
- 2) We are also requesting that for the thesis option, students be allowed to count three credit hours of thesis toward one of the engineering courses.

With the above revisions, the program requirements for the thesis option will increase to 63 hours (to include the minimum 6 credit hours of thesis). The non-thesis option will remain at 60 credit hours

#### **REVISE FOOTNOTE 1 IN THE MS-MBA PROGRAM REQUIREMENTS TO REFLECT THE ABOVE REVISIONS**

<sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Materials Science and Engineering major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

Formerly: <sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Materials Science and Engineering major.

Rationale: To allow MS thesis option to be used in the MS-MBA Program. Impact on other units: None. Financial impact: None.

### **DEPARTMENT OF MECHANICAL, AEROSPACE, AND BIOMEDICAL ENGINEERING**

#### **REVISE REQUIREMENTS DUAL MS-MBA PROGRAM – AEROSPACE ENGINEERING MAJOR TO ALLOW THESIS OPTION**

In the 2017-2018 Graduate Catalog revise the dual MS-MBA program requirements to:

- 1) add the thesis option.
- 2) We are also requesting that for the thesis option, students be allowed to count three credit hours of thesis toward one of the engineering courses.

With the above revisions, the program requirements for the thesis option will increase to 63 hours (to include the minimum 6 credit hours of thesis). The non-thesis option will remain at 60 credit hours

#### **REVISE TO ADD FOOTNOTE 2 IN THE MS-MBA PROGRAM REQUIREMENTS TO REFLECT THE ABOVE REVISIONS**

<sup>1</sup>MS requirements: 12 credit hours minimum in major and 6 credit hours minimum mathematics courses (400-graduate level or above).

Dual degree candidates enrolled in engineering science are required to take 18 credit hours of graduate-level engineering courses. This program requires a course work plan, approved by the Dual Program Committee Chair, including a concentration.

<sup>2</sup>The engineering courses selected must satisfy the degree requirements for the Aerospace Engineering major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

Rationale: To allow MS thesis option to be used in the MS-MBA Program. Impact on other units: None. Financial impact: None.

#### **REVISE REQUIREMENTS DUAL MS-MBA PROGRAM – BIOMEDICAL ENGINEERING MAJOR TO ALLOW THESIS OPTION**

In the 2017-2018 Graduate Catalog revise the dual MS-MBA program requirements to:

- 1) add the thesis option.
- 2) We are also requesting that for the thesis option, students be allowed to count three credit hours of thesis toward one of the engineering courses.

With the above revisions, the program requirements for the thesis option will increase to 63 hours (to include the minimum 6 credit hours of thesis). The non-thesis option will remain at 60 credit hours.

**REVISE TO ADD FOOTNOTE 2 IN THE MS-MBA PROGRAM REQUIREMENTS TO REFLECT THE ABOVE REVISIONS**

<sup>1</sup>MS requirements: 12 credit hours minimum in major and 6 credit hours minimum mathematics courses (400-graduate level or above).

Dual degree candidates enrolled in engineering science are required to take 18 credit hours of graduate-level engineering courses. This program requires a course work plan, approved by the Dual Program Committee Chair, including a concentration.

<sup>2</sup>The engineering courses selected must satisfy the degree requirements for the Biomedical Engineering major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

Rationale: To allow MS thesis option to be used in the MS-MBA Program. Impact on other units: None. Financial impact: None.

**REVISE REQUIREMENTS DUAL MS-MBA PROGRAM – MECHANICAL ENGINEERING MAJOR TO ALLOW THESIS OPTION**

In the 2017-2018 Graduate Catalog revise the dual MS-MBA program requirements to:

- 1) add the thesis option.
- 2) We are also requesting that for the thesis option, students be allowed to count three credit hours of thesis toward one of the engineering courses.

With the above revisions, the program requirements for the thesis option will increase to 63 hours (to include the minimum 6 credit hours of thesis). The non-thesis option will remain at 60 credit hours.

**REVISE TO ADD FOOTNOTE 2 IN THE MS-MBA PROGRAM REQUIREMENTS TO REFLECT THE ABOVE REVISIONS**

<sup>1</sup>MS requirements: 12 credit hours minimum in major and 6 credit hours minimum mathematics courses (400-graduate level or above).

Dual degree candidates enrolled in engineering science are required to take 18 credit hours of graduate-level engineering courses. This program requires a course work plan, approved by the Dual Program Committee Chair, including a concentration.

<sup>2</sup>The engineering courses selected must satisfy the degree requirements for the Biomedical Engineering major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for engineering courses.

Formerly: 1 MS requirements: 12 credit hours minimum in engineering major and 6 credit hours minimum mathematics courses (400-level or above).

Dual degree candidates enrolled in engineering science are required to take 18 credit hours of graduate-level engineering courses. This program requires a course work plan, approved by the Dual Program Committee Chair, including a concentration.

Rationale: To allow MS thesis option to be used in the MS-MBA Program. Impact on other units: None. Financial impact: None.

**DEPARTMENT OF NUCLEAR ENGINEERING**

**REVISE REQUIREMENTS – NUCLEAR ENGINEERING MAJOR, MS**

In the 2017-2018 Graduate Catalog, under the Requirement heading revise first bullet to add course NE 563 to the list of courses.

Formerly: A major consisting of 12 credit hours of graduate courses in nuclear engineering which must include at least two of the following courses – NE 511, NE 521, NE 540, NE 542, NE 551, NE 571.

Rationale: NE 563 (Plasma Physics and Plasma Material Interactions) should be added to the list of course options for the UTNE MS degree requirement. NE 563 is a new foundational course for the fusion technology research focus in the department and is sufficiently different from all of the other courses on the list to qualify as diverse and distinct from the subject areas. Impact on other units: none. Financial impact: none.

**REVISE REQUIREMENTS – NUCLEAR SECURITY SCIENCE AND ANALYSIS GRADUATE CERTIFICATE**

In the 2017-2018 Graduate Catalog, in the third bullet revise the NSSA electives to add course NE 537 (bolded and shown below).

NSSA electives include:

- NE 532 Advanced Topics in Nuclear Security Science and Analysis
- NE 533 Physical Security for High-Consequence Facilities
- NE 534 Physical Security Vulnerability Assessment,

**NE 537 Human Reliability in Nuclear Systems**

NE 550 Radiation Measurements Laboratory

NE 635 Nuclear Forensics

POLS 686 Arms Control, Deterrence and Nuclear Nonproliferation.

Rationale: NE 537 has already been an integral part of the NSSA certificate electives for a few years. It has simply been overlooked to add this course to the list of electives and so the approval process to allow students to count this course as an NSSA elective has been handled manually. Impact on other units: none. Financial Impact: none.

**REVISE REQUIREMENTS DUAL MS-MBA PROGRAM – NUCLEAR ENGINEERING MAJOR TO ALLOW THESIS OPTION**

In the 2017-2018 Graduate Catalog revise the dual MS-MBA program requirements to:

- 1) add the thesis option.
- 2) We are also requesting that for the thesis option, students be allowed to count three credit hours of thesis toward one of the engineering courses.

With the above revisions, the program requirements for the thesis option will increase to 63 hours (to include the minimum 6 credit hours of thesis). The non-thesis option will remain at 60 credit hours.

**REVISE FOOTNOTE 1 IN THE MS-MBA PROGRAM REQUIREMENTS TO REFLECT THE ABOVE REVISIONS**

<sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Nuclear Engineering major. Subject to the approval by departmental Director of Graduate Studies, up to three credit hours of thesis may be substituted for

Formerly: <sup>1</sup>The engineering courses selected must satisfy the degree requirements for the Nuclear Engineering major.

Rationale: To allow MS thesis option to be used in the MS-MBA Program. Impact on other units: None. Financial impact: None.

# COLLEGE OF LAW

All changes effective Fall 2017

## I. COURSE CHANGES

### ADD

**Law 986 Semester in Residence (9-11)** Student engages in supervised legal work in a professional placement approved by the program's supervising faculty member. The student, supervising faculty member, and an onsite attorney supervisor will structure the placement to maximize opportunities for the student to achieve career goals and develop knowledge, skills, and professionalism needed in law practice. The student will regularly interact with and receive feedback from the supervising faculty member and onsite attorney supervisor. In addition to enrolling in this course, student must also enroll in Semester in Residence Seminar during the same semester.

*Grading Restriction: Satisfactory/No Credit grading only.*

*Repeatability: Not repeatable. May be taken once for 9 – 11 hours.*

*(DE) Prerequisite(s): 814.*

*(DE) Corequisite(s): 987.*

*Comments: May not be taken concurrently with 905, 947, 948, or 949.*

*Registration Restriction(s): Third-year law students only.*

Rationale: New course that expands curriculum. Impact on other units: None expected. Financial impact: None expected.

Learning outcomes: Each student should be proficient in legal analysis and writing. Each student should be proficient in various competencies for legal practice, such as solving problems in light of a client's objectives, interviewing, structuring transactions, agreements, or settlements, and counseling clients. Each student should understand how to act in professional settings in a manner expected of a competent legal practitioner.

**Law 987 Semester in Residence Seminar (1-2)** This seminar is taken by all students while enrolled in the Semester in Residence program. In this seminar, students will develop their knowledge of legal doctrine, lawyering skills, and professional values needed to succeed in practice, with a particular focus on the practice areas in which students are working in their Semester in Residence placements. Assignments to be completed in this Seminar include (but are not limited to) a statement of goals for the Semester in Residence placement, a weekly time sheet, and a weekly journal entry discussing the experience and evaluating the student's own progress toward meeting the goals of the placement.

*Repeatability: Not repeatable. May be taken once for 1 – 2 hours.*

*(DE) Prerequisite(s): 814.*

*(DE) Corequisite(s): 986.*

*Comments: May not be taken concurrently with 905, 947, 948, or 949.*

*Registration Restriction(s): Third-year law students only.*

Rationale: New course that expands curriculum. Impact on other units: None expected. Financial impact: None expected.

Learning outcomes: Each student should be proficient in legal analysis and writing. Each student should be proficient in various competencies for legal practice, such as solving problems in light of a client's objectives, interviewing, structuring transactions, agreements, or settlements, and counseling clients. Each student should understand how to act in professional settings in a manner expected of a competent legal practitioner.

### REVISE TITLE AND DESCRIPTION

**LAW 930 Ediscovery (3)** Introduces students to electronic discovery (ediscovery) in civil litigation. Students will handle every aspect of ediscovery in a simulated case, including participating in a 26(f) conference, drafting and responding to discovery requests, preparing a privilege log, and conducting a document review using ediscovery software. Students will study recent ediscovery cases and other developments in the law. Members of the bench and bar will sometimes participate in class discussions. Each student will make a presentation in which the student will propose a solution to an emerging problem in ediscovery practice. Students must have a laptop computer or other device that meets the requirements necessary to operate the ediscovery software used in the simulated case. (These requirements will be communicated at registration).

Formerly: E-Discovery (3). An introduction to electronic discovery (e-discovery) in civil litigation. Students will handle every aspect of e-discovery in a simulated case, including participating in a 26(f) conference, drafting and responding to discovery requests, preparing a privilege log, and conducting a document review using e-discovery software. Will study recent e-discovery cases and other developments in the law. Members of the bench and bar will sometimes participate in class discussions. Each student will write a paper and make a presentation on an emerging problem in e-discovery practice. Must have a laptop computer that meets the requirements necessary to operate the e-discovery software used in the simulated case.

SUPPORTING INFORMATION: Rationale: Revises title to reflect more common use. Revises description to describe revised course content. Impact on other units: None expected. Financial impact: None expected. Additional Documentation: None required.

# COLLEGE OF NURSING

All changes effective Fall 2017

## I. COURSE CHANGES

### REVISE TITLE AND DESCRIPTION

**NURS 622 Evidence Based Practice and Translational Research (3)** Evaluation and synthesis of existing research in a focused area of nursing practice

Formerly: Methods for Translational Research (3) Provide students with methods and tools for the evaluation of existing evidence and testing application of interventions.

**NURS 623 Ethical and Societal Issues within Healthcare (2)** A critical analysis of ethical, cultural, and societal issues within healthcare.

Formerly: Bioethics, Culture, and Societal Issues within Healthcare (2) A critical analysis of ethical, diversity, and social issues within healthcare systems.

**NURS 624 Technology and the Transformation of Healthcare (3)** Supports the use information systems /technology to improve patient care outcomes and transform health care systems.

Formerly: Evidence-Based Practice and Use of Information Technology (3) Provides students with methods and tools for evaluating the strength of existing evidence including meta-synthesis and meta-analysis and testing application of interventions

Rationale: To align with AACN Essentials of Doctoral Education standards and to more accurately reflect course content and objectives. Impact on other units: None. Financial impact: None.

### REVISE DESCRIPTION

**NURS 630 Project Organization Seminar I (1)** Conceptualization of a problem in nursing practice and initial planning for the DNP Scholarly Project..

Formerly: Conceptualization of a clinical problem and initial planning for the DNP Scholarly Project.

### REVISE DESCRIPTION AND (RE)PREREQUISITE

**NURS 631 Project Organization Seminar II (1)** Critical assessment of a problem in nursing practice and continued planning for the DNP Scholarly Project.

*(RE) Prerequisite(s): 630.*

Formerly: Critical assessment of a clinical problem and continued planning for the DNP Scholarly Project.  
(RE) Prerequisite(s): 620 and 630.

### REVISE DESCRIPTION AND (RE)PREREQUISITE AND DELETE (RE)COREQUISITE

**NURS 633 DNP Practice Immersion (1-12)** Individually designed practicum to implement and evaluate the DNP Scholarly Project.

*(RE) Prerequisite(s): 632, 613.*

Formerly: Individually designed practicum in a variety of settings to implement and evaluate the DNP Scholarly Project and its effect on healthcare outcome.

*(RE) Prerequisite(s): 632.*

*(RE) Co-requisite(s): 612 and 613.*

### REVISE GRADING (FROM LETTER GRADE TO P/NP)

**NURS 634 DNP Scholarly Project (3)**

*Grading Restriction: P/NP only.*

Formerly: A-F grading.

Rationale: To align with AACN Essentials of Doctoral Education standards .DNP Scholarly Project is equivalent of thesis/dissertation in other graduate programs. Impact on other units: None. Financial impact: None.

## II. PROGRAM CHANGES

- **DROP CONCENTRATIONS – NURSING MAJOR, MSN**
  - Mental Health Nursing
  - Pediatric Nursing
  
- **ADD CONCENTRATIONS – NURSING MAJOR, MSN**
  - Pediatric Nurse Practitioner concentration
  - Psychiatric Mental Health Nurse Practitioner concentration
  
- **DROP CONCENTRATIONS – NURSING MAJOR, DNP**
  - Mental Health Practitioner
  - Pediatric Nursing
  
- **ADD CONCENTRATIONS – NURSING MAJOR, DNP**
  - Pediatric Nurse Practitioner concentration
  - Psychiatric Mental Health Nurse Practitioner concentration
  
- **DROP CERTIFICATES**
  - Adult Health Nursing Clinical Nurse Specialist
  - Mental Health Nursing
  - Pediatric Nursing
  
- **ADD CERTIFICATES**
  - Adult Gerontology Clinical Nurse Specialist
  - Pediatric Nurse Practitioner
  - Psychiatric Mental Health Nurse Practitioner

Rationale: To meet requirements of national agencies administering certification examinations, the concentration name in the catalog and on transcripts must reflect population [Psychiatric Mental Health or Pediatric] and role preparation [Nurse Practitioner]. Impact on other units: None. Financial impact: None.

Rationale: Concentration Adult Health Nursing CNS dropped in 2016 when name revised to Adult Gerontology Clinical Nurse Specialty for MSN and DNP programs. Impact on other units: None. Financial impact: None.

### **REVISE ABOVE NAME CHANGES TO CONCENTRATIONS AND CERTIFICATES WHERE APPROPRIATE WHERE EACH IS LISTED IN THE CATALOG**

#### **REVISE COLLEGE INTRODUCTORY TEXT**

In the 2017-18 Graduate Catalog, revise the introductory text as follows:

The College of Nursing was established in July 1971. The master's program was initiated in 1976; the PhD program approved in 1988; and the DNP program launched in 2011. For more information, contact the office of Student Services Graduate Advisor, The University of Tennessee, College of Nursing, 1200 Volunteer Boulevard, Knoxville, Tennessee 37996-4180; (865) 974-4151.

College research efforts are coordinated through the Office of Research Administration.

Formerly: The College of Nursing was established in July 1971. The master's program was initiated in 1976 and approval for the doctoral program was granted in 1988. For more information, contact the Director of MSN or PhD Program, The University of Tennessee, College of Nursing, 1200 Volunteer Boulevard, Knoxville, Tennessee 37996-4180; (865) 974-4151.  
College research efforts are coordinated through the Center for Nursing Research.

#### **REVISE INTRODUCTORY TEXT – NURSING MAJOR, MSN**

In the 2017-18 Graduate Catalog, revise the second paragraph, second sentence as follows:

The program offers role preparation as nurse practitioners (Family, Pediatric, Psychiatric Mental Health), clinical nurse specialists (Adult Gerontology), nurse anesthetists, or nursing administrators. The Pediatric Nurse Practitioner concentration has two options: (1) Primary Care and (2) Primary/Acute Care.

Formerly: The program prepares advanced practice nurses for a career in adult-gerontology nursing, pediatric nursing, mental health nursing and nurse anesthesia, as well as role preparation as nurse practitioners, clinical nurse specialists, or nurse administrators.

Rationale: Update of current program names and research center name change. Impact on other units: None. Financial impact: None.

#### **ADD ADMISSION REQUIREMENT, NURSING MAJOR, MSN**

In the 2017-18 Graduate Catalog, add bullet point as shown below:

- Applicants for the Pediatric Nurse Practitioner Acute Care track must complete a minimum of one year of employment in an acute care setting (usually a hospital) prior to the beginning of coursework in the Acute Care track.

Rationale: Update of current programs and name changes. Impact on other units: None. Financial impact: None.

#### **REVISE REQUIREMENTS, NURSING MAJOR, MSN**

Concentration (choose one)	Hours	Credit
NURS 574, NURS 575, NURS 576 Adult Gerontology Clinical Nurse Specialist		15
NURS 544, NURS 545, NURS 546, NURS 547, NURS 548, NURS 549 Clinical Nurse Anesthesia Practicum/Seminar I, II, III, IV, V, VI		40
NURS 550, NURS 551, NURS 527, NURS 528, NURS 562, NURS 563 Pediatric Nurse Practitioner (Primary Care)		20
NURS 541, NURS 527 Pediatric Nurse Practitioner (Acute Care)		7
NURS 560, NURS 561, NURS 519 Psychiatric Mental Health Nurse Practitioner		16
NURS 570, NURS 571, NURS 572, NURS 573 Family Nurse Practitioner		19
NURS589, NURS 590, NURS 591, NURS 594, NURS 595 Nursing Administration		12

Additional course requirement for Family Nurse Practitioner, Psychiatric Mental Health Nurse Practitioner, and Pediatric Nurse Practitioner concentrations

NURS 512 - Practice Issues: Nurse Practitioner		1
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Formerly Concentration (choose one)	Hours	Credit
NURS 574, NURS 575, NURS 576 Adult Gerontology Clinical Nurse Specialist		15
NURS 529 Adult Health: Gerontology		5
NURS 544, NURS 545, NURS 546, NURS 547, NURS 548, NURS 549 Clinical Nurse Anesthesia Practicum/Seminar I, II, III, IV, V, VI		40
NURS 550, NURS 551, NURS 527, NURS 528, NURS 562, NURS 563 Pediatric Nurse Practitioner (Primary Care)		20
NURS 541, NURS 527 Pediatric Nurse Practitioner (Acute Care)		7
NURS 560, NURS 561, NURS 519 Mental Health Nursing I, II		16
NURS 570, NURS 571, NURS 572, NURS 573 Family Nurse Practitioner I, II, III		19
NURS 590, NURS 591 Nursing Administration: Macro/Micro Analysis		12

Additional course requirement for Family Nurse Practitioner, Mental Health Nursing, and Pediatric Nursing concentrations

NURS 512 - Practice Issues: Nurse Practitioner		1
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#### **REVISE – NURSING MAJOR, DNP**

In the 2017-18 Graduate Catalog, revise the first paragraph as follows:

The College of Nursing offers the Doctor of Nursing Practice program (DNP), designed for BSN or MSN graduates or those with a BSN and a Master's degree in a business or health related field, who are interested in earning a clinical doctorate in nursing.

Formerly: The College of Nursing offers the Doctor of Nursing Practice program (DNP), designed for MSN graduates who are interested in earning a clinical doctoral degree in nursing.

#### **REVISE ADMISSION REQUIREMENT – NURSING MAJOR, DNP**

In the 2017-18 Graduate Catalog, under the Admission heading, revise the second bullet and add additional bullet as follows:

- All applicants must hold a Bachelor's degree in nursing from a program accredited by the National League for Nursing Accrediting Commission or the Collegiate Commission on Nursing Education.
- Hold a master's degree in nursing or a business or health related field [e.g., MBA, MPH, MHA).

Formerly: Hold a Bachelor's or Master's degree in nursing from a program accredited by the National League for Nursing Accrediting Commission or the Collegiate Commission on Nursing Education.

Rationale: Current practice in post-graduate nursing education . Impact on other units: None. Financial impact: None.

#### **ADD ADMISSION REQUIREMENT – NURSING MAJOR, DNP**

In the 2017-18 Graduate Catalog, add bullet point as shown below:

- BSN to DNP applicants for the Pediatric Nurse Practitioner Acute Care track must complete a minimum of one year of employment in an acute care setting (usually a hospital) prior to the beginning of coursework in the Acute Care track.

Rationale: Update of current programs and name changes. Impact on other units: None. Financial impact: None.

### REVISE REQUIREMENTS – NURSING MAJOR, DNP

In the 2017-18 Graduate Catalog, revise the last course to reflect a course number for “Epidemiology” as follows:

NURS 579 – Epidemiology 3

Formerly: Epidemiology 3

Rationale: Reflects designation of NURS course number (579). Impact on other units: None. Financial impact: None.

### REVISE REQUIREMENTS – NURSING MAJOR, DNP (PEDIATRIC NURSE PRACTITIONER CONCENTRATION)

Requirements for Pediatric Nurse Practitioner concentration

	Hours Credit
NURS 501	3
NURS 510	3
NURS 504	3
NURS 505	3
NURS 515	3

#### Primary Care Track

NURS 527	5
NURS 528	2
NURS 550	2
NURS 551	2
NURS 562	2
NURS 563	2
Total hours	30

#### Acute Care Track

NURS 541 Care of the child with Complex Acute, Chronic and Critical Illness	2
NURS 527 Clinical Experience in Pediatric Health	5
Total hours	7

Rationale: Update of current programs and name changes. Impact on other units: None. Financial impact: None.

### REVISE REQUIREMENTS – NURSING MAJOR, DNP

In the 2017-18 Graduate Catalog, delete the last paragraph and replace with the following:

Students will be admitted to candidacy after successfully passing a comprehensive examination and defending the DNP Scholarly Project proposal. The DNP Scholarly Project produces a tangible and deliverable academic product that is derived from the practice immersion experience and is reviewed and evaluated by an academic committee. The DNP Scholarly Project committee is composed of a minimum of two doctoral-prepared (DNP or PhD) faculty. When appropriate, a third committee member may be selected, who holds special expertise relative to the specific project. The third member may be a faculty member from another academic unit, or external to the university.

Formerly: Students will be admitted to candidacy after successfully passing a comprehensive examination and defending the capstone project proposal. The capstone project produces a tangible and deliverable academic product that is derived from the practice immersion experience and is reviewed and evaluated by an academic committee. The capstone project committee is composed of a minimum of two doctorally-prepared (DNP or PhD) faculty. When appropriate, a third committee member may be selected, who holds special expertise relative to the specific project. The third member may be a faculty member from another academic unit, or external to the university.

Rationale: Reflects change in name of capstone project to DNP Scholarly Project as culminating outcome. Impact on other units: None. Financial impact: None.

### ADD ADMISSION REQUIREMENT – NURSING MAJOR, PHD

In the 2017-18 Graduate Catalog, add bullet point as shown below:

- BSN to PhD applicants for the Pediatric Nurse Practitioner Acute Care track must complete a minimum of one year of employment in an acute care setting (usually a hospital) prior to the beginning of coursework in the Acute Care track.

Rationale: Update of current programs and name changes. Impact on other units: None. Financial impact: None.

### REVISE ADMISSION REQUIREMENT – NURSING MAJOR, PHD

In the 2017-18 Graduate Catalog, under the Admissions heading add as introductory paragraph.

All applicants must hold a Bachelor's degree in nursing from a program accredited by the National League for Nursing Accrediting Commission or the Collegiate Commission on Nursing Education.

Hold a master's degree in nursing or a business or health related field [e.g., MBA, MPH, MHA).

Rationale: Current practice in post-graduate nursing education. Impact on other units: None. Financial impact: None.



## **REVISE GRADUATE CERTIFICATE – ADULT GERONTOLOGY CLINICAL NURSE SPECIALIST**

### Adult Gerontology Clinical Nurse Specialist Graduate Certificate

The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. This post-MSN certificate prepares advanced practice nurses for a career in adult-gerontology nursing. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Contact the Assistant Dean, Graduate Studies for more information.

#### Requirements

Course requirements are NURS 574, NURS 575, and NURS 579, plus additional hours as determined by the college.

Formerly: The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. The post-MSN certificates prepare advanced practice nurses for a career in adult-gerontology nursing, pediatric nursing, mental health nursing, and nurse anesthesia, as well as role preparation as nurse practitioners, clinical nurse specialists, or administrators. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Most students complete 16-20 hours of course credit with the exception of those pursuing certificates in nurse anesthesia or acute pediatric nurse practitioner, where additional hours are required. The nurse anesthesia certificate program requires students who have completed the master's degree in nursing within the preceding five (5) years to complete 60-70 credit hours. Contact the Assistant Dean, Graduate Studies for more information.

#### Requirements

Course requirements are NURS 574, NURS 575, and NURS 576, plus additional hours as determined by the college.

## **REVISE GRADUATE CERTIFICATE – FAMILY NURSE PRACTITIONER**

### Family Nurse Practitioner Graduate Certificate

The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. This post-MSN certificate prepares advanced practice nurses for a career as a Family Nurse Practitioner. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Contact the Assistant Dean, Graduate Studies for more information.

#### Requirements

Course requirements are NURS 570, NURS 571, NURS 572, and NURS 573 plus additional hours as determined by the college.

Formerly: The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. The post-MSN certificates prepare advanced practice nurses for a career in adult-gerontology nursing, pediatric nursing, mental health nursing, and nurse anesthesia, as well as role preparation as nurse practitioners, clinical nurse specialists, or administrators. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Most students complete 16-20 hours of course credit with the exception of those pursuing certificates in nurse anesthesia or acute pediatric nurse practitioner, where additional hours are required. The nurse anesthesia certificate program requires students who have completed the master's degree in nursing within the preceding five (5) years to complete 60-70 credit hours. Contact the Assistant Dean, Graduate Studies for more information.

#### Requirements

Course requirements are NURS 570, NURS 571, NURS 572, and NURS 573 plus additional hours as determined by the college.

## **REVISE GRADUATE CERTIFICATE – PSYCHIATRIC MENTAL HEALTH NURSE PRACTITIONER**

### Psychiatric Mental Health Nurse Practitioner Graduate Certificate

The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. This post-MSN certificate prepares advanced practice nurses for a career as a Psychiatric Mental Health Nurse Practitioner. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Contact the Assistant Dean, Graduate Studies for more information.

#### Requirements

Course requirements are NURS 519, NURS 560, and NURS 561, plus additional hours determined by the college.

Formerly: Mental Health Nursing Graduate Certificate

The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. The post-MSN certificates prepare advanced practice nurses for a career in adult-gerontology nursing, pediatric nursing, mental health nursing, and nurse anesthesia, as well as role preparation as nurse practitioners, clinical nurse specialists, or administrators. Advanced practice nursing

involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Most students complete 16-20 hours of course credit with the exception of those pursuing certificates in nurse anesthesia or acute pediatric nurse practitioner, where additional hours are required. The nurse anesthesia certificate program requires students who have completed the master's degree in nursing within the preceding five (5) years to complete 60-70 credit hours. Contact the Assistant Dean, Graduate Studies for more information.

#### Requirements

Course requirements are NURS 519, NURS 560, and NURS 561, plus additional hours determined by the college.

### **REVISE GRADUATE CERTIFICATE – NURSE ANESTHESIA**

#### Nurse Anesthesia Graduate Certificate

The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. This post-MSN certificate prepares advanced practice nurses for a career as a nurse anesthetist. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. The nurse anesthesia certificate program requires students who have completed the master's degree in nursing within the preceding five (5) years to complete 60-70 credit hours. Contact the Assistant Dean, Graduate Studies for more information.

#### Requirements

In addition to the general requirements for admission to graduate study and the College of Nursing, the following are required of all nurse anesthesia certificate applicants.

- One year of critical care experience with adult clients.
- Certification in Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS).
- A personal interview.

Course requirements are NURS 506, NURS 516, NURS 517, NURS 518, NURS 522, NURS 523, NURS 524, NURS 525, NURS 526 of nurse anesthesia didactic content, plus additional hours as determined by the college and 54 hours of nurse anesthesia clinical practice courses, NURS 544, NURS 545, NURS 546, NURS 547, NURS 548, NURS 549, NURS 583.

Formerly: The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. The post-MSN certificates prepare advanced practice nurses for a career in adult-gerontology nursing, pediatric nursing, mental health nursing, and nurse anesthesia, as well as role preparation as nurse practitioners, clinical nurse specialists, or administrators. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Most students complete 16-20 hours of course credit with the exception of those pursuing certificates in nurse anesthesia or acute pediatric nurse practitioner, where additional hours are required. The nurse anesthesia certificate program requires students who have completed the master's degree in nursing within the preceding five (5) years to complete 60-70 credit hours. Contact the Assistant Dean, Graduate Studies for more information.

#### Requirements

In addition to the general requirements for admission to graduate study and the College of Nursing, the following are required of all nurse anesthesia certificate applicants.

One year of critical care experience with adult clients.

Certification in Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS).

A personal interview.

Course requirements are NURS 506, NURS 516, NURS 517, NURS 518, NURS 522, NURS 523, NURS 524, NURS 525, NURS 526 of nurse anesthesia didactic content, plus additional hours as determined by the college and 54 hours of nurse anesthesia clinical practice courses, NURS 544, NURS 545, NURS 546, NURS 547, NURS 548, NURS 549, NURS 583.

### **REVISE GRADUATE CERTIFICATE – NURSING ADMINISTRATION**

#### Nursing Administration Graduate Certificate

The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. This post-MSN certificate prepares nurses for a career as nurse managers and administrators. Nursing Administration involves the managing delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Most students complete 16-20 hours of course credit. Contact the Assistant Dean, Graduate Studies for more information.

#### Requirements

Course requirements are NURS 589, NURS 590, NURS 591, NURS 594, and NURS 595 plus additional hours as determined by the college.

Formerly: The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. The post-MSN certificates prepare advanced practice nurses for a career in adult-gerontology nursing, pediatric nursing, mental

health nursing, and nurse anesthesia, as well as role preparation as nurse practitioners, clinical nurse specialists, or administrators. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Most students complete 16-20 hours of course credit with the exception of those pursuing certificates in nurse anesthesia or acute pediatric nurse practitioner, where additional hours are required. The nurse anesthesia certificate program requires students who have completed the master's degree in nursing within the preceding five (5) years to complete 60-70 credit hours. Contact the Assistant Dean, Graduate Studies for more information.

#### Requirements

Course requirements are NURS 589, NURS 590, NURS 591, NURS 594, and NURS 595 plus additional hours as determined by the college.

### **REVISE GRADUATE CERTIFICATE – NURSING EDUCATION**

The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. This post-MSN certificate prepares nurses for a career as nurse educators in both academic and nursing service settings. Nursing education practice involves the management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Contact the Assistant Dean, Graduate Studies for more information.

#### Requirements

The post-master's certificate in Nursing Education consists of 12 hours – 6 hours in nursing and 6 in education. Required courses in the College of Nursing are NURS 566 and NURS 565. In consultation with the Nursing Education Minor Coordinator, students select 6 hours of course work from the College of Education, Health, and Human Sciences.

Formerly: The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. The post-MSN certificates prepare advanced practice nurses for a career in adult-gerontology nursing, pediatric nursing, mental health nursing, and nurse anesthesia, as well as role preparation as nurse practitioners, clinical nurse specialists, or administrators. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Most students complete 16-20 hours of course credit with the exception of those pursuing certificates in nurse anesthesia or acute pediatric nurse practitioner, where additional hours are required. The nurse anesthesia certificate program requires students who have completed the master's degree in nursing within the preceding five (5) years to complete 60-70 credit hours. Contact the Assistant Dean, Graduate Studies for more information.

#### Requirements

The post-master's certificate in Nursing Education consists of 12 hours – 6 hours in nursing and 6 in education. Required courses in the College of Nursing are NURS 566 and NURS 565. In consultation with the Nursing Education Minor Coordinator, students select 6 hours of course work from the College of Education, Health, and Human Sciences.

### **REVISE GRADUATE CERTIFICATE – PEDIATRIC NURSE PRACTITIONER**

#### Pediatric Nurse Practitioner Graduate Certificate

The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. The post-MSN certificate prepares the advanced practice nurse for a career as a pediatric nurse practitioner in the primary and/or the acute care role. Students enrolling in the acute care track must have completed a primary care pediatric nurse practitioner program. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Contact the Assistant Dean, Graduate Studies for more information.

Course requirements for the primary care pediatric nurse practitioner program are: NURS 550, NURS 551, NURS 527, NURS 528, NURS 562, NURS 563, plus additional hours as determined by the college.

Course requirements for the acute care pediatric nurse practitioner program are: 541 and 527 plus additional hours as determined by the college.

Primary care pediatric nurse practitioner students can expect to complete approximately 20 credit hours of graduate course work. The acute care track is an additional 7 credit hours. A minimum of one year of work in an acute care setting (usually a hospital) is required before beginning coursework in the acute care track.

Formerly: The College of Nursing offers certificates for nurses who need additional training. A master's degree in nursing is required for admission. The post-MSN certificates prepare advanced practice nurses for a career in adult-gerontology nursing, pediatric nursing, mental health nursing, and nurse anesthesia, as well as role preparation as nurse practitioners, clinical nurse specialists, or administrators. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

The total hours will vary depending on the student's academic record, clinical experience, and objectives. Students must complete a minimum of 12 hours. Most students complete 16-20 hours of course credit with the exception of those pursuing certificates in nurse anesthesia or acute pediatric nurse practitioner, where additional hours are required. The nurse anesthesia certificate program requires students who have completed the master's degree in nursing within the preceding five (5) years to complete 60-70 credit hours. Contact the Assistant Dean,

Graduate Studies for more information.

Course requirements are: NURS 550, NURS 551, NURS 527, NURS 528, NURS 562, NURS 563, plus additional hours as determined by the college.

Rationale: To meet requirements of national agencies administering certification examinations, the concentration name in the catalog and on transcripts must reflect population [Adult Gerontology , Psychiatric Mental Health, Pediatric ] and role preparation [Clinical Nurse Specialist or Nurse Practitioner].

# COLLEGE OF SOCIAL WORK

All changes effective Fall 2017

## I. COURSE CHANGES

### (SOWK) Social Work

#### REVISE TITLE

#### **SOWK 519 Social Work Research (3)**

Formerly: Foundation Research

#### **SOWK 541 Generalist Field Practice Extended I (1)**

Formerly: Foundation Field Practice Extended I

#### **SOWK 542 Generalist Field Practice Full Time I/Extended II (2)**

Formerly: Foundation Field Practice Full Time I/Extended II

#### **SOWK 543 Generalist Field Practice Extended III (3)**

Formerly: Foundation Field Practice Extended III

#### **SOWK 544 Generalist Field Practice Full Time II (4)**

Formerly: Foundation Field Practice Full Time II

#### REVISE DESCRIPTION

**SOWK 510 Social Work and Social Welfare Policies and Programs (3)** Will identify issues in social welfare policy and social service delivery at the micro, mezzo and macro levels of practice within the profession of social work. This includes neighborhood, local, state, national and international levels of policy practice. The course will address methods which will expand the student's capacity to promote social, economic and environmental justice and access to services. Such areas of policy practice as policy analysis and advocacy will be discussed and simulated. The history of the social work profession's role in policy as well as ethical considerations will also be addressed.

Formerly: Historic and contemporary contexts of social welfare. The profession's distinctive mission, history, values and ethical standards, and multiple roles with individuals, families, groups, organizations, and communities are examined using local to international comparisons. Key professional competencies, diversity, justice, critical thinking, and evidence-based practice are emphasized. Organizational, community, and legislated policies related to social issues, problems, and client systems using local to international comparisons. Use of justice, power, social construction, and social work values and ethics in analyzing, influencing, developing, implementing, and advocating for policies and programs.

#### REVISE TITLE AND DESCRIPTION

**SOWK 512 Introduction to Macro Social Work Practice (2)** Will allow students to explore the social, economic, environmental, and political factors that impact society, particularly those groups who are negatively impacted by such societal forces. This knowledge will be applied to the practice of macro social work. Particularly, the essential skills of engagement, assessment, planning, implementation, evaluation and termination while focused on strengths, capacities and resources of communities and organizations. Cultural competency and technological issues of concern within the macro practice environment will also be considered.

Formerly: Social, Economic, and Political Environments

Examines the profound influences on and critical interfaces of client systems with the world in which we live. Incorporates local to international information about social, economic, and political trends and innovations, and about effects of social problems, injustice, and power on client systems and on social change and service delivery systems.

**SOWK 522 Introduction to Direct Social Work Practice (4)** Will introduce the student to the profession of social work, its history, ethical code and theories related to interpersonal practice. The course will allow students to compare and contrast evidence-based interventions and models of social work practice with clients/client systems in relation to their congruence with social work values, attention to all forms of diversity, evidence-bases and to engagement in practice-informed research. The course will address the essential skills of social work practice of engagement, assessment, intervention, evaluation and termination. Students will identify personal biases and demonstrate the appropriate use of self, including self-care strategies, in social work practice with diverse populations.

Formerly: Introduction to Social Work Practice

Historic and contemporary contexts of social welfare. The profession's distinctive mission, history, values and ethical standards, and multiple roles with individuals, families, groups, organizations, and communities are examined using local to international comparisons. Theories are examined in the context of critical thinking and evidence-based practice. Defines generalist practice philosophy, methods, roles. Emphasizes skills (i.e., interpersonal communication, relationship building, power analyses, assertiveness, conflict management) that are essential to

problem identification, assessment, and intervention with all client systems (individuals, groups, organizations, communities), and with other professionals and decision-makers. Uses local to international examples to translate theory and evidence-based knowledge into practice that is competent, ethical, culturally affirming, and empowering.

**SOWK 536 Generalist Field Practice Block (1-6)** Instruction and supervision in generalist social work practice. Practicum is completed on a block schedule. Students may take concurrent generalist courses, but are not required to do so. Students may complete block placements in Tennessee, in other states, or in other nations.

Formerly: Foundation Field Practice Block (1-6) Instruction and supervision in generalist social work practice. Practicum is completed on a block schedule. Students may take concurrent foundation courses, but are not required to do so. Students may complete block placements in Tennessee, in other states, or in other nations.

#### **REVISE TITLE, ADD (RE) PREREQUISITE**

##### **SOWK 567 Veterinary Social Work (3)**

*(RE) Prerequisite(s): 510, 512, 513, 519, 522, 537, 538, 539 and 543 or 544.*

Formerly: Introduction to Veterinary Social Work

*(RE) Prerequisite(s): 510, 512, 513, 519, 522, 537, 538 and 539.*

#### **REVISE TO ADD (RE) PREREQUISITE**

SOWK 556 Social Policy of North America (3)

SOWK 557 Principles and Techniques of Mediation (3)

SOWK 558 Legislative Advocacy and Political Social Work (3)

SOWK 559 Community Based Practice in Mexico and the United States (3)

SOWK 570 Evidence-based Policy and Practice with Families (3)

SOWK 571 Evidence-based Policy and Practice with Children and Adolescents (3)

SOWK 572 Evidence-based Policy and Practice with Older Adults (3)

SOWK 584 Advanced Field Practice Extended (4)

SOWK 586 Advanced Field Practice Full Time (6)

SOWK 587 Advanced Field Practice Block (1-12)

SOWK 527 - Cognitive Behavioral Therapy

SOWK 529 - Beyond Combat: Military Social Work Practice

SOWK 531 - Trauma Theory and Practice

SOWK 532 - Motivational Interviewing

SOWK 533 - Treatment of Trauma

SOWK 535 - School Social Work

SOWK 540 - General Topics in Social Work

SOWK 545 - Resource Development and Management

SOWK 546 - Evidence-based Social and Economic Development Practice Across Systems

SOWK 547 - Advanced Organizational Theory and Practice

SOWK 548 - Advanced Change Management and Policy Practice

SOWK 549 - Program Development and Continuous Improvement

SOWK 553 - Clinical Social Work Practice in Hospitals and Health Settings

SOWK 555 - Psychological Development and Mental Health in Later Life

SOWK 560 - Evidence-based Interpersonal Practice with Groups

SOWK 561 - Spirituality in Clinical Social Work Practice

SOWK 562 - Evidence-based Interpersonal Practice with Adult Individuals

SOWK 564 - Evidence-Based Substance Abuse Treatment

SOWK 566 - Social and Cultural Aspects of Aging

*(RE) Prerequisite(s): 510, 512, 513, 519, 522, 537, 538, 539 and 543 or 544.*

Formerly: *(RE) Prerequisite(s): 510, 512, 513, 519, 522, 537, 538 and 539.*

Rationale: In accordance with CSWE, our accrediting body, revised to change wording from foundation to generalist. Also revised to add completion of generalist field courses as prerequisites.

Rationale for revisions to SOWK 510, SOWK 512 and SOWK 522: The accrediting body of Master of Social Work programs, the Council on Social Work Education, has put out a new set of standards that are required to be addressed in our curriculum. The revision of three courses listed here allows for these new standards to be taught and measured within each course. A further consideration in reformatting these courses is that the previous construction of the courses was not as well compartmentalized. In the proposed format the three courses build on one another and the courses are built around one core concept. For instance, SOWK 522 was previously constructed to teach broad areas, now it is focused on the elements of direct practice while the concepts of macro work are shifted to the 512 course. Financial Impact: None. Impact on other units: None.

## II. PROGRAM CHANGES

### REVISE REQUIREMENTS – FIVE YEAR BSSW / MSSW PROGRAM

#### Five-Year BSSW/MSSW Program

All students in the BSSW Honors Program are eligible, but not required, to apply for conditional admission to the Five-Year BSSW/MSSW Program. Eligibility to apply for the Five-Year BSSW/MSSW Program is restricted to social work majors who have also been accepted into the BSSW Honors Program.

The process of seeking conditional admission to the Five-year BSSW/MSSW Program begins in the spring semester of the junior/third year of undergraduate study. Students seeking conditional admission to the Five-Year BSSW/MSSW Program must

- submit the Five-Year BSSW/MSSW Program Application Packet either in person or electronically to the BSSW Program Director or his/her designee by April 1st of their junior/third year of undergraduate study.
- Additionally, in order to be considered for conditional admission students must have a minimum overall GPA of 3.5.
- Have completed or will have completed 60 credit hours of coursework which includes the following required social work courses: SW 200, SW 250, SW 312, SW 313, SW 315, SW 317, SW 318, and SW 380 by the end of their junior/third year of undergraduate study; and
- Complete a personal interview with the BSSW Program Director or his/her designee.

Personal interviews will typically occur after the April 1st BSSW/MSSW Program Application Packet deadline and before May 1st during the junior/third year of undergraduate study. Immediately following the personal interview, the BSSW Program Director or his/her designee will notify students, in writing, of their conditional admission status.

In the Five-Year BSSW/MSSW Program Application Packet, students will specify their preference for program location (Knoxville or Nashville campus or Online) and for the full-time or part-time (2 year) program. Students will also be asked to identify their preference for the Evidence-based Interpersonal Practice or Organizational Leadership specialization. Although the MSSW Admissions Committee will do its best to match students with their preferences, there is no guarantee a student will receive their preference once fully admitted.

Conditional admission to the Five-Year BSSW/MSSW Program does not guarantee admission into either the Graduate School or the MSSW program. Starting in October but NO LATER than December 1st of their senior/fourth year of undergraduate study, students must:

- Apply for admission to the Graduate School (<http://gradschool.utk.edu/admissions/applying-to-graduate-school/>);
- Submit the MSSW professional statement (submitted online with application); and
- Submit three reference evaluation forms (submitted online with application):
- One reference shall be from the BSSW Program Director or his/her designee;
- One reference shall be from any previous or current social work field instructor, liaison, or coordinator affiliated with the UT College of Social Work BSSW Program; and
- One reference shall be from any previous or current faculty member or course instructor from the University of Tennessee, Knoxville.

Students will be fully admitted to the Five-Year BSSW/MSSW Program only after they have been accepted by both the Graduate School and MSSW program. The College of Social Work will notify students of their official admission to the Five-Year BSSW/MSSW Program and Graduate School early in the spring semester of their senior/fourth year.

A candidate will be fully admitted if they:

- Maintained a minimum overall 3.5 GPA;
- Earned a B+ or higher in all required Social Work Field Practice courses (SW 380, SW 480, and SW 481) for the BSSW Program;
- Met all requirements for the BSSW Honors Program; and
- Met all degree requirements for the BSSW.

Upon graduation from the BSSW Program, the BSSW Program Director or his/her designee will provide written verification to the MSSW program that all admission requirements for the Five-Year BSSW/MSSW program have been met. Once fully admitted, students are required to complete the summer semester and specialization year (Fall and Spring semesters) of the MSSW program. Graduate hours required for the Five-Year BSSW/MSSW program total 37 credit hours.

Students who enroll in a 500-level course for undergraduate credit and applied to the BSSW degree, may not apply the course credit towards the MSSW degree. The requirements for the MSSW degree may be found in the Graduate Catalog in the College of Social Work section. Students are ineligible for graduate assistantships until they satisfy all requirements for the BSSW degree.

#### Course Requirements

Summer following BSSW graduation

- SOWK 537 (3), SOWK 539 (2), SOWK, 593 (2)

Year 5 (Evidence-based Interpersonal Practice specialization)

- Fall requirements – total 15 credit hours as follows: SOWK 560 (3), SOWK 562 (3), selective courses SOWK 570, or SOWK 571, or SOWK 572 (3), and SOWK 586 (6).
- Spring requirements – total 15 credit hours as follows: SOWK 563 (3), SOWK 586 (6), elective (3), elective (3)

Year 5 (Organizational Leadership specialization)

- Fall requirements – total 15 credit hours as follows: SOWK 545 (3), SOWK 546 (3), elective or selective course (3), and SOWK 586 (6).
- Spring requirements – total 15 credit hours as follows: SOWK 548 (3), SOWK 549 (3), SOWK 586 (6), elective (3).

Rationale: Revised and enhanced the application process and edited for clarity. Financial Impact: None. Impact on other units: None.

#### **REVISE GRADUATE CERTIFICATE REQUIREMENTS – VETERINARY SOCIAL WORK**

In the 2017-2018 Graduate Catalog revise paragraph under Admissions heading as follows:

To be admitted to this program, students must meet the Graduate Admission requirements for a certificate program, complete the Veterinary Social Work Certificate Program application and agree to program requirements, and have passed all coursework in the generalist year of the Masters of Science in Social Work program.

Formerly: 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.

Revise the last sentence/paragraph as follows:

Other courses may, where appropriate, be substituted for the courses listed above with the permission of the director of the VSW-CP.

Formerly: Other courses may, where appropriate, be substituted for the courses listed above with the permission of the director.

Rationale: Change in wording. Financial Impact: None. Impact on other units: None.



# COLLEGE OF VETERINARY MEDICINE

All changes effective Summer 2017

## I. COURSE CHANGES

Learning objectives for the DVM degree:

1. Demonstrate professional skills of a veterinarian, including overall clinical competencies (technical and nontechnical), problem solving, and professionalism.
2. Students will perform at or above the national mean on North American Veterinary Licensing Examination (NAVLE).
3. Clinical Competency 1: Ability to diagnose patient problems, interpret clinical laboratory findings, and manage patient records.
4. Clinical Competency 2: Ability to plan patient treatment, including identifying referral when indicated.
5. Clinical Competency 3: Demonstrate basic surgery skills and technical skills.
6. Clinical Competency 4: Demonstrate basic medical skills and case management.
7. Clinical Competency 5: Design and implement basic anesthesia protocols, conduct appropriate pain management plans, and conduct appropriate animal welfare management.
8. Clinical Competency 6: Demonstrate basic emergency and intensive care case management.
9. Clinical Competency 7: Address strategies of health promotion, disease prevention and biosecurity, zoonotic and food safety issues involving animals and humans.
10. Clinical Competency 8: Demonstrate appropriate communication methods, including client communication and medical personnel communication.
11. Clinical Competency 9: Demonstrate awareness of research in furthering the practice of veterinary medicine.
12. Demonstrate overall professionalism.

### (VMD) Veterinary Medicine

#### ADD

**VMD 800 One Health, Wellness, and Ethics V (1)** Develop essential non-technical skills needed for veterinary professional competence. A continuation of VMD 858. Advanced training in communication, leadership, business management, ethical decision making, and health-related behavior skills.

*Grading Restrictions: Satisfactory/No Credit.*

*Repeatability: Not repeatable. May be taken once for credit.*

*Registration Restriction(s): Veterinary Medicine Students only*

Rationale: Critical areas of non-technical skills needed for successful practice in veterinary medicine will be taught. This is year three of a 4 year course that is under curricular design. The VMD Curriculum Committee and the College faculty voted June 10, 2014 to approve inclusion of non-technical skills into the curriculum. This will expand the content into the third year of the curriculum. The course will be composed of in class discussion, work assignments, resume building and more task oriented activities. S/NC grading is elected as there is no planned exam and grading will be based on participation, attendance and completion of external projects. The American Veterinary Medical Association Council on Education (AVMA COE) requires Colleges of Veterinary Medicine to provide instruction in the non-technical competencies provided in this course. This has been a greater focus of accreditation oversight in the past 2-3 years. This course will address educational objectives of our curriculum and meet educational standards set by the COE. Financial Impact: None.

This course supports learning objectives: global outcome, 2, 7, 9 for the VMD Program

Support from assessment activities and research within the CVM, College of Veterinary Social Work and AAVMC Research on Veterinary Student Wellness, Stress, and Suicide. Student surveys indicate a need for ongoing training in finance, business, stress-management, and other topics included in the series.

**VMD 876 One Health, Wellness, and Ethics VI (1)** Develop essential non-technical skills needed for veterinary professional competence. A continuation of VMD 8xx, One Health and Wellness VI. Advanced training in communication, leadership, business management, ethical decision making, and health-related behavior skills.

*Grading Restrictions: Satisfactory/No Credit.*

*Repeatability: Not repeatable. May be taken once for credit.*

*Registration Restriction(s): Veterinary Medicine Students only*

Rationale: Critical areas of non-technical skills needed for successful practice in veterinary medicine will be taught. This is year three of a 4 year course that is under curricular design. The VMD Curriculum Committee and the College faculty voted June 10, 2014 to approve inclusion of non-technical skills into the curriculum. This will expand the content into the second year of the curriculum. The course will be composed of in class discussion, work assignments, resume building and more task oriented activities. S/NC grading is elected as there is no planned exam and grading will be based on participation, attendance and completion of external projects. The American Veterinary Medical Association Council on Education (AVMA COE) requires Colleges of Veterinary Medicine to provide instruction in the non-technical competencies provided in this course. This has been a greater focus of accreditation oversight in the past 2-3 years. This course will address educational objectives of our curriculum and meet educational standards set by the COE. Financial Impact: None.

This course supports learning objectives: global outcome, 2, 7, 9 for the VMD Program

Support from assessment activities and research within the CVM, College of Veterinary Social Work and AAVMC Research on Veterinary Student Wellness, Stress, and Suicide. Student surveys indicate a need for ongoing training in finance, business, stress-management, and other topics included in the series.

**VMD 865 Advanced Veterinary Pharmacology II (0.5)** Continuation of VMD 862: Modes of action, pharmacologic effects, and clinical application of drugs to control specific disease conditions.

*Grading Restrictions: A-F Grading*

*Repeatability: Not repeatable. May be taken once for credit.*

*Registration Restriction(s): Veterinary Medicine Students only.*

Rationale: The addition of this course would allow us to split Pharmacology II into two courses. Doing so would reduce the number of lectures to half in each course and allow delivery of the lecture at times that are more consistent with those of systems courses (cardiovascular, respiratory, etc.). This change also addresses student feedback on the coordination of course content, as well as, learning outcomes 4, 6, 7, and 8. The college's Curriculum Committee has reviewed and supports the change. Offering half-credit courses was approved for the College of Veterinary Medicine at the January 2015 Graduate Council meeting. Impact on Other Units: None. Financial Impact: None.

Support from assessment activities: Students have repeatedly commented in their course evaluations about the difficulty of memorizing a massive amount of material all at once, as well as having some of the material taught when they have not yet learned about specific body systems. Such memorization is a necessity for a pre-clinical pharmacology course, and our hope is that splitting the course will result in enhanced student learning.

## REVISE TITLE

### **VMD 812 One Health, Wellness, and Ethics I**

Formerly: Success and Wellness One-Health I

Rationale: The new course name was recommended by the course coordinator to better reflect the content of the course. No changes to the content have been made. Impact on Other Units: None. Financial Impact: None.

Support from assessment activities: The course has been taught only once, so minimal assessment has been done.

### **VMD 817 One Health, Wellness, and Ethics II**

Formerly: Success and Wellness One-Health II

Rationale: The new course name was recommended by the course coordinator to better reflect the content of the course. No changes to the content have been made. Impact on Other Units: None. Financial Impact: None.

Support from assessment activities: The course has been taught only once, so minimal assessment has been done.

### **VMD 839 One Health, Wellness, and Ethics III**

Formerly: Success and Wellness One-Health III

Rationale: The new course name was recommended by the course coordinator to better reflect the content of the course. No changes to the content have been made. Impact on Other Units: None. Financial Impact: None.

Support from assessment activities: The course has been taught only once, so minimal assessment has been done.

### **VMD 858 One Health, Wellness, and Ethics IV**

Formerly: Success and Wellness One-Health IV

Rationale: The new course name was recommended by the course coordinator to better reflect the content of the course. No changes to the content have been made. Impact on Other Units: None. Financial Impact: None.

Support from assessment activities: The course has been taught only once, so minimal assessment has been done.

## REVISE TITLE AND HOURS

### **VMD 862 Advanced Veterinary Pharmacology I (0.5)**

Formerly: Veterinary Pharmacology II (2)

Rationale: Revising the hours in this course would allow us to split Pharmacology II into two courses. Doing so would reduce the number of lectures to half in each course and allow delivery of the lecture at times that are more consistent with those of systems courses (cardiovascular, respiratory, etc.).

This change addresses student learning outcomes 4, 6, 7, and 8.

The college's Curriculum Committee has reviewed and supports the change. Offering half-credit courses was approved for the College of Veterinary Medicine at the January 2015 Graduate Council meeting. Impact on Other Units: None. Financial Impact: None.

Support from assessment activities: Students have repeatedly commented about the difficulty of memorizing a massive amount of material all at once, as well as some of the material being presented when they have not yet learned about specific body systems. Such memorization is a necessity for a pre-clinical pharmacology course, and our hope is that splitting the course will result in enhanced student learning.

## REVISE GRADING RESTRICTIONS

### VMD 877 Special Problems in Pathology (1-8)

*Grading Restriction: Satisfactory/No Credit or letter grade.*

Formerly: A-F Grading only

Rationale: This course provides specially-designed studies in selected topics of pathology with varying requirements across the many different programs of study. Certain programs of study require quantitative or non-qualitative assignments that are assessed by determining completion or participation. These course studies do not provide opportunities for qualitative assessment of outcome and are better graded as Satisfactory/No Credit. Other course studies continue to require qualitative assignments or exams that are appropriately graded by A-F grading standards. Current grading practices results in some courses assigning all students A grades for satisfactory performance. Instructors and the Curriculum Committee of the College of Veterinary Medicine will determine study sections that are best graded by S/NC. Financial Impact: None.

This course supports learning objectives: global outcome 1-9 for the VMD Program

Support from Instructors, CVM Curriculum and Assessment Committee for revised grading options.

Support from assessment activities: This change improves assessment by providing more accurate performance assessment of course content as it varies by study area.

### VMD 887 Special Problems in Small Animal Clinical Sciences (1-8)

*Grading Restriction: Satisfactory/No Credit or letter grade.*

Former: A-F Grading only

Rationale: This course provides specially-designed studies in selected topics of small animal medicine and surgery with varying requirements across the many different programs of study. Certain programs of study require quantitative or non-qualitative assignments that are assessed by determining completion or participation. These course studies do not provide opportunities for qualitative assessment of outcome and are better graded as Satisfactory/No Credit. Other course studies continue to require qualitative assignments or exams that are appropriately graded by A-F grading standards. Current grading practices results in some courses assigning all students A grades for satisfactory performance. Instructors and the Curriculum Committee of the College of Veterinary Medicine will determine study sections that are best graded by S/NC. Financial Impact: None

This course supports learning objectives: global outcome 1-9 for the VMD Program

Support from Instructors, CVM Curriculum and Assessment Committee for revised grading options.

Support from assessment activities: This change improves assessment by providing more accurate performance assessment of course content as it varies by study area.

### VMD 897 – Special Problems in Large Animal Clinical Sciences (1-8)

*Grading Restriction: Satisfactory/No Credit or letter grade.*

Former: A-F Grading only

Rationale: This course provides specially designed studies in selected topics of large animal medicine and surgery with varying requirements across the many different programs of study. Certain programs of study require quantitative or non-qualitative assignments that are assessed by determining completion or participation. These course studies do not provide opportunities for qualitative assessment of outcome and are better graded as Satisfactory/No Credit. Other course studies continue to require qualitative assignments or exams that are appropriately graded by A-F grading standards. Current grading practices results in some courses assigning all students A grades for satisfactory performance. Instructors and the Curriculum Committee of the College of Veterinary Medicine will determine study sections that are best graded by S/NC. Financial Impact: None

This course supports learning objectives: global outcome 1-9 for the VMD Program

Support from Instructors, CVM Curriculum and Assessment Committee for revised grading options.

Support from assessment activities: This change improves assessment by providing more accurate performance assessment of course content as it varies by study area.

## II. PROGRAM CHANGES

### ❖ ADD ACCELERATED DVM-MS PROGRAM, ANIMAL SCIENCE MAJOR

For qualified students, the Department of Animal Science offers an accelerated MS degree program for individuals pursuing a doctor in veterinary medicine degree. Qualified veterinary students may use up to 9 hours of veterinary medicine courses to count toward both the doctor of veterinary medicine degree and the MS degree. To this end, a student may earn the DVM and MS in about 5 to 5.5 years rather than the 6 to 6.5 years otherwise required.

Normally, students will be considered for conditional admission to the program during, or immediately following, their first year of study at the University of Tennessee College of Veterinary Medicine. Efforts related to identifying a graduate mentor and starting a research-based project in consultation with a graduate advisory committee (that meets MS committee requirements) are appropriate in and around or following the first year of veterinary study.

To be considered for conditional admission to the program, a student must have completed at least one semester of coursework required for the Doctor of Veterinary Medicine degree, with a minimum GPA of 3.0. A student must also coordinate the provision of three letters of recommendation and complete a personal interview with individuals who compose the Graduate Committee in the Department of Animal Science and College of Veterinary Medicine. Conditional admission of a student must be approved by both the Department of Animal Science, the Graduate School, and College of Veterinary Medicine.

The student must have earned a grade of at least a "B" in all A–F-graded courses eligible to be used for graduate credit; courses used for graduate credit (maximum 9 hours) must be approved by both the individual's Graduate Committee and by the Department of Animal Science Graduate Director. These courses must be identified in advance, in consultation with the student's Graduate Committee, and must be listed on the Animal Science Conditional Admission Form for the Five-Year DVM-MS program. The conditional application for admission form is obtained from the Animal Science Graduate Program Director and must be completed, signed, and submitted to the College of Agricultural Sciences and Natural Resources and the Graduate School for final approval and processing.

Conditional admission into this type of accelerated program does not guarantee acceptance into either the Graduate School or the MS program. Students will normally apply for admission to the Graduate School and to the MS program during their fourth year of study in the DVM program, following the same procedures that all other MS student applicants follow. At that time, GRE scores must be submitted as part of the application for admission into the Department of Animal Science. Students will be fully admitted to the MS program after they have been accepted both by the Graduate School and by the Animal Science MS program. Students will not be eligible for graduate assistantships until they are officially enrolled in the Department of Animal Science Graduate Program.

Rationale: Because graduate students often take/benefit from certain veterinary school courses (e.g., physiology, theriogenology and others), the basis of this change is to provide individuals pursuing a doctor in veterinary medicine degree at the University of Tennessee College of Veterinary Medicine to apply up to 9 credit hours of veterinary-based course work toward their MS program of study. These would be graduate courses that Animal Science graduate students would have taken or find benefit to their graduate program of study. Several examples exist in other programs allowing use of Veterinary Medicine credits. This is also consistent with the Accelerated BS to MS program in Animal Science allowing undergraduate students to use up to 9 credit hours of their coursework toward the 24 required credit hours for MS degree. Because use of the senior requesting graduate credit form is not relevant for this scenario, the Animal Science Department will take effort to derive a conditional admission form for which VMD courses to be used for DVM degree as well as the MS degree will be identified and approved in advance of completing degree requirements. Approval of the individuals' graduate advisory committee, the graduate director, CASNR, and Graduate School will be obtained as a part of conditional admission to this accelerated DVM-MS program. Doing so will assist toward formalizing the process and ensuring that all who should be are a part of the approval process. Impact on other units: The Animal Science Department—There are a number of individuals who do not gain admission to vet school with their first attempt to apply. This program may be particularly attractive to these individuals who could benefit from taking graduate courses and engaging in research experiences before acceptance into vet school.

Financial impact: None.

# INTERCOLLEGIATE

## COMPARATIVE AND EXPERIMENTAL MEDICINE

Effective Fall 2017

### I. COURSE CHANGES

#### (CEM) COMPARATIVE AND EXPERIMENTAL MEDICINE

##### ADD

**CEM 535 Capstone Experience (1–3)** Capstone experience completed under the supervision of the student's major professor and master's committee. Individual project involving a literature survey, development of a white paper, or other suitable project.

*Grading Restriction: Satisfactory/No Credit.*

*Repeatability: May be repeated once.*

*Registration Restriction: Master of Science - Forensic Odontology concentration.*

*Registration Permission: Consent of Instructor.*

Rationale: In lieu of a thesis, students in the Master of Science Forensic Odontology concentration are required to complete a capstone experience. This course provides training in research, writing, and presentation skills needed to satisfy this requirement. Impact on Other Units: None. Financial Impact: None.

##### REVISE HOURS

#### CEM 510 Graduate Research Participation (1–3)

Formerly: (3)

Rationale: The variable credit option allows the student to commit to a level of research that is consistent with his or her goals, the research advisor's expectations, and the student's ability to meet all of his or her obligations.

##### REVISE (DE)PREREQUISITE

#### CEM 541 Cellular and Molecular Basis of Disease (2)

*(DE) Prerequisite(s): Biochemistry and Cellular and Molecular Biology 419 or equivalent.*

Formerly: (DE) Prerequisite(s): Biochemistry and Cellular and Molecular Biology 419.

#### CEM 542 Cellular and Molecular Basis of Disease (2).

*(DE) Prerequisite(s): Biochemistry and Cellular and Molecular Biology 419 or equivalent.*

Formerly: (DE) Prerequisite(s): Biochemistry and Cellular and Molecular Biology 419.

Rationale: Other courses in the life sciences can similarly provide the necessary foundation for the student to succeed in this course.

### II. PROGRAM CHANGES

#### REVISE REQUIREMENTS – COMPARATIVE AND EXPERIMENTAL MEDICINE MAJOR, PHD

In the 2016-2017 Graduate Catalog, under Requirements heading, first paragraph, first sentence, revise the following text from: (...in a program-related biomedical science...) to (...in a program-related field...).

Rationale: Many fields other than biomedical science provide the training and skills required to adequately prepare students for entry into a biomedical PhD program.

In the 2016-2017 Graduate Catalog, under Requirements heading, second paragraph, second sentence, revise the text from: (...a minimum of 8 credit hours...) to (...a minimum of 7 credit hours...).

Rationale: CEM core credits add up to 17 hours. Subtracting 17 from the 24 PhD hours required for students with a professional or master's degree, independent of dissertation, equals 7.

## **REVISE REQUIREMENTS – DUAL PHD-DVM PROGRAM – COMPARATIVE AND EXPERIMENTAL MEDICINE**

In the 2016-2017 Graduate Catalog, first paragraph, second sentence, revise the following text from: (...9 credit hours...) to (...7 credit hours...).

Formerly: The accelerated dual program allows veterinary students to apply up to 9 credit hours of DVM course work toward a PhD degree in CEM.

Rationale: CEM core credits add up to 17 hours. Veterinary students are automatically allowed 24 credit hours toward the PhD from their veterinary coursework. Together, these credits total 41 hours. Subtracting 41 from the 48 hours required for PhD, independent of dissertation, equals 7.

In the 2016-2017 Graduate Catalog, fourth paragraph, second sentence, revise the following text from: (The CEM program will award up to 33 credit hours...) to (The CEM program will award up to 31 credit hours...).

Formerly: The CEM program will award up to 33 credit hours toward the PhD for acceptable performance (a grade of at least a "B" in A-F graded courses) in approved courses offered by the College of Veterinary Medicine.

Rationale: CEM core credits add up to 17 hours. Subtracting 17 from the 48 hours required for PhD, independent of dissertation, equals 31.

In the 2016-2017 Graduate Catalog, fourth paragraph, fourth sentence, revise the following text from: (...15 CEM credit hours plus 33 credit hours...) to (...17 CEM core course credit hours plus 31 credit hours...).

Formerly: A total of 48 course credit hours independent of dissertation (CEM 600) are required for the PhD degree (15 CEM credit hours plus 33 credit hours accepted from the DVM program).

Rationale: CEM core credits add up to 17 hours. Subtracting 17 from the 48 hours required for PhD, independent of dissertation, equals 31. Also, we want to emphasize that these 17 CEM credits are core requirements.

# **BREDESEN CENTER FOR INTERDISCIPLINARY RESEARCH AND GRADUATE EDUCATION**

**All changes effective Fall 2017**

## **COURSE CHANGES**

### **Energy Science and Engineering (ESE)**

#### **REVISE HOURS**

#### **ESE 530 Business Model Canvas (3)**

Formerly (1)

Rationale: Through teaching this course, we have discovered that one of the most valuable components is in customer discovery. Reaching out to companies that could act as customers for a startup in the future provides the most beneficial and applicable feedback. Customer discovery can help shape a business model canvas and help generate the most useful business plan. Customer outreach and finding companies that are willing to speak with students takes more time and effort than a 1 credit hour course warrants. Rather than reducing customer outreach, we would like to increase the credits offered to 3. Impact on other units: None. Financial impact: None.