

Thursday January 25, 2018 2:00 P.M.	Graduate Curriculum Committee Meeting	405 Student Services Building
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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

College of Engineering

College of Law

College of Nursing

College of Social Work

College of Veterinary Medicine

Intercollegiate: Comparative and Experimental Medicine

► Indicates drop or add of Majors

✚ Indicates drop or add of Certificates

❖ Indicates drop or add of Concentrations

COLLEGE OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES

All Changes Effective Fall 2018

I. COURSE CHANGES

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 the ability to explore issues, objects or works through the collection and analysis of evidence that results in informed conclusions or judgements and break complex topics or issues into parts to gain a better understanding of the topic.

(ALEC) Agricultural Leadership, Education and Communications

ADD

ALEC 532 Introduction to Agricultural Communications (3) Understanding the role of agricultural communicators. Explore elements of written, visual, and digital communication methods to interact with agricultural audiences.
Credit Restriction: May not receive credit for both 330 and 532.

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 support Program Learning Outcome 1 for the MS in Agricultural Leadership, Education and Communications.

Support from assessment activities: The current faculty member 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. Expected enrollment for this course is 15 students.

ALEC 535 Communicating in Agriculture and Natural Resources (3) Focuses on strategic communication for agriculture and life science industries. The content is designed to explore the practical and philosophical elements when communicating with both agricultural and nonagricultural audiences. Additionally, students will explore the historical and foundational elements of agriculture and communications.

Rationale: Hired a new faculty member in agricultural communications and he would like to expand the agricultural communication course electives in the on-line Master of Science program in Agricultural Leadership, Education and Communications. Impact on other units: None. Financial impact: None.

Supports Program Learning Outcome 2 and 3 for the MS in Agricultural Leadership, Education and Communications. Support from assessment activities: The current faculty member hired to oversee the Agricultural Concentration was asked by the graduate faculty to deliver an on-line course for the distance education students. Expected enrollment for this course is 30 students.

ALEC 539 Basic Applied Data Analysis in Agricultural Leadership, Education and Communications (3) Select (a) appropriate statistical techniques to use in analyzing ALEC quantitative research data, and (b) appropriate coding methods for analyzing ALEC qualitative data. Use appropriate software to analyze both qualitative and quantitative data. Report results in narrative and appropriate table, graphic, or visual forms for inclusion in scholarly writing and impact communications.

Rationale: Hired a new faculty member in program development/evaluation and he would like to expand the ALEC course electives. Impact on other units: None. Financial impact: None.

Supports Program Learning Outcome 1 for the MS in Agricultural Leadership, Education and Communications. Support from assessment activities: ALEC faculty have reviewed curricula, and believe this course will improve the rigor of our MS program by fully complementing our existing research methodology and research proposal development courses. Expected enrollment is 30 students.

ALEC 543 Digital Media Production (3) Explore elements of video production techniques with a focus on camera, lighting, audio, and editing methods.

(RE) Prerequisite: ALEC 330 or ALEC 532 (Student cannot receive credit for both).

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 support Program Learning Outcome 3 for the MS in Agricultural Leadership, Education and Communications. Support from assessment activities: The current faculty member hired to oversee the Agricultural Communications concentration has conducted research to determine needed skills of agricultural communication graduates and digital media production was identified as one of the most needed skills. Expected Enrollment for this course is 15 students.

REVISE TITLE

ALEC 530 Specials Topics in Agricultural Leadership, Education and Communications (1-3)

Formerly: Special Topics: Agricultural and Extension Education

Rationale: We no longer are the agricultural and extension education program; therefore, the new title reflects our current academic focus. Impact on other units: None. Financial impact: None.

REVISE TITLE AND DESCRIPTION

ALEC 440 Business and Research Writing (3) Develop professional and scholarly interactions through business and research writing.

Formerly: Communication Techniques in Agriculture. Engage agricultural audiences through journalistic and research writing.

Rationale: To more accurately describe the course content. Impact on other units: None. Financial impact: None.

REVISE TO ADD (RE)PREREQUISITE AND CREDIT RESTRICTION

ALEC 542 Layout and Design (3)

(RE)Prerequisite: 330 or 532.

Credit Restriction: Students may not receive credit for both ALEC 330 and ALEC 532.

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 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 layout and design was one of the most needed skills.

REVISE HOURS

ALEC 502 (1 - 3) Registration for use of Facilities. Required for the student not otherwise registered during any semester when student uses University facilities and/or faculty time before degree is completed.

Formerly: ALEC 502 (3 – 15)

Rationale: To align better with the course hours that are students would need to register for if they needed to graduate. Impact on other units: None. Financial impact: None.

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

DROP 400-LEVEL COURSE

AREC 445 Renewable Energy Economics (2)

Rationale: Course is being revised to a 300-level, 2-credit hour course in the undergraduate curriculum and will no longer provide course content appropriate at the graduate level. Impact on other units: None. Financial impact: None

DEPARTMENT OF ANIMAL SCIENCE

Learning objectives for the M.S. in Animal Science

1. Students will demonstrate the ability to apply advanced knowledge and conduct research necessary for deriving eventual solutions to problems impacting animal agriculture and humans
2. Students will demonstrate written and oral communication skills important for relaying scientific concepts to scientific and general audiences

Learning objectives for the Ph.D. in Animal Science

1. Student will demonstrate capacity to conduct independent, original research important for deriving eventual solutions to problems impacting animal agriculture and humans.

2. Student will demonstrate written and oral communication skills for effectively communicating new scientific knowledge to any audience (e.g., scientific, undergraduate and graduate students and/or general).

(ANSC) Animal Science

REVISE TO ADD REGISTRATION RESTRICTION

ANSC 511 Special Problems in Animal Science (1-4)

Registration Restriction(s): Minimum student level – graduate or permission of instructor.

ANSC 515 Special Topics (1-4)

Registration Restriction(s): Minimum student level – graduate or permission of instructor.

ANSC 519 Techniques in Molecular Biology (3)

ANSC 520 Animal Physiology (4)

Registration Restriction(s): Minimum student level – graduate or permission of instructor.

ANSC 523 Advanced Mammalian Reproduction (3)

Registration Restriction(s): Minimum student level – graduate or permission of instructor.

ANSC 531 Comparative Nutritional Biochemistry and Metabolism (4)

Registration Restriction(s): Minimum student level – graduate or permission of instructor.

ANSC 535 Ruminology (3)

Registration Restriction(s): Minimum student level – graduate or permission of instructor.

ANSC 550 Animal Immune Physiology (3)

Registration Restriction(s): Minimum student level – graduate or permission of instructor.

ANSC 571 Design and Analysis of Biological Research (3)

Registration Restriction(s): Minimum student level – graduate or permission of instructor.

Cross-listed: (Same as Plant Sciences 571.)

DROP COURSES

ANSC 572 Mixed Linear Statistical Modeling (3)

ANSC 675 Statistical Genomics (3)

DEPARTMENT OF BIOSYSTEMS ENGINEERING AND SOIL SCIENCES

Learning objectives for the MS and PhD degrees in Biosystems Engineering

1. An ability to apply basic mathematics, science, and engineering science, including especially how those are related to biological systems.
2. An ability to apply common engineering tools, including problem formulation, design, and data collection and analysis.
3. An ability to perform in the non-technical aspects required of engineers, including communications and working in teams.
4. A demonstrated understanding of how engineers fits into the broader society, including ethical behavior and lifelong learning responsibilities.

(BSET) Biosystems Engineering Technology

REVISE 400-LEVEL COURSE TO REMOVE CONTACT HOUR DISTRIBUTION

BSET 432 Agricultural and Construction Equipment (3)

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

ADD

BSET 525 Commercial Estimating (3) Advanced estimation techniques and procedures associated with commercial construction. Analysis of costs developed from detailed construction systems leading to the preparation of bid proposals. Emphasis will be placed on estimating using commercially available computer software.

(RE) Prerequisite/s: 125.

Credit Restriction: May not receive credit for both 425 and 525.

Recommended Background: Prerequisite course or experience in construction estimating.

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

BSET 530 Construction Field Operations (3) Introduction to construction field operations and project organization. Integrates project management with field supervision, emphasizing the requirements normally associated with on-site commercial construction activities. Special attention will be given in areas of stakeholders, recordkeeping, mobilization, closeout, equipment, implementation tools, communication, safety compliance, and field office function.

Credit Restriction: May not receive credit for both 430 and 530.

Recommended Background: Introductory accounting and business management.

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

BSET 535 Construction Finance/Accounting and Law (3) Construction finance and cost accounting, industry formats, fixed and variable costs, record and report practices; capital equipment, depreciation, and expensing; forecasting costs and cash flow requirements, payment processes and time value of money, surety bonds and insurance; construction law, construction contracts, legal roles and responsibilities, the regulatory environment and licensing, lien laws and the contractor's rights, national and local labor law, administrative procedures to avoid disputes.

Credit Restriction: May not receive credit for both 435 and 535.

Recommended Background: Introductory accounting.

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

Rationale: In order to provide graduate-level BSET classes in the growing Construction Science area, these are graduate-level versions of existing 400-level courses. They will meet at the same time / place as the 400-level courses, but will require additional graduate-level work, including graduate-level independent assignments in each course. The instructors for these sections will have the terminal degree in the related disciplines, being the PhD for 525 and 530, and the JD for 535. Impact on other units: None: no additional courses, and does not change existing curriculum. Response to assessment: none. Financial impact: none.

(BSE) Biosystems Engineering

REVISE 400-LEVEL COURSE TO REMOVE CONTACT HOUR DISTRIBUTION

BSE 411 Mechanical Systems Engineering (3)

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

(ESS) Environmental and Soil Sciences

Learning objectives for the MS degree in Environmental and Soil Sciences

1. Demonstrate the ability to effectively communicate their subject-based knowledge to appropriate audiences
2. Demonstrate knowledge of the discipline and the ability to convey research findings through publication in appropriate peer-reviewed journals and presentations to scientific audiences at international, national, or regional scientific meetings
3. Demonstrate knowledge of pertinent subject area literature, the scientific method, and experimental design.

ADD REGISTRATION RESTRICTION

ESS 503 Seminar (1)

Registration Restriction(s): Biosystems Engineering major, Biosystems Engineering Technology major, or Environmental and Soil Science major – minimum student level, graduate.

ESS 603 Seminar (1)

Registration Restriction(s): Biosystems Engineering major, Biosystems Engineering Technology major, or Environmental and Soil Science major – minimum student level, graduate.

Formerly: Registration restriction(s): Minimum student level – graduate.

Rationale: Have had several cases now of an undergraduate student from outside the department signing up for this graduate seminar class, which does not mesh with its intended purpose. Impact on other units: None. Response to assessment: This course is used for our SACS graduate program assessment, so it is not appropriate to have undergraduates in it. Financial impact: none.

REVISE 400-LEVEL COURSE TO ADD CONTACT HOUR DISTRIBUTION

ESS 434 Agricultural and Construction Equipment (3)

Contact Hour Distribution: 2 hours lecture and 1 lab.

DEPARTMENT OF ENTOMOLOGY AND PLANT PATHOLOGY

(EPP) Entomology and Plant Pathology

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

EPP 485 Forensic Entomology and Crime Scene Investigations (3) Objectively observe, record, and determine how insects and other arthropods contribute to the overall analysis of a death event or crime scene, e.g., homicide, child/elderly neglect investigations, food contamination, and other civil and criminal applications. Learn how to collect, preserve, and identify forensically important arthropods as well as estimate post-mortem interval. Learn how to prepare written reports of investigation, write an affidavit, learn the basics of crime scene processing, identify and classify forensically important insects, and present findings in a mock courtroom.

Contact Hour Distribution: 2 hours lecture and 1 lab.

(DE)Prerequisites: Twelve hours of biology (BIOL) and/or anthropology (ANTH), or consent of instructor.

Rationale: There is significant student interest in this topic and we anticipate large enrollment. Impact on other units: None. Financial impact: Costs for lab supplies, such as field cadavers, safety equipment and collecting supplies, will be paid by the department. Support from assessment activities: This course will support learning outcomes 1 and 4 for the MS program.

ADD

EPP 503 Non-Thesis Project / Practicum (1-2). Field, laboratory, or library project under the supervision of a faculty member.

Grading Restriction: Satisfactory/No Credit grading only.

Repeatability: May be repeated. Maximum 4 hours.

Registration Restriction: Available only to: Entomology and Plant Pathology major, MS, in the non-thesis option.

Rationale: This course needed, in lieu of EPP 500 (Thesis), in order to add a non-thesis option to the Entomology and Plant Pathology MS major. Impact on other units: None. Financial impact: Non-thesis MS students will not be eligible for tuition waivers or assistantships. We anticipate that most of these students will be part-time and will already be employed in entomology or plant pathology related industries, state or federal government agencies, or private practice, and will earn the degree over a longer period of time. This will allow us to increase our number of MS graduates, and shift our financial resources to support more PhD students. Support from assessment activities: This course will support learning outcomes 3 and 4 for the MS program.

EPP 570 Entomology and Plant Pathology Colloquium (1) Will focus on professional development and other essential topics for new Graduate Students, who are enrolled in a graduate academic program in the Department of Entomology and Plant Pathology.

Rationale: Professional development is a key component of our graduate program. This course is designed to introduce students to information that will help them develop the soft skills that are an important part of career development. It is also aimed at facilitating communication between students and faculty about career opportunities. Impact on other units: None. Financial impact: None. Support from assessment activities: This course will support learning outcome 1 for the MS program and for the PhD program.

DROP

EPP 528 - Molecular Techniques in Entomology, Nematology, and Plant Pathology (3)

Rationale: Many of our graduate students have had courses on molecular techniques in their undergraduate studies. For those who have not had a course on this topic, there are several courses offered in different departments across the university that cover this information. Impact on other units: None. Financial impact: Eliminating this course, which has a laboratory, will result in a savings of approximately \$250 per student. Assuming 15 students, this will provide a savings of \$3750. Support from assessment activities: Not applicable

EPP 551 Biological Control (3)

Rationale: Course was added to the Graduate Catalog in AY 2014-15, but has not been taught due to a faculty resignation. Impact on other units: None. Financial impact: None. Support from assessment activities: Not applicable.

DEPARTMENT OF FOOD SCIENCE

(FDSC) FOOD SCIENCE

ADD

FDSC 525 Molecular Parasitology (3) The basics of parasitology, life cycle analysis, prevalence, and control strategies of the major classes of parasites affecting global public health will be presented. In particular, the molecular mechanisms employed by parasites that lead to human disease will be the focus.

Registration Restriction: Minimal student level - graduate.

Rationale: At present, the only parasitology course taught on campus is through the Vet school, and that class is primarily focused on animal parasites. Considering the global importance of parasites in food science, tropical medicine, animal health, and water treatment, it is necessary that students are provided with course material related to this subject. An example curriculum is included on

the following page. Impact on other units: As described above, the only other dedicated parasitology course is at UTCVM, and that course is restricted to CVM students, thus this course will not detract from that course. In addition, the course is expected to draw enrollment from BCMB on main campus, as well as, Forestry, Wildlife, and Fisheries at UTIA. Financial impact: None. The course will be taught by a FDSC faculty member.

FDSC 551 Advanced Regression for Agricultural Research (3) Designed to give an overview of various statistical models for description or prediction purposes and offer students hands on analysis of their own data. Topics will include linear regression models, nonlinear regression models, logistic regression, principle component regression, step-wise regression, and partial least squares regression.

Recommended background: 3 credit hours of graduate level statistics.

Registration Restriction(s): Minimal student level – graduate.

Rationale: To better equip students to correctly analyze their current and future research data. There is current need to instruct graduate students within CASNR on the various approaches to regression. Impact on other units: This course is designed so that students from across CASNR will benefit. There are currently no graduate level regression courses being taught in CASNR. Financial impact: None. The course is currently taught by a FDSC faculty member under FDSC 590 Special Topics in Food Science, and the faculty member plans to offer it as a regular course. Support from assessment activities: Assessment indicated that students were not getting this material in other courses.

DEPARTMENT OF FORESTRY, WILDLIFE AND FISHERIES

(FWF) Forestry, Wildlife and Fisheries

ADD

FWF 522 Rare Species Biology, Conservation and Management (3) Provides an introduction to relevant aspects of rare species biology (concept of rarity; the development and use of rarity indices; issues of detection; *in situ* and *ex situ* methods and assisted migration), and how that information is used for conservation, management and recovery purposes. Students will apply knowledge learned in a project addressing a conservation or management priority with data provided by government agencies (e.g. USFWS).

Credit Restriction: May not receive credit for both 422 or 422R and 522.

Recommended Background: ecology, mathematics, statistics.

Registration Restriction: Minimal student level – graduate.

Rationale: Numerous FWF faculty work with rare species (e.g., threatened and/or endangered; species of greatest conservation need; species in decline) in a variety of contexts. Graduate students working with such species and headed towards careers in conservation science will benefit from a consolidated approach that takes into account information on species biology and interactions, status assessment given continued global change pressures, legal requirements, and management options. Impacts on other units: None. Financial impact: None.

This supports FWF's Graduate Education Teaching Goals' Objective 2 (Increase graduate course offerings within the department). The course will also contribute to FWF graduate degree learning outcomes 1 and 2: use appropriate theory to conceptualize research problems; and use appropriate methods and procedures to achieve specific research objectives. Support from assessment activities: FWF faculty have discussed growing trends in stakeholder interest and have identified conservation as an area worthy of further emphasis.

REVISE REGISTRATION RESTRICTION ON 400-LEVEL COURSE

FWF 416 Planning and Management of Forestry, Wildlife and Fisheries Resources (3)

Registration Restriction(s): Restricted to Forestry and Wildlife and Fisheries Science majors only; minimum student level – senior.

Formerly: Registration Restriction(s): Minimum student level - senior.

(WFS) Wildlife and Fisheries Science

REVISE (RE)PREREQUISITE(S) ON 400-LEVEL COURSES

WFS 440 Wildlife Techniques (2)

(RE) Prerequisite(s): 100 and Forestry, Wildlife and Fisheries 212, 250, 310 and 315.

Formerly: (RE) Prerequisite(s): 100 and Forestry, Wildlife and Fisheries 212, 250, 310 and 317.

WFS 442 Fisheries Techniques (3)

(RE) Prerequisite(s): 100 and Forestry, Wildlife and Fisheries 212, 250, 310 and 315.

Formerly: (RE) Prerequisite(s): 100 and Forestry, Wildlife and Fisheries 212, 250, 310 and 317.

WFS 443 Fisheries Science (3)

(RE) Prerequisite(s): Forestry, Wildlife and Fisheries 315.

Formerly: (RE) Prerequisite(s): Forestry, Wildlife and Fisheries 317.

WFS 444 Ecology and Management of Wild Mammals (3)
(DE) Prerequisite(s): Forestry, Wildlife and Fisheries 315.

Formerly: (DE) Prerequisite(s): Forestry, Wildlife and Fisheries 317.

WFS 445 Ecology and Management of Wild Birds (3)
(RE) Prerequisite(s): Forestry, Wildlife and Fisheries 315.

Formerly: (RE) Prerequisite(s): Forestry, Wildlife and Fisheries 317.

Rationale: FWF 317 is being dropped and replaced by FWF 315.

DEPARTMENT OF PLANT SCIENCES

(PLSC) Plant Sciences

DROP

PLSC 505 Professional Development and Presentation Skills (1)

Rationale: This course has not had sufficient enrollment to maintain it as a catalog entry. Department has been exploring other means to provide training on this skillset. Impact on other units: None Financial Impact: None.

REVISE 400-LEVEL COURSE TO ADD (RE) PREREQUISITES

PLSC 410 Nursery Management and Production (3) (RE) Prerequisite(s): English 102 or 132 or 290 or 298.

REVISE (RE) PREREQUISITES ON 400-LEVEL COURSE

PLSC 421 Native Plants in the Landscape (3) (RE) Prerequisite(s): 320 or Ecology and Evolutionary Biology 330.

Formerly: (RE) Prerequisite(s): 220 or Ecology and Evolutionary Biology 330.

REVISE HOURS, DESCRIPTION; DROP (RE) PREREQUISITES AND (DE)PREREQUISITES, REVISE REGISTRATION RESTRICTION ON 400-LEVEL COURSE

PLSC 470 Professional Practices for the Green Industry (1) Professionalism, ethics, sales, sales proposals, budgeting, managerial skills, estimating, and contract management in the green industry. Students will additionally learn about professional involvement in industry related organizations.
Registration Restriction(s): Minimum student level — junior.

Formerly: (3) Professionalism, sales, sales proposals, budgeting, managerial skills, estimating, specifications, and contract management in the turf, public horticulture, and landscaping professions.

(RE) Prerequisite(s): 210.

(DE) Prerequisite(s): 226 or 230 or 240.

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

Rationale: Course is being reduced in credit hours to accommodate other curricular actions. PLSC has undergone a 2 year process to evaluate and develop a core set of classes within their curriculum, this is a part of that change. Based on a committee vote it was decided to reduce the credit hours of this course. Financial impact: This course is taught by a paid adjunct professor. Their compensation will be reduced to reflect the new credit hour number.

II. PROGRAM CHANGES

INTERDEPARTMENTAL

REVISE REQUIREMENTS – WATERSHED MINOR

In the 2017-18 *Graduate Catalog*, add the ENVE course listed below to the Science/Engineering course listings.

ENVE 533 – Green Infrastructure Design

DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS

DROP DEPARTMENT INTRODUCTORY PARAGRAPH

In the 2017-18 *Graduate Catalog*, drop the introductory paragraph as shown below:

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

Rationale: The Agricultural Economics Resource Economics field in the Economics PhD program is no longer being offered by the Department of Economics. Impact on other units: None. Financial impact: None.

DEPARTMENT OF BIOSYSTEMS ENGINEERING AND SOIL SCIENCE

► ADD FIVE-YEAR ACCELERATED BS-MS PROGRAM – BIOSYSTEMS ENGINEERING TECHNOLOGY MAJOR

In the 2017-18 *Graduate Catalog*, add heading and text for BS-MS accelerated program.

Five-Year Accelerated BS-MS Program – Biosystems Engineering Technology Major

The department offers especially qualified students a Five-Year BS/MS program with a BS degree (major in environmental and soil sciences) and an MS degree (major in biosystems engineering technology). This option is particularly applicable to students in the Construction Science, Off-Road Vehicle Technology, and Agricultural Systems Technology ESS concentrations, but is also available to students in the other ESS concentrations (Soil Science, Environmental Science, and Conservation Agriculture and Environmental Sustainability). The primary component of the program is that qualified students may take up to 9 hours of approved graduate courses for their upper-division undergraduate electives and have them count toward both their BS and MS degrees at the University of Tennessee. This program is designed for students who intend to complete their MS degree at the University of Tennessee, as other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the BS degree. Significant components of the program are as follows:

- Students must have an overall GPA of 3.4 in required coursework. Conditional admission to the five-year program may be granted after completion of 65 hours of coursework meeting requirements of the BS degree with at least 15 credit hours of that in technical courses within their concentration. Full admission may be granted after the completion of 96 hours of required coursework with a minimum GPA of 3.4 and at least 24 hours of that in technical courses in their concentration.
- Admission must be approved by the department and the Graduate School. The approval process begins with application to the BSE Undergraduate Program Coordinator. The admission decision will be based on the coursework, level of maturity, letters of recommendation, GRE scores as required by the department, and work experience.
- Students must at least be conditionally admitted to the program prior to taking courses that receive credit for both the BS and MS degrees. All courses taken for graduate credit must be approved by the BSE Graduate Program Director. Students admitted to the program must also request permission from the Graduate School to take approved courses for graduate credit, and must be admitted to the Graduate School within the BSET program following the normal admission process.
- Students will not be eligible for assistantships until they are enrolled as graduate-level students in the Graduate School.

SUPPORTING INFORMATION: Rationale: Open additional opportunities for high-achieving students to pursue graduate degrees here. Impact on other units: None: no additional courses, and does not change existing undergraduate curriculum. Response to assessment: none. Financial impact: none.

► ADD FIVE-YEAR ACCELERATED BS-MS PROGRAM - BIOSYSTEMS ENGINEERING MAJOR

In the 2017-18 *Graduate Catalog*, add heading and text for BS-MS accelerated program.

Five-Year Accelerated BS-MS Program – Biosystems Engineering Major

The department offers especially qualified students a Five-Year BS/MS program with a BS degree (major in biosystems engineering) and an MS degree (major in biosystems engineering). The primary component of the program is that qualified students may take up to 6 hours of approved graduate courses for their senior undergraduate electives and have them count toward both their BS and MS degrees at the University of Tennessee. This program is designed for students who intend to complete their MS degree at the University of Tennessee, as other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the BS degree. Significant components of the program are as follows:

- Students must have an overall GPA of 3.4 in required coursework. Conditional admission to the five-year program may be granted after completion of 65 hours of coursework meeting requirements of the BS degree, with at least 24 hours in technical courses required for the major. Full admission may be granted after the completion of 96 hours of required coursework with a minimum GPA of 3.4 and at least 30 hours of technical coursework required by the major. Approval of such coursework is decided on by the BSE Undergraduate Program Coordinator.
- Admission must be approved by the department and the Graduate School. The approval process begins with application to the BSE Undergraduate Program Coordinator.
- Students must at least be conditionally admitted to the program prior to taking courses that receive credit for both the BS and MS degrees. All courses taken for graduate credit must be approved by the BSE Graduate Program Director. Students admitted to the program must also request permission from the Graduate School to take approved courses for graduate credit, and must follow the normal procedure for admission to the Graduate School within the BSE program.
- Students will not be eligible for assistantships until they are enrolled as graduate-level students in the Graduate School.

► **ADD FIVE-YEAR ACCELERATED BS-MS PROGRAM – ENVIRONMENTAL AND SOIL SCIENCES MAJOR**

In the 2017-18 *Graduate Catalog*, add heading and text for BS-MS accelerated program.

Five-Year Accelerated BS-MS Program – Environment and Soil Sciences Major

The department offers especially qualified students a Five-Year BS/MS program with a BS degree (major in environmental and soil sciences) and an MS degree (major in biosystems engineering technology). This option is particularly applicable to students in the Construction Science, Off-Road Vehicle Technology, and Agricultural Systems Technology ESS concentrations, but is also available to students in the other ESS concentrations (Soil Science, Environmental Science, and Conservation Agriculture and Environmental Sustainability). The primary component of the program is that qualified students may take up to 9 hours of approved graduate courses for their upper-division undergraduate electives and have them count toward both their BS and MS degrees at the University of Tennessee. It is recommended that students speak with their advisor and the BSE Undergraduate Program Coordinator about long-term career goals before committing to this program, as those goals may affect their selection of upper-division classes. For example, students interested in a career in construction are encouraged to take BSET425, 430, and 435. This program is designed for students who intend to complete their MS degree at the University of Tennessee, as other universities may not accept these courses for graduate credit since they were used to satisfy requirements for the BS degree. Significant components of the program are as follows:

- Students must have an overall GPA of 3.4 in required coursework. Conditional admission to the five-year program may be granted after completion of 65 hours of coursework meeting requirements of the BS degree with at least 15 credit hours of that in technical courses within their concentration. Full admission may be granted after the completion of 96 hours of required coursework with a minimum GPA of 3.4 and at least 24 hours of that in technical courses in their concentration.
- Admission must be approved by the department and the Graduate School. The approval process begins with application to the BSE Undergraduate Program Coordinator. The admission decision will be based on the coursework, level of maturity, letters of recommendation, GRE scores as required by the department, and work experience.
- Students must at least be conditionally admitted to the program prior to taking courses that receive credit for both the BS and MS degrees. All courses taken for graduate credit must be approved by the BSE Graduate Program Director. Students admitted to the program must also request permission from the Graduate School to take approved courses for graduate credit, and must be admitted to the Graduate School within the BSET program following the normal admission process.
- Students will not be eligible for assistantships until they are enrolled as graduate-level students in the Graduate School.

DEPARTMENT OF ENTOMOLOGY AND PLANT PATHOLOGY

REVISE REQUIREMENTS – ENTOMOLOGY AND PLANT PATHOLOGY MAJOR, MS (TO ADD A NON-THESIS OPTION)

In the 2017-18 *Graduate Catalog*, under the Requirements heading, delete the second paragraph and replace with the description for the Thesis and Non-thesis Option.

Thesis Option

Students must select from three concentrations: Bioinformatics and Genomics; Entomology; or Plant Pathology, and fulfill the course requirements accordingly. The program requires a written thesis based on original research, which has been approved by the student's advisory committee, completion of a minimum of 24 credit hours of coursework for graduate credit, and 6 credit hours of EPP 500. Included in the course requirements are two acceptable seminar presentations for one credit hour each. An oral final examination that covers the thesis and coursework is required, and must be passed to the satisfaction of the advisory committee after the thesis has been completed. A minor is not required, but may be selected at the option of the student. A minor includes 6 (minimum) to 12 (maximum) credit hours of graduate-level credit in the minor department.

Non-Thesis Option

There are no concentrations for the non-thesis option. In lieu of a thesis, students are required to complete a project/practicum and prepare of a written report summarizing the project findings. Students working on a project/practicum must complete 30 credit hours of graduate credit, which includes one to four credit hours of EPP 503, and an acceptable seminar presentation for one credit hour. Final oral and written examinations covering the project and coursework are required, and must be passed to the satisfaction of the advisory committee after the project/practicum has been completed.

Non-Thesis Course Requirements:

1. Select at least 15 credit hours from EPP courses listed in the Graduate Catalog at the 500 level or above (excluding EPP 500, EPP 502, EPP 531, EPP 570, EPP 640, and EPP 675).
2. Colloquium (EPP 570) (1 credit hour)
3. Graduate Seminar (EPP 640) (1 credit hour)
4. Non-thesis Project/Practicum (EPP 503) (1-4 credit hours)
5. Program Electives¹ (9-12 credit hours)

¹ The remainder of coursework will be selected by the student in consultation with the major advisor and advisory committee. Students may elect to have a minor, including but not limited to Plant Sciences, Forestry, Fisheries and Wildlife, Wildlife Health, and Statistics. Course(s) in statistical analysis of biological data are highly recommended, but not required.

Rationale: Addition of a non-thesis option will increase accessibility to part-time students who are fully employed in entomology and plant pathology industries. Impact on other units: None. Financial impact: Non-thesis MS students will not be eligible for tuition waivers or assistantships. We anticipate that most of these students will be part-time and will already be employed in entomology or plant pathology related industries, state or federal government agencies, or private practice, and will earn the degree over a longer period of time. This will allow us to maintain our number of MS graduates, and shift our financial resources for assistantships to support more PhD students. Support from assessment activities: Not applicable

REVISE REQUIREMENTS – ENTOMOLOGY AND PLANT PATHOLOGY MAJOR, MS

In the 2017-18 *Graduate Catalog*, under “Requirements” heading, add the following sentences to the end of the first paragraph

An understanding of research ethics is also required. This departmentally-enforced requirement may be achieved through (CITI RCR) training, as evidenced by presenting a valid CITI RCR certificate to the EPP Director of Graduate Studies. In addition, students are expected to attend seminar (EPP 640) each academic semester of their MS program.

In the 2017-18 *Graduate Catalog*, add the words “thesis option” to the end of the heading Bioinformatics and Genomics concentration. The heading will now read as shown below:

Bioinformatics and Genomics concentration (thesis option)

In the 2017-18 *Graduate Catalog*, under the Bioinformatics and Genomics concentration, delete the current text for requirements and replace with the following:

Required:

1. Core Bioinformatics and Genomics Courses
 - a. EPP 622 (3 credit hours)
 - b. Select a minimum of nine credit hours from EPP courses listed in the Graduate Catalog (excluding EPP 500, EPP 502, EPP 503, EPP 640, EPP 675, and EPP 622).
 - c. Select a minimum of six credit hours from CBE 672 (3), LFSC 507 (3), LFSC 520 (4), LFSC 521 (4), and MICR540 / LFSC 517 (3).
2. Colloquium (EPP 570) (1 credit hour)
3. Graduate Seminar (EPP 640) (2 credit hours for thesis)
4. Thesis (EPP 500) (6 credit hours)
5. ANSC 675 (3 credit hours) or another statistics course is highly recommended and usually will be required by the student's advisory committee.

Rationale: Minor changes made to align the description of course requirements for the three concentrations within the Entomology and Plant Pathology MS program. Impact on other units: None. Financial impact: None. Support from assessment activities: Not applicable

In the 2017-18 *Graduate Catalog*, add the words “thesis option” to the end of the heading Entomology concentration.

Entomology concentration (thesis option)

In the 2017-18 *Graduate Catalog*, under the Entomology concentration, delete the current text for requirements and replace with the following:

Required:

1. Core Entomology Courses
 - a. EPP 548 (3 credit hours)
 - b. Select one course (3 credit hours) from EPP 530, EPP 552, and EPP 561.
 - c. Select a minimum of one course (3 credit hours) from EPP 508, EPP 523, EPP 525, EPP 530, EPP 552, EPP 561, EPP 570, EPP 630, and EPP 640.
2. Colloquium (EPP 570) (1 credit hour)
3. Graduate Seminar (EPP 640) (2 credit hours)
4. Program Electives¹ (12 credit hours)
5. Thesis (EPP 500) (6 credit hours)

Formerly: Rationale: The number of required core Entomology courses was reduced to add flexibility to the curriculum and encourage interdisciplinary training. Impact on other units: None. Financial impact: None. Support from assessment activities: Not Applicable

In the 2017-18 *Graduate Catalog*, add the words “thesis option” to the end of the heading Plant Pathology concentration.

Plant Pathology concentration (thesis option)

In the 2017-18 *Graduate Catalog*, under the Plant Pathology concentration, delete the current text for requirements and replace with the following:

Required:

1. Core Plant Pathology courses
 - a. EPP 505 (3 credit hours)
 - b. Select one course (3 credit hours) from EPP 514, EPP 515, EPP 520, and EPP 521.
 - c. Select a minimum of one course (3 credit hours) from EPP 508, EPP 512, EPP 514, EPP 515, EPP 520, and EPP 521.
2. Colloquium (EPP 570) (1 credit hour)
3. Graduate Seminar (EPP 640) (2 credit hours)
4. Program Electives¹ (12 credit hours)
5. Thesis (EPP 500) (6 credit hours) or Non-thesis Project/Practicum (EPP 503) (2-4 credit hours)

Rationale: The number of required core Plant Pathology courses was reduced to add flexibility to the curriculum and encourage interdisciplinary training. Impact on other units: None. Financial impact: None. Support from assessment activities: Not Applicable

REVISE REQUIREMENTS – ENTOMOLOGY, PLANT PATHOLOGY AND NEMATOLOGY MAJOR, PHD

In the 2017-18 *Graduate Catalog*, under the Bioinformatics, Genomics, and Molecular Interactions concentration, delete the second listing of requirements and replace with the following:

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

EPP 505 - Mycology (3)
EPP 508 - Plant Health Diagnostics (3)
EPP 512 - Soilborne Plant Pathogens (3)
EPP 514 - Phytobacteriology (3)
EPP 515 - Physiology of Plant Disease (3)
EPP 520 - Nematology (3)
EPP 521 - Plant Virology (3)
EPP 523 - Field Crops and Vegetable Entomology (3)
EPP 525 - Medical and Veterinary Entomology (3)
EPP 530 - Integrated Pest Management (3)
EPP 548 - Taxonomy of Adult Insects (3)
EPP 561 - Insect Physiology (3)
EPP 552 - Insect Morphology (3)
EPP 630 - Advanced Integrated Pest Management (3)

Formerly: EPP 515, EPP 521, EPP 528, and EPP 561.

Rationale: Adding more course options to the second portion of the course menu gives more flexibility to the curriculum. Impact on other units: None. Financial impact: None. Support from assessment activities: Not Applicable

In the 2017-18 *Graduate Catalog*, under the Organismal Biology, Ecology and Systematics concentration and from the Sustainable Disease and Integrated Pest Management Systems concentration, remove EPP 528 and EPP 551 from the list of course options

Rationale: Removes two dropped courses (EPP 528 and EPP 551) from the list of course options. Impact on other units: None. Financial impact: None. Support from assessment activities: Not Applicable

DEPARTMENT OF FOOD SCIENCE

❖ ADD CONCENTRATION – FOOD SCIENCE MAJOR, PHD

Sensory science concentration

REVISE INTRODUCTORY DEPARTMENT TEXT

In the 2017-18 *Graduate Catalog*, revise the introductory department text in the following two areas:

- 1) Revise the first sentence of the department introductory text to include the name of the new concentration as follows:

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

- 2) Under the Admissions heading, delete the 2nd and 3rd sentences of the paragraph and replace with the following:

The Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) is required for applicants whose native language is not English. In addition, applicants must submit a written statement of educational and career goals, and Graduate Rating Forms or letters of recommendation from at least three people familiar with the applicant's scholastic ability and professional potential. Admission to the program is contingent upon faculty evaluation of the applicant's undergraduate/graduate grade point average, GRE scores, rating forms, relevant work experience, and TOEFL or IELTS score, if applicable.

Formerly: To the Office of Graduate Admissions submit online application, application fee, official transcripts, and scores from the general portion of the Graduate Record Examination (GRE) and TOEFL (if applicable). In addition, applicants must submit a written statement of educational and career goals, and Graduate Rating Forms or letters of recommendation from at least three people familiar with the applicant's scholastic ability and professional potential.

Rationale: The IELTS score also is accepted by the Graduate Admission but was not listed.

REVISE REQUIREMENTS – FOOD SCIENCE MAJOR, MS (BOTH THESIS AND NON-THESIS OPTIONS)

In the 2017-18 *Graduate Catalog*, under the thesis option revise as follows:

- 1) First bullet, delete the first sentence and replace with the following sentence:

Prior to research for the thesis, the student must develop a detailed written research plan and defend it by his/her advisory committee at least one semester before the graduating semester.

- 2) Before the last bullet, add the following sentence to make this sentence the fourth bullet. There will now be 5 bullets.

- All students are required to have teaching experience in the FDSC Department for at least one term.

In the 2017-18 *Graduate Catalog*, under the non-thesis option, first bullet, remove current text and replace with the following:

In lieu of a thesis, students are required to complete a problem in cooperation with their employer (company or governmental agency) and/or their faculty committee.

Formerly: In lieu of a thesis, students are required to complete a problem in cooperation with their employer (company or governmental agency) and their faculty committee. Students working on a problem must register for 6 credit hours of FDSC 503.

REVISE REQUIREMENTS – ACCELERATED FIVE YEAR BS-MS PROGRAM, FOOD SCIENCE MAJOR

In the 2017-18 *Graduate Catalog*, revise the accelerated program as follows:

First paragraph revise the third and fourth sentences as follows:

Students will be considered for conditional admission to the program by the end of their junior year of undergraduate study at UT. Because the MS program requires that students write a thesis based on their original research, students in BS/MS program must start working on their research project not later than starting the senior year of undergraduate studies.

Formerly: Students will be considered for conditional admission to the program during, or immediately following junior year of undergraduate study at UT. Because the MS program requires that students write a thesis based on their original research, students in BS/MS program must start working on their research project not later than immediately following junior year of undergraduate studies.

Revise first bullet point, first sentence as follows:

A student must be a declared Food Science major, Science concentration, with a minimum GPA of 3.4, must have completed at least 15 credit hours of Food Science courses, and must have completed at least 90 credit hours of the 120 credit hours of coursework required for the BS degree with a major in Food Science.

Formerly: A student must be a declared Food Science major, Science concentration, with a minimum GPA of 3.4, must have completed at least 15 credit hours of Food Science courses, and must have completed at least 90 credit hours of the 120 credit hours of coursework required for the BS degree with a major in Food Science.

Revise fourth bullet point, last sentence as follows:

Students will be typically informed of the outcome of their application by the end of their junior year of undergraduate study.

Formerly: Students will be typically informed of the outcome of their application before the beginning of their senior year of undergraduate study.

Revise paragraph 3 as follows: remove paragraph and replace with the following paragraph.

Any course taken for graduate credit before satisfying all requirements for the BS degree must be approved by the student's graduate advisory committee, the Graduate Director, and the Graduate School. These courses must be identified in advance in consultation with the undergraduate advisor and the graduate advisory committee. UT's Senior Privilege rule imposes a maximum limit of 9 credit hours on the number of graduate-level credit hours that an undergraduate student may complete before completing an undergraduate degree and being formally admitted to the Graduate School. The form "Food Science Conditional Admission 5 Year BS-MS" is available from the Graduate Director and must be completed and signed by the undergraduate advisor, undergraduate coordinator, and graduate advisory committee at least two months before the end of the junior year. After review by the Department, the form will be signed by the Graduate Director and submitted 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 undergraduate advisor, proposed master's graduate advisor, and advisory committee members. UT's Senior Privilege rule imposes a maximum limit of 9 credit hours on the number of graduate-level credit hours that an undergraduate student may complete before completing an undergraduate degree and being formally admitted to the Graduate School. 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 4, second sentence as follows:

Students in the BS/MS program must apply for admission to the Graduate School and to the MS program during their senior year of undergraduate study for the term immediately following the completion of their undergraduate study, following the same procedures of all other student applicants.

Formerly: Students in the BS/MS program must apply for admission to the Graduate School and to the MS program during their senior year of undergraduate study, following the same procedures of all other student applicants.

REVISE REQUIREMENTS – FOOD SCIENCE MAJOR, PHD

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

- 1) Delete bullets one and two. The text below replaces the two deleted bullets.

Completion of a master's degree in the field, or a closely related field, or an extraordinary record in undergraduate study is required for admission. Students admitted without an MS degree must demonstrate promise to complete a doctoral dissertation by the third semester before continuing further doctoral studies, which will be determined by the advisory committee based on progresses such as submitting manuscripts to refereed journals, presenting papers at scientific meetings, or independently developing and proving research hypotheses. A dissertation is required for the Doctor of Philosophy degree. Each student must develop a detailed written plan for the dissertation research and submit it to his/her committee at least one semester before the graduating semester.

Formerly: Completion of a master's degree in the field, or a closely related field, or passing a special qualifying examination is required for admission. A dissertation is required for the Doctor of Philosophy degree. Each student must develop a detailed written plan for the dissertation research and submit it to his/her committee by the end of the second semester in the program.

- 2) Add new bullet point. Insert text below as the next to last bullet point.

All students are required to have teaching experience in the FDSC Department for at least one term.

3) Delete text from last bullet and replace with the following text.

Each student must pass a comprehensive examination no later than two semesters before the graduating semester. Satisfactory scores of both written and oral components of the comprehensive exam, as determined by the graduate advisory committee, are required prior to admission to candidacy. A final oral examination is required that includes a defense of the dissertation and subject matter that the student's advisory committee considers appropriate.

Formerly: Each student must pass both written and oral comprehensive examinations prior to admission to candidacy. Major professors will advise candidates on competencies expected. A final oral examination is required that includes a defense of the dissertation and subject matter that the student's committee considers appropriate.

DEPARTMENT OF PLANT SCIENCES

REVISE REQUIREMENTS – PLANT SCIENCES MAJOR, MS (NON-THESIS OPTION)

In the 2017-18 *Graduate Catalog*, under the non-thesis option revise as follows:

Bullet 2: delete current text and replace with the following:

- An understanding of research ethics is also required. This departmentally-enforced requirement may be achieved through coursework (e.g., PLSC 525 /ANSC 525 /CEM 525; BCMB 614; PSYC 660) or via online (CITI RCR) training, as evidenced by presenting a valid CITI RCR certificate to the Graduate Director upon submission of the Application to Candidacy form. For projects involving human subjects, CITI IRB certification may also be required.

Formerly: For projects involving human subjects, CITI IRB certification may also be required.

Rationale: These changes reflect changes approved in previous catalog year, which were not replicated within the non-thesis option catalog descriptions of the program. Clarifies the existing policy regarding departmental requirement for understanding about research ethics. Impact on other units: None Financial Impact: None.

COLLEGE OF ARCHITECTURE AND DESIGN

All changes effective Fall 2018

I. COURSE CHANGES

SCHOOL OF ARCHITECTURE

(ARCH) Architecture

ADD

ARCH 527 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.

Rationale: Replaces existing course but number reflects location in curriculum.

ARCH 528 Design Theories (3) Exploration of architectural theory in the early 21st and late 20th centuries, with an emphasis on the connection between theory and architectural practice. The course will also explore theory in allied forms of cultural production.

(RE) Prerequisite(s): 527.

Rationale: New course on contemporary theory

ARCH 529 MAP Seminar (3) Students develop a Master of Architecture Project (MAP) thesis, proposal and document based on their own interests, seminar discussions and faculty advice. Students also identify a MAP advisory committee, which approves the proposal as a basis for ARCH 598 – MAP Studio.

(RE) Prerequisite(s): 528.

Rationale: New course to support students' independent work

ARCH 543 Design Charrette (3) Principles of architectural design of form, space, and place exploring possibilities of modern design thinking for contemporary situations, in an off-campus site. Course to include travel and research off campus.

Rationale: New course to support intensive design projects

ARCH 557 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.

Rationale: Replaces existing course but number reflects location in curriculum.

ARCH 558 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.

Rationale: Replaces existing course but number reflects location in curriculum.

ARCH 559 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: Replaces existing course but number reflects location in curriculum.

ARCH 560 Seminar in Design Integration (3) Technological aspects influencing building form and space. Integral application of technical aspects of structural, environmental control, and construction supporting sustainability, experience, use, contextual fit, meaning, and expression. Whole building simulation and other methods for higher performance building. Bases for integrating design knowledge.

(RE) Prerequisite(s): 557 and 558 and 559.

(RE) Corequisite(s): 572.

Rationale: Replaces existing course but number reflects location in curriculum.

ARCH 598 Master of Architecture Project (MAP) Studio (3-6) Students develop their thesis independently in consultation with their Master of Architecture Project (MAP) committee, which reviews the work on a systematic basis. Students present the work publicly and prepare documentation for archive in the UTK libraries. The Committee Chair serves as the primary critic and is responsible to confirm that the requirements of the MAP are met.

Grading Restriction: P/NP only.

Repeatability: May be repeated. Maximum 24 hours.

(RE) Prerequisite(s): 529.

Credit Level Restriction: Graduate credit only.

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

Rationale: New course to support students' independent work

DROP

ARCH 503 Modern Architecture: Histories and Theories (3)

Rationale: 513 is being revised to reflect the content of this course and fit the numbering sequence of courses ARCH 511, 512, 513.

ARCH 504 Design Tactics (3)

Rationale: Replaced by new course ARCH 527.

ARCH 506 Ideas in Architecture (3)

Rationale: Last taught prior to Summer 2005.

ARCH 509 Seminar in Design Integration (3)

Rationale: Replaced by new course ARCH 560.

ARCH 516 Design Implementation: Construction Methods I (3)

Rationale: Replaced by ARCH 558.

ARCH 517 The International Style (3)

Rationale: Last taught prior to Summer 2005.

ARCH 520 History of American Architecture (3)

Rationale: Last taught prior to Summer 2005.

ARCH 530 Computer Applications in Design I (3)

Rationale: Last taught Fall 2010.

ARCH 531 Information Modeling (2)

Rationale: Last taught prior to Summer 2005.

ARCH 539 - Structures in Architecture I (3)

Rationale: Replaced by ARCH 557

ARCH 540 Structures in Architecture II (3)

Rationale: Replaced by ARCH 557

ARCH 545 Principles of Environmental Control I (3)

Rationale: Replaced ARCH 559

ARCH 546 Principles of Environmental Control II (3)

Rationale: Replaced by ARCH 559

ARCH 547 Structural Principles in Architecture (4)

Rationale: Replaced by ARCH 557

ARCH 548 Materials and Methods in Architecture (4)

Rationale: Replaced by ARCH 558

ARCH 549 Building Systems in Architecture (4)

Rationale: Replaced by ARCH 558

Equivalency Table

Current Courses	Equivalent Courses: Effective Fall 2018
ARCH 503	ARCH 513
ARCH 504	ARCH 527
ARCH 509	ARCH 560
ARCH 516	ARCH 558
ARCH 539	ARCH 557
ARCH 540	ARCH 557
ARCH 545	ARCH 559
ARCH 546	ARCH 559
ARCH 547	ARCH 557
ARCH 548	ARCH 558
ARCH 549	ARCH 559

REVISE DESCRIPTION

ARCH 501 Introduction to the Built Environment (2) Introduction to the design disciplines from an intellectual perspective. Intended as a framework for understanding architectural form, its production, and interpretation, the course analyzes the built environment through discussions of space, place, and culture. Human experience, the performance of materials, social concerns, technological developments, and natural contexts provide ways of understanding design form. Texts explore the integrated relationship of history, theory, representation, and design. Content coordinated with Architecture 538 and 518.

Formerly: Introduction to the design disciplines from an intellectual perspective. Intended as a framework for understanding architectural form, its production, and interpretation, the course analyzes the built environment through discussions of space, place, and culture. Human experience, the performance of materials, social concerns, technological developments, and natural contexts provide ways of understanding design form. Texts explore the integrated relationship of history, theory, representation, and design. Content coordinated with Architecture 538 and 518/519.

Rationale: Course ARCH 519 now taught in the Fall Semester.

ARCH 518 Design Representation and Process I (2) Introduction of analog and digital representation methods in two and three dimensions. Emphasis is on learning how various techniques impact design exploration and visual logic through drawing, visualization, and analysis, including drawing conventions, representational and graphic structure. Content coordinated with Architecture 501 and 538.

Formerly: Exploration of drawing as a means of visual thinking and communication, addressing perceptual phenomena, the relationship between the abstract and the concrete, the representation of design ideas in early design process. Introduces compositional principles of design and basic technical drawing skills and conventions, including orthographic and paraline drawings. Concentration on both freehand and measured drawing as a means of visualizing space and form. Content coordinated with Architecture 501 and 538.

Rationale: Update of representation techniques.

ARCH 519 Design Representation and Process II (2) Continued exploration of analog and digital representation methods and their relationships to design intent. Emphasis is on developing an understanding of how a variety of media address perceptual phenomena, abstraction, concepts of mapping and diagramming. Development of a systemic understanding of representational workflows across multiple platforms. Emphasis is placed on translating between multiple tools, techniques, and design ambitions while leveraging potentials created by computational power.

Formerly: Elaboration of drawing as a means of visual thinking and a method of communication, emphasizing the relationship of design intent representation methods in the design process and presentation. Continued development of freehand and constructed drawings, including shadow, shade, and perspective. Introductory digital skills related to scanning, image manipulation, layout, and printing. Content coordinated with Architecture 501 and 538.

Rationale: Update of representation techniques.

REVISE TITLE AND DESCRIPTION AND ADD (RE)PREREQUISITE

ARCH 513 Modern Architecture: Histories and Theories (3) Examines the history and theory of modern and contemporary architecture through broad-based examinations of the questions of modernity and specific case studies of buildings, projects, landscapes and theories.

(RE) Prerequisite(s): 512.

Formerly: Non-Western and Indigenous Architecture (3) Building responsive to climate, material availability, and economic level, as designed by anonymous builders. Examples from prehistoric times to present including the fertile crescent; the Indus Valley; Hindu, Buddhist, and Mughal architecture of India, China, and Japan.

Rationale: This is the correct content for the course that is part of the sequence of courses ARCH 511, 512, 513.

REVISE HOURS AND DESCRIPTION

ARCH 538 Design I: Fundamentals (3) Elements of form, space, and place in compositions, simple structures, and site designs. The introduction of significant ideas, context, human experience, purpose, construction, and ecological literacy as the basis of design. Application and engagement of representational and theoretical skills and knowledge in design process. Content coordinated with Architecture 501 and 518.

Formerly: (6) Elements of form, space, and place in compositions, simple structures, and site designs. The introduction of significant ideas, context, human experience, purpose, construction, and ecological literacy as the basis of design. Application and engagement of representational and theoretical skills and knowledge in design process. Content coordinated with Architecture 501 and 518/519.

Rationale: Course shortened and ARCH 519 now taught in Fall

II PROGRAM CHANGES

SCHOOL OF ARCHITECTURE

REVISE COLLEGE INTRODUCTORY TEXT

In the 2018-19 Graduate Catalog, revise the fourth paragraph as follows:

The School of Architecture is proud of its long history and accomplishments and celebrated its 50th anniversary in 2015. The college resides in a newly furnished award-winning facility, providing studio space for every student, a fully equipped woodshop, and state of the art digital technology, including laser and waterjet cutters, robotics, 3-D digital modeling and fabrication equipment, and an image center for printing and digital reproduction needs. The college has a tradition of using the state of Tennessee as a laboratory for applied research with a direct benefit for the citizens of Tennessee. Facilities for research, creative activity, and service include the Nashville Civic Design Center; the Design/Build/Evaluate Initiative (DBEI); the Institute for Smart Structures; the Governor's Chair Studio; and a Fablab for digital fabrication located in downtown Knoxville.

Formerly: The School of Architecture is proud of its long history and accomplishments and celebrated its 50th anniversary in 2015. The college resides in a newly furnished award-winning facility, providing studio space for every student, a fully equipped woodshop, and state of the art digital technology, including laser and waterjet cutters, robotics, 3-D digital modeling and fabrication equipment, and an image center for printing and digital reproduction needs. The college has a tradition of using the state of Tennessee as a laboratory for applied research with a direct benefit for the citizens of Tennessee. Facilities for research, creative activity, and service include the Nashville Civic Design Center (in collaboration with Vanderbilt University); the Design/Build/Evaluate Initiative (DBEI); a new, Rural Urbanism Laboratory (RUL) serving communities in need through design; the Governor's Chair Studio; and a Fablab for digital fabrication located in downtown Knoxville.

Rationale: Update to current resources in the college

DROP CONCENTRATION – ARCHITECTURE MAJOR, MARCH

Urban Design

ADD CONCENTRATION – ARCHITECTURE MAJOR, MARCH

Urbanism

Rationale: Update to reflect faculty vote in 2016.

REVISE REQUIREMENTS – ARCHITECTURE MAJOR, MARCH

In the 2018-2019 Graduate Catalog, delete current text and replace with revised text:

Architecture Major, March

The Graduate Program in Architecture offers a design-centered curriculum that promotes personal development and critical thinking, as well as a sustained discussion of ethical imperatives and ecologically sustainable practices. These values are expressed in an education that challenges students to expand their awareness, become leaders, master the discipline, and engage architectural production in its cultural and social context with the responsibility of stewardship for the built and natural environments. The program is committed to preparing students for leadership roles, not only within the profession, but also within the broader communities they join and influence.

In the United States, state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure <http://www.tn.gov/commerce/boards/ae/>. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an 8-year, 3-year, or 2-year term.

The School of Architecture offers two paths to NAAB-accredited, professional Master of Architecture degrees, which qualify the graduate to sit for the Architects Registration Exam in the United States. These degrees are distinguished by the length of study required and level of study. All graduate architecture degrees also offer several options to specialize in concentrations, furthering the student's ability to customize their graduate educations in areas that they find the most promising and inviting.

The Master of Architecture 3G (M.Arch 3G) program is a program for students who hold a bachelor's degree in another field other than architecture. Typically, three academic years plus one summer in length, the Master of Architecture program is designed to accommodate students who come from a variety of backgrounds, including those with no previous formal study in architecture. This academic plan culminates in either a written- or design-based Master of Architecture Project (MAP). This program requires 102 credit hours of graduate coursework.

Learning objectives for the M.Arch 3G Degree in Architecture:

- 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.
- Graduating students 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 a comprehension of the technical aspects of design, systems and materials, and be able to apply that comprehension in their coursework.
- 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.

The Master of Architecture 2G, (M.Arch 2G) is a professional degree program for students with a 4-year pre-professional bachelor's degree in architecture. Typically two academic years in length, the M.Arch 2G program is designed to accommodate students who have completed a 4-year Bachelor of Architecture program at a university that is not NAAB-accredited. This academic plan culminates in either a Master of Architecture Project (MAP) or in a Diploma Studio. This program requires 60 credit hours of graduate coursework.

As many undergraduate programs are unique, each prospective student's records will be reviewed, and the student will be advised of any NAAB required coursework that needs to be included as part of their individual graduate studies to ensure that the student has completed all required areas of study upon graduation.

Learning objectives for the M.Arch 2G Degree in Architecture:

- 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.
- Graduating students 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 a comprehension of the technical aspects of design, systems and materials, and be able to apply that comprehension in their coursework.
- 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.

In addition, the Graduate Program offers

The Master Architecture, Post-Professional (M.Arch PP) is a 3-semester post-professional degree for students who have already earned an accredited professional degree in architecture, and who seek to develop an area of specialization. Post-professional degrees are not reviewed for accreditation.

Learning Objective:

- 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.

Rationale: Updated to better describe current programs.

Formerly: The Graduate Program in Architecture offers a design-centered curriculum that promotes personal development, ethical imperatives, critical thinking, and ecologically sustainable practices. These values are expressed in an education that challenges students to expand their awareness, become leaders, master the discipline, and engage architectural production in its cultural and

social context with the responsibility of stewardship for the built and natural environments. The program is committed to preparing students for leadership roles, not only within the profession, but also within the broader communities they join and influence.

In the United States, state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure <http://www.tn.gov/commerce/boards/ae/>. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an 8-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

The Master of Architecture, Advanced Placement (AP), and Master of Architecture, Post-professional (PP) programs at the University of Tennessee received a full 8-year accreditation as a result of its last NAAB accreditation review. Post-professional degrees are not reviewed for accreditation.

The School of Architecture offers three curricular paths leading to the Master of Architecture degree.

- The Master of Architecture program is a 3.5-year professional degree program for students who already hold a bachelor's degree in another field other than architecture.
- Master of Architecture, Advanced Placement (MArch AP) is a two-year path in the professional degree program for students with a 4-year pre-professional bachelor's degree in architecture in which students are placed in upper level coursework based on previously completed coursework in a pre-profession.
- The Master Architecture, Post-Professional (MArch PP) is a 3-semester post-professional degree for students who have already earned an accredited professional degree in architecture, and who seek to develop an area of specialization.

Concentrations: The Graduate Architecture Program offers optional concentrations in Conservation and Stewardship, High Performance Buildings, Sustainable Design, and Urban Design.

A concentration in the MArch and MArch AP requires a minimum of:

- One focus area studio and two directed elective courses, or
- Four directed elective courses

Requirements may vary by concentration area. Additionally, a concentration in the MArch PP requires an approved thesis in the topic area.

REVISE CONCENTRATIONS – ARCHITECTURE MAJOR, MARCH

Also, in the 2018-2019 Graduate Catalog, under the Concentrations heading, delete current text and replace with the following:

Concentrations

The Graduate Architecture Program offers the option to focus course work in one of four concentrations – Conservation and Stewardship, High Performance Buildings, Sustainable Design, and Urbanism.

A concentration in the M.Arch 3G and the M.Arch 2G vary by area, but requires a minimum of:

- One focus area studio and two directed elective courses, or
- Four directed elective courses

In the M.Arch PP the concentration requirements also include an approved thesis in the topic area.

Formerly: Concentrations

The Graduate Architecture Program offers optional concentrations in Conservation and Stewardship, High Performance Buildings, Sustainable Design, and Urban Design.

A concentration in the M.Arch and MArch AP requires a minimum of:

- One focus area studio and two directed elective courses, or
- Four directed elective courses

Requirements may vary by concentration area. Additionally, a concentration in the M.Arch PP requires an approved thesis in the topic area.

Rationale: Updated to better describe current programs.

REVISE ADMISSION REQUIREMENTS – ARCHITECTURE MAJOR, MARCH

In the 2018-2019 Graduate Catalog, under the Admission heading, delete current text and replace with the following:

Admission

The following must be submitted by all applicants directly to the Office of Graduate Admissions:

- A completed online Graduate Application for Admission. Visit their website at <http://graduateadmissions.utk.edu/req.shtml> for the online application process.
- The general portion scores of the Graduate Record Examination. Applicants should take the GRE at least six weeks in advance of application for admission.
- For applicants whose native language is not English, scores from the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

In addition to meeting the Graduate School's minimum requirements, the following specific admission requirements must be submitted to the Graduate Program in Architecture:

For applicants to all degree programs:

- An essay addressing the applicant's intent and expectations for study in the program.
- Three letters of recommendation.
- A required portfolio illustrating evidence of visual creativity and/or graphic capabilities.
- A personal on-site interview is optional.

For all applicants to M.Arch 3G and M.Arch 2G:

- A minimum 3.00 undergraduate GPA, minimum 3.25 graduate GPA, minimum GRE scores: 147 QV and 3.0 analytical. Standardized test scores can be weighted differently in the admissions process depending on an applicant's strengths.

For M.Arch 2G applicants additionally:

- A four-year degree (typically, BS, BED, or BA) in architecture, with a minimum 3.00 GPA, or international equivalent degree and equivalent grades, as determined by the Graduate Admissions Office. Placement in the 2-year program requires a minimum of 24 semester credit hours of design studio. Applicants in their undergraduate senior year are eligible to apply.
- A portfolio illustrating evidence of visual creativity and/or graphic capabilities, which must include prior academic and (if applicable) professional design work.

For M.Arch, Post Professional (M.Arch PP) applicants:

- A professional degree in architecture (5-yr Bachelor of Architecture, Master of Architecture, or Doctor of Architecture) with a minimum 3.00 GPA, from an NAAB accredited program or international equivalent degree and equivalent grades, as determined by the Graduate Admissions Office. Applicants in their final year of a professional architecture program are eligible to apply.
- A portfolio illustrating evidence of visual creativity and/or graphic capabilities, which must include prior academic and (if applicable) professional design work.
- An essay of intent identifying a specific area of study aligned with the general goals of the Architecture Graduate Program and the existing research / scholarship interests of the standing faculty in the College of Architecture and Design. Applicants may focus on either "advanced design skills" or "research-oriented focus."
- Prior contact with individual faculty members in the applicant's interest area and with the Chair of the Graduate Architecture Program is highly recommended.

Formerly: The following must be submitted by all applicants directly to the Office of Graduate Admissions:

A completed online Graduate Application for Admission. Visit their website at <http://graduateadmissions.utk.edu/req.shtml> for the online application process.

The general portion scores of the Graduate Record Examination. Applicants should take the GRE at least six weeks in advance of application for admission.

For applicants whose native language is not English, scores from the Test of English as a Foreign Language (TOEFL).

In addition to meeting the Graduate School's minimum requirements, the following specific admission requirements must be submitted to the Graduate Program in Architecture:

For applicants to all degree programs:

An essay addressing the applicant's intent and expectations for study in the program.
Three letters of recommendation.
A required portfolio illustrating evidence of visual creativity and/or graphic capabilities.
A personal on-site interview is optional.

For M.Arch, Post Professional (M.Arch PP) applicants:

A professional degree in architecture (5-yr Bachelor of Architecture, Master of Architecture, or Doctor of Architecture) with a minimum 3.00 GPA, from an NAAB accredited program or international equivalent degree and equivalent grades, as determined by the Graduate Admissions Office. Applicants in their final year of a professional architecture program are eligible to apply.

A portfolio illustrating evidence of visual creativity and/or graphic capabilities, which must include prior academic and (if applicable) professional design work.

An essay of intent identifying a specific area of study aligned with the general goals of the Architecture Graduate Program and the existing research / scholarship interests of the standing faculty in the College of Architecture and Design. Applicants may focus on either "advanced design skills" or "research-oriented focus."

Prior contact with individual faculty members in the applicant's interest area and with the Chair of the Graduate Architecture Program is highly recommended.

For all applicants to MArch and MArch (AP)

A minimum 3.00 undergraduate GPA, minimum 3.25 graduate GPA, minimum GRE scores: 147 QV and 3.0 analytical. Standardized test scores can be weighted differently in the admissions process depending on an applicant's strengths.

A curriculum plan will be developed with each accepted applicant on a case-by-case basis, based on the applicant's prior education. Upon the applicant's acceptance of admission, applicants must provide comprehensive information documenting all professional courses

for review of advanced standing or course waivers in the professional degree. This detailed information (syllabi, etc.) is not reviewed during the application process.

For M.Arch applicants additionally:

A four-year degree (typically, BS, BED, or BA) in architecture, with a minimum 3.00 GPA, or international equivalent degree and equivalent grades, as determined by the Graduate Admissions Office. Placement in the 2-year program requires a minimum of 24 semester credit hours of design studio. Applicants in their undergraduate senior year are eligible to apply.

A portfolio illustrating evidence of visual creativity and/or graphic capabilities, which must include prior academic and (if applicable) professional design work.

For M.Arch PP applicants, additionally:

A four-year Bachelor's degree with a minimum 3.00 GPA from an accredited college or university, or international equivalent degree and equivalent grades, as determined by the Graduate Admissions Office. Candidates with a GPA less than 3.00 may be considered for conditional admission when evidence of exceptional promise is identified. Applicants in their undergraduate senior year are eligible to apply.

Undergraduate prerequisites are 1) 12 semester credit hours of humanities courses, 2) one course in physics, and 3) one pre-calculus math course including trigonometry and logarithms (or college calculus or equivalent). Completion of prerequisites is not required prior to application.

Preparatory courses recommended but not required include: 1) a second course in physics, 2) calculus, 3) freehand drawing (highly recommended).

Rationale: updated language to facilitate understanding and remove conflicting language about the M.Arch Post Professional Degree

REVISE REQUIREMENTS – ARCHITECTURE MAJOR, MARCH

In the 2018-2019 Graduate Catalog, under the heading Degree Requirements, delete current text and replace as follows:

Degree Requirements:

The Master of Architecture 3G (M.Arch 3G)

The Master of Architecture 3G program requires 102 graduate credit hours:

- 30 credit hours in a required sequence of design courses, called studio.
- 4 credit hours in Representation courses.
- 11 credit hours in History, Theory and Research
- 9 credit hours in Disciplinary Discourse courses.
- 18 credit hours in Structures, Technology and Professional Practice courses.
- 18 credit hours in Architecture-Approved Elective Courses.

Students may elect to complete some of their credit hours in the College of Architecture and Design's off campus and study- abroad programs.

The M.Arch 3G culminates in a rigorous final project that combines research and design in a comprehensive proposal. Work on this project begin in ARCH 529 MAP Seminar. In this course, it is the student's responsibility to identify their particular area of study and the motivation for work. Students are expected to become familiar with current discourse including key building and texts. Students are also expected to formulate a thesis and/or critical position and establish strategies for the in-depth study of the topic.

Students may elect to complete the project as a self-directed Master of Architecture Project (ARCH 598 MAP Studio) or pursue it as part of a Diploma Studio (ARCH 599.) In the MAP Studio students work independently with a self-selected committee of faculty advisors, who oversee the work and certify its completion. In the Diploma Studio students develop their own project in the context of a group of students working with a single faculty member.

A graduating student is required to present their work in a public review and prepare a pamphlet documenting the project to be archived in the University of Tennessee, Knoxville Library.

A typical program is completed in the following schedule:

SUMMER YEAR 1

- ARCH 538 Design I (3)
- ARCH 518 Representation I (2)
- ARCH 501 Introduction to the Built Environment (2)

FALL YEAR 1

- ARCH 541 Design II (6)
- ARCH 519 Representation II (2)
- ARCH 511 History/Theory I (3)
- ARCH 557 Structural Principles in Architecture (4)

SPRING YEAR 1

- ARCH 542 Design III (6)

ARCH 512 History/Theory II (3)
ARCH 558 Materials and Methods in Architecture (4)
ARCH Approved Elective (3)

MAY SEMESTER YEAR 1

ARCH 543 Design Charrette (3)

FALL YEAR 2

ARCH 571 Design IV (6)
ARCH 513 Modern Architecture: Histories and Theories (3)
ARCH 527 Design Tactics (3)
ARCH 559 Building Systems in Architecture (4)

SPRING YEAR 2

ARCH 572 Design V (6)
ARCH 528 Design Theories (3)
ARCH 560 Seminar in Design Integration (3)
ARCH Approved Elective (3)

FALL YEAR 3

ARCH 58X Option Studio (6)
ARCH 529 MAP Seminar (3)
ARCH Approved Elective (3)
ARCH Approved Elective (3)

SPRING YEAR 3

ARCH 598 MAP Studio OR ARCH 599 - Diploma Studio (6)
ARCH 562 Professional Practice (3)
ARCH Approved Elective (3)
ARCH Approved Elective (3)

The Master of Architecture 2G (M.Arch 2G)

The Master of Architecture 2G program requires 60 graduate credit hours:

- 24 credit hours in a required sequence of design courses, called studio.
- 9 credit hours in Disciplinary Discourse courses.
- 6 credit hours in Integration and Professional Practice courses.
- 21 credit hours in Architecture-Approved Elective Courses.

Students may elect to complete some of their credit hours in the College of Architecture and Design's off campus and study- abroad programs.

A typical program is completed in the following schedule:

FALL YEAR 1

ARCH 58X Option Studio (6)
ARCH 527 Design Tactics (3)
ARCH Approved Elective (3)
ARCH Approved Elective (3)

SPRING YEAR 1

ARCH 572 Design Integration (6)
ARCH 528 Design Theories (3)
ARCH 560 Seminar in Design Integration (3)
ARCH Approved Elective (3)

FALL YEAR 2

ARCH 58X Option Studio (6)
ARCH 529 MAP Seminar (3)
ARCH Approved Elective (3)
ARCH Approved Elective (3)

SPRING YEAR 2

ARCH 598 MAP Studio OR ARCH 599 - Diploma Studio (6)
ARCH 562 Professional Practice (3)
ARCH Approved Elective (3)
ARCH Approved Elective (3)

Master of Architecture, Post-professional (MArch PP)

The Master of Architecture, Post-professional (MArch PP) program requires a minimum of 36 semester credit hours of graduate course work, taking approximately three semesters of full-time study. A concentration area of study from among the currently available options ought to be selected. Self-designed concentrations will also be considered upon petition to the Chair, Graduate Architecture Programs.

The MArch (PP) requires 6 credit hours of Thesis 500 with a public presentation and oral defense of the thesis.

Formerly: Master of Architecture, Post-professional (MArch PP) requires a minimum of 36 semester credit hours of graduate course work, taking approximately three semesters of full-time study. A concentration area of study from among the currently available options ought to be selected. Self-designed concentrations will also be considered upon petition to the Chair, Graduate Architecture Programs.

The MArch (PP) requires 6 credit hours of Thesis 500 with a public presentation and oral defense of the thesis.

Master of Architecture, Advanced Placement (MArch AP) requires a minimum of 60 semester credit hours of graduate course work, taking approximately two years of full-time study. A concentration within the program options is optional.

MArch normally requires 102 semester credit hours of graduate course work, taking approximately three and a half years of full-time study. Students with prior formal education in design may receive advanced placement upon admission. In such cases, a minimum of 75 semester credit hours of graduate course work will be required. A concentration within the program is optional.

Rationale: Updated to better describe current programs.

REVISE REQUIREMENTS – ARCHITECTURE MAJOR, MARCH, CONSERVATION AND STEWARDSHIP CONCENTRATION

In the 2018-2019 Graduate Catalog, under the Requirements for Conservation and Stewardship concentration, delete current text and replace with the following:

Conservation and Stewardship concentration

Six credit hours from the following:

- 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 Architectural Design: Sustainable Architecture (6)
- ARCH 590 Advanced Architectural Design: Special Topics (6)
- ARCH 598 MAP Studio (6)
- ARCH 599 Design VII: Diploma Thematic Studio (6)

Formerly: Six credit hours 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 Architectural Design: Sustainable Architecture (6)
- ARCH 590 - Advanced Architectural Design: Special Topics (6)
- ARCH 599 - Design VII: Diploma Thematic Studio (6)

REVISE REQUIREMENTS – ARCHITECTURE MAJOR, MARCH, HIGH PERFORMANCE BUILDINGS CONCENTRATION

In the 2018-2019 Graduate Catalog, under the Requirements for High Performance Buildings concentration, delete current text and replace with the following:

High Performance Buildings concentrations

Six credit hours from one of the following:

- ARCH 586 Advanced Architectural Design: Sustainable Architecture (6)
- ARCH 588 Advanced Architectural Design: Structural Innovations (6)
- ARCH 590 Advanced Architectural Design: Special Topics (6)
- ARCH 598 MAP Studio (6)
- ARCH 599 Design VII: Diploma Thematic Studio (6)

Formerly: Six credit hours from one of the following:

- ARCH 500 Thesis (6)
- ARCH 586 Advanced Architectural Design: Sustainable Architecture (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)

Rationale: update to reflect change in course requirement, approved by the faculty 2017

REVISE REQUIREMENTS – ARCHITECTURE MAJOR, MARCH, SUSTAINABLE DESIGN CONCENTRATION

In the 2018-2019 Graduate Catalog, under the Requirements for Sustainable Design concentration, delete current text and replace with the following:

Sustainable Design concentrations

Six credit hours from one of the following:

- ARCH 586 Advanced Architectural Design: Sustainable Architecture (6)
- ARCH 590 Advanced Architectural Design: Special Topics (6)
- ARCH 598 MAP Studio (6)
- ARCH 599 Design VII: Diploma Thematic Studio (6)

Formerly: Six credit 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)

REVISE/ADD REQUIREMENTS – ARCHITECTURE MAJOR, MARCH, URBANISM CONCENTRATION

In the 2018-2019 Graduate Catalog, delete text for the dropped Urban Design concentration and replace with the requirements for the Urbanism concentration as follows:

Urbanism concentrations

The urbanism 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 urbanism 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 Urbanism 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 credit hours from one of the following:

- ARCH 571 Design IV: Building in the Urban Context (6)
- ARCH 583 Architectural Design: Urbanism (6)
- ARCH 598 MAP Studio (6)
- ARCH 599 Design VII: Diploma Thematic Studio (in Urban Design) (6)

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

- ARCH 515 Seminar in Urban Design Theory (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 credit hours, up to three credit 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 (3)

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

Geography

GEOG 441 Cities as Economic Engines (3)
GEOG 442 Urban Spaces and Urban Society (3)
GEOG 449 Geography of Transportation (3)
GEOG 541 Topics in Urban/Economic Geography (3)
GEOG 641 Seminar in Urban/Economic Geography (3)

LANDSCAPE ARCHITECTURE

LAR 525 Special Topics (1-6)
LAR 583 Design Theory and Methods I (3)

Rationale: Update to reflect faculty vote in 2016

REVISE INTRODUCTORY TEXT – DUAL MARCH-MLA PROGRAM – ARCHITECTURE / LANDSCAPE ARCHITECTURE MAJORS

In the 2018-2019 Graduate Catalog, delete current text for the dual program and replace with the following:

Dual MArch-MLA Program – Architecture / Landscape Architecture Major

The School of Architecture offers two paths to the Dual Degree M.Arch/MLA, which earns the graduate both the NAAB-accredited professional Master of Architecture degree and the LAAB-accredited professional Master of Landscape Architecture. These paths are distinguished by the length of study required and level of study.

The 3G M.Arch/MLA Dual Degree program is for students who hold a bachelor's degree in another field other than architecture. Typically, four academic years plus one summer in length, the 3G M.Arch/MLA program is designed to accommodate students who come from a variety of backgrounds, including those with no previous formal study in architecture. This academic plan culminates in either a written- or design-based Master of Architecture Project (MAP). This program requires 137 credit hours of graduate coursework.

Learning objectives for the 3G M.Arch/ MLA Dual Degree:

- 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.
- Graduating students 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 a comprehension of the technical aspects of design, systems and materials, and be able to apply that comprehension in their coursework.
- 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.

The 2G M.Arch/MLA Dual Degree is a professional dual degree program for students with a 4-year pre-professional bachelor's degree in architecture. Typically three academic years in length, the 2G M.Arch/MLA program is designed to accommodate students who have completed a 4-year Bachelor of Architecture program at a university that is NAAB-accredited. This academic plan culminates in either a written/design Master of Architecture Project (MAP). This program requires 94 credit hours of graduate coursework.

As many undergraduate programs are unique, each prospective student's records will be reviewed, and the student will be advised of any NAAB required coursework that needs to be included as part of their individual graduate studies to ensure that the student has completed all required areas of study upon graduation.

Learning objectives for the 2G M.Arch/MLA Dual Degree

- 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.
- Graduating students 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 a comprehension of the technical aspects of design, systems and materials, and be able to apply that comprehension in their coursework.
- 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.

Formerly: The School of Architecture and the School of Landscape Architecture in the College of Architecture and Design offer a dual degree program leading to the conferral of both the Master of Landscape Architecture and Master of Architecture degrees. The dual program can be accomplished with approximately 54 fewer credit hours of coursework than would be required to earn both degrees separately.

The establishment of the dual program addresses the growing need for graduates with an understanding of the disciplinary concepts, skills, and agendas of architecture and landscape architecture. The objective of the dual degree program is to prepare graduates to take leading roles in envisioning and implementing the built environment of the future.

Rationale: Update to reflect faculty vote in 2016 and to combine the description of the two option in the program

REVISE ADMISSIONS REQUIREMENTS – DUAL MARCH-MLA PROGRAM - ARCHITECTURE / LANDSCAPE ARCHITECTURE

In the 2018-2019 Graduate Catalog, delete current admission text and replace with the following:

Admission

Applications are accepted for summer semester only (fall semester if admitted to the M.Arch 2G track, see below). Applicants for the dual M.Arch/MLA program must make separate applications to and be accepted by the Schools of Architecture and Landscape Architecture. Students should indicate on both applications the intent to pursue the dual M.Arch/MLA program. Students accepted for both the MLA and M.Arch degree programs will be assigned to an advisor from each School. These advisors will be responsible for course approval and supervision of the students' progress through the dual program.

The following must be submitted by all applicants directly to the Office of Graduate Admissions:

- A completed online Graduate Application for Admission. Visit their website at <http://graduateadmissions.utk.edu/req.shtml> for the online application process.
- The general portion scores of the Graduate Record Examination. Applicants should take the GRE at least six weeks in advance of application for admission.
- For applicants whose native language is not English, scores from the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

In addition to meeting the Graduate School's minimum requirements, the following specific admission requirements must be submitted to the Graduate Program in Architecture:

- An essay addressing the applicant's intent and expectations for study in the program.
- Three letters of recommendation.
- A required portfolio illustrating evidence of visual creativity and/or graphic capabilities.
- A personal on-site interview is optional.

A minimum 3.00 undergraduate GPA, minimum 3.25 graduate GPA, minimum GRE scores: 147 QV and 3.0 analytical. Standardized test scores can be weighted differently in the admissions process depending on an applicant's strengths.

After the M.Arch application deadline of February 1, applications by United States citizens and permanent residents will still be considered as space allows. Additional information is required and different application dates are established by Graduate and International Admissions for international students. Students are encouraged to contact Jason Young (Jason.young@utk.edu), Director of the School of Architecture or Gale Fulton (gfulton@utk.edu), Director of the School of Landscape Architecture, with any questions.

Formerly: Applications are accepted for summer semester only (unless admitted to the Advanced Placement track). Applicants for the dual M.Arch/MLA program must make separate applications to and be accepted by the Schools of Architecture and Landscape Architecture. Students should indicate on both applications the intent to pursue the dual M.Arch/MLA program. Students accepted for both the MLA and M.Arch degree programs will be assigned to an advisor from each School. These advisors will be responsible for course approval and supervision of the students' progress through the dual program.

After the M.Arch application deadline of February 1, applications by United States citizens and permanent residents will still be considered as space allows. Additional information is required and different application dates are established by Graduate and International Admissions for international students. Students are encouraged to contact Jason Young (Jason.young@utk.edu), Director of the School of Architecture or Gale Fulton (gfulton@utk.edu), Director of the School of Landscape Architecture, with any questions.

Rationale: Update to expand and detail the requirements

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

In the 2018-2019 Graduate Catalog, delete current requirements and replace with the following:

Requirements

The 3G M.Arch/MLA Dual Degree

This degree requires 137 graduate credit hours:

- 54 credit hours in a required sequence of design courses, called studio.
- 5 credit hours in Representation courses.
- 20 credit hours in History, Theory and Research
- 3 credit hours in Disciplinary Discourse courses.
- 25 credit hours in Materials & Tectonics, Technology and Professional Practice courses.
- 12 credit hours in Living Systems
- 15 credit hours in Architecture or Landscape Architecture Approved Elective Courses.
- 3 credit hours of Landscape Architecture Practicum

The 3G M.Arch/MLA Dual Degree culminates in a rigorous final project that combines research and design or research and writing in a comprehensive proposal. Work on this project begins in ARCH 529 MAP Seminar. In this course, it is the student's responsibility to identify their particular area of study and the motivation for work. Students are also expected to become familiar with current discourse including key buildings, landscapes and texts. Students are also expected to formulate a thesis and/or critical position and establish strategies for the in-depth study of the topic.

Students may elect to complete the project as a self-directed Thesis project. In the Thesis Studio students work independently with a self-selected committee of faculty advisors who oversee the work and certify its completion.

A typical program is completed in the following schedule:

SUMMER YEAR 1

ARCH 538 Design I: Fundamentals (3)
ARCH 518 Design Representation and Process (2)
ARCH 501 Introduction to the Built Environment (2)

FALL YEAR 1

ARCH 541 Design II: Principles (6)
LAR 521 Design Communication I (3)
ARCH 511 History and Theory of Architecture I (3)
ARCH 557 Structural Principles in Architecture (4)

SPRING YEAR 1

LAR 552 Design Studio II (6)
ARCH 512 History and Theory of Architecture II (3)
ARCH 558 Materials and Methods in Architecture (4)
Architecture or Landscape Architecture approved elective (3)

MAY SEMESTER YEAR 1

ARCH 543 Design Charrette (3)

FALL YEAR 2

LAR 554 Design Studio IV (6)
LAR 583 Design Theory and Methods I (3)
LAR 571 Landform and Hydrology (4)
PLSC 501 Special Topics in Plant Sciences (3) or PLSC 421 - Native Plants in the Landscape (3)

SPRING YEAR 2

Arch 58X (Design Studio III) (6)
LAR 582 Professional Practices (3)
LAR 572 Design and Construction I (3)
Architecture or Landscape Architecture approved elective (3)

SUMMER

LAR 561 Practicum for Landscape Architecture (3) 1

FALL YEAR 3

LAR 555 Design Studio V (6)
ARCH 513 Modern Architecture: Histories and Theories (3)
ARCH 559 Building Systems in Architecture (4)
Architecture or Landscape Architecture approved elective (3)

SPRING YEAR 3

ARCH 572 Design VI: Design Integration (6)

LAR 584 Histories and Theories II (3)
ARCH 560 Seminar in Design Integration (3)
GEOL 590 Special Problems in Geology (3)

FALL YEAR 4

Arch 58X Option Studio (6)
ARCH 529 MAP Seminar (3)
LAR 534 Operative Landscapes (3)
Architecture approved elective (3)

SPRING YEAR 4

LAR 500 Thesis (6)
ARCH 562 Professional Practice (3)
LAR 535 Operative Landscape Tactics (3)
Landscape Architecture approved elective (3)

Total credit hours = 137

¹ LAR 561 can occur in Summer of Second or Third Year. The internship report must be completed before the end of the semester of registration.

The 2G M.Arch/MLA Dual Degree

This degree requires 94 graduate credit hours:

- 36 credit hours in a required sequence of design courses, called studio.
- 12 credit hours in History, Theory and Research.
- 3 credit hours in Disciplinary Discourse courses.
- 13 credit hours in Materials & Tectonics, Technology and Professional Practice courses.
- 12 credit hours in Living Systems
- 15 credit hours in Architecture or Landscape Architecture Approved Elective Courses.
- 3 credit hours of Landscape Architecture Practicum.

The 2G M.Arch/MLA Dual Degree culminates in a rigorous final project that combines research and design or research and writing in a comprehensive proposal. Work on this project begins in ARCH 529 MAP Seminar. In this course, it is the student's responsibility to identify their particular area of study and the motivation for work. Students are also expected to become familiar with current discourse including key buildings, landscapes and texts. Students are also expected to formulate a thesis and/or critical position and establish strategies for the in-depth study of the topic.

Students may elect to complete the project as a self-directed Thesis project. In the Thesis Studio students work independently with a self-selected committee of faculty advisors who oversee the work and certify its completion.

The dual degree candidate must satisfy the curriculum and graduation requirements of the dual degree curriculum path. Students withdrawing from the dual degree program before completing both degrees will not receive credit toward graduation in either degree program for courses taken in the other degree program, except as such courses qualify for credit without regard to the dual degree program. The M.Arch and the MLA degrees will be awarded upon successful completion of the requirements of the dual program.

A typical program is completed in the following schedule:

FALL YEAR 1

Architecture 58X - Design Studio III (6)
LAR 585 - Design Theory and Methods I (3)
LAR 571 - Landform and Hydrology (4)
PLSC 501 - Special Topics in Plant Sciences (3) or PLSC 421 - Native Plants in the Landscape (3)

SPRING YEAR 1

LAR 554 - Design Studio IV (6)
LAR 582 - Professional Practices (3)
LAR 572 - Design and Construction I (3)
Architecture or Landscape Architecture approved elective (3)

SUMMER

LAR 561 Practicum for Landscape Architecture (3)¹

FALL YEAR 2

LAR 555 Design Studio V (6)
ARCH 513 Modern Architecture: Histories and Theories (3)
GEOL 590 Special Problems in Geology (3)
Architecture approved elective (3)

SPRING YEAR 2

ARCH 572 Design VI: Design Integration (6)

LAR 584 Histories and Theories II (3)
ARCH 560 Seminar in Design Integration (3)
Architecture approved elective (3)

FALL YEAR 3

Architecture 58X Design Studio VII (6)
ARCH 529 MAP Seminar (3)
LAR 533 Living Systems III (3)
Architecture approved elective (3)

SPRING YEAR 3

ARCH 598 MAP Studio or LAR 500 Thesis (6)
ARCH 562 Professional Practice (3)
LAR 532 Living Systems II (3)
Landscape Architecture approved elective (3)

Total credit hours = 94

¹ LAR 561 can occur in Summer of First or Second Year. The internship report must be completed before the end of the semester of registration.

Formerly: The dual M.Arch/MLA curriculum consists of 136 credit hours of coursework, 64 credit hours for the Master Landscape Architecture and 72 credit hours for the Master of Architecture. The dual degree requires the completion of a thesis.

The dual degree candidate must satisfy the curriculum and graduation requirements of the dual degree curriculum path. Students withdrawing from the dual degree program before completing both degrees will not receive credit toward graduation in either degree program for courses taken in the other degree program, except as such courses qualify for credit without regard to the dual degree program. The M.Arch and the MLA degrees will be awarded upon successful completion of the requirements of the dual program.

Summer—First Year

ARCH 501 - Introduction to the Built Environment 2 credit hours
ARCH 518 - Design Representation and Process I 2 credit hours
ARCH 519 - Design Representation and Process II 2 credit hours
ARCH 538 - Design I: Fundamentals 6 credit hours

Fall—First Year

ARCH 511 - History and Theory of Architecture I 3 credit hours
ARCH 547 - Structural Principles in Architecture 4 credit hours
ARCH 541 - Design II: Principles 6 credit hours
LAR 521 - Design Communication I 3 credit hours

Spring—First Year

ARCH 512 - History and Theory of Architecture II 3 credit hours
ARCH 548 - Materials and Methods in Architecture 4 credit hours
LAR 552 - Design Studio II 6 credit hours

Fall—Second Year

Arch 58X (Design Studio III) 6 credit hours
LAR 571 - Landform and Hydrology 4 credit hours
LAR 583 - Design Theory and Methods I 3 credit hours
PLSC 501 - Special Topics in Plant Sciences 3 credit hours or PLSC 421 - Native Plants in the Landscape 3 credit hours

Spring—Second Year

LAR 554 - Design Studio IV 6 credit hours
LAR 572 - Design and Construction I 3 credit hours
LAR 582 - Professional Practices 3 credit hours
GEOL 590 - Special Problems in Geology 3 credit hours

Summer

LAR 561 - Practicum for Landscape Architecture 1 3 credit hours

Fall—Third Year

ARCH 503 - Modern Architecture: Histories and Theories 3 credit hours |
ARCH 549 - Building Systems in Architecture 4 credit hours
LAR 555 - Design Studio V 6 credit hours

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

ARCH 509 - Seminar in Design Integration 3 credit hours
ARCH 572 - Design VI: Design Integration 6 credit hours
LAR 584 - Histories and Theories II 3 credit hours

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

Arch 5XX (Professional Elective) 3 credit hours
ARCH 580 - Thesis Preparation 3 credit hours
Arch 58X (Design Studio VII) 6 credit hours
LAR 534 - Operative Landscapes 3 credit hours

Spring–Fourth Year

ARCH 562 - Professional Practice 3 credit hours
LAR 500 - Thesis 6 credit hours
LAR 535 - Operative Landscape Tactics 3 credit hours
Landscape Architecture approved elective 3 credit hours
Total credit hours = 136

1 LAR 561 can occur in Summer of Second or Third Year. The internship report must be completed before the end of the semester of registration.

Rationale: correct error in number of credits, update course list and expand description.

REVISE REQUIREMENTS – DUAL MARCH-MLA PROGRAM - ARCHITECTURE / LANDSCAPE ARCHITECTURE (ADVANCED PLACEMENT OPTION)

In the 2018-2019 Graduate Catalog, delete all text under the Advanced Placement Option.

Rationale: The requirements for the Advanced Placement is now incorporated into description of dual degree.

REVISE REQUIREMENTS – CONSERVATION AND STEWARDSHIP GRADUATE CERTIFICATE

In the 2018-2019 Graduate Catalog, delete current requirements and replace with the following:

Conservation and Stewardship Graduate Certificate

The Conservation and Stewardship Graduate Certificate 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 Certificate in Conservation and Stewardship 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 Certificate in Conservation and Stewardship 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 Certificate in Conservation and Stewardship 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

All courses must meet the approval of Chair of Graduate Architecture Program in order to be counted towards the Conservation and Stewardship Graduate Certificate. 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 credit hours from the following:

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 Architectural Design: Sustainable Architecture (6)
ARCH 590 Advanced Architectural Design: Special Topics (6)
ARCH 598 MAP Studio (6)
ARCH 599 Design VII: Diploma Thematic Studio (6)

Plus six elective credit hours from one of these courses or similar courses per advising process: Of the six elective credit hours, up to three credit 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 credit hours, up to three credit hours may be from approved courses in other departments, such as:

ART

ART 481 - Museum Studies I: Museums, Purpose and Function (3)

ANTHROPOLOGY

ANTH 510 Method and Theory in Cultural Anthropology (3)

CLASSICS

CLAS 436 Cities and Sanctuaries of the Greek and Roman World (3)

GEOGRAPHY

GEOG 411 - Intermediate Geographic Information Science (3)

HISTORY

HIST 642 - Seminar in 19th-Century United States (3) HIST 643 - Seminar in 20th-Century United States (3)

LANDSCAPE ARCHITECTURE

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

LAR 525 - Special Topics (1-6)

LAR 583 - Design Theory and Methods I (3)

POLITICAL SCIENCE

POLS 548 Public Policy Process (3)

POLS 549 Environmental Policy (3)

POLS 556 Policy Analysis (3)

Formerly: The College of Architecture and Design offers a certificate in Conservation and Stewardship that engages a wide range of disciplines. This program is a multi-disciplinary, inter-collegiate locus of research and public service projects that operates across colleges, across campuses, across the state and region. It 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 Certificate focuses on collaborative research and coursework – in particular on the relationships between the design disciplines and their effect on both built and natural environments. The coursework explores the processes and systems that affect both local and global responses to contemporary issues of public policy. The certificate curriculum 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.

Admission

Submit online application to Graduate Admissions Office. Students must be admitted to the university as degree-seeking graduate students either in master's programs, doctoral programs, or in the certificate program. Application to the certificate program is made by submitting graduate transcripts and a letter of application to the Chair of Graduate Architecture.

Program of Study

The 12 credit hour certificate is earned by completing ARCH 525, and a minimum of 6 credit hours from the following directed electives: ARCH 505, ARCH 508, ARCH 520, ARCH 586, ARCH 590, ARCH 599, LAR 521, LAR 522, or LAR 532. For other recommended courses, consult with an academic advisor or the Chair of Graduate Architecture. To register for any Special Topics course, and for a list of other courses that fulfill the requirements for this certificate, students should consult with an academic advisor or the Chair of Graduate Architecture. Students must maintain a GPA of 3.0 in certificate-related courses.

Rationale: update to reflect the changes in the Graduate Architecture Programs.

REVISE REQUIREMENTS – HIGH PERFORMANCE BUILDINGS GRADUATE CERTIFICATE

In the 2018-2019 Graduate Catalog, delete current requirements and replace with the following:

High Performance Buildings Graduate Certificate

The High Performance Buildings Graduate Certificate 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 Graduate Certificate 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 Graduate Certificate 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:

All courses must meet the approval of Chair of Graduate Architecture Program in order to be counted towards the High Performance Buildings Graduate Certificate. 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 credit hours from one of the following:

ARCH 586 Advanced Architectural Design: Sustainable Architecture (6)
ARCH 588 Advanced Architectural Design: Structural Innovations (6)
ARCH 590 Advanced Architectural Design: Special Topics (6)
ARCH 598 MAP Studio (6)
ARCH 599 Design VII: Diploma Thematic Studio (6)

Plus six elective credit 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 credit hours, up to three credit hours may be from:

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

Formerly: The High Performance Buildings Certificate 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.

Admission

Submit online application to Graduate Admissions Office. Students must be admitted to the university as degree-seeking graduate students either in master's programs, doctoral programs, or in the certificate program. Application to the certificate program is made by submitting graduate transcripts and a letter of application to the Chair of Graduate Architecture.

Program of Study

The 12 credit hour certificate is earned by completing one of the following graduate elective 6 credit hour studios: ARCH 586, ARCH 590. Students in the Track 1 curriculum may opt for ARCH 572. All students in the HPBC must choose two courses (6 credit hours) from the following 3 credit hour courses: ARCH 508, ARCH 509, or ARCH 525. To register for any Special Topics course, and for a list of other courses that fulfill the requirements for this certificate, students should consult with an academic advisor or the Chair of Graduate Architecture. Students must maintain a GPA of 3.0 in certificate-related courses.

Up to 6 credit hours from the following list of courses in approved building technology topics: ARCH 508, ARCH 509, or ARCH 525.

ARCH 505, ARCH 508, ARCH 520, ARCH 586, ARCH 590, ARCH 599, LAR 521, LAR 522, or

LAR 532. For other recommended courses, consult with an academic advisor or the Chair of Graduate Architecture. Other course credits may be taken from a pool of courses approved by the Graduate Architecture Committee. Students must maintain a GPA of 3.0 in certificate-related courses.

Rationale: update to clarify expectations and widen description.

REVISE REQUIREMENTS – SUSTAINABLE DESIGN GRADUATE CERTIFICATE

In the 2018-2019 Graduate Catalog, delete current requirements and replace with the following:

Sustainable Design Graduate Certificate

The College of Architecture and Design offers a Sustainable Design Graduate Certificate incorporating knowledge from a wide range of disciplines, ranging from technical to philosophical. This certificate 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 Graduate Certificate 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

All courses must meet the approval of Chair of Graduate Architecture Program in order to be counted towards the Sustainable Design Graduate Certificate. 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 credit hours from one of the following:

- ARCH 586 Advanced Architectural Design: Sustainable Architecture (6)
- ARCH 590 Advanced Architectural Design: Special Topics (6)
- ARCH 598 MAP Studio (6)
- ARCH 599 Design VII: Diploma Thematic Studio (6)

Plus six elective credit 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 credit hours, up to three credit 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 (3)

Of the six elective credit hours, up to three credit 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)

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- LAR 525 Special Topics (1-6)

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)

Formerly: The College of Architecture and Design offers a certificate in Urban Design and a certificate in Sustainable Design. Certificate programs are open to master's students in any degree program within the college and to students with a professional design degree, such as professionals seeking continuing education on a part-time or full-time basis. Certificate students must meet minimum admission requirements for one of the college graduate programs. Requirements for certificates are the same as for concentrations. All MArch concentrations qualify for a graduate certificate in the concentration. Concentrations and certificates are open to all design disciplines.

Rationale: update to clarify expectations and widen description

DROP CERTIFICATE – URBAN DESIGN

ADD CERTIFICATE - URBANISM

In the 2018-19 Graduate Catalog add heading and text for the Urbanism Graduate Certificate

Urbanism Graduate Certificate

The Urbanism Graduate Certificate gives students in a mechanism through which to develop a deep understanding of how architectural thinking impacts the myriad conditions of urbanism across multiple contexts. This Urbanism Graduate Certificate 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 Urbanism Graduate Certificate 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:

All courses must meet the approval of Chair of Graduate Architecture Program in order to be counted towards the Urbanism Graduate Certificate. 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 credit hours from one of the following:

- ARCH 571 Design IV: Building in the Urban Context
- ARCH 583 Architectural Design: Urbanism (6)
- ARCH 598 MAP Studio (6)
- ARCH 599 Design VII: Diploma Thematic Studio (in Urban Design) (6)

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

- ARCH 515 Seminar in Urban Design Theory (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 credit hours, up to three credit 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 (3)

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

GEOGRAPHY

GEOG 441 Cities as Economic Engines (3)
GEOG 442 Urban Spaces and Urban Society (3)
GEOG 449 Geography of Transportation (3)
GEOG 541 Topics in Urban/Economic Geography (3)
GEOG 641 Seminar in Urban/Economic Geography (3)

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LAR 525 Special Topics (1-6)
LAR 583 Design Theory and Methods I (3)

Rationale: update to clarify expectations and widen description and reflect name change voted on by faculty.

SCHOOL OF LANDSCAPE ARCHITECTURE

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

In the 2018-2019 Graduate Catalog, delete current requirements and replace with the following:

Dual MLA-MArch Program – Landscape Architecture - Architecture

The School of Landscape Architecture, in conjunction with the School of Architecture, offers two paths to the Dual Degree M.Arch/MLA, which earns the graduate both the NAAB-accredited professional Master of Architecture degree and the LAAB-accredited professional Master of Landscape Architecture. These paths are distinguished by the length of study required and level of study.

The 3G M.Arch/MLA Dual Degree program is for students who hold a bachelor's degree in another field other than architecture. Typically, four academic years plus one summer in length, the 3G M.Arch/MLA program is designed to accommodate students who come from a variety of backgrounds, including those with no previous formal study in architecture or landscape architecture. This academic plan culminates in either a written- or design-based Master of Architecture Project (MAP).

This program requires 137 credit hours of graduate coursework.

Learning objectives for the 3G M.Arch/ MLA Dual Degree

- 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.
- Graduating students will be able to demonstrate that they have the basic knowledge, skills, and abilities necessary to enter the profession and to become licensed architects and landscape architects.
- 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.
- Graduating students must have an understanding of the architect and landscape architect's role in managing and advocating for legal, ethical, and critical action for the good of the client, society and the public.

The 2G M.Arch/MLA Dual Degree is a professional dual degree program for students with a 4-year pre-professional bachelor's degree in architecture. Typically three academic years in length, the 2G M.Arch/MLA program is designed to accommodate students who have completed a 4-year Bachelor of Architecture program at a university that is NAAB-accredited. This academic plan culminates in either a written/design Master of Architecture Project (MAP). This program requires 94 credit hours of graduate coursework.

As many undergraduate programs are unique, each prospective student's records will be reviewed, and the student will be advised of any NAAB required coursework that needs to be included as part of their individual graduate studies to ensure that the student has completed all required areas of study upon graduation.

Learning objectives for the 2G M.Arch/MLA Dual Degree

- 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.
- Graduating students will be able to demonstrate that they have the basic knowledge, skills, and abilities necessary to enter the profession and to become licensed architects and landscape architects.
- 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.
- Graduating students must have an understanding of the architect and landscape architect's role in managing and advocating for legal, ethical, and critical action for the good of the client, society and the public.

Admission

Applications are accepted for summer semester only (fall semester if admitted to the M.Arch 2G track, see below). Applicants for the dual M.Arch/MLA program must make separate applications to and be accepted by the Schools of Architecture and Landscape Architecture. Students should indicate on both applications the intent to pursue the dual M.Arch/MLA program. Students accepted for both the MLA and M.Arch degree programs will be assigned to an advisor from each School. These advisors will be responsible for course approval and supervision of the students' progress through the dual program.

The following must be submitted by all applicants directly to the Office of Graduate Admissions:

- A completed online Graduate Application for Admission. Visit their website at <http://graduateadmissions.utk.edu/req.shtml> for the online application process.
- The general portion scores of the Graduate Record Examination. Applicants should take the GRE at least six weeks in advance of application for admission.
- For applicants whose native language is not English, scores from the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

In addition to meeting the Graduate School's minimum requirements, the following specific admission requirements must be submitted and met in the Master of Landscape Architecture program:

- A first-professional Bachelor of Landscape Architecture degree from an LAAB accredited program with a 3.0 GPA or equivalent and a minimum of 12 credit hours of humanities courses from an accredited college or university are required. International applicants must have an equivalent first professional degree and 3.0 GPA.
- An essay addressing intent and expectations for study in the program.
- Three letters of recommendation.
- Applicants with a professional landscape architecture design degree must submit a portfolio that includes prior design work. Applicants without prior formal design training or experience have the option to submit a portfolio, but it is not a requirement.
- Candidates with a GPA less than 3.0 may be considered for conditional admission when evidence of exceptional promise is identified.
- A personal onsite interview is desirable but not mandatory.
- The general portion of the Graduate Record Examination (GRE) is recommended but not required. Applicants choosing to take the test should take the GRE at least one semester in advance of application for admission.
- Applicants whose native language is not English are required to take and pass the Test of English as a Foreign Language (TOEFL). Recommended overall TOEFL scores are a minimum of 92 or submit scores from the International English Language Testing System (IELTS), minimum score of 6.5.

After the MArch/MLA application deadline of February 1, applications by United States citizens and permanent residents will still be considered as space allows. Additional information is required and different application dates are established by Graduate and International Admissions for international students. Students are encouraged to contact Jason Young (Jason.young@utk.edu), Director of the School of Architecture or Gale Fulton (gfulton@utk.edu), Director of the School of Landscape Architecture, with any questions.

Requirements:

The 3G M.Arch/MLA Dual Degree

This degree requires 137 graduate credit hours:

- 54 credit hours in a required sequence of design courses, called studio.
- 5 credit hours in Representation courses.
- 20 credit hours in History, Theory and Research
- 3 credit hours in Disciplinary Discourse courses.
- 25 credit hours in Materials & Tectonics, Technology and Professional Practice courses.
- 12 credit hours in Living Systems
- 15 credit hours in Architecture-Approved Elective Courses
- 3 credit hours of Landscape Architecture Practicum

The 3G M.Arch/MLA Dual Degree culminates in a rigorous final project that combines research and design or research and writing in a comprehensive proposal. Work on this project begins in ARCH 529 MAP Seminar. In this course, it is the student's responsibility to identify their particular area of study and the motivation for work. Students are also expected to

become familiar with current discourse including key buildings, landscapes and texts. Students are also expected to formulate a thesis and/or critical position and establish strategies for the in-depth study of the topic.

Students may elect to complete the project as a self-directed Thesis project. In the Thesis Studio students work independently with a self-selected committee of faculty advisors who oversee the work and certify its completion. A typical program is completed in the following schedule:

SUMMER YEAR 1

ARCH 538 Design I: Fundamentals (3)
ARCH 518 Design Representation and Process (2)
ARCH 501 Introduction to the Built Environment (2)

FALL YEAR 1

ARCH 541 Design II: Principles (6)
LAR 521 Design Communication I (3)
ARCH 511 History and Theory of Architecture I (3)
ARCH 557 Structural Principles in Architecture (4)

SPRING YEAR 1

LAR 552 Design Studio II (6)
ARCH 512 History and Theory of Architecture II (3)
ARCH 558 Materials and Methods in Architecture (4)
Architecture or Landscape Architecture approved elective (3)

MAY SEMESTER YEAR 1

ARCH 543 Design Charrette (3)

FALL YEAR 2

LAR 554 Design Studio IV (6)
LAR 583 Design Theory and Methods I (3)
LAR 571 Landform and Hydrology (4)
PLSC 501 Special Topics in Plant Sciences (3) or PLSC 421 - Native Plants in the Landscape (3)

SPRING YEAR 2

Arch 58X (Design Studio III) (6)
LAR 582 Professional Practices (3)
LAR 572 Design and Construction I (3)
Architecture or Landscape Architecture approved elective (3)

SUMMER

LAR 561 Practicum for Landscape Architecture 1 (3)

FALL YEAR 3

LAR 555 Design Studio V (6)
ARCH 513 Modern Architecture: Histories and Theories (3)
ARCH 559 Building Systems in Architecture (4)
Architecture or Landscape Architecture approved elective (3)

SPRING YEAR 3

ARCH 572 Design VI: Design Integration (6)
LAR 584 Histories and Theories II (3)
ARCH 560 Seminar in Design Integration (3)
GEOL 590 Special Problems in Geology (3)

FALL YEAR 4

Arch 58X (Design Studio VII) (6)
ARCH 529 MAP Seminar (3)
LAR 534 Operative Landscapes (3)
Architecture approved elective (3)

SPRING YEAR 4

LAR 500 Thesis (6)
ARCH 562 Professional Practice (3)
LAR 535 Operative Landscape Tactics (3)
Landscape Architecture approved elective (3)

Total credit hours = 137

¹ LAR 561 can occur in Summer of Second or Third Year. The internship report must be completed before the end of the semester of registration.

The 2G M.Arch/MLA Dual Degree

This degree requires 94 graduate credit hours:

- 36 credit hours in a required sequence of design courses, called studio.
- 12 credit hours in History, Theory and Research.
- 3 credit hours in Disciplinary Discourse courses.
- 13 credit hours in Materials & Tectonics, Technology and Professional Practice courses.
- 12 credit hours in Living Systems
- 15 credit hours in Architecture or Landscape Architecture Approved Elective Courses.
- 3 credit hours of Landscape Architecture Practicum.

The 2G M.Arch/MLA Dual Degree culminates in a rigorous final project that combines research and design or research and writing in a comprehensive proposal. Work on this project begins in ARCH 529 MAP Seminar. In this course, it is the student's responsibility to identify their particular area of study and the motivation for work. Students are also expected to become familiar with current discourse including key buildings, landscapes and texts. Students are also expected to formulate a thesis and/or critical position and establish strategies for the in-depth study of the topic.

Students may elect to complete the project as a self-directed Thesis project. In the Thesis Studio students work independently with a self-selected committee of faculty advisors who oversee the work and certify its completion. The dual degree candidate must satisfy the curriculum and graduation requirements of the dual degree curriculum path. Students withdrawing from the dual degree program before completing both degrees will not receive credit toward graduation in either degree program for courses taken in the other degree program, except as such courses qualify for credit without regard to the dual degree program. The M.Arch and the MLA degrees will be awarded upon successful completion of the requirements of the dual program.

A typical program is completed in the following schedule:

FALL YEAR 1

Architecture 58X Design Studio III (6)
LAR 583 Design Theory and Methods I (3)
LAR 571 Landform and Hydrology (4)
PLSC 501 Special Topics in Plant Sciences (3) or PLSC 421 - Native Plants in the Landscape (3)

SPRING YEAR 1

LAR 554 Design Studio IV (6)
LAR 582 Professional Practices (3)
LAR 572 Design and Construction I (3)
Architecture or Landscape Architecture approved elective (3)

SUMMER

LAR 561 Practicum for Landscape Architecture¹ (3)

FALL YEAR 2

LAR 555 Design Studio V (6)
ARCH 513 Modern Architecture: Histories and Theories (3)
GEOL 590 Special Problems in Geology (3)
Architecture approved elective (3)

SPRING YEAR 2

ARCH 572 Design VI: Design Integration (6)
LAR 584 Histories and Theories II (3)
ARCH 560 Seminar in Design Integration (3)
Architecture approved elective (3)

FALL YEAR 3

Architecture 58X Design Studio VII (6)
ARCH 529 MAP Seminar (3) credit hours
LAR 534 Living Systems III (3)
Architecture approved elective (3)

SPRING YEAR 3

ARCH 598 MAP Studio or LAR 500 Thesis (6)
ARCH 562 Professional Practice (3)
LAR 535 Living Systems II (3)
Landscape Architecture approved elective (3)

Total credit hours = 94

¹ LAR 561 can occur in Summer of First or Second Year. The internship report must be completed before the end of the semester of registration.

Formerly: The School of Architecture and the School of Landscape Architecture in the College of Architecture and Design offer a dual degree program leading to the conferral of both the Master of Landscape Architecture and Master of Architecture degrees. The dual program can be accomplished with approximately 54 fewer credit hours of coursework than would be required to earn both degrees separately.

The establishment of the dual program addresses the growing need for graduates with an understanding of the disciplinary concepts, skills, and agendas of architecture and landscape architecture. The objective of the dual degree program is to prepare graduates to take leading roles in envisioning and implementing the built environment of the future.

Admissions

Applications are accepted for summer semester only (unless admitted to the Advanced Placement track). Applicants for the dual M.Arch/MLA program must make separate applications to and be accepted by the Schools of Architecture and Landscape Architecture. Students should indicate on both applications the intent to pursue the dual M.Arch/MLA program. Students accepted for both the MLA and M.Arch degree programs will be assigned to an advisor from each School. These advisors will be responsible for course approval and supervision of the students' progress through the dual program.

After the M.Arch application deadline of February 1, applications by United States citizens and permanent residents will still be considered as space allows. Additional information is required and different application dates are established by Graduate and International Admissions for international students. Students are encouraged to contact Jason Young (Jason.young@utk.edu), Director of the School of Architecture or Gale Fulton (gfulton@utk.edu), Director of the School of Landscape Architecture, with any questions.

The dual M.Arch/MLA curriculum consists of 136 credit hours of coursework, 64 credit hours for the Master Landscape Architecture and 72 credit hours for the Master of Architecture. The dual degree requires the completion of a thesis.

The dual degree candidate must satisfy the curriculum and graduation requirements of the dual degree curriculum path. Students withdrawing from the dual degree program before completing both degrees will not receive credit toward graduation in either degree program for courses taken in the other degree program, except as such courses qualify for credit without regard to the dual degree program. The M.Arch and the MLA degrees will be awarded upon successful completion of the requirements of the dual program.

Requirements:

Summer—First Year

ARCH 501 - Introduction to the Built Environment 2 credit hours
ARCH 518 - Design Representation and Process I 2 credit hours
ARCH 519 - Design Representation and Process II 2 credit hours
ARCH 538 - Design I: Fundamentals 6 credit hours

Fall—First Year

ARCH 511 - History and Theory of Architecture I 3 credit hours
ARCH 547 - Structural Principles in Architecture 4 credit hours
ARCH 541 - Design II: Principles 6 credit hours
LAR 521 - Design Communication I 3 credit hours

Spring—First Year

ARCH 512 - History and Theory of Architecture II 3 credit hours
ARCH 548 - Materials and Methods in Architecture 4 credit hours
LAR 552 - Design Studio II 6 credit hours

Fall—Second Year

Arch 58X (Design Studio III) 6 credit hours
LAR 571 - Landform and Hydrology 4 credit hours
LAR 583 - Design Theory and Methods I 3 credit hours
PLSC 501 - Special Topics in Plant Sciences 3 credit hours or PLSC 421 - Native Plants in the Landscape 3 credit hours

Spring—Second Year

LAR 554 - Design Studio IV 6 credit hours
LAR 572 - Design and Construction I 3 credit hours
LAR 582 - Professional Practices 3 credit hours
GEOL 590 - Special Problems in Geology 3 credit hours

Summer

LAR 561 - Practicum for Landscape Architecture 1 3 credit hours

Fall—Third Year

ARCH 503 - Modern Architecture: Histories and Theories 3 credit hours
ARCH 549 - Building Systems in Architecture 4 credit hours
LAR 555 - Design Studio V 6 credit hours

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

ARCH 509 - Seminar in Design Integration 3 credit hours
ARCH 572 - Design VI: Design Integration 6 credit hours
LAR 584 - Histories and Theories II 3 credit hours

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

Arch 5XX (Professional Elective) 3 credit hours

ARCH 580 - Thesis Preparation 3 credit hours

Arch 58X (Design Studio VII) 6 credit hours

LAR 534 - Operative Landscapes 3 credit hours

Spring—Fourth Year

ARCH 562 - Professional Practice 3 credit hours

LAR 500 - Thesis 6 credit hours

LAR 535 - Operative Landscape Tactics 3 credit hours

Landscape Architecture approved elective 3 credit hours

Total credit hours = 136

1 LAR 561 can occur in Summer of Second or Third Year. The internship report must be completed before the end of the semester of registration.

Rationale: Update course listings and detail the requirements. Update to reflect faculty vote in 2016 and to combine the description of the two options in the program

REVISE REQUIREMENTS – DUAL MLA-MARCH PROGRAM - LANDSCAPE ARCHITECTURE - ARCHITECTURE (ADVANCED PLACEMENT OPTION)

In the 2018-2019 Graduate Catalog, delete all text under the heading: Advanced Placement Option.

Rationale: The requirements for the Advanced Placement is now incorporated into description of dual degree.

COLLEGE OF ARTS AND SCIENCES

All changes effective Fall 2018

DEPARTMENT OF ANTHROPOLOGY

(ANTH Anthropology)

ADD NEW 400-LEVEL COURSES FOR GRADUATE CREDIT

ANTH 422 Anthropology of Global Inequality (3) Survey of the study of global inequality, exploring the problem of inequality through a range of theoretical and ethnographic accounts in anthropology and related disciplines. Emphasis on poverty and structural inequality in the contemporary world in relation to neoliberalism, globalization and climate change.
(RE) *Prerequisite(s): 130 or 137.*

Rationale: This will be a new offering by a recently hired faculty member in his area of specialization and makes an original contribution to the curriculum. Impact on other units: None. Financial impact: None.

ANTH 423 Anthropology of Gender (3) Introduces debates and perspectives in the anthropological study of gender and gender relations. Examines different approaches to the study and conceptualization of gender across the globe, with a focus on how gender and sexuality are related to other social practices and categories, including ethnicity and race, socioeconomic status, nation, citizenship, etc. The course fosters an appreciation for the rich diversity of human practices and beliefs connected to gender in the U.S. and abroad.

Rationale: This is a new offering enabled by the appointment of faculty with expertise in the thematic area and makes an important contribution to the breadth of the cultural anthropology curriculum. Impact on other units: None. Financial impact: None.

ANTH 425 Humanitarianism (3) Provides a critical survey of theoretical and ethnographic studies of modern humanitarianism, with particular emphasis on the relationship between humanitarianism and cultural, economic and political orders associated with global capitalism. Explores critical questions around democracy, development, human rights and social justice in relation to the ideologies and practices of humanitarianism.
(RE) *Prerequisite(s): 130 or 137.*

Rationale: This is a new offering by a recently hired faculty member in his area of specialization and makes an important contribution to the curriculum. Impact on other units: None. Financial impact: None.

ANTH 441 Topics in Cultural Method and Theory (3) Variable topics focusing on contemporary issues in cultural anthropology method and theory. Writing emphasis course.
Repeatability: May be repeated. Maximum 6 hours.
(RE) *Prerequisite(s): 130 or 137.*

Rationale: Degree requirements in the Anthropology major require students to take courses in cultural method and theory and culture area studies. Will provide a variable topics number for courses that fit this area. Impact on other units: None. Financial impact: None.

ANTH 449 Big-data Anthropology (3) Big-data research is now a major part of the social sciences, including anthropology. Course combines lectures with practical tutorials in computational approaches using digital data on cultural change, from ancient to contemporary social media. Students are encouraged to bring a laptop, but no programming experience is required.
(RE) *Prerequisite(s): 130 or 137 or 210.*

Rationale: Big-data research is now a major part of the social sciences, including anthropology. This course introduces students to big-data social science. At present we have no offerings specifically in this regard, not in Anthropology or even in the Social Sciences it appears, at UTK. We seek a broad audience for this course, so no programming experience is required. Impact on other units: No impact, but the course might be of interest across the social sciences. Financial impact: None.

ANTH 455 Archaeological Foodways (3) Seminar class is designed to survey the complex behaviors by which humans produce, prepare, present, and consume foods and the various methods used by archaeologists (including paleoethnobotany, zooarchaeology, osteology, residue analysis, and other artifact analyses) to address foodways and larger interpretations of lifeways at archaeological sites.
(RE) *Prerequisite(s): 120 or 127.*

Rationale: Course will be taught on a regular basis, and will serve as an "Archaeology Method and Theory" course that contributes to the undergraduate major. Will introduce students to foodways theory, as well as the use of various data in archaeological contexts to address foodways in past societies. Will complement other current method and theory courses. Impact on other units: None. Financial impact: None.

ANTH 460 Paleoethnobotany (3) Seminar class provides advanced undergraduate students a comprehensive understanding of the methods and applications of paleoethnobotany within archaeology, as well as providing some hands-on experience in working with archaeological plant remains.
(RE) *Prerequisite(s): 120 or 127.*

Rationale: This course will be taught on a regular basis and will serve as an "Archaeology Method and Theory" course that contributes to the major, and will introduce students to the use of plant data in archaeological contexts, serving as a companion to Principles of Zooarchaeology, which introduces students to the use of faunal data in archaeological contexts. Impact on other units: None. Financial impact: None.

DROP PRIMARY CROSS LISTED COURSE

+ANTH 411 Linguistic Anthropology (3)

Cross-listed: (Same as Linguistics 411)

Rationale: Course has not been taught in several years and will not be taught again by existing faculty. Dropping the course makes room in the curriculum for adding new courses proposed by recently hired faculty in cultural anthropology and other updates to the curriculum. Impact on other units: The cross listing unit has been informed of this drop and is dropping its listing. Financial impact: None.

DROP

ANTH 485 Oral Biology (4)

Rationale: Course has not been offered in several years and current faculty will not be teaching it. Impact on other units: None. Financial impact: None.

ANTH 515 Medical Anthropology (3)

Rationale: Course has not been taught in several years and will not be taught again by existing faculty. Dropping the course makes room in the curriculum for adding new courses proposed by recently hired faculty in cultural anthropology and other updates to the curriculum. Impact on other units: None. Financial impact: None.

REVISE TITLE AND DESCRIPTION

ANTH 413 Dynamics of Health and Illness (3) Socio-cultural dimensions of health, illness, health care systems, and the body. Includes examination of global epidemics and health issues related to disasters. Overview of methods and theories in medical anthropology. Writing-emphasis course.

Formerly: Dynamics of Culture (3) Definition and in-depth study of major forms of culture change, ranging from evolution and diffusion to religious revitalization and political revolt. Continuity and change in diverse cultural settings examined through use of archaeological, ethnohistoric, and contemporary cases.

Rationale: Course was previously taught by a faculty member who retired and has not been taught by any current faculty. By changing the title and description we provide an updated offering focusing on health and illness (medical anthropology), thereby enriching our undergraduate and graduate curriculum. Impact on other units: None. Financial impact: None.

ANTH 416 Engaged Anthropology (3) Explores how applying principals, methods, and ethics of anthropology can have real impact in everyday life and work to address contemporary social problems in non-academic settings. Addresses applied, public, and activist dimensions of anthropology.

Formerly: Applied Anthropology (3) Introduction to principles, practice and ethics of anthropology applied to practical problems in non-academic settings. Overview of career opportunities in various domains of applied anthropology.

Rationale: Course will be updated and transformed to reflect the most contemporary approaches to applying anthropological knowledge and methods in the public sphere, thereby enriching our undergraduate and graduate curriculum. The language of "engaged" has replaced "applied" within the discipline today. Impact on other units: None. Financial impact: None.

ANTH 590 Theory in Biological Anthropology (3) Development of theoretical orientations in biological anthropology, with emphasis on evolutionary theory.

Formerly: Method and Theory in Biological Anthropology (3) Current methods of analysis in biological anthropology and of past and current history of theoretical perspectives. Paleoanthropology, human osteology, and human variation and population structure.

Rationale: Changes are needed to reflect actual course content, which is on theory. Methods are not addressed in this course but are covered in other courses. Impact on other units: None. Financial impact: None.

SCHOOL OF ART

(ARTB) Art-Three Dimensional Arts

ADD NEW 400-LEVEL COURSE FOR GRADUATE CREDIT

ARTB 423 Ceramics Research Project (1-6) Student- or faculty-led research project in ceramics.

(RE) Prerequisite(s): 321 or 322.

Rationale: This course will provide a registration pathway for students who have project ideas that cannot be accommodated in the standard advanced course, either because the time commitment exceeds what the advanced course supports, or because they have a project smaller than what the advanced course supports. Impact on other units: none. Financial impact: None.

(ARTC) Art – Art Four-Dimensional Arts

REVISE TO MAKE CURRENT 400-LEVEL COURSE A PRIMARY CROSS-LISTED COURSE

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

Cross-listed: (Same as Cinema Studies 431.)

Formerly: Not cross-listed.

Rationale: This is an appropriate course for the Cinema Studies program. Impact on other units: Cross list with Cinema Studies. Financial impact: None.

(ARTD) Art Design/Graphic

REVISE HOURS

ARTD 451 Advanced Graphic Design (6)

(Formerly: 4 Credit Hours)

***ARTD 452 Graphic Design Capstone (6)**

(Formerly: 4 Credit Hours)

Rationale: This will bring course credit and contact hours in line with other upper-level studio offerings in the School of Art. Impact on other units: None. Financial impact: None.

(ARTH) Art History

REVISE TITLE AND DESCRIPTION

ARTH 413 Art of China: Neolithic Period Through the Song Dynasty (3) Survey of the art and architecture of China up through the 13th century including early bronze-casting, funerary arts, Buddhist arts, painting and ceramics. Selected major monuments are examined in relation to their religious, political, and social contexts. Writing-emphasis course.

Formerly: Art of China I (3) Survey of the art and architecture of China from the Neolithic period through the Song dynasty (968-1279). The major achievements of each period are examined in relation to their religious, political, and social contexts. Writing-emphasis course.

ARTH 414 Art of China: Yuan through Qing Dynasties (3) Survey of the art and architecture of China from the fourteenth through the nineteenth centuries including painting, religious and secular architecture, woodblock prints, and ceramics. Selected major monuments are examined in relation to their religious, political, and social contexts. Writing-emphasis course.

Formerly: Art of China II (3) Survey of the art and architecture of China from the Yuan period through the Qing dynasties (1644-1911). The major achievements of each period are examined in relation to their religious, political, and social contexts. Writing-emphasis course.

Rationale: Revisions are implemented to avoid the appearance that ARTH 413 and ARTH 414 must be taken in sequence and to provide more information about material covered. Impact on other units: None. Financial impact: None.

DEPARTMENT OF BIOCHEMISTRY AND CELLULAR AND MOLECULAR BIOLOGY

ADD

BCMB 609 Journal Club in Plant Biology (1) Readings and discussion based on current literature.

Repeatability: May be repeated. Maximum 12 hours.

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

Rationale: This journal club was previously offered as LFSC 510 – Special Topics in Life Sciences, dating back to the times of the old Botany department. Listing it as BCMB 609 brings this journal club in line with all the other journal clubs offered by the department, giving it its own number. Impact on other units: None. Financial impact: None.

BCMB 623 Advanced Plant Growth and Development (3) Growth and differentiation of plants at molecular, cellular and organismal levels. Regulation of develop; macromolecular interpretation of differentiation, dormancy, germination, flowering, and senescence. This class is intended for doctoral students.

Credit Restriction: students may not receive credit for both 523 and 623.

(DE) Prerequisite(s): 401.

Recommended Background: One semester of introductory plant physiology or cell biology.

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

Rationale: This class will be taught together with BCMB 523 but with additional tasks and higher requirements for doctoral students.
Impact on other units: None. Financial impact: None.

REVISE TITLE AND DESCRIPTION

BCMB 523 Plant Growth and Development (3) Growth and differentiation of plants at molecular, cellular and organismal levels. Regulation of development; macromolecular interpretation of differentiation, dormancy, germination, flowering, and senescence. This class is intended for Master's students.

Formerly: Advanced Plant Physiology II (3) Growth and differentiation of plants at molecular, cellular and organismal levels. Regulation of development; macromolecular interpretation of differentiation, dormancy, germination, flowering and senescence.

Rationale: This class was part of a lecture series, but the other class (522 – Advanced Plant Physiology I) is no longer offered. The new title better reflects the content. The description was modified to distinguish it from the new BCMB 623 class that is intended for doctoral students. Impact on other units: None. Financial impact: None.

REVISE TITLE

BCMB 550 Advanced Concepts in Neurobiology (3)

Formerly: Advanced Concepts in neurobiology/Physiology (3)

BCMB 605 Neuroscience Journal Club (1)

Formerly: Journal Club in Neurophysiology/Physiology (1)

Rationale: The new titles for these courses better represent course content. Impact on other units: None. Financial impact: None.

DEPARTMENT OF CHEMISTRY

ADD

CHEM 503 Chemical Research Skills and Ethical Conduct (1) Discusses skills that are necessary for successful scientific careers and complementary to laboratory skills, such as professional ethics, chemical literacy, oral presentation, proposal writing, experimental design and career development.

Grading Restriction: Satisfactory/No Credit grading only.

Rationale: Adding as a required course for entering graduate students. Success in graduate school and beyond requires many additional skills that are complementary to laboratory work. This course will instill students with these skills that will enhance their success in graduate school and beyond. Impact on other units: None. Financial impact: None.

DEPARTMENT OF EARTH AND PLANETARY SCIENCES

ADD

GEOL 564 Water Sustainability and Climate (3) A survey of regional and global water challenges related to water pollution and sustainability of water resources, how ancient civilizations and current human activities have affected water quality in different environmental settings and what kind of techniques and strategies can be applied to water protection, remediation and sustaining clean water resources for future generations. The influence of global warming and human impact on water quality and resources will be discussed using case studies.

Recommended Background: Two courses in geology and environmental studies.

Rationale: Course has been offered previously as GEOL 590, which is the number we use for new or one-time course offerings. It has been successful and it is time to give it a regular course number and description. Impact on other units: None. Financial impact: None.

REVISE TITLE

GEOL 596 Scientific Presentations (1)

Formerly: Geology Colloquium

Rationale: To better distinguish GEOL 595 – Selected Topics, a required course that entails attending the department colloquia, from 596, a required course that entails learning how to give good scientific presentations. Course material and content are otherwise unaffected. Impact on other units: None. Financial impact: None.

DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY

ADD NEW 400-LEVEL COURSES FOR GRADUATE CREDIT

EEB 465 Special Topics in Ecology (3) Current topics in Ecology.

Repeatability: May be repeated if topic differs. Maximum 12 hours.

EEB 466 Special Topics in Evolution (3) Current topics in evolution.
Repeatability: May be repeated if topic differs. Maximum 12 hours.

EEB 469 Special Topics in Conservation Biology (3) Current topics on the conservation of biological diversity at population, community and ecosystem levels.
Repeatability: May be repeated if topic differs. Maximum 12 hours.

Rationale: These courses will serve as a mechanism for considering recent discoveries, emerging concerns, and new and technical advances in the study of these areas. Impact on other units: None. Financial impact: None.

EEB 480 Natural History of the Smoky Mountains (3) Field ecology course that includes a one-week field trip. Students will learn about the natural history and ecological and evolutionary factors that are responsible for the diversity of plants and animals in the Great Smoky Mountains. Emphasis on field study of selected biotic communities. Course will meet daily on campus for lectures/labs for 5 days (week 1) before venturing into the field. Students will stay full-time at the Biology Field Station in week 2. Course will conclude with 2 days (week 3) of oral presentations and discussion.
(RE) Prerequisite(s): Biology 150 and Biology 260 or equivalent.
Comment(s): This course is offered in the summer term only.

Rationale: Course will expose students to intensive field study in a biodiversity hot-spot. Course material will include background information on the geology, geography and human history of the Great Smoky Mountains. This will be followed by field-based exploration. Students and faculty will stay at the EEB Field Station and each day will explore a different part of the park, investigating plant and animal communities and identifying species. Impact on other units: None. Financial impact: None.

EEB 496 Special Topics Seminars (1) Special topics in ecology and evolutionary biology.
Repeatability: May be repeated. Maximum 12 hours. Maximum of two credit hours can count toward the major.

Rationale: This course is needed to provide a means for exploring contemporary topics in ecology, evolution and conservation. Impact on other units: None. Financial impact: None.

ADD

EEB 550 Ecological Niche Models and Species' Distributions (1) Species niches and spatial patterns – course will combine lectures with computer demonstrations and practice. Students will develop and work on an instructor approved project during class and present project results at the end of the semester. This hands-on course will be structured in three modules: I. Species' ranges in GIS; II. Species' niches – ecological niche modeling; III. Spatial patterns of biodiversity – macroecology and conservation. Each module will last 5 weeks and students have the option to enroll in one, two, or three modules.
Repeatability: May be repeated. Maximum 3 hours.
Registration Restriction(s): Consent of instructor.

Rationale: Development of spatial analysis tools with applications in conservation biology, ecology, and phylogeography has provided new research avenues that combine cross-disciplinary knowledge. This course will cover the theory and practice of ecological niche modeling which has generated much interest in recent years. Impact on other units: None. Financial impact: None.

DROP

EEB 462 Paleocology (3)

Rationale: The department has no one to teach this course. Impact on other units: None. Financial impact: None.

REVISE DESCRIPTION AND REMOVE (RE)PREREQUISITE

EEB 461 Special Topics in Organismal Biology (3) Current topics in organismal biology.

Formerly: Evolution, ecology, biogeography, classification, and anatomy of selected animal and plant taxa.
(RE) Prerequisite(s): Biology 280.

Rationale: The description change will broaden choices of topics in the course. The prerequisite is no longer needed. Impact on other units: None. Financial impact: None.

INTERDISCIPLINARY PROGRAMS

(CNST) CINEMA STUDIES

ADD NEW 400-LEVEL SECONDARY CROSS LISTED COURSE FOR GRADUATE CREDIT

+CNST 431 The Business of Cinema (3)
Cross-listed: (See Art Four-Dimensional Arts 431.)

ADD SECONDARY CROSS LISTED 400-LEVEL COURSE FOR GRADUATE CREDIT

+CNST 469 Sexuality and Cinema (3)
Cross-listed: (See Women, Gender, and Sexuality 469.)

Rationale: These are appropriate courses for the Cinema Studies program. Impact on other units: Cross listed Art course and cross listed Women, Gender, and Sexuality course. Financial impact: None.

(WGS) WOMEN, GENDER, AND SEXUALITY

ADD PRIMARY CROSS LISTED 400-LEVEL COURSE FOR GRADUATE CREDIT

+WGS 469 Sexuality and Cinema (3) Explores issues surrounding sexuality, gender and cinema from points of view of feminist film criticism. Writing-emphasis course.

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

Rationale: The program would like to have a graduate version of this course. Impact on other units: Cross listed with Cinema Studies. Financial impact: None.

ADD

WGS 591 Foreign Study (1-6)

Repeatability: May be repeated. Maximum 6 hours.

Registration Permission: Consent of the Women, Gender, and Society Chair.

WGS 592 Off-Campus Study (1-6)

Repeatability: May be repeated. Maximum 6 hours.

Registration Permission: Consent of the Women, Gender, and Society Chair.

WGS 593 Independent Study (1-6)

Repeatability: May be repeated. Maximum 6 hours.

Registration Permission: Consent of the Women, Gender, and Society Chair.

Rationale: These courses were not added when the Women's Studies program was dropped and added as Women, Gender, and Society. They are now needed for graduate students. Impact on other units: None. Financial impact: None.

Equivalency Table

Current or Recent Courses	Equivalent Courses Effective Fall 2018
WOST 469	WGS 469
WOST 591	WGS 591
WOST 592	WGS 592
WOST 593	WGS 593

DEPARTMENT OF MICROBIOLOGY

ADD

MICR 679 Advanced Techniques in Nucleic Acid Sequencing (1-3) Theory and implementation of experimental and computational techniques for obtaining and processing nucleic acid sequence data. Emphasis on oral presentations and written reports. Combined lecture/lab format.

Repeatability: May be repeated. Maximum 6 hours.

Rationale: High throughput nucleic acid (DNA and RNA) sequencing technology has become a fundamental component of all biological research. A high quality biological sciences graduate training program must include standardized, guided education in the theory and implementation of experimental and computational techniques for obtaining and processing nucleic acid sequence data. This course will fill a current campus gap in this area. Impact on other units: None. Financial impact: None.

DEPARTMENT OF MODERN FOREIGN LANGUAGES AND LITERATURES

(FREN) FRENCH

REVISE DESCRIPTION ON PRIMARY CROSS-LISTED 400-LEVEL COURSE

FREN 425 Introduction to Descriptive Linguistics (3) Introduction to concepts and methods of modern linguistics with an emphasis on analyzing the structure of human language. Provides a strong grounding in techniques of linguistic analysis in the subfields of phonetics, phonology, morphology, syntax, semantics, pragmatics. Writing emphasis course.

Cross-listed: (Same as German 425; Linguistics 425; Russian 425; Spanish 425.)

Formerly: Initiation into the theory and practice of techniques of linguistic analysis in the subfields of phonetics, phonology, morphology, syntax, semantics, pragmatics, and historical linguistics. Discussion of their relevance to the learning and teaching of foreign languages and to the study of literary texts. Writing-emphasis course.
(Same as German 425; Linguistics 425; Russian 425; Spanish 425.)

Rationale: Removing the reference to teaching and the study of literary texts. Impact on other units: None. Financial impact: None.

(GERM) GERMAN

REVISE TITLE, DESCRIPTION AND ADD REPEATABILITY TO CROSS-LISTED 400-LEVEL COURSE

GERM 426 Topics in Linguistics Research Methods (3) Provides a basic foundation in research methods in various fields of Linguistics and Applied Linguistics. Emphasis is on foundational notions of sound research design and analysis, applicable across linguistic areas of research, with attention to specific types of research.

Cross-listed: (Same as French 426; Linguistics 426; Russian 426; Spanish 426.)

Repeatability: May be repeated if topic differs. Maximum 6 hours.

Formerly: Methods of Historical Linguistics (3) Phonetics, distinctive feature analysis, sound change types, nature of sound change, principles of reconstruction, and fundamental assumptions about language change through time. Non-phonological linguistic change, language families, and Proto-Indo-European and other proto-languages.

Cross-listed: (Same as French 426; Linguistics 426; Russian 426; Spanish 426.)

Rationale: Due to recent retirements and changes in personnel, we broadened the name and description of the course to allow current faculty in Linguistics to teach it, with the focus changing depending on faculty teaching, hence making the course repeatable. Impact on other units: All cross listing units have approved the change. Financial impact: None.

(RUSS) RUSSIAN

ADD REPEATABILITY

RUSS 451 Senior Seminar (3) Intensive study of language, literary style, and literary criticism based on selected major novels.

Repeatability: May be repeated. Maximum 6 hours.

Rationale: Repeatability of this course makes up for the elimination of Russian 452, the former second semester of this course. Impact on other units: None. Financial impact: None.

DEPARTMENT OF PHYSICS AND ASTRONOMY

REVISE (RE)PREREQUISITE(S)

PHYS 431 Electricity and Magnetism (3) Electrostatics and magnetostatics in vacuum and in matter. Time-dependent electric and magnetic fields. Maxwell's equations. Required course for all physics majors.

(RE) Prerequisite(s): 136 or 138 or 232; Mathematics 241.

Formerly: (RE) Prerequisite(s): 136 or 138 or 232.

Rationale: These changes are to make explicit the inclusion of Mathematics 231 and 241 as requirements for the physics majors. These requirements have previously been hidden or implicit through prerequisites to MATH 435 which was, in turn, prerequisite to Physics 411. Impact on other units: None. Financial impact: None.

DEPARTMENT OF POLITICAL SCIENCE

ADD

POLS 597 Readings in Two Fields of Political Science (3) Selected topics in two fields from among American Politics, Comparative Politics and International Relations.

Rationale: The Academic Program Review noted that some graduate courses suffered from low enrollment. This is a function of the size of the graduate student body, rather than lack of demand for specific courses. This course will help address this problem by allowing the Department to offer a course each semester that students can designate as meeting the requirement for either one of two fields. Impact on other units: None. Financial impact: None.

REVISE COURSES TO DROP REPEATABILITY

POLS 530 American Government and Politics (3)

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

POLS 540 Courts and Judicial Processes (3)

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

POLS 556 Policy Analysis (3)

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

POLS 558 The Politics of Administration (3)

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

POLS 562 Public Management (3)

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

POLS 570 Comparative Government and Politics (3)

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

POLS 572 The Politics of Development (3)

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

POLS 580 International Politics (3)

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

POLS 654 Contemporary Public Policies (3)

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

POLS 660 Contemporary Perspectives on Public Administration (3)

Formerly: Repeatability: May be repeated with consent of instructor. Maximum 9 hours.

Rationale: These courses do not vary significantly and should not be repeatable. Impact on other units: None. Financial impact: None.

REVISE REPEATABILITY**POLS 574 Area Seminar in Comparative Government and Politics (3)**

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

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

POLS 610 Special Topics in Empirical Theory and Methodology (3)

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

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

POLS 639 Special Topics in American Government (3)

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

Formerly: Repeatability: May be repeated with consent of instructor. Maximum 9 hours.

POLS 668 Special Topics in Public Administration (3)

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

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

POLS 670 Special Topics in Comparative Government and Politics (3)

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

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

POLS 688 Special Topics in International Politics (3)

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

Formerly: Repeatability: May be repeated with consent of instructor. Maximum 9 hours.

Rationale: To standardize across graduate courses the grounds for repeatability. Impact on other units: None. Financial impact: None.

DEPARTMENT OF PSYCHOLOGY**ADD NEW 400-LEVEL COURSE FOR GRADUATE CREDIT:**

PSYC 484 Sleep and Dreaming (3) Exploration of the biological, personal, and societal relevance of sleep. Topics spanning a cellular-level understanding of how sleep and dreams are generated by the brain to the effects of sleep disruption on both personal and public health and safety.

Rationale: This is an important area that none of our current courses cover. Impact on other units: None. Financial impact: None.

REVISE HOURS

PSYC 596 Laboratory in Psychological Assessment (1)

Formerly: (2)

Rationale: This lab course has 2 hours of face-to-face meeting time, which is more appropriate as a 1-credit course. Impact on other units: None. Financial impact: None.

REVISE HOURS AND DESCRIPTION

PSYC 598 Ethical Issues in Professional Psychology (1) Ethical, legal and professional issues in the conduct and process of science and practice in psychology.

Formerly: (3) Conceptual and practical applications in human services and research.

Rationale: Description change better aligns with course content. Ethical and professional issues are explicitly integrated into many of our other doctoral programs, making a 3-credit stand-alone seminar excessive. A 1-credit seminar better meets the needs of our graduate students as well as our staffing needs, while still fulfilling accreditation requirements for our professional programs. Impact on other units: None. Financial impact: None.

REVISE TITLE

PSYC 645 Seminar on Supervision, Professional Development, Internship, and Ethical Conduct (1)

Formerly: Advanced Professional Issues in Clinical Psychology: Supervision and Career Development

Rationale: Changing the course title to better reflect actual course content. Impact on other units: None. Financial impact: None.

PART II. PROGRAM CHANGES

DEPARTMENT OF BIOCHEMISTRY AND CELLULAR AND MOLECULAR BIOLOGY

❖ ADD NEW GRADUATE MINOR

Interdisciplinary Graduate Minor in Neuroscience

The new minor will be housed in the Department of Biochemistry and Cellular and Molecular Biology:

In the 2018-19 Graduate Catalog, add heading, text, and requirements for the Neuroscience minor.

Interdisciplinary Graduate Minor in Neuroscience

The Departments of BCMB and Psychology in the College of Arts and Sciences; the Departments of EECS, MABE, and ISE in the College of Engineering; and the Department of Child and Family Services in the College of Education, Health and Human Sciences participate in the Interdisciplinary Graduate Minor in Neuroscience (IGMN) program. Any student pursuing a master's or PhD with a major in these departments can receive a minor in Neuroscience by completing the appropriate IGMN requirements. For further information, see the description of the IGMN below or visit the IGMN web site at <http://IGMN.utk.edu/>.

The Interdisciplinary Graduate Minor in Neuroscience (IGMN) is a formal academic program at the University of Tennessee established to allow students to earn a minor in Neuroscience simultaneously with a master's or doctorate in another academic discipline. The program is open to graduate students in all departments that have approved the IGMN program. The program is administered by a committee composed of representatives, including program faculty, from all colleges that have approved the IGMN program.

The graduate minor consists of a Neurobiology course (BCMB 550; 3 credit hours), a Neuropsychology elective (PSYC 524, 525, or 527; 3 credit hours), one elective course (3 credit hours) chosen from BME 503, BME 511, BME 574, BME 580, or BME 674 (check with Program Committee if additional electives are available), and the Workshop on Computational Neuroscience.

Neuroscience is an interdisciplinary field of science. Faculty members from BCMB, Chemistry, Psychology, Child and Family Studies, Computer Science, Biomedical Engineering, Industrial Engineering, Nursing and many other disciplines across the university are engaged in research and training that contribute to and enhance our understanding of the brain. Because modern Neuroscience demands computational and analytical skills that supplement an understanding of nervous system function, the IGMN program is designed to provide students seeking an advanced degree in one of the participating departments with additional knowledge and experience centered on Neuroscience research and

computational analyses. In addition to the core courses, the minor currently includes elective courses in EECS, MABE, and Psychology, which are selected according to a plan approved by the respective home departments and then approved by the IGMN Program Committee.

Procedures

The student's home department (i.e., the department in which the student is currently pursuing an advanced degree) must have approved a program of courses with the IGMN Program Committee prior to declaration of the IGMN minor. That program will specify the Neuroscience courses, selected from the IGMN approved list, that are considered appropriate by the home department, and the home department must verify fulfillment of non-Neuroscience degree requirements. Students wishing to participate in this program should contact their college representatives or the Chair of the IGMN Program Committee.

The student's graduate committee must include a member of the IGMN faculty.

The student's Admission to Candidacy Application must contain all courses required for the chosen degree program delineated and labeled "Courses required for the minor in Neuroscience." Should the student decide not to apply for admission to the program until after completion of some of the courses, the student's major professor should file a program change with the cooperating departments and assist the student in obtaining an IGMN faculty member to serve on the student's graduate committee.

Successful completion of the graduate minor in Neuroscience is recognized by appropriate documentation on the student's transcript. Students who do not complete the requirements of the minor will still receive academic credit for the courses they have successfully completed. For more information contact Dr. Rebecca Prosser at rprosser@utk.edu or visit <http://IGMN.utk.edu/>.

Rationale: Graduate students across existing programs are interested in adding expertise in Neuroscience to their existing degrees, but currently there is no graduate degree in Neuroscience offered at UTK. Because modern Neuroscience demands computational and analytical skills that supplement an understanding of nervous system function, the IGMN program is designed to provide students seeking an advanced degree in one of the participating departments with additional knowledge and experience centered on Neuroscience research and computational analyses. In addition to the core courses, the minor includes elective courses in EECS, Law, MABE, Nursing, Psychology, Social Work and other departments, which are selected according to a plan approved by the respective home departments and then approved by the IGMN Program Committee. Impact on other units: All affected units have participated in planning this program. Financial impact: None.

DEPARTMENT OF CHEMISTRY

REVISE REQUIREMENTS – CHEMISTRY MAJOR, MS

In the 2018-19 Graduate Catalog, add a new bullet after the fourth bullet (there will now be six bullets)

- CHEM 503 (required course)

REVISE REQUIREMENTS – CHEMISTRY MAJOR, PHD

In the 2018-19 Graduate Catalog, add a new bullet after the fifth bullet (there will now be eight bullets)

- CHEM 503 (required course)

Rationale: Success in graduate school and beyond requires many additional skills that are complementary to laboratory work. This course will instill students with these skills that will enhance their success in graduate school and beyond. Impact on other units: None. Financial impact: None.

INTERDISCIPLINARY PROGRAMS

+ ADD GRADUATE CERTIFICATE

Women, Gender, and Sexuality Graduate Certificate

In the 2018-19 Graduate Catalog, add heading, text, and requirements for the Women, Gender, and Sexuality Graduate Certificate.

Women, Gender, and Sexuality Graduate Certificate

The add-on Graduate Certificate in Women, Gender, and Sexuality (WGS) offers graduate students the opportunity to study from an interdisciplinary perspective how gender and sexuality shape the past, present, and future of human cultures and societies. This interdisciplinary curriculum trains students in critical studies of the ways in which gender and sexuality intersect with race, ethnicity, nationality, ability, and other dimensions of difference.

The WGS program is dedicated to welcoming all members of our academic community and to studying issues pertinent to men, women, LGBTQIA+ and intersectionality. Our courses provide students with a wide variety of methodological skills and perspectives with which to conduct their own research, creative activity, and activism.

Application to the WGS graduate certificate program must be made through the Office of Graduate Admissions and by submitting a letter of application and copies of relevant transcripts to the WGS program chair. The WGS certificate is intended as additional study for graduate students who are concurrently enrolled in a master's or doctoral program in another discipline at the University of Tennessee.

Students must be admitted to the certificate program prior to completing six credit hours toward the certificate. Students will select their coursework in conjunction with the WGS program chair, who must approve each student's program. Students must maintain a minimum 3.0 grade point average throughout the program.

The WGS Graduate Certificate consists of a minimum of 12 credit hours in interdisciplinary coursework outlined as follows. A maximum of six credit hours can overlap between the WGS certificate and the student's home discipline, as approved by the WGS program chair. At least six credit hours toward the WGS Graduate Certificate must be taken at the 500-level or above.

I. Six (6) credit hours chosen from:

ENGL/WGS 422 Women Writers in Britain
FREN 433 French and Francophone Women Writers
MUCO/WGS 412 Gender, Performance Art and the Avant Garde
MUCO 586 Topics in Opera
PSYC 434 Psychology of Gender
SOCI 453 Gender and Crime
AFST/WGS 484 African-American Women in American Society
or special topics courses as approved by the WGS chair

II. An additional 3 credit hours chosen from

ENGL/WGS 422 Women Writers in Britain
FREN 433 French and Francophone Women Writers.
GERM 416 Berlin Culture and History
HIST 517 Classic and Contemporary Readings in African-American History
MFLL 584 Modern Theory and Criticism
MUCO/WGS 412 Gender, Performance Art and the Avant Garde
MUCO/AFST 413 Music and the African Diaspora
MUCO 586 Topics in Opera
PSYC 434 Psychology of Gender
PSYC 435 Multicultural Psychology
PSYC 675 Advanced Group Methods: Intergroup Dialogue
SOCI 453 Gender and Crime
SOCI 621 Sociological Theory II
SOCI 640 Discourse Analysis
SOCI 656 Contemporary Critical Criminologies
AFST/WGS 484 African-American Women in American Society
or special topics courses as approved by the WGS chair

III. Three (3) credit hours of WGS 593, to be completed under the supervision of a member of the WGS Steering Committee, or another faculty member approved by the WGS Chair. Normally this will involve a capstone experience that consists of a thoughtful creation of a course syllabus, a teaching philosophy, and a public presentation pertaining to WGS and the student's home discipline.

Rationale: The program formerly known as Women's Studies is closed and WGS has replaced. The WGS Graduate Certificate replaces and updates the old WOST Graduate Certificate, emphasizing an updated curriculum and broader inclusion of students, topics, and methods. Impact on other units: None. Financial impact: None.

DEPARTMENT OF POLITICAL SCIENCE

REVISE REQUIREMENTS – POLITICAL SCIENCE MAJOR, PHD

In the 2018-19 Graduate Catalog, under the Requirements heading, delete the current text and replace with the following:

Doctoral students admitted to the program must complete a minimum of 72 semester hours beyond the bachelor's degree, exclusive of credit for a master's thesis. These hours include 24 hours of Doctoral Research and Dissertation and a minimum of 48 semester hours in other courses graded A-F. Students also must pass a written comprehensive examination in one broad field of political science (American government and politics; public administration; comparative government and politics; or international relations) and must pass a final oral examination on the dissertation.

In addition to the total hours required for the degree, the following requirements must also be met.

- At least 60 hours must be in political science courses.
- At least 60 hours in political science must be in courses above 500, to include completion of POLS 510, POLS 511 and POLS 513.
- Completion of at least three courses or seminars at the University of Tennessee, Knoxville, in the field in which the students take the comprehensive examination.
- Completion of at least three courses or seminars at the University of Tennessee, Knoxville in each of two minor fields.
- At least 6 hours must be earned in political science courses numbered above 600.
- A total of 24 hours must be earned by writing the dissertation.

Formerly: Doctoral students admitted to the program must complete a minimum of 72 semester hours beyond the bachelor's degree, exclusive of credit for a master's thesis. These hours include 24 hours of Doctoral Research and Dissertation and a minimum of 48 semester hours in other courses graded A-F. Students also must pass a written comprehensive examination in one broad field of political science (American government and politics; public administration; comparative government and politics; or international relations), must complete one cross-field concentration (in methodology, public policy, or political economy), and must pass a final oral examination on the dissertation.

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

In addition to the total hours required for the degree, the following requirements must also be met.

At least 60 hours must be in political science courses.

At least 60 hours in political science must be in courses numbered above 500.

Completion of POLS 510, POLS 511 and POLS 513.

Completion of at least three courses or seminars at the University of Tennessee, Knoxville, in the field in which the students take the comprehensive examination.

Completion of at least three courses or seminars at the University of Tennessee, Knoxville in the cross-field concentration.

At least 6 hours must be earned in political science courses numbered above 600.

A total of 24 hours must be earned by writing the dissertation.

Rationale: The Department's 10-year program review recommended revising the requirements of the PhD program to increase class sizes and consolidate course offerings to reduce the number of courses offered. These revisions to the program help achieve these goals by removing the cross-field concentration requirement and replacing it with a more traditional focus on a second substantive field. As such, the courses currently offered to satisfy the cross-field concentrations will no longer have to be offered every two years, and courses offered in the four fields of political science, some of which suffer from low enrollment, should observe increased enrollment. Impact on other units: None. Financial impact: None.

HASLAM COLLEGE OF BUSINESS

All changes effective Fall 2018

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

REVISE REPEATABILITY

ACCT 693 Independent Study (3)

Repeatability: May be repeated. Maximum 12 hours.

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

Rationale: To accommodate the need to provide additional credit hours in analysis programming when alternative source of that content is not available due to scheduling limitations. Impact on Staffing: No change in staffing. Financial Impact: No financial impact, Impact on other units: No impact on other academic units.

Learning Outcomes Supported: Learning outcome #2: Students will demonstrate mastery of conceptual and methodological skills for the areas of specialization.

Evidence from Assessment Activities: None specifically. But the ability to perform these analytical programming activities is key for data analysis associated with creation of original research.

REVISE DESCRIPTION

ACCT 509 Financial Institutions (3) Exposes students to various technology tools useful for analyzing financial data.

Formerly: Exposes students to various aspects of financial institutions.

Rationale: To reflect a change in the content to more use of technology tools for financial analysis. Impact on Staffing: No change in staffing. Financial Impact: No financial impact, Impact on other units: No impact on other academic units.

Learning Outcomes Supported: The proposal to place more emphasis on technology tool use in a course required for all MAcc students is based on learning objective #1. To demonstrate the successful completion of a program emphasizing advanced knowledge of accounting and information management. In today's business world, demonstrating this knowledge relies on the ability to leverage technology tools used to perform more in-depth financial analysis.

Evidence from Assessment Activities: No direct evidence from prior assessment activities; the demand from the "market" for this type of skill set prompted this proposal.

DEPARTMENT OF BUSINESS ANALYTICS AND STATISTICS

Learning Goals and Objectives for the Master of Science in Business Analytics

1. Demonstrate ability to identify the necessary data to address an important business question.
2. Demonstrate the ability to apply sound statistical analysis techniques to solve business problems, and to present these to the faculty and students.
3. Students will be able to present and defend data analysis conducted to address an important business question in business language for a general manager.

(BZAN) Business Analytics

ADD

BZAN 555 Supply Chain Analytics (3) Presents tools and modeling frameworks that are relevant to solving today's supply-chain problems. Topics include capacity analysis, inventory optimization, forecasting, and supply chain design. This course is for students who will be working in consulting or supply-chain management.

(RE) Prerequisite(s): 535.

Registration Permission: Or permission of instructor.

Rationale: Adding 555 will ensure that the Analytics curriculum incorporates cutting edge analytics techniques to ensure curriculum relevancy. The course has been taught as a special topics course for the last 2 years with increasingly high enrollments. Impact on Staffing: No change in staffing. Financial Impact: No financial impact. Impact on other units: No impact on other academic units.

Learning Outcomes Supported: Change did not occur because of learning outcome results, but supports LO#1. Evidence from Assessment Activities: N/A.

BZAN 557 Text Mining (3) A general introductory level course for graduate students who are interested in analyzing textual data. Topics include textual data cleaning and manipulation, web crawling, natural language processing, word association analysis, n-grams, clustering and categorization of documents, information retrieval, web log analysis, sentiment analysis, topic modeling, and interfacing unstructured data with structured data.

(RE) Prerequisite(s): 542.

Registration Permission: Or permission of instructor.

Rationale: Adding 557 will ensure that the Analytics curriculum incorporates cutting edge analytics techniques to ensure curriculum relevancy. The course has been taught as a special topics course for the last 2 years with increasingly high enrollments. Impact on Staffing: No change in staffing. Financial Impact: No financial impact. Impact on other units: No impact on other academic units.

Learning Outcomes Supported: Change did not occur because of learning outcome results, but supports LO#1. Evidence from Assessment Activities: N/A.

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 535 Financial Markets and Institutions (3) Analysis of management policies of financial institutions and investment banking firms. Legal, economic and regulatory environment and implications for management. Financial institution structure and competition and changing trends in U.S. financial system. Study the theories and mathematics of interest rate determination and characterize the financial services firms which participate in these markets.

(RE) Prerequisite(s): Business Administration 518.

Comment(s): Prior knowledge may satisfy prerequisite with consent of instructor.

Rationale: Course content and description no longer appropriate for FINC 532. To better identify the content being taught as well as eliminate possible confusion with undergraduate course offerings, new course is being proposed. Staffing impact: None. Financial impact: None. Impact on other units: None.

Learning Outcomes Supported: Replacement/updated course for FINC 532. Evidence from Assessment Activities: No evidence from assessment activities.

FINC 595 Investment Fund Management (1-6) Members of an investment team manage portfolios of financial assets on behalf of The University of Tennessee (known as the Haslam Torch Fund) or LaPorte Family Trust (known as the LaPorte Fund). Goals are to beat their stated benchmark, earn a positive total rate of return, and outperform the competing investment team. Professional ethics emphasized.

Repeatability: May be repeated. Maximum 6 hours.

Registration Permission: Consent of instructor only.

Rationale: Change is to eliminate confusion regarding identification of our graduate level "Investment Fund Management" course vis-a-vis our undergraduate equivalent (FINC 495). Staffing impact: None. Financial impact: None. Impact on other units: None.

Equivalency Table	
Current Course	Equivalent Course - Effective Fall 2018
(FINC) 585	(FINC) 595

DROP

FINC 585 Investment Fund Management (1-6)

Rationale: Change is to eliminate confusion regarding identification of our graduate level "Investment Fund Management" course vis-a-vis our undergraduate equivalent (FINC 495). Staffing impact: None. Financial impact: None. Impact on other units: None.

FINC 532 Commercial and Investment Banking (3)

Rationale: Course is a legacy course which does not reflect the material being taught. Proposal to replace this course with FINC 535, Financial Markets and Institutions, being submitted via separate proposal. Impact on other units: None.

REVISE (DE)PREREQUISITE

FINC 571 International Finance (3)

(DE) Prerequisite(s): Business Administration 518.

Formerly: (DE) Prerequisite(s): Business Administration 513.

Rationale: Correct a typographical error. Staffing impact: None. Financial impact: None. Impact on other units: None.

REVISE (DE)PREREQUISITE AND ADD COMMENTS

FINC 593 Independent Study (3)

(DE) Prerequisite(s): Business Administration 518.

Comment(s): Prior knowledge may satisfy prerequisite with consent of instructor.

Formerly: (DE) Prerequisite(s): Business Administration 511, 512, 513, and 514, or consent of instructor.

Rationale: Current prerequisites state: Business Administration 511, 512, 513, and 514, or consent of instructor. These four courses (511, 512, 513 and 514) no longer exist. Proposal reflects prerequisite consistent with other MBA courses. Staffing impact: None. Financial impact: None. Impact on other units: None.

GRADUATE AND EXECUTIVE EDUCATION

Learning Goals and Objectives for Executive MBA and Professional MBA Programs

1. Leadership Development: Each student will demonstrate the ability to appraise their own leadership strengths and weaknesses; create a leadership development plan with specific, measurable goals to strengthen their leadership potential, assess their progress toward those goals; and revise their plan, as necessary, to support their continued growth and development as a leader.
2. Application of Knowledge to a Real Company Project: Each student shall assimilate the knowledge of core business disciplines acquired in the classroom and directly apply this knowledge to their workplace so as to achieve the highest level of cognitive learning.
3. Decision Making in an Integrated and Global Context: By satisfactorily contributing to a team engaged in a competitive Marketplace simulation, each student shall demonstrate an ability to work cooperatively with others to identify and solve business problems in an integrated and global market environment.
4. Corporate Social Responsibility and Ethics Awareness: Each student shall demonstrate the ability to identify and analyze issues related to corporate social responsibility (CSR), ethics and organizational culture in an applied and integrated business context.

(BUAD) Business Administration

ADD

BUAD 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.

Rationale: Parameters in Banner require students be enrolled during the semester they graduate. In other words, if a student is not enrolled, he or she cannot be approved for graduation. Each program year, executive MBA programs have 1-4 students who are resolving Incompletes and plan to graduate the following semester. In order for them to apply and be approved for graduation, they need to be enrolled in a BUAD 502 Registration for Use of Facilities. Staffing impact: None. Financial impact: None. Impact on other units: None.

BUAD 583 Special Topics in Business Administration (1-3) Designed to explore current issues in Business Administration.

Repeatability: May be repeated. Maximum 9 hours.

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

Registration Permission: Consent of Instructor.

Rationale: Addition of this course would allow for special topics courses that are not tied to a specific academic department (example: a course that allows academic credit for graduate level case competition teams). Staffing impact: None. Financial impact: None. Impact on other units: None.

REVISE HOURS

BUAD 593 Independent Study (1-3)

Formerly: 3

Rationale: Addition of this course would allow for independent study courses that are interdepartmental or are not tied to a specific academic department. Staffing impact: None. Financial impact: None. Impact on other units: None.

DEPARTMENT OF MANAGEMENT

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 Goals and Objectives for the Master of Science in Human Resource Management

1. Students will be able to assess human resource issues in the following areas: recruitment, workforce planning, training and development, employee relations, and compensation practices through critical applications.
2. Students will understand effective retention and sourcing strategies; HRIS and compensation strategies; ways in which quality employees contribute to the overall success of the organization.
3. Students will create training and development programs to find and create career development plans for employees.

(HRM) Human Resource Management

ADD REGISTRATION RESTRICTION(S)

HRM 521 Foundations of Strategic HRM (1)

Registration Restriction(s): Master of Science – Management and Human Resources major. Minimum student level – graduate.

Rationale: This intensive one-credit hour Foundations course is intended only for students admitted to the Master of Science in Management and Human Resources program. It is a pre-requisite for most other courses in this MS program. Impact on other units: None. Financial Impact: None.

HRM 535 Strategic Performance Management (3)

Registration Restriction(s): Master of Science – Management and Human Resources major (or previous program name: Master of Science – Human Resource Management). Otherwise, contact instructor of record for permission to register. Minimum student level – graduate.

HRM 540 Strategic Talent Management (3)

Registration Restriction(s): Master of Science – Management and Human Resources major (or previous program name: Master of Science – Human Resource Management). Otherwise, contact instructor of record for permission to register. Minimum student level – graduate.

HRM 545 Strategic Rewards Management (3)

Registration Restriction(s): Master of Science – Management and Human Resources major (or previous program name: Master of Science – Human Resource Management). Otherwise, contact instructor of record for permission to register. Minimum student level – graduate.

HRM 550 Organizational Behavior and Development (3)

Registration Restriction(s): Master of Science – Management and Human Resources major (or previous program name: Master of Science – Human Resource Management). Otherwise, contact instructor of record for permission to register. Minimum student level – graduate.

Rationale: These courses intended only for students admitted to the Master of Science in Management and Human Resources program. However, with permission of the instructor, students enrolled as degree-seeking students in other UT graduate programs may be allowed to take the course as an elective. Impact on other units: None. Financial Impact: None.

(MGT) Management

REVISE REGISTRATION RESTRICTION(S)

MGT 520 Foundations of Management (1)

Registration Restriction(s): Master of Science – Management and Human Resources major. Minimum student level – graduate.

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

MGT 553 Legal and Ethical Issues in Management (3)

Registration Restriction(s): Master of Science – Management and Human Resources major (or previous program name: Master of Science – Human Resource Management). Otherwise, contact instructor of record for permission to register. Minimum student level – graduate.

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

MGT 555 Foundations of Effective Leadership (3)

Registration Restriction(s): Master of Science – Management and Human Resources major (or previous program name: Master of Science – Human Resource Management). Otherwise, contact instructor of record for permission to register. Minimum student level – graduate.

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

MGT 556 Strategic Leadership (3)

Registration Restriction(s): Master of Science – Management and Human Resources major (or previous program name: Master of Science – Human Resource Management). Otherwise, contact instructor of record for permission to register. Minimum student level – graduate.

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

MGT 558 Business Fundamentals: Structure, Function, and Strategy (3)

Registration Restriction(s): Master of Science – Management and Human Resources major (or previous program name: Master of Science – Human Resource Management). Otherwise, contact instructor of record for permission to register. Minimum student level – graduate.

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

MGT 561 Finance and Accounting Essentials for Managers (3)

Registration Restriction(s): Master of Science – Management and Human Resources major (or previous program name: Master of Science – Human Resource Management). Otherwise, contact instructor of record for permission to register. Minimum student level – graduate.

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

MGT 562 Data-Driven Decision Making (3)

Registration Restriction(s): Master of Science – Management and Human Resources major (or previous program name: Master of Science – Human Resource Management). Otherwise, contact instructor of record for permission to register. Minimum student level – graduate.

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

MGT 565 Management and HR Capstone (1)

Registration Restriction(s): Master of Science – Management and Human Resources major (or previous program name: Master of Science – Human Resource Management). Otherwise, contact instructor of record for permission to register. Minimum student level – graduate.

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

Rationale: These courses intended only for students admitted to the Master of Science in Management and Human Resources program. However, with permission of the instructor, students enrolled as degree-seeking students in other UT graduate programs may be allowed to take the course as an elective. Impact on other units: None. Financial Impact: None.

DEPARTMENT OF MARKETING AND SUPPLY CHAIN MANAGEMENT

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.

(MARK) Marketing

ADD

MARK 539 Professional Sales and Customer Portfolio Management in Information-Rich Environments (3)

Contributes to the Marketing concentration in the full-time MBA program by focusing on professional selling, sales force management and customer portfolio management in complex data-rich environments. Emphasis is placed on business-to-business sales and relationship management and spans industries and contexts such as consumer goods sold through retail, selling supply chain solutions, industrial/aerospace and complex services such as financial products.

(DE) Prerequisites: Business Administration 518.

Registration Restriction(s): Master of Business Administration admission.

Registration Permission: Or consent of instructor.

Rationale: This course is an addition to the two current marketing concentration courses, MARK 537 (Brand and Shopper Marketing Management) and MARK 538 (Marketing Insights). The three courses (537, 538, 539) can serve as the MBA final semester course load to meet the requirements for a Marketing concentration. The MBA Marketing concentration currently consists of two dedicated courses when three courses are required. Currently, MBA students take a Sales Force Management course under an independent study catalog number which is an unsustainable strategy.

Staffing impact: An MBA faculty member will need to teach this course. Currently many of the topics in this proposed course are being taught within an advanced undergraduate course, MARK 468 Sales Force Management, with MBA students working off a unique syllabus. Rather than combining MBA and undergraduate students, this new course will require it to be a stand-alone offering. The additional sales course will require the department to provide 1 additional teaching/course load assignment annually. This course will be taught by a faculty member within load. Currently several faculty already on staff are qualified to teach it. Thus, no new hire is needed to field this course. **Financial impact:** No impact. **Impact on other units:** MBA students with any concentration are able to take this course.

Learning Outcomes Supported: This course will round out the Marketing Concentration that currently places little to no emphasis on professional selling and sales force management. Professional sales, account management, business development and the management of these specialized employees is a critical part of marketing. If one considers marketing areas of strategy, brand/product management, market research, advertising and sales as key components of a marketing foundation, the current concentration is lacking in the sales arena. Many of the jobs available to both graduate and undergraduate students lie within the sales/business development realm. In addition, new knowledge is emerging for analyzing significant volumes of complex data for the purpose of managing a portfolio of customers in ways that maximize service to customers and customer lifetime value to the firms that serve them. M&SCM has expertise in all of these areas that can be leveraged. **Evidence from Assessment Activities:** MBA student feedback suggests a desire for a more robust Marketing Concentration.

II. PROGRAM CHANGES

DEPARTMENT OF ACCOUNTING AND INFORMATION MANAGEMENT

REVISE REQUIREMENTS – ACCOUNTING MAJOR, MACC, INFORMATION MANGEMENT CONCENTRATION

In the 2018-2019 Graduate Catalog, under Requirements heading for the Information Management concentration, add course ACCT 535 to the list of courses as shown below.

ACCT 507, ACCT 508, ACCT 509, ACCT 518, ACCT 522 or ACCT 535, ACCT 593, INMT 540, INMT 543, INMT 544, INMT 548.

Rationale: Students entering the MAcc program from other programs often have limited exposure to certain accounting content, in this case tax standards and procedures. For students specializing in Information Management this can be problematic in their careers and for success in passing the Regulation section of the CPA exam. This change allows these students to obtain necessary audit knowledge and skills to enhance their career and perform better on the Regulation section of the CPA. **Impact on Staffing:** No change in staffing. **Financial impact:** No financial impact. **Impact on other units:** No impact on other academic units.

Learning Outcomes Supported: This change supports program learning objective #2, application of technical accounting skills on tax issues. **Evidence from Assessment Activities:** An examination of CPA test score results, particularly for students from other (non-UTK) undergraduate programs, shows that students from these programs have lower completion rates and test scores on the Regulation section of the CPA exam.

REVISE REQUIREMENTS – ACCOUNTING MAJOR, MACC, TAXATION CONCENTRATION

In the 2018-2019 Graduate Catalog, under Requirements heading for the Taxation concentration, add course ACCT 518 to the list of courses as shown below.

ACCT 507, ACCT 508, ACCT 509, ACCT 522 or ACCT 518, ACCT 530, ACCT 531, ACCT 532, ACCT 533, ACCT 539, ACCT 593.

Rationale: Students entering the MAcc program from other programs often have limited exposure to certain accounting content, in this case tax standards and procedures. For students specializing in Information Management this can be problematic in their careers and for success in passing the Regulation section of the CPA exam. This change allows these students to obtain necessary audit knowledge and skills to enhance their career and perform better on the Regulation section of the CPA. Impact on Staffing: No change in staffing. Financial Impact: No financial impact. Impact on other units: No impact on other academic units.

Learning Outcomes Supported: This change supports program learning objective #2, application of technical accounting skills on tax issues. Evidence from Assessment Activities: An examination of CPA test score results, particularly for students from other (non-UTK) undergraduate programs, shows that students from these programs have lower completion rates and test scores on the Regulation section of the CPA exam.

DEPARTMENT OF BUSINESS ANALYTICS AND STATISTICS

REVISE REQUIREMENTS – BUSINESS ANALYTICS MAJOR, MS

In the 2018-2019 Graduate Catalog, under the Requirements heading add the following statement to the list of program requirements:

The degree requires the completion of an internship/practicum that is relevant to the program.

Rationale: To formally add an internship to the program requirements. Impact on Staffing: No change in staffing. Financial Impact: No financial impact. Impact on other units: No impact on other academic units. Learning Outcomes Supported: Change did not occur because of learning outcome results. Evidence from Assessment Activities: N/A.

REVISE REQUIREMENTS – INTERCOLLEGIATE GRADUATE STATISTICS PROGRAM

In the 2018-2019 Graduate Catalog, revise the table under Requirements, to reflect the proper number of hours in the program, to show the following. Increases the number of hours.

Master's in home department, minor in statistics	9
Master's in home department, MS in statistics*	24
Doctorate in home department, minor in statistics	15
Doctorate in home department, MS in statistics**	24

* The MS in Statistics requires 33 credit hours separate from the degree requirements in the home department.

** The MS in Statistics requires 33 credit hours.

Formerly:

Master's in home department, minor in statistics	9
Master's in home department, MS in statistics*	21
Doctorate in home department, minor in statistics	15
Doctorate in home department, MS in statistics**	21

* The MS in Statistics requires 30 credit hours separate from the degree requirements in the home department.

** The MS in Statistics requires 30 credit hours.

REVISE: Also, under the Statistics Major, MS, under the Requirements heading revise the paragraph to reflect the proper number of hours in the program. Increases the number of hours from 30 to 33 for the Statistics major, MS.

A minimum of 33 credit hours must be completed for the master's degree. Required of all students are 6 credit hours in statistical methods and 6 credit hours in statistical theory. Students must complete a minimum of 24 credit hours in approved statistics courses, exclusive of consulting, internship, independent study, or thesis.

Formerly: A minimum of 30 credit hours must be completed for the master's degree. Required of all students are 6 credit hours in statistical methods and 3 credit hours in statistical theory. Students must complete a minimum of 21 credit hours in approved statistics courses, exclusive of consulting, internship, independent study, or thesis.

Rationale: To correct an error in the catalog where the addition of STAT 564 in the program was not properly represented in the hours and program requirements page for the IGSP Major. Impact on Staffing: No change in staffing. Financial Impact: No financial impact. Impact on other units: No impact on other academic units. Learning Outcomes Supported: Change did not occur because of learning outcome results. Evidence from Assessment Activities: N/A

❖ **DROP CONCENTRATION – BUSINESS ADMINISTRATION MAJOR, MBA**

Operations Management concentration

In the 2018-2019 Graduate Catalog, drop the Operations Management concentration for the MBA.

Rationale: The Business Analytics and Statistics Department developed an MBA concentration in Business Analytics several years ago, which is the primary MBA concentration selected by MBA students and supported by the department. In addition, several of the courses required for the Operations concentration are no longer offered and/or recommended. Impact on Staffing: No change in staffing. Financial Impact: No financial impact. Impact on other units: No impact on other academic units. Learning Outcomes Supported: Change did not occur because of learning outcome results. Evidence from Assessment Activities: N/A

+ **DROP CERTIFICATE – APPLIED STATISTICAL STRATEGIES**

In the 2018-2019 Graduate Catalog, delete and remove the Applied Statistical Strategies Certificate from the catalog.

Rationale: there have been no students in the program since 2010 and we will no longer offer sufficient online course work to allow students to complete the certificate through distance education. Financial impact: None, no courses offered as part of this program are unique to the program. Impact on other units: None.

DEPARTMENT OF MARKETING AND SUPPLY CHAIN MANAGEMENT

REVISE REQUIREMENTS – BUSINESS ADMINISTRATION MAJOR, MBA, MARKETING CONCENTRATION

In the 2018-2019 catalog, delete current catalog text and replace with the following:

Minimum course requirements for the concentration are MARK 537, MARK 538 and MARK 539.

Formerly: Minimum course requirements are BZAN 522 and MARK 537

Rationale: The current description is outdated and incomplete. In addition, BZAN 522 is an old course not offered anymore. Impact on Staffing: There is no staffing impact. Financial Impact: There is no additional financial obligation for the execution of this change. Impact on other units: There is no impact to other units.

Learning Outcomes Supported: This change better articulates the requirements for the Marketing Concentration.

Evidence from Assessment Activities: MBA students have noted that the current description does not accurately articulate the requirements for a concentration in Marketing.

COLLEGE OF COMMUNICATION AND INFORMATION

All changes effective Fall 2018

I. COURSE CHANGES

SCHOOL OF COMMUNICATION STUDIES

(CMST) Communication Studies

DROP

CMST 505 Human Communication Research Methods (3)

CMST 510 Survey of Interpersonal Communication (3)

CMST 516 Interpersonal Health Communication (3)

CMST 540 Survey of Organizational Communication (3)

CMST 544 Mindfulness: Research and Experience (3)

CMST 560 Special Topics in Communication Studies (3)

Rationale: Dropping these courses and placing their former content into other courses in the curriculum streamlines course offerings and maximizes teaching power. Impact on other units: None. Financial impact: None. Support from assessment activities: Comprehensive review of program.

ADD

CMST 508 Quantitative Methods of Communication Research (3) Principles and methods of conducting systematic empirical quantitative research in laboratory and natural settings. Emphasis on experimental, survey, and observational research design. Overview of data analysis techniques.

Credit Level Restriction: Graduate credit only.

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

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Assessment indicated that students are not getting this material in other courses.

CMST 520 Foundations of Interpersonal Communication Theory and Research (3) Survey of major theoretical perspectives and examples of classic research in interpersonal communication.

Credit Level Restriction: Graduate credit only.

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

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Assessment indicated that students are not getting this material in other courses.

CMST 522 Relational Communication (3) Theory and research related to the study of close relationships. Emphasis on the role of communication in the initiation, maintenance, and dissolution of interpersonal relationships.

Credit Level Restriction: Graduate credit only.

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

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Assessment indicated that students were not getting this material in other courses.

CMST 524 Interpersonal Conflict (3) Communicative processes associated with the manifestations and experiences of interpersonal conflict. Exploration of theories, methodologies, and evolving trends.

Credit Level Restriction: Graduate credit only.

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

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Assessment indicated that students are not getting this material in other courses.

CMST 526 Social Influence, Persuasion, and Compliance-Gaining (3) Examination of social influence theory and practice. In-depth treatment of intentional, message-driven attitude and behavior change.

Credit Level Restriction: Graduate credit only.

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

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Assessment indicated that students are not getting this material in other courses.

CMST 550 Foundations of Organizational Communication Theory and Research (3) Survey of major theoretical perspectives and examples of classic research in organizational communication.

Credit Level Restriction: Graduate credit only.

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

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Assessment indicated that students are not getting this material in other courses.

CMST 552 Group Communication (3) Theories and practices related to developing and working in groups. Issues of development, decision-making, roles, interpersonal relations, and norms are examined.

Credit Level Restriction: Graduate credit only.

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

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Assessment indicated that students are not getting this material in other courses.

CMST 554 Organizational Communication, Strategic Leadership, and Culture (3) Examines the relationships between organizational culture, ethics, leadership, and communication. Explores competing conceptualizations of organizational culture.

Credit Level Restriction: Graduate credit only.

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

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Assessment indicated that students are not getting this material in other courses.

CMST 556 Behavior and Communication in Organizations (3) Study of communication within and between organizations. Consideration of micro-, meso-, and macro-level processes.

Credit Level Restriction: Graduate credit only.

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

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Assessment indicated that students are not getting this material in other courses.

CMST 610 Seminar in Methods of Communication Research (3) Advanced topics in communication research methods.

Repeatability: May be repeated. Maximum 9 hours.

Credit Level Restriction: Graduate credit only.

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

Registration Permission: Consent of instructor.

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Assessment indicated that students are not getting this material in other courses.

CMST 620 Seminar in Interpersonal Communication (3) Advanced topics in interpersonal communication.

Repeatability: May be repeated. Maximum 9 hours.

Credit Level Restriction: Graduate credit only.

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

Registration Permission: Consent of instructor.

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Assessment indicated that students are not getting this material in other courses.

CMST 650 Seminar in Organizational Communication (3) Advanced topics in organizational communication.

Repeatability: May be repeated. Maximum 9 hours.

Credit Level Restriction: Graduate credit only.

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

Registration Permission: Consent of instructor.

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Assessment indicated that students are not getting this material in other courses.

REVISE TITLE AND DESCRIPTION

CMST 509 Qualitative and Ethnographic Methods of Communication Research (3) Principles and methods of conducting systematic empirical qualitative research in laboratory and natural settings. Emphasis on ethnographic methods and field observation. Overview of data analysis techniques.

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

Rationale: Brings school curriculum in-line with faculty expertise and field-wide standards. Impact on other units: None. Financial impact: None. Support from assessment activities: Comparison of School curriculum against curriculum offered at aspirational peer institutions.

SCHOOL OF INFORMATION SCIENCES

REVISE DESCRIPTION

INSC 573 Programming for Children and Young Adults (3) Philosophy and objectives of diverse, culturally and developmentally appropriate library services for children and young adults. Emphasis on program planning, implementation, and evaluation.

Formerly: Philosophy and objectives of public and school library services for children and young adults. Reading, listening, and viewing guidance for individuals and groups. Program planning, implementation, and evaluation.

Rationale: The description was outdated and referred to both school and public library programming. This adjustment allows us to focus on non-curricular programming and better prepares students for jobs in both school and public library youth services. Impact on other units: None. Financial impact: None.

Support from assessment activities: The updates reflect changes in the field and better support students seeking employment in public libraries.

REVISE TITLE AND DESCRIPTION

INSC 571 Children's Materials (3) Critical survey of diverse children's materials, for birth through age 12, in all formats and genres, including print, digital, and multimodal. Emphasis on evaluation, selection, and recreational or curricular use in school and public libraries.

Formerly: Resources and Services for Children (3) Critical survey of diverse books and related materials for children, development of genres. Evaluation, selection, and utilization for school and public libraries.

Rationale: The description was outdated and referred to a limited view of the field of children's literature. In order to stay up-to-date with advances and developments in literature and literacy, the course needs to include electronic, online, and multimodal information. Impact on other units: None. Financial impact: None. Support from assessment activities: The updates reflect changes in the field.

INSC 572 Young Adult Materials (3) Critical survey of diverse young adult materials, for ages 13-18, in all formats and genres, including print, digital, and multimodal. Emphasis on evaluation, selection, and recreational or curricular use in school and public libraries.

Formerly: Resources and Services for Young Adults (3) Critical survey of diverse books and related materials for young adults; personal, vocational, and recreational needs and interests. Evaluation, selection, and utilization for school and public libraries.

Rationale: Description was outdated and referred to a limited view of the field of young adult literature. In order to stay up-to-date with advances and developments in literature and literacy, the course needs to include electronic, online, and multimodal information. Impact on other units: None. Financial impact: None. Support from assessment activities: The updates reflect changes in the field.

II. PROGRAM CHANGES

REVISE COLLEGE TEXT – ADMISSION GRE REQUIREMENTS

In the 2016-2017 Graduate Catalog, under the heading, "Admission and Assistance for College-Wide Degrees"

- 1) second sentence, add "(PhD applicants only)" after General Record Examination.
- 2) add a new third sentence: The submission of General Record Examination scores is optional for MS applicants.

Formerly: In addition, they must complete the ~~Graduate Record Examination~~, rating forms, and application forms as required by the College of Communication and Information.

Rationale: Making the GRE optional will attract more students to apply and remove barriers from taking this entrance exam. Explanation for this noted below in assessment activities. Impact on Other Units: None. Financial Impact: None.

Support from assessment activities: Research demonstrates: (1) that this examination presents a financial hardship for many students; (2) the examination delays the application process in several ways; (3) that the relationship between success on the GRE and in subsequent graduate program is equivocal at best; (4) that it can present a barrier for minorities and non-native English speakers, and is a poor predictor of female students' success; and (5) that the undergraduate GPA is more reliable than the GRE in predicting success.

REVISE REQUIREMENTS – COMMUNICATION AND INFORMATION MAJOR, MS

In the 2016-2017 Graduate Catalog, under Admission heading, delete second bullet and replace with the following:

- The submission of Graduate Record Examination scores is optional for MS applicants.

Formerly: At or above the fiftieth percentile in verbal, quantitative and analytical aptitude on the Graduate Record Examination.

Rationale: Making the GRE optional will attract more students to apply and remove barriers from taking this entrance exam.

Explanation for this noted below in assessment activities. Impact on Other Units: None. Financial Impact: None.

Support from assessment activities: Research demonstrates: (1) that this examination presents a financial hardship for many students; (2) the examination delays the application process in several ways; (3) that the relationship between success on the GRE and in subsequent graduate program is equivocal at best; (4) that it can present a barrier for minorities and non-native English speakers, and is a poor predictor of female students' success; and (5) that the undergraduate GPA is more reliable than the GRE in predicting success.

COLLEGE OF EDUCATION, HEALTH, AND HUMAN SCIENCES

All Changes Effective Fall 2018

I. COURSE CHANGES

DEPARTMENT OF CHILD AND FAMILY STUDIES

Student Learner Outcomes

Learning objectives for the MS programs:

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.

Learning objectives for the PhD program:

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

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

CFS 445 Teaching in Kindergarten (3) Curriculum planning, classroom organization, and management practices for teaching young children. Relationship of kindergarten to total elementary school.

Registration Restriction(s): Admission to teacher education.

Rationale: This course is being added to our department (CFS) and dropped from the department of TPTE. The curricular revision is needed as this course is required for PreK-3 and PreK-K teacher licensure students. It was previously taught under ELEM ED 445 in TPTE, Theory and Practice in Teacher Education. As of Fall 2018, TPTE will no longer teach this course, so CFS must teach it to meet the program requirements of our students. It was determined the change was needed as CFS was notified that due to retirements of faculty in TPTE and the enrollment of mainly CFS students in the course, TPTE would no longer offer it. The change is not connected to a formal SACs assessment.

Impact on Other Units: This course is required for PreK-3 and PreK-K teacher licensure students. The course will be dropped by the TPTE department. The proposed change does not require courses offered by other programs. The course is not a general education, tracking, or high demand course. The course is not a prerequisite or co-requisite for other courses and is not cross-listed in other units.

Financial Impact: This change will require funding for an instructor to teach the course two times per calendar year: summer session and fall semester. An instructor will be required to teach the course. The course does not require additional resources (facilities, materials, etc.). The funding source will be the department operating budget. **Additional Documentation:** No additional approvals are required for this change. However, this course was offered for both UG and Grad credit and so the change will be submitted to both committees. The change is not substantive and does not need to be reported to SACSCOC.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING

Student Learner Outcomes

Applied Educational Psychology

Learning Objectives for the PhD in Education with a concentration in Applied Educational Psychology:

1. Students will write a scholarly review of the literature related to their primary research and practice areas.
2. Students will demonstrate mastery of the content in their area of academic concentration and how to apply the content in professional settings.
3. Students will actively contribute to scholarship in their profession.

Learning, Design, and Technology

Learning Objectives for the PhD in Education with a concentration in Learning, Design, and Technology:

1. Students will engage in reflective inquiry of learning environments that address the need of diverse learners based on theoretical foundations in learning, design, and technology and rigorous educational research;
2. Students will participate in interdisciplinary research teams and examine issues related to learning environments in various contexts;
3. Students will develop a keen sense of understanding about their social and ethical responsibilities as designers, researchers, and practitioners of learning environments based on theoretical and practical knowledge in the field.

Rehabilitation Counseling.

Learning objectives for the Counseling MS programs:

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

Learning Objectives for the Rehabilitation Counseling Deafness Rehabilitation Certificate

1. Students will demonstrate fluency in American Sign Language (ASL).
2. Students will demonstrate knowledge of deaf culture and the deaf community.
3. Students will demonstrate knowledge of community resources and services available for persons who are deaf or hard of hearing in diagnosing hearing loss, accommodating functional limitations, and obtaining and maintaining employment.
4. Student will demonstrate knowledge of adequate communication/counseling techniques with individuals who are deaf or hard of hearing.
5. Student will demonstrate knowledge of current issues concerning the deaf community, including special populations within the deaf community.

(IT) INSTRUCTIONAL TECHNOLOGY

REVISE TITLE AND DESCRIPTION

IT 679 Theoretical Trends and Issues in Learning, Design, and Technology (3) Examine theory, research, and trends in Learning, Design, and Technology including perspectives in instructional technology and educational technology in both formal and informal learning environments.

Formerly: Trends and Issues in Instructional Technology (3)

Literature: history and origins, integration and application, teacher preparation, future developments, of change and philosophical/theoretical perspectives.

Rationale: Revised title and description better reflects content of the course in an updated manner as there have been changes in the field and Instructional Technology doctoral programs are more commonly referred to as Learning, Design, and Technology programs. Supports Learner Outcomes #1. Impact on Other Units: None. This course is not used by students/programs outside the Unit. Financial impact: None. Current faculty will teach this course.

Additional Documentation: No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

REVISE TITLE, DESCRIPTION, AND DROP COMMENT(S)

IT 681 Design Problems in Learning Environments (3) Examine research and practice related to how designers approach design as problem solving.

Formerly: Designing Problem-Based Learning Environments (3) Development and integration of problem-based learning pedagogy into curriculum. Examination of literature to understand the theoretical perspective for design of this type of learning environment. Comment(s): Requires admission to the PhD program with a concentration in LEEDS or consent of instructor.

Rationale: Revised title and description better reflects content of the course in an updated manner because new ways to examine design and problems solving has been adopted in the field. Removed comment because the LEEDS concentration is phasing out, and this course will be used by the Learning, Design, and Technology concentration students. Supports Learner Outcomes #3. Impact on Other Units: None. This course is not used by students/programs outside the Unit. Financial impact: None. Current faculty will teach this course. Additional Documentation: No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

(RHCO) REHABILITATION COUNSELING

DROP ACADEMIC DISCIPLINE AND ALL COURSES

RHCO 521 Rehabilitation Services in the Deaf Community (3)

RHCO 522 Communication with Persons who are Deaf or Hard of Hearing (3)

RHCO 523 Special Populations and Topics in Deafness Rehabilitation (3-4)

RHCO 530 Orientation to Rehabilitation (3)

RHCO 532 Caseload Management in Rehabilitation (3)

RHCO 533 Job Analysis, Development, and Placement (3)

RHCO 537 Vocational Evaluation: Clinical Methods (3)

RHCO 538 Current Issues in Rehabilitation Counseling (3)

- RHCO 541 Psychosocial and Multicultural Aspects of Disability (3)**
RHCO 543 Physical Disabilities, Rehabilitation, and Employment (3)
RHCO 544 Cognitive Disabilities, Rehabilitation and Employment (3)
RHCO 545 The Rehabilitation Interview (3)
RHCO 547 Practicum in Rehabilitation (3)
RHCO 549 Internship in Rehabilitation Counseling (3-6)
RHCO 579 Special Topics (1-3)
RHCO 593 Independent Study (1-3)

Rationale: The Rehabilitation Counseling concentration of the Counseling Major (MS) is being dropped. The related certificate and courses also are being dropped. Impact on other programs: None. Students have not enrolled in these courses in several years. Financial impact: None.

Support from Assessment Activities: No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

DEPARTMENT OF KINESIOLOGY, RECREATION, AND SPORT STUDIES

Student Learner Outcomes

(KNS) KINESIOLOGY

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.

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 & SPORT MANAGEMENT

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.

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.

(RSM) RECREATION AND SPORT MANAGEMENT

REVISE TITLE, DESCRIPTION, AND REGISTRATION RESTRICTION(S)

RSM 511 Personnel Management (3) Examines the human resource/personnel functions within contemporary recreation and sport organizations. Key functions such as recruitment, selection, staff training and development, performance appraisal, retention, succession planning, compensation, benefits administration, and labor relations are examined. The implications of legal and global environments are appraised and current issues such as employee and management rights, diversity and inclusion training, and sexual harassment policies are discussed.

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

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

Registration Restriction(s): Recreation and Sport Management major.

Rationale: A review of the curriculum by the faculty indicated a need to focus the course on Personnel Management only. Thus, the name and course description have been changed to provide a more accurate description of the course content. There has been an issue with undergraduate students being able to enroll in RSM graduate classes. This is not only seniors but all academic classifications. This will enable Banner to enforce this registration restriction. Seniors will still have the privileges afforded to them in the Graduate Catalog in terms of taking graduate courses. RSM has a practice of requiring seniors to have permission to enroll in graduate classes

and this will still be the case. Molly Sullivan (Office of the Registrar) replied to an inquiry as to the best way to address this issue was to send a proposal through the normal curricular review process.

Impact on other units: The registration restriction limits registration to graduate students only which is the intent of the course. The course is not required by any other degree programs on campus. Students outside of RSM have rarely taken the course. Financial Impact: There is no financial impact only a change in registration restriction, course title, and course description. The course is taught as the regular teaching load of existing faculty. Additional Documentation: The change does not require any additional approvals based on the Curricular Changes Chart. The change is not substantive and does not need to be reported to SACSCOC.

REVISE TITLE AND REGISTRATION RESTRICTION(S)

RSM 595 Sport Management Internship (6)

Registration Restriction(s): Recreation and Sport Management Major – Sport Management concentration, Minimum student level – graduate.

Formerly: Internship (6)

Registration Restriction(s): Recreation and Sport Management Major.

Rationale: RSM 595 previously included students in both Sport Management and Therapeutic Recreation concentrations. A review of the curriculum by the faculty indicated a need to have two separate classes: one for Sport Management and one for Therapeutic Recreation students. This would eliminate confusion among students about the section in which they should be enrolled. This would allow flexibility in course requirements for the two concentrations. This was accomplished last year and RSM 596 was added to the catalog as Therapeutic Recreation Internship. Revising the name of RSM 595 to Sport Management Internship will be consistent with the title for RSM 596 and be an accurate reflection of the course.

There has been an issue with undergraduate students being able to enroll in RSM graduate classes. This is not only seniors but all academic classifications. This will enable Banner to enforce this registration restriction. Seniors will still have the privileges afforded to them in the Graduate Catalog in terms of taking graduate courses. RSM has a practice of requiring seniors to have permission to enroll in graduate classes and this will still be the case. Molly Sullivan (Office of the Registrar) replied to an inquiry as to the best way to address this issue was to send a proposal through the normal curricular review process.

Impact on other units: The registration restriction limits registration to graduate students only which is the intent of the course. The course is not required by any other degree programs on campus. Students outside of RSM have rarely taken the course.

Financial Impact: There is no financial impact only a change in registration restriction, course title, and course description. The course is taught as the regular teaching load of existing faculty.

Additional Documentation: The change does not require any additional approvals based on the Curricular Changes Chart. This change does not impact the data being gathered in regards to the SACSCOC SLOs No. 2 for the MS Degree in Recreation and Sport Management.

REVISE TO ADD REGISTRATION RESTRICTION(S)

RSM 508 Research Methods (3)

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

Formerly: None

Rationale: RSM 508 was previously cross-listed with KNS 508. A review of the curriculum and course content revealed the course was not compatible for students in both RSM and KNS. Course content needed to be different to serve both groups of students. The cross-listing was removed last year. Registration restrictions were inadvertently removed as well. This will put back the registration restriction for RSM students only that was in place prior the cross-listing. The restriction was on the class in 2009-10 Graduate Catalog (SPMG 532 – Research Techniques in Sport) before the cross-listed and renumbering of the class took place. Adding RSM major will simply be reinstating that restriction.

There has been an issue with undergraduate students being able to enroll in RSM graduate classes. This is not only seniors but all academic classifications. This will enable Banner to enforce this registration restriction. Seniors will still have the privileges afforded to them in the Graduate Catalog in terms of taking graduate courses. RSM has a practice of requiring seniors to have permission to enroll in graduate classes and this will still be the case.

Impact on other units: The registration restriction limits registration to graduate students only which is the intent of the course. The course is not required by any other degree programs on campus. Students outside of RSM have rarely taken the course. Financial Impact: There is no financial impact only a change in registration restriction, course title, and course description. The course is taught as the regular teaching load of existing faculty.

Additional Documentation: The change does not require any additional approvals based on the Curricular Changes Chart. The change is not substantive and does not need to be reported to SACSCOC.

RSM 593 Independent Study (1-3)

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

Formerly: none.

Rationale: All other RSM graduate classes have a major restriction either to the program or department. Adding the major restriction will ensure only RSM students are enrolled in the course.

There has been an issue with undergraduate students being able to enroll in RSM graduate classes. This is not only seniors but all academic classifications. This will enable Banner to enforce this registration restriction. Seniors will still have the privileges afforded to them in the Graduate Catalog in terms of taking graduate courses. RSM has a practice of requiring seniors to have permission to enroll in graduate classes and this will still be the case.

Impact on other units: The registration restriction limits registration to graduate students only which is the intent of the course. The course is not required by any other degree programs on campus. Students outside of RSM have rarely taken the course.

Financial Impact: There is no financial impact only a change in registration restriction, course title, and course description. The course is taught as the regular teaching load of existing faculty.

Additional Documentation: The change does not require any additional approvals based on the Curricular Changes Chart. The change is not substantive and does not need to be reported to SACSCOC.

RSM 521 Facilitation Techniques in Therapeutic Recreation (3)

Registration Restriction(s): Recreation and Sport Management Major – Therapeutic Recreation Concentration. Minimum student level – graduate.

Formerly: none.

RSM 522 Clinical Aspects in Therapeutic Recreation (3)

Registration Restriction(s): Recreation and Sport Management Major – Therapeutic Recreation Concentration. Minimum student level – graduate.

Formerly: none.

RSM 525 Advanced Therapeutic Recreation Programming (3)

Registration Restriction(s): Recreation and Sport Management Major – Therapeutic Recreation Concentration. Minimum student level – graduate.

Formerly: none.

Rationale: These courses are specifically for the Recreation and Sport Management - Therapeutic Recreation Concentration Graduate program. This will ensure only students in that concentration are able to register for the classes.

There has been an issue with undergraduate students being able to enroll in RSM graduate classes. This is not only seniors but all academic classifications. This will enable Banner to enforce this registration restriction. Seniors will still have the privileges afforded to them in the Graduate Catalog in terms of taking graduate courses. RSM has a practice of requiring seniors to have permission to enroll in graduate classes and this will still be the case.

Impact on other units: The registration restriction limits registration to graduate students only which is the intent of the course. The course is not required by any other degree programs on campus. Students outside of RSM have rarely taken the course.

Financial Impact: There is no financial impact only a change in registration restriction, course title, and course description. The course is taught as the regular teaching load of existing faculty.

Additional Documentation: The change does not require any additional approvals based on the Curricular Changes Chart. The change is not substantive and does not need to be reported to SACSCOC.

REVISE REGISTRATION RESTRICTION(S)

RSM 510 Financial Aspects of Sport (3)

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major.

RSM 512 Legal Aspects of Sport (3)

Registration Restriction(s): Recreation and Sport Management major or Kinesiology Major. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major or Kinesiology Major

RSM 530 Sport and Media Issues (3)

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major.

RSM 535 Ethics in Sport Management

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major.

RSM 540 Sport Marketing (3)

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major.

RSM 544 Leadership Theories (3)

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major.

RSM 550 Intercollegiate Athletics (3)

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major.

RSM 554 Environmental Sustainability in Sport (3)

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major.

RSM 555 Facility Planning and Development (3)

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major.

RSM 556 Sport and Religion (3)

Registration Restriction(s): Majors in the Department of Kinesiology, Recreation, and Sport Studies only. Minimum student level – graduate.

Formerly: Registration Restriction(s): Majors in the Department of Kinesiology, Recreation, and Sport Studies only.

RSM 580 Special Topics (1-3)

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major.

RSM 590 Sport Management Practicum (3)

Registration Restriction(s): Recreation and Sport Management major. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major.

RSM 594 Therapeutic Recreation Practicum (3)

Registration Restriction(s): Recreation and Sport Management major - Therapeutic Recreation concentration. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major - Therapeutic Recreation concentration.

RSM 596 Therapeutic Recreation Internship (6)

Registration Restriction(s): Recreation and Sport Management major -Therapeutic Recreation concentration. Minimum student level – graduate.

Formerly: Registration Restriction(s): Recreation and Sport Management major - Therapeutic Recreation concentration.

Rationale: There has been an issue with undergraduate students being able to enroll in RSM graduate classes. This is not only seniors but all academic classifications. This will enable Banner to enforce this registration restriction. Seniors will still have the privileges afforded to them in the Graduate Catalog in terms of taking graduate courses. RSM has a practice of requiring seniors to have permission to enroll in graduate classes and this will still be the case. Molly Sullivan (Office of the Registrar) replied to an inquiry as to the best way to address this issue was to send a proposal through the normal curricular review process.

Impact on other units: The registration restriction limits registration to graduate students only which is the intent of the course. The course is not required by any other degree programs on campus. Students outside of RSM have rarely taken the course.

Financial Impact: There is no financial impact only a change in registration restriction, course title, and course description. The course is taught as the regular teaching load of existing faculty.

Additional Documentation: The change does not require any additional approvals based on the Curricular Changes Chart. This change does not impact the data being gathered in regards to the SACSCOC SLOs No. 2 for the MS Degree in Recreation and Sport Management.

DEPARTMENT OF NUTRITION**Student Learner Outcomes****MS in Nutrition**

1. By the time of program completion, students enrolled in the master's degree program will demonstrate readiness for professional employment in the discipline.
2. Upon completing the program, students who have completed the dietetic internship option will have demonstrated the ability to understand, interpret, and apply the science of nutrition in individual, clinical, and community settings.
3. Upon completing the program, students in the public health nutrition concentration will have demonstrated the ability to apply public health nutrition skills in community settings.

PhD in Nutritional Sciences

1. Upon completing the program, the student will have the ability to interpret, critique, and synthesize research literature in nutrition.
2. Upon completing the program students will have demonstrated the ability to communicate and disseminate research findings.
3. Upon completing the program, the student will have demonstrated the ability to write a NIH-formatted specific aims and research strategy for a grant proposal and to submit a grant proposal for research funding.
4. Upon completing the program, the student will attain a nutrition-related position appropriate to doctoral-prepared program graduates.

(NUTR) NUTRITION

ADD

NUTR 524 Public Health Nutrition: Community Assessment, Intervention, and Evaluation (4) Examination of the socio-ecological model and nutrition-related protective and risk factors at each level of the model; community nutrition needs assessment, including defining nutrition-related services, gaps, and health disparities in target populations; development of population-focused goals and objectives to improve health; development of population-focused nutrition intervention and policy plans; development of evaluation plans for nutrition-related interventions, policies, and programs. Includes field experiences.

Rationale: This new course will replace the NUTR 505/506 course sequence (being dropped) in the MS (PHN) program, and will result in the reduction of redundancies discovered as part of regular curricular review and student feedback. This course will be required for MS Nutrition students in the PHN concentration, as well as students completing the MS/MPH Dual program (and the identical program offered by Public Health, referred to as the MPH/MS Dual in their materials). In addition, this will reduce the number of required credit hours by 2, bringing our MS program into better alignment with peer institutions. This change supports SLO#3 of the MS in Nutrition.

Impact on other units: Though only NUTR graduate students will take this course, this change will impact the MS/MPH Dual Program (also called the MPH/MS Dual Program in Public Health's materials). The NUTR faculty has worked closely with the PUBH faculty and both programs have put forth an identical Program Change proposal for their respective Dual programs.

Financial Impact: This course will replace one of the courses being dropped (NUTR 505/506) and will be taught by existing faculty as part of their normal course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either the department or college budget.

Additional documentation: This course addition and changes to the relevant Nutrition Programs (addressed in Program Changes) were approved by the Nutrition faculty. The impact of this course addition on the MS/MPH and MPH/MS Dual programs was approved by the MPH Academic Program Committee in their meeting on 9/22/17. In addition, PUBH and NUTR have submitted duplicate language for their MPH/MS Dual and MS/MPH Dual Programs, respectively (see relevant Program Changes in NUTR and PUBH). No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

NUTR 624 Public Health Nutrition Systems, Programs and Services (3) An in-depth examination of food and nutrition-related public health systems, programs, and services; an overview of public health and public health nutrition essential services in the US; an analysis of leadership and management roles of community and public health nutritionists in system- and community-level programs to support and improve population health; delineation of system-thinking theories and development of community-based nutrition-related systems models and diagrams.

(RE)Prerequisite(s): Graduate-level statistics course; Graduate-level community/public health assessment/intervention course(s).

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

Rationale: This new course is designed to replace the NUTR 505/506 course sequence (being dropped) in the PhD program (Community Nutrition concentration), and will result in the reduction of redundancies discovered as part of regular curricular review and student feedback. This course will be required for PhD students in the Community Nutrition concentration, increasing the differentiation between the MS and PhD programs and providing training specific to those pursuing a terminal degree in this discipline. This change supports SLO#4 of the PhD in Nutrition.

Impact on other units: Only students in the PhD program (Community Nutrition concentration) will be required to take this course and this course addition does not affect other programs. Therefore, no impact is expected on other units.

Financial Impact: This course will replace one of the courses being dropped (NUTR 505/506) and will be taught by existing faculty as part of their normal course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either the department or college budget. **Additional documentation:** This course addition and its impact on the Community Nutrition concentration of the PhD program (addressed in Program Changes) was approved by the Nutrition faculty. No additional approvals are required for this course addition. The change is not substantive and does not need to be reported to SACSCOC.

NUTR 626 Life Course Nutrition (3) Advanced nutrition principles related to needs across the life cycle will be explored in-depth (i.e., pregnancy, fetal development, lactation, infancy, early-, middle-, and late-childhood, adolescence, and young-, middle-, and late-adulthood). Factors associated with the ability to follow the Dietary Guidelines for Americans, at each relevant stage, will be discussed. An emphasis will be placed on the impact of these concepts on the maternal and child population.

(DE)Prerequisite(s): 511 or consent of instructor.

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

Rationale: Regular curricular review and faculty participation in development of disciplinary competencies support the need for offering a course that focuses across the life span and employs a life course approach. Therefore, this course has been proposed as a replacement for NUTR 616 (Maternal and Child Nutrition), which was more limited in scope and which we are proposing to drop (below). This new course (626) will be required for all Nutrition graduate students as well as students completing the MS/MPH Dual program (and the identical program offered by Public Health, referred to as the MPH/MS Dual in their materials). This proposed change supports SLO#1 for both the MS and the PhD programs in Nutrition.

Impact on other units: Though only NUTR graduate students will be required to take this course, this change will impact the MS/MPH Dual Program (also called the MPH/MS Dual Program in Public Health's materials). The NUTR faculty has worked closely with the PUBH faculty and both programs have put forth an identical Program Change proposal for their respective Dual programs. Moreover, with appropriate background or instructor consent, students in related disciplines, such as KRSS, CFS, and ANTHRO would be welcomed to take this course.

Financial Impact: This course will replace one of the courses being dropped (NUTR 616) and will be taught by existing faculty as part of their normal course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either the department or college budget.

Additional documentation: This course addition and its impact on the relevant Nutrition Programs (addressed in Program Changes) was approved by the Nutrition faculty. This course addition and its impact on the MS/MPH and MPH/MS Dual programs, was approved by the MPH Academic Program Committee in their meeting on 9/22/17. In addition, PUBH and NUTR have submitted duplicate language for their MPH/MS Dual and MS/MPH Dual Programs, respectively (see relevant Program Changes in NUTR and PUBH). No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

NUTR 645 Advanced Research Methods (3) Funding mechanisms, scientific grant writing, advanced research design/methodology in nutrition, and peer review.

(RE)Prerequisites: 543.

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

Rationale: Regular curricular review, as well as feedback from students, indicates the current NUTR 543-545 (Research Methods I & II) course sequence is not meeting the needs of either MS or PhD students. This proposed course addition will allow for greater differentiation between the needs of these two types of student. This course will replace NUTR 545, which we are proposing to drop (below). The NUTR 6XX (645) content will be similar to the content offered in NUTR 545, but will be at a doctoral-level, emphasizing scientific grant-writing, funding mechanisms and design/methodology. In addition, it will be a 3-credit course, as opposed to the 2-credit NUTR 545 course. This supports SLO's 1, 2, and 3 of the PhD in Nutritional Sciences.

Impact on other units: Only students in the Nutrition PhD Program will be required to take this course and this course addition does not affect other programs. Therefore, no impact is expected on other units. **Financial Impact:** This course will replace one of the courses being dropped (NUTR 545) and will be taught by existing faculty as part of their normal course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either the department or college budget.

Additional documentation: This course addition and its impact on the relevant Nutrition programs (addressed in Program Changes) was approved by the Nutrition faculty. No additional approvals are required for this course addition (and its impact on the Nutrition PhD program, addressed in Program Changes). The change is not substantive and does not need to be reported to SACSCOC.

DROP

NUTR 505 Nutrition Intervention in the Community (3)

NUTR 506 Public Health Nutrition Management (3)

Rationale: Regular curricular review and feedback from students indicates the need to reduce redundancies in existing courses as well as to increase the differentiation between our MS and PhD programs. Dropping the NUTR 505/506 course sequence, and replacing these with courses designed to reduce these identified redundancies and increase differentiation between the MS and PhD programs, will allow us to better meet the needs of our graduate students.

Impact on other units: Dropping these courses will affect students in our MS and PhD programs (addressed in Program Changes, below), as well as students in the MS/MPH Dual Program (called the MPH/MS Dual Program in Public Health's materials). The NUTR faculty has worked closely with the PUBH faculty and both programs have put forth an identical Program Change proposal for their respective Dual programs.

Financial Impact: This course sequence will be replaced with course work, proposed above (524 and 624), which will be taught by existing faculty as part of their normal course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either the department or college budget.

Additional documentation: These course drops and their impact on the relevant Nutrition programs (addressed in Program Changes) were approved by the Nutrition faculty. The impact of these course drops on the MS/MPH and MPH/MS Dual programs were approved by the MPH Academic Program Committee in their meeting on 9/22/17. In addition, PUBH and NUTR have submitted duplicate language for their MPH/MS Dual and MS/MPH Dual Programs, respectively (see relevant Program Changes in NUTR and PUBH). No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

NUTR 545 Research Methods II (2)

Rationale: Regular curricular review and feedback from students indicates the need to reduce identified redundancies and to further differentiate our MS and PhD programs from one another. Along with dropping NUTR 545 from the NUTR 543/545 course sequence,

we are proposing to increase NUTR 543 by one credit hour (below) and to add a 3-credit 600 level Advanced Research Methods course (NUTR 645, above).

Impact on other units: Dropping this course will affect students in our MS and PhD programs (addressed in Program Changes, below), as well as students in the MS/MPH Dual Program (called the MPH/MS Dual Program in Public Health's materials). The NUTR faculty has worked closely with the PUBH faculty and both programs have put forth an identical Program Change proposal for their respective Dual programs.

Financial Impact: This course will be replaced with course work changes proposed elsewhere (adding 1 credit hour to NUTR 543 and adding NUTR 645), which will be taught by existing faculty as part of their normal course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either the department or college budget.

Additional documentation: This course drop and its impact on the relevant Nutrition programs (addressed in Program Changes) were approved by the Nutrition faculty. The impact of this drop on the MS/MPH and MPH/MS Dual programs were approved by the MPH Academic Program Committee in their meeting on 9/22/17. In addition, PUBH and NUTR have submitted duplicate language for their MPH/MS Dual and MS/MPH Dual Programs, respectively (see relevant Program Changes in NUTR and PUBH). No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

NUTR 616 Maternal and Child Nutrition (3)

Rationale: Regular curricular review and faculty participation in development of disciplinary competencies supports the need for offering a course that increases the focus across the life span and employs a life course approach. Therefore, this course has been revised to such an extent that the NUTR faculty believe it will now be a substantively different course. Therefore, we are proposing to drop NUTR 616, and replace it with NUTR 6XX (626) Life Course Nutrition (addressed in the "ADD", above).

Impact on other units: Dropping this course will affect students in our MS and PhD programs (addressed in Program Changes, below), as well as students in the MS/MPH Dual Program (called the MPH/MS Dual Program in Public Health's materials). The NUTR faculty has worked closely with the PUBH faculty and both programs have put forth an identical Program Change proposal for their respective Dual programs.

Financial Impact: This course will be replaced by the proposed new NUTR 626 course, which will be taught by existing faculty as part of their normal course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either the department or college budget.

Additional documentation: This course drop and its impact on the relevant Nutrition programs (addressed in Program Changes) were approved by the Nutrition faculty. The impact of this course drop on the MS/MPH and MPH/MS Dual programs was approved by the MPH Academic Program Committee in their meeting on 9/22/17. In addition, PUBH and NUTR have submitted duplicate language for their MPH/MS Dual and MS/MPH Dual Programs, respectively (see relevant Program Changes in NUTR and PUBH). No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

REVISE TITLE AND HOURS

NUTR 543 Research Methods (3)

Formerly: Research Methods I (2)

Rationale: Regular curricular review and feedback from students indicates the need to reduce identified redundancies and to further differentiate our MS and PhD programs from one another. Along with dropping NUTR 545 from the NUTR 543/545 course sequence (addressed above), we are proposing to increase NUTR 543 by one credit hour and to add a 3-credit 600 level Advanced Research Methods course (NUTR 645), addressed above). Increasing the credit hours of NUTR 543, from 2 to 3, reflects the current course content and expectations and allows for incorporation of some of the content from NUTR 545 (being dropped) into the course. This course will continue to be required of both MS and PhD students as well as students completing the MS/MPH Dual program (and the identical program offered by Public Health, referred to as the MPH/MS Dual in their materials). However, PhD students will also be required to take the newly proposed NUTR 645 course. The change to NUTR 543 supports SLO #2 of the MS in Nutrition and SLOs 1-3 of the PhD Program.

Impact on other units: Revising the credit amount of this course will affect students in our MS and PhD programs (addressed in Program Changes, below), as well as students in the MS/MPH Dual Program (called the MPH/MS Dual Program in Public Health's materials). The NUTR faculty has worked closely with the PUBH faculty and both programs have put forth an identical Program Change proposal for their respective Dual programs.

Financial Impact: This credit increase will be offset by course work changes proposed elsewhere (dropping NUTR 545) and will be taught by existing faculty as part of their normal course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either the department or college budget.

Additional documentation: This 1 credit hour increase and its impact on the relevant Nutrition programs (addressed in Program Changes) were approved by the Nutrition faculty. The impact of this credit change on the MS/MPH and MPH/MS Dual programs were approved by the MPH Academic Program Committee in their meeting on 9/22/17. In addition, PUBH and NUTR have submitted duplicate language for their MPH/MS Dual and MS/MPH Dual Programs, respectively (see relevant Program Changes in NUTR and PUBH). No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

REVISE HOURS

NUTR 515 Field Study in Community Nutrition (3-12)

Formerly: NUTR 515 Field Study in Community Nutrition (1-12)

Rationale: Students in both the MS (PHN concentration) program and the MS/MPH Dual Program (called the MPH/MS Dual Program in Public Health's materials) are required to complete a minimum of 3 credit hours of NUTR 515. Though neither program explicitly states in the catalog that students must take a minimum of 3 credit hours of NUTR 515, this is how students are advised in our departments and it is essential for the students to register for these 3 credit hours in order to reach the required credit hours for degree completion. Recently, students have been registering for only one credit hour of NUTR 515, despite this advising (and detailed explanation in our Graduate Handbook). Because this is not detailed in the requirements of either program, there is no need to revise any program language. This only needs to be revised in the course description section of the catalog. Increasing the minimum number of credit hours' students can register for (from "1" to "3") should eliminate this potential registration error.

Impact on other units: Students in our MS (PHN concentration) as well as those pursuing the MS/MPH Dual Program (called the MPH/MS Dual Program in Public Health's materials) are required to take this course. However, this revision to the minimum credit hours is not a change and there is no program language that needs to change. This is a housekeeping issue.

Financial Impact: There is no expected financial impact on the faculty, departments, or college. Completion of 3 hours of NUTR 515 is already a degree requirement.

Additional documentation: No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

REVISE RECOMMENDED BACKGROUND

NUTR 512 Advances in Vitamin and Mineral Metabolism (3)

Recommended Background: Advanced nutrition course or instructor consent.

Formerly: Recommended Background: Advanced nutrition course.

Rationale: Regular curricular review identified an inconsistency between the current course syllabus and the recommended background listed in the catalog. The proposed revised language reflects the preferred recommended background of the course instructors. Impact on other units: None. This course is only required of Nutrition graduate students. This change does not reduce the ability of students in other programs to take it as an elective.

Financial Impact: This is not a substantive change and does not change anything about the faculty course load. No financial impact is expected on the faculty, department, or college. Additional documentation: No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

DEPARTMENT OF PUBLIC HEALTH

Student Learner Outcomes

Learning objectives for the DrPH Program

Students completing the DrPH program should be able to:

1. Students will demonstrate clarity of scientific writing skills
2. Students will demonstrate clarity of verbal expression and the ability to respond to scientific questions in a clear and accurate manner
3. Students will demonstrate mastery of complex scientific and technical issues relevant to the student's area of research
4. Students will demonstrate mastery of complex scientific and technical skills relevant to the student's broader foundation in health behavior and health education.

Learning objectives for the MPH Program

1. Students will demonstrate readiness for professional practice in health-related settings.
2. Students will demonstrate critical thinking and 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.

(PUBH) PUBLIC HEALTH

ADD

PUBH 526 Health Care and Public Health Systems (3) An examination of the U.S. healthcare system – including public (Medicaid, Medicare) and private components of healthcare delivery – and public health systems in the United States, at the federal, tribal, state, territorial, and local levels; historical and legal foundations of public health; U.S. healthcare and public health within a global context.

Rationale: Over the past several years, student feedback indicated that the HPM concentration courses as currently provided were insufficient for providing a robust focus on, and learning opportunities about, policy. Other concerns were also expressed specific to each of the required HPM courses. Discussions between HPM and other departmental faculty identified similar concerns, and the HPM faculty conducted a thorough review of the Health Policy and Management concentration. The faculty recommended adding a new course, which focuses on the U.S. healthcare system as well as some global context of healthcare. As such, student and alumni surveys, as well as review and approval by the MPH Academic Program Committee and the DPH faculty provide comprehensive support for the course. We also interviewed two practicing professionals likely to hire MPH prepared individuals for their organization each

academic year. We asked them to review and make recommendations for the curriculum. Their input supports strengthening knowledge and skills around the healthcare system, policy, and systems-level thinking. The addition of this class will positively impact learner outcomes 1 and 2 in that it strengthens the preparation for the students to demonstrate readiness (1) and critical thinking (2).

Impact on Other Units: The JD-MPH dual degree program will realize an increase of 3 hours with the addition of PUBH 5XX (526). Note it is not technically adding this course that has the impact, it's changing the concentration that has the impact. This proposal is associated with an additional proposal to change the HPM concentration, which will have a direct impact on the JD-MPH program, which uses the HPM concentration as part of its requirements. No other unit is responsible for the development or delivery of this course.

Financial impact: None, course will be taught by current faculty. This was assessed and the HPM faculty determined that the capacity existed to offer the course with existing resources. The full faculty approved the overall revision to the concentration with awareness that no new resources were necessary.

Additional Documentation: This is a low-impact course add and does not require additional approvals. A new course number is needed. In addition, The College of Law will be submitting curricular changes to reflect these revisions simultaneously.

REVISE TITLE, HOURS, DESCRIPTION, REPEATABILITY, REGISTRATION RESTRICTION(S), AND ADD COMMENTS

PUBH 687 Advanced Field Practice (3) Internship in a public health practice setting, approved by the academic advisor and DrPH Program Director. See DrPH Graduate Handbook for further information and documentation.

Repeatability: May be repeated once. Maximum 6 hours.

Comment(s): 12 credit hours in the DrPH program required before registration in 687.

Registration Restriction(s): DrPH students only.

Formerly: Practice Engagement/Field Placement (1-6) Internship in a public health practice setting, approved by the DrPH Program Director. Required for two semesters of the DrPH program.

Repeatability: May be repeated once. Maximum 9 hours.

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

Rationale: The DrPH committee reviewed field practice descriptions and requirements of 5 other CEPH accredited DrPH programs. The name was changed to better reflect the doctoral level ("advanced") and highlight the applied "practice" required of the course work. The minimum of 3 credit hours was in keeping with most of DrPH programs that were available for review. Faculty reviewed and voted to accept this proposal. **Impact on Other Units:** Three of the 5 reviewed DrPH programs reflected 3 or fewer credit hours. In reducing the required units from 6 to 3, the doctoral students now have the ability to include an elective in their DrPH training. No elective was available with the prior requirement of 6 units. **Financial impact:** None: course will be facilitated by the faculty advisors, working in collaboration with Advanced Field Practice preceptors. **Additional Documentation:** This change does not require any additional approvals and does not need to be reported to SACSCOC.

REVISE GRADING OPTION (FROM A-F GRADING TO SATISFACTORY/NO CREDIT GRADING)

PUBH 610 Scientific Writing for the Health Sciences (1)

Grading Restriction: Satisfactory/No Credit grading only.

PUBH 611 Leadership in Public Health (1)

Grading Restriction: Satisfactory/No Credit grading only.

PUBH 613 Public Health Ethics and Law (1)

Grading Restriction: Satisfactory/No Credit grading only.

Rationale: These are one-credit hour seminar courses. There is a very limited number of assignments in the courses, with the emphasis placed on reading and participating in discussion. Given this format, satisfactory/NC is appropriate in assessing student performance. **Impact on Other Units:** The content will remain the same; hence, the change in grading structure will not impact other units. **Financial impact:** There is no financial impact, as the faculty investment remains the same with the change in grading structure. **Additional Documentation:** This change does not require any additional approvals and does not need to be reported to SACSCOC.

DROP (RE) PREREQUISITE(S)

PUBH 656 Comparative Theories/Health Behavior (3)

Formerly: (RE)Prerequisite(s): 555.

Rationale: Following a careful review of the curriculum by the DrPH committee in 2016, it was determined that PUBH 555 would no longer be a core requirement for the DrPH program. Hence, PUBH 555 was not a practical prerequisite for PUBH 656. With that, the instructor of PUBH 656 revised the course content so that PUBH 656 is no longer dependent on PUBH 555 as a foundational course. This proposal and justification were reviewed and approved by the faculty. **Impact on Other Units:** There is no impact on other units given that PUBH 555 is not included in the DrPH program. **Financial impact:** There is no financial impact as PUBH 555 will remain in the MPH program and is no longer included in the DrPH program. **Additional Documentation:** This change does not require any additional approvals and does not need to be reported to SACSCOC.

DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

Student Learner Outcomes

MS Track I Learner Outcomes

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

MS Track II Learner Outcomes

1. The candidate understands the central concepts, tools of inquiry, structures of the discipline 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)

Rehabilitation Counseling for the Deaf Learner Outcomes

1. Students will understand advanced topics related to the deaf community to enhance practice as rehabilitation counselors for persons who are deaf or hard of hearing.
2. Students will understand advanced topics related to public and private services available through community agencies for persons who are deaf or hard of hearing, with an emphasis upon vocational rehabilitation services.
3. Students will gain a deep understanding of special populations within the deaf community, including but not limited to persons who are deaf and blind, late-deafened individuals, and veterans who have become deaf or hard-of-hearing through service-connected circumstances.
4. Students will learn appropriate counseling skills using American Sign Language (ASL).
5. Students will be immersed in American Sign Language (ASL) by virtue of courses being taught using ASL as the means of delivering lecture materials.

Urban Learner Outcomes

1. Understand and acquire leadership abilities and change strategies to improve teaching and learning in urban school contexts.
NBPTS Standard 1: Teachers are committed to students and their learning.
NBPTS Standard 5: Teachers are members of learning communities.
2. Demonstrate an array of teaching/learning strategies or instructional models aligned with the needs of students and families in urban school communities.
NBPTS Standard 4: Teachers think systematically about their practice and learn from experience.
3. Demonstrate the ability to assess student learning and achievement in urban school contexts
NBPTS Standard 3: Teachers are responsible for managing and monitoring student learning.

(ASL) AMERICAN SIGN LANGUAGE

ADD NEW 400-LEVEL COURSE FOR GRADUATE CREDIT

ASL 422 Deaf Literature and ASL Folklore (3) Provides an opportunity for ASL students to explore various genres of literature by and about d/Deaf people. Concentrates on d/Deaf characters and the influences of Deaf culture and Deaf history on literacy works from early 1900s to the present. There will be extensive use of videotaped materials. Course content will include viewing and discussing works performed by Deaf poets, writers, dramatists, and storytellers. Taught in ASL.

(RE) Prerequisite(s): 212.

Rationale: We are adding ASL 422 as a requirement of the new ASL Education Post-Bac concentration and an option for ASL minors. A state bill, HB0462/SB0524, was passed and signed into law effective 7/1/17, which allows high school students to take ASL as a foreign language. A concentration in ASL Education allows us to begin filling the demand in the state of TN for licensed ASL teachers, PreK-12. A class on Deaf Literature is required for graduates to obtain professional certification and/or state licensure in the teaching of American Sign Language. Related to SACS, candidates will learn central concepts and structures of the discipline(s)—learning outcome 1 for MS Track II. Impact on other units: There is no impact on other units. However, the course will be part of a program concurrently being proposed in the Undergraduate CRC, the American Sign Language (ASL) Education Professional Internship concentration.

Financial impact: This course will be offered every other summer by current ASL faculty. No additional resources are required.

Additional documentation: No additional approvals are required. However, this course will also be proposed concurrently to the next UG CRC as a new course offering as part of the ASL Minor. The change is not substantive and does not need to be reported to SACSCOC. We are requesting the number 422 for this ASL course so that it follows in sequence ASL 421 (we are updating the title and description of ASL 421 in this same narrative). This course will be offered for both UG and Grad credit and is being submitted to both CRC committees concurrently.

ADD NEW 400-LEVEL COURSE FOR GRADUATE CREDIT AND ADD AS A SECONDARY CROSS-LISTED COURSE

ASL 455 Teaching of World Languages (3) ACTFL standards-based instructional methods, resources, integrated technologies, second language theories, research and evaluation for world languages. Required for licensure in World Languages.

Cross-listed: (See World Language and English as a Second Language 455).

Recommended Background: Completion or near completion of world language hours for certification.

Registration Restriction(s): Admission to teacher education or consent of instructor.

Rationale: We are adding ASL 455 and cross listing it with WLEL 455 (WLEL 455 is the primary cross-listing). A state bill, HB0462/SB0524, was passed and signed into law effective 7/1/17, which allows high school students to take ASL as a world language. A concentration in ASL Education allows us to begin filling the demand in the state of TN for licensed ASL teachers, PreK-12. ASL 455 is a required course of the new concentration. There is considerable overlap with the content and pedagogy of World Languages. Upon review of WLEL 455 course content and through discussion with instructor, Dr. Davis-Wiley, we determined that the learning experiences in WLEL 455 would be applicable to ASL teachers, and that Dr. Davis-Wiley has designed the course in a beneficial way so that students gain in knowledge and practice in the context of teaching their select languages. Although WLEL and ASL students would be combined for the purpose of this class, we feel the ASL prefix is needed for program visibility. There will be no changes in SACS.

Impact on other units: No impact on other units outside of the department. We have the written support of the WLEL faculty within TPTE for this change. Financial impact: None. No additional resources are needed due to this change. The course is currently being taught by existing WLEL faculty.

Additional documentation: No additional approval required. This is not a substantive change and does not need to be reported to SACSCOC. However, we do have written support from WLEL faculty. We are requesting the course number 455 for this ASL class so that it aligns with the WLEL 455 course (primary) that it is being cross listed with. This course is being offered for UG and Grad credit and is being submitted to both CRC committees concurrently. No major revisions to the syllabus are needed to cross list ASL 455.

ADD

ASL 545 Teaching of American Sign Language: Grades PreK-5 (3) ACTFL standards-based pedagogy, research, assessment, curricula, and instructional materials for the PreK-5 ASL classroom.

Registration Restriction(s): Admission to teacher education or consent of instructor.

Rationale: We are adding ASL 545. A state bill, HB0462/SB0524, was passed and signed into law effective 7/1/17, which allows high school students to take ASL as a foreign language. A new concentration in ASL Education allows us to begin filling the demand in the state of TN for licensed ASL teachers, PreK-12. ASL 545 will be a required course of that concentration. There are several opportunities to address SACS standards through this course. For example, students will engage in assignments and research to learn central concepts of the discipline, and will practice instructional strategies that encourage student participation and performance. ASL 545 will be offered every other summer by current ASL faculty members; thus, there is no impact on other units or need for additional financial resources.

Impact on other units: No impact on other units. This course is only a part of ASL programs and will not impact other courses, programs or majors. Financial impact: None. This course will be offered every other summer and will be taught by current ASL faculty. No additional resources are needed.

Additional documentation: This change does not require additional approval. It is not a substantive change and does not need to be reported to SACSCOC.

REVISE TITLE, DESCRIPTION, AND ADD (RE) PREREQUISITE(S)

ASL 421 History and Culture of the Deaf (3) Comprehensive overview of historical and socio-cultural aspects of the Deaf. Students will explore beliefs, theories, and evidence about the historical experience of Deaf people; the influence of geographic, cultural, educational, and economic forces on Deaf people; concepts and implications of disability theory; social and medical models as ways of defining the Deaf population; demographics including the various subcultures and under-represented groups that comprise the larger Deaf community; impact of deaf education on the history and organizational structure of the Deaf community.

(RE) Prerequisite(s): 211.

Comment(s): Course offered in summer term only.

Formerly: Deaf Culture and Community (3) Comprehensive overview of the Deaf and hard-of-hearing populations of North America. Consideration also given to similarities and differences with international Deaf communities. Students will explore beliefs, theories, and evidence about the experience of Deaf people. Examination of the concepts and implications of disability theory, social and medical models as ways of defining the Deaf population; demographics of the Deaf community; distinctions among the pre and post-lingually deaf, oral and sign language users, and under-represented groups that comprise the larger Deaf community; impact of deaf education on the history and organizational structure of the Deaf community.

Rationale: We are revising the course title and description and adding a prerequisite to ensure intermediate sign competency. The curricular revision is needed because some graduates from our program will need to show proof of having taken Deaf culture and history coursework in order to obtain professional certification and/or state licensure in related professions. e.g. Teaching Deaf Education or American Sign Language, Sign Language Interpreting, Rehabilitation Counseling for the Deaf. Based on professional standards for related professions it was determined that a curricular change was needed. Related to SACS, candidates will learn central concepts and structures of the discipline(s)—learning outcome 1 for MS Track II.

Impact on other units: One program that is concurrently being proposed in Undergraduate CRC is the American Sign Language Teaching Licensure program. It will require this course. Based on a review of the undergrad and grad catalogs, we have determined this change will not affect any other programs. It is not required, is not a pre-requisite or co-requisite for any other course and is not cross-listed with any other units/courses. It is not a general education, tracking, or high-demand course.

Financial Impact: No financial impact on the department or college budget. The course is currently being offered during the summer only but will move to fall/spring as resources become available to avoid any impact on availability of faculty to teach other courses. It does not require any additional resources. This course is offered for both UG and Grad credit and this change is being submitted to both CRC committees concurrently.

Additional documentation: No additional approval is required. The change is not substantive and does not need to be reported to SACSCOC.

(ELED) ELEMENTARY EDUCATION

DROP

ELED 445 Early Childhood Education: Program Development and Teaching in Kindergarten (3)

Rationale: This course is being dropped from our department (TPTE) and added in the department of Child and Family Studies (CFS). This course is now taken almost exclusively by students in CFS, not TPTE. A review of enrollment data indicates that mostly CFS students take this course. Changes in TPTE's Elementary Education program have led to students taking more content-related courses (e.g., Reading Education, Mathematics Education) and decreased enrollment of TPTE students in 445, which has always been only an elective. Further, increasingly, with recent faculty retirements and hiring, expertise in early childhood education is centered in CFS and not TPTE. No learner outcomes are affected by this change. Impact on other units: It is not required for TPTE students. A small number (2-4) of TPTE students per year add an endorsement in Early Childhood Special Education. ELED 445 is required for this optional endorsement. This is an agreed upon change within the two departments as this course is required for CFS students. It is no longer part of a required program offered in TPTE. The course is required for some programs in CFS. This course was offered for UG and Grad credit and this change is being submitted to the UG CRC as well.

Financial Impact: none. Dropping it from TPTE won't have a significant impact on the departmental budget. It is offered once per academic year (and once in summer). TPTE will shift staffing resources to meet the growing demand for content-related courses as mentioned above. Course is already offered routinely and is currently being taught by CFS faculty.

Additional Documentation: No additional approvals are required for this change. However, CFS is to submit the changes to add this course to their department and programs. The change is not substantive and does not need to be reported to SACSCOC.

(MEDU) MATHEMATICS EDUCATION

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

MEDU 405 Functions and Modeling for Secondary Math Instruction (3) Project-based activities to strengthen and expand knowledge of topics in mathematics for secondary math instruction, focusing especially on topics from pre-calculus and the transition to calculus.

(RE) Prerequisite(s): Mathematics 142 or 148 and Theory and Practice in Teacher Education 120.

Rationale: This revision is to add a new course. Currently, Math 205 is part of the VolsTeach minor that was moved to this department (TPTE) from Arts & Sciences effective fall 2017. This change is to house this course within TPTE as a math education course. College of Arts & Sciences are in agreement with this change and will no longer be offering this course. TPTE faculty have been teaching this course for the past few years and will continue to do so. This situation facilitates the need for this change. This change is not connected to a formal SACs assessment. No learner outcomes are associated with this course as it is part of a minor.

Impact on other units. This change will impact the Math Department in Arts & Sciences in that they will no longer offer this course and as noted previously, they are in agreement with this change. The change does not impact any other program except VolsTeach.

Financial impact: None. TPTE faculty already teach this course and will continue to do so.

Additional documentation: No additional approvals are required. The change is not substantive and does not need to be reported to SACSCOC. This course will also be offered for undergraduate credit and will be submitted concurrently to both CRC committees.

(RCDE) REHABILITATION COUNSELING FOR THE DEAF

ADD NEW ACADEMIC DISCIPLINE AND COURSES

RCDE 521 Rehabilitation Services in the Deaf Community (3) Provides an overview of the specialized field of deafness within the rehabilitation counseling profession.

Recommended Background: at least intermediate level of skill with the Sign Language Proficiency Inventory or equivalent.

RCDE 522 Communication with Persons who are Deaf or Hard of Hearing (3) Provides an overview of communication strategies for working in rehabilitation counseling settings with clients who are deaf or hard of hearing.

Recommended Background: at least intermediate level of skill with the Sign Language Proficiency Inventory or equivalent.

RCDE 523 Special Populations and Topics in Rehabilitation of the Deaf (3-4) Provides an overview of the diverse populations within the field of deafness rehabilitation.

Repeatability: Not repeatable. May be taken once for 3 or 4 hours.

Recommended Background: at least intermediate level of skill with the Sign Language Proficiency Inventory or equivalent.

Rationale: This revision is to add the Rehabilitation Counseling for the Deaf (RCDE) Certificate program with a title change and to add three courses for the certificate. This graduate certificate was originally created in 2016 and housed under the Department of Educational Psychology and Counseling (EPC) under their Rehabilitation Counseling program. In 2017 the College administration decided to discontinue the Rehabilitation Counseling Program (RHCO). Therefore, EPC is dropping the certificate because the program has closed. EPC and TPTE are both of the opinion that TPTE would be a better fit for this program and are in agreement with TPTE going forward with the submission to add the certificate and the necessary courses.

The Chair of EPC, Dr. Jeff Cochran has offered TPTE and the Center on Deafness the option of taking over the Deafness Rehabilitation Graduate Certificate and three of the four courses that make it up (RHCO 521, RHCO 522, RHCO 523). One course, ASL 421 Deaf Culture and Community, is currently part of the TPTE graduate and undergraduate catalog. Impact on other units: The three courses (RCDE 521, 522 and 523) are needed for the Rehabilitation Counseling for the Deaf Graduate Certificate program. As this graduate certificate program will be housed entirely within TPTE (if approved) there will not be an impact on other units. NOTE: Dr. Sherry Bell is aware of this proposal and has had discussions with Dr. Jeff Cochran of EPC and they are in agreement with this change.

Financial impact: There is no impact on staffing for AY semesters as these courses will be offered during the summer sessions only. Courses will be taught by existing faculty or qualified adjuncts. The Rehabilitation Counseling for the Deaf certificate will be completed via distance education and the certificate would be self-sustaining via student fees. We could also have funding coming back to the department via the distance education incentive which would be adequate to cover the summer salary expenses of department faculty or the salary of adjuncts as needed.

Additional documentation: The change requires no additional approval. The change is not substantive and will not need to be reported to SACSCOC. This graduate certificate program is moving from the EPC department to the TPTE department. This change has been discussed and agreed upon by Dr. Bell from TPTE and Dr. Cochran from EPC.

Equivalency Table	
Current Courses Deafness Rehabilitation RHCO	Equivalent Courses - Effective Fall 2018 Rehabilitation Counseling for the Deaf (RCDE)
521	521
522	522
523	523

(WLEL) WORLD LANGUAGE AND ENGLISH AS A SECOND LANGUAGE

ADD

WLEL 570 Sociolinguistics for ESL Teachers (3) Educational sociolinguistic approaches, research, and theories for teaching English to second language learners. Examines how sociolinguistic variables such as cultural background, ethnicity, urbanization, disability, and socioeconomic status impacts second language learning and teaching English to speakers and signers of other languages. Required for PreK-12 ESL Licensure.

Recommended Background: Completion or near completion of hours for ESL certification.

Rationale: The State of Tennessee requires an Educational Sociolinguistics course for PreK-12 ESL Licensure. The course has been offered for a number of years as a TPTE 595 special topics course; this revision is adding this course under the WLEL program. This change is not connected to a formal SACS assessment.

Impact on other units: This change will not impact any other units. This course is required as part of the WLEL program. It is not required by programs outside of that, nor is it a high-impact or general education course. It is not listed as a co-requisite or pre-requisite for any other course nor is it cross-listed.

Financial Impact: There will be no financial impact. The course has been taught for a number of years by TPTE faculty who will continue to do so. No additional resources are required.

Additional documentation: No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

REVISE 400-LEVEL COURSE – TO MAKE AS A PRIMARY CROSS-LISTED COURSE

WLEL 455 Teaching of World Languages (3)

Cross-listed: (Same as American Sign Language 455).

Formerly: Not cross-listed.

Rationale: We are adding ASL 455 and cross listing it with WLEL 455. A state bill, HB0462/SB0524, was passed and signed into law effective 7/1/17, which allows high school students to take ASL as a world language. A concentration in ASL Education allows us to begin filling the demand in the state of TN for licensed ASL teachers, PreK-12. ASL 455 is a required course of the new concentration.

There is considerable overlap with the content and pedagogy of World Languages. Upon review of WLEL 455 course content and through discussion with instructor, Dr. Davis-Wiley, we determined that the learning experiences in WLEL 455 would be applicable to ASL teachers, and that Dr. Davis-Wiley has designed the course in a beneficial way so that students gain in knowledge and practice in the context of teaching their select languages. Although WLEL and ASL students would be combined for the purpose of this class, we feel the ASL prefix is needed for program visibility. There will be no changes in SACS.

Impact on other units: There will be no impact on other units outside of the department. We have the written support of the WLEL faculty within TPTE for this change. Financial impact: None. No additional resources are needed due to this change. The course is currently being taught by existing WLEL faculty.

Additional documentation: There is no additional approval required. This is not a substantive change and does not need to be reported to SACSCOC. However, we do have written support from WLEL faculty. We are requesting the course number 455 for this ASL class so that it aligns with the WLEL 455 course (primary) that it is being cross listed with. This course is being offered for UG and Grad credit and is being submitted to both CRC committees concurrently. No major revisions to the syllabus are needed to cross list ASL 455.

II. PROGRAM CHANGES

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING

Student Learner Outcomes

Applied Educational Psychology (new concentration)

Learning Objectives for the PhD in Education with a concentration in Applied Educational Psychology:

1. Students will write a scholarly review of the literature related to their primary research and practice areas.
2. Students will demonstrate mastery of the content in their area of academic concentration and how to apply the content in professional settings.
3. Students will actively contribute to scholarship in their profession.

Learning, Design, and Technology

Learning Objectives for the PhD in Education with a concentration in Learning, Design, and Technology:

1. Students will engage in reflective inquiry of learning environments that address the need of diverse learners based on theoretical foundations in learning, design, and technology and rigorous educational research;
2. Students will participate in interdisciplinary research teams and examine issues related to learning environments in various contexts.
3. Students will develop a keen sense of understanding about their social and ethical responsibilities as designers, researchers, and practitioners of learning environments based on theoretical and practical knowledge in the field.

Rehabilitation Counseling.

Learning objectives for the Counseling MS programs:

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

Learning Objectives for the Rehabilitation Counseling Deafness Rehabilitation Certificate

1. Students will demonstrate fluency in American Sign Language (ASL).
2. Students will demonstrate knowledge of deaf culture and the deaf community.
3. Students will demonstrate knowledge of community resources and services available for persons who are deaf or hard of hearing in diagnosing hearing loss, accommodating functional limitations, and obtaining and maintaining employment.
4. Student will demonstrate knowledge of adequate communication/counseling techniques with individuals who are deaf or hard of hearing.
5. Student will demonstrate knowledge of current issues concerning the deaf community, including special populations within the deaf community.

❖ **ADD CONCENTRATION – EDUCATIONAL PSYCHOLOGY AND RESEARCH MAJOR, PHD**

Applied Educational Psychology concentration

In the 2018-2019 Graduate Catalog, add heading, text, and requirements for the new Applied Educational Psychology concentration under the Educational Psychology and Research Major, PhD, as follows:

The Applied Educational Psychology (AEP) concentration represents all major areas of traditional Educational Psychology, including learning, development, measurement, instructional strategies, and academic assessment. Completion of the Ph.D. concentration requires a total of 72 graduate credit hours beyond a Master's degree (24 of which are dissertation hours).

Students select a Cognate from a rich array of options which are listed below. In addition, the Concentration curriculum includes four of the six courses required to satisfy curriculum requirements for the Board Certified Behavior Analysis (BCBA) credentials. The other two courses required for meeting the BCBA coursework requirements may be completed through the Special Education Cognate (SPED 430 and SPED 555). The major learning outcomes in the concentration are (a) extensive knowledge of the traditional areas in Educational Psychology, (b) the skills necessary to contribute to relevant scholarship in the field, and (c) contributions to the professional literature through oral and written products.

Admission to the Concentration will be based on successful completion of a Master's degree in Educational Psychology or a related field such as teacher education, GRE scores, grade point average at all collegiate levels, statement of career goals, and professional references. Other prior graduate work will be examined on a case-by-case basis to determine if it can be used to satisfy some course requirements for the Ph.D. concentration. Entering students must have completed graduate coursework in life-span human development, learning theory, and introductory research.

Professional Development Core (6 credit hours minimum)

EDPY 601 Professional Seminar (1)

EDPY 655 Research in Psychoeducational Studies (5)

EDPY 668 Practicum in Instructional Planning (3)

Advanced Core (21 credit hours)

EDPY 517 Direct Assessment and Interventions for Academic Skills Deficits*

EDPY 515 Educational Application of Behavioral Theories of Learning*

EDPY 636 Ethical, Legal, and Professional Issues in Psychology*

EDPY 516 Educational Applications of Cognitive Learning Theories

LEES 671 Advanced Seminar in Theories of Learning

LEES 604 Advanced Seminar in Motivation Theory

CSE 607 Advanced Seminar in Educational Studies

Research (15 credit hours)

Must complete the following two research courses

EDPY 682 Educational Research Methods

EDPY 559 Introduction to Qualitative Research in Education

Select three of the following research courses

EDPY 577 Statistics in Applied Fields I

EDPY 677 Statistics in Applied Fields II

EDPY 678 Statistics in Applied Fields III

EDPY 505 Quasi-Experimental and Single-Subjects Design Research*

SPED 603 Reading and Applying Research for Diverse Learning: Single-subject Designs I*

Cognate (6 credit hours)

Students choose at least two courses from one of the following areas for a cognate: Gifted/Talented Learners, Instructional Strategies in Special Education, Educational Technology or Instructional Technology, Higher Education Administration, or Cultural Studies in Education. Other cognates may be negotiated with the Applied Educational Psychology faculty. (Note: Students planning to work toward BCBA certification will need to complete SPED 430 Applied Behavior Analysis in School Settings and SPED 555 Methods of Teaching Students with Autism Spectrum Disorders to satisfy the Cognate requirement for the AEP Ph.D. or in addition to another Cognate.)

EDPY 600 Doctoral Research and Dissertation (24 credit hours)

Total 72 credit hours

*Note: To complete the BCBA curriculum, students must complete EDPY 517, EDPY 515, EDPY 636, SPED 555, and SPED 430. In addition, students must choose either EDPY 505 or EDPY 603.

Rationale: Educational Psychology is a core component of the EPC department. This new concentration will help draw students qualified to teach EDPY 401 which is required for initial teacher licensure students, the significant majority of who are students in the department of Theory and Practice in Teacher Education (TPTE). There is no other Ph.D. offering of this nature in eastern Tennessee.

Impact on other units: CSE 607 is required from another unit (see supporting documents from TPTE). Though not required, students who obtain the BCBA certificate will take two courses from TPTE (see supporting documents).

Financial impact: No impact, uses existing faculty and courses. Learning Outcomes Supported: This concentration supports SLOs 1, 2, and 3. Additional Documentation: A review of market needs by the EPC faculty and College of Education, Health, and Human Sciences administration determined that EPC would be an appropriate location for this concentration.

❖ **ADD CONCENTRATION – EDUCATION MAJOR, PHD**

Learning, Design, and Technology concentration

In the 2018-2019 Graduate Catalog, add heading, text, and requirements for the new Learning, Design, and Technology concentration to the Education Major, PhD, as follows:

The Learning, Design, and Technology (LDT) concentration in the Education Major is an instructional design and technology program designed for students with a wide-range of interests. Students in this program engage in research, design, development, implementation, and evaluation of learning environments. The name of the degree, LDT, reflects the changing nature of the field to become more inclusive of informal and formal learning environments. The program supports graduate study of learning environments from an instructional design and technology perspective as well as an educational technology perspective, in various formal and informal settings such as K-12 education, higher education, non-profit agencies, military, and corporate settings. The program supports both part-time and full-time students.

Once admitted, students are required to complete the basic core courses to gain a foundational understanding of both theory and practice related to the design and development of learning environments. In the advanced core and the research apprenticeship courses, students will work closely with faculty to explore potential research projects as a member of an interdisciplinary research team or on their own. Students are required to engage in additional coursework in research methods, electives, and cognates. These additional courses may lead to obtaining a graduate certificate in areas such as Cultural Studies in Education; Online Teaching and Learning; Qualitative Research Methods in Education; and Measurement, Evaluation and Statistics.

Admission requires a Master's degree in Instructional Technology or a Master's degree in another field with the completion of prerequisites prescribed by the admissions committee. Students meet regularly with their advisor to determine courses, follow Graduate School and LDT program requirements, and set personal scholarly goals. In addition to required coursework, all students must complete a minimum of 24 dissertation credit hours.

Requirements

Basic Core (10-credit hours required) *

EDPY 601 Professional Seminar

IT 678 Seminar in Instructional Technology

LEES 650 Design Thinking and Theory

IT 679 Theoretical Trends and Issues in Learning, Design, and Technology

*Co-Requisites that do not count towards the doctoral degree include IT 521, IT 570, and IT 573. If students have equivalent experiences or coursework from a Master's degree they can be exempt from part or all of the co-requisite requirement.

Advanced Core (6 credit hours from the choices below) *

EDPY 631 Discourse Analysis

LEES 659 Cultural Historical Activity Theory and Methods

IT 681 Design Problems in Learning Environments

ETEC 587 Integrating Emerging Technologies into Teaching and Learning

Or courses approved by advisor

*Co-Requisites in the Basic Core are Pre-Requisites for the Advanced Core

Research Apprenticeship (6 credit hours)

LEES 602 Directed Research

IT 693 Independent Study

Research Methods (15 credit hours)

EDPY 682 Educational Research Fundamentals

EDPY 559 Intro to Qualitative Research in Education

EDPY 577 Statistics in Applied Fields I

Two additional Research Methods Courses recommended by advisor

Electives (9 credit hours)

9-credit hours of graduate level courses recommended by advisor that can include courses in Instructional Technology, Educational Technology, Adult Learning, Qualitative Research, Evaluation, and Quantitative Research.

Cognate (6 credit hours)

6-credit hours of graduate level courses recommended by advisor in areas such as Educational Technology, Cultural Studies, and Information Science.

Dissertation (24 credit hours)
IT 600 Dissertation Hours

Total 76 credit hours

Rationale: The Learning Environments and Educational Studies programs is being administratively closed following graduation or approved change of program of all current LEEDS students. In the past, Cultural Studies (CS) was an interdisciplinary portion of the LEEDS coursework. CS has been moved to TPTE and is offering an independent curriculum. It was determined by EPC faculty and the CEHHS college administration that the LDT program will be created in EPC to continue an Instructional Technology doctoral curriculum. Additionally, within the state of Tennessee there is a shortage of Instructional Technology doctoral programs and having LDT at UT Knoxville will fill this void.

Impact on Other Units: The TPTE Department Head and faculty have been consulted and have agreed to take a collaborative role to strengthen the LDT program by allowing one of their courses in the LDT core offerings. See the email in support of these changes from Dr. Sherry Bell, TPTE Department Head. **Financial Impact:** None. Courses in LDT will be taught by existing faculty; no impact

Additional Documentation: No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

+ DROP CERTIFICATE – DEAFNESS REHABILITATION GRADUATE CERTIFICATE

In the 2018-2019 Graduate Catalog, drop the Deafness Rehabilitation Graduate Certificate and remove all description text and reference throughout the catalog.

Rationale: The Rehabilitation Counseling concentration of the Counseling Major (MS) has been closed. The related certificate is also being closed. **Impact on other programs:** None. This certificate has not enrolled new students for the past 2 years. **Financial impact:** None. **Additional Documentation:** No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

DEPARTMENT OF NUTRITION

Student Learner Outcomes

MS in Nutrition

1. By the time of program completion, students enrolled in the master's degree program will demonstrate readiness for professional employment in the discipline.
2. Upon completing the program, students who have completed the dietetic internship option will have demonstrated the ability to understand, interpret, and apply the science of nutrition in individual, clinical, and community settings.
3. Upon completing the program, students in the public health nutrition concentration will have demonstrated the ability to apply public health nutrition skills in community settings.

PhD in Nutritional Sciences

1. Upon completing the program, the student will have the ability to interpret, critique, and synthesize research literature in nutrition.
2. Upon completing the program students will have demonstrated the ability to communicate and disseminate research findings.
3. Upon completing the program, the student will have demonstrated the ability to write a NIH-formatted specific aims and research strategy for a grant proposal and to submit a grant proposal for research funding.
4. Upon completing the program, the student will attain a nutrition-related position appropriate to doctoral-prepared program graduates.

REVISE REQUIREMENTS – NUTRITION MAJOR, MS – THESIS OPTION

In the 2018-2019 Graduate Catalog, under the Thesis Option heading, remove current text and replace with the following:

Thesis Option

Public Health Nutrition concentration

- Public health nutrition students must take NUTR 509, NUTR 515, NUTR 522, NUTR 524, NUTR 543, NUTR 626, and at least 6 additional credits of graduate course work in NUTR (exclusive of thesis), as identified by faculty advisor and approved by the Director of the Public Health Nutrition Graduate Program.
- PUBH 520, PUBH 530, and PUBH 540.
- 6 credit hours of NUTR 500.
- An oral comprehensive examination is required upon completion of the thesis.

Cellular and Molecular Nutrition concentration

- Cellular and molecular nutrition students must take NUTR 511, NUTR 512, NUTR 543, NUTR 621, NUTR 626, and 2 credit hours of NUTR 549.
- 3 credit hours of graduate-level statistics, BCMB 440, LFSC 520 and an additional 3 credits of graduate course work outside the NUTR department, as identified by faculty advisor and approved by the Departmental Director of

Graduate Studies. Appropriate substitutions for BCMB 440 or LFSC 520, if required, must be approved by the Departmental Director of Graduate Studies.

- 6 credit hours of NUTR 500.
- An oral comprehensive examination is required upon completion of the thesis.

Rationale: These changes to the MS thesis program (PHN and CMN concentrations) incorporate the proposed course changes that resulted from regular curricular review and student feedback, and support SLO#1 of the MS in Nutrition. Removal of the sentence under "Thesis Option" should reduce confusion for students, as each program has slightly different credit requirements. In addition, suggested revisions to bullet order (e.g., grouping departmental and non-departmental courses into separate bullets, putting course numbers in sequential order, when possible, etc.) should result in increased clarity of requirements for each program. All changes have been approved by the Nutrition faculty. Rationale for specific changes to each program are outlined below:

PHN concentration: 1st bullet - We propose removing NUTR 511 and NUTR 512 from the list of required credits, and replacing these hours with 6 NUTR graduate credits. PHN students may still take these courses, but removing this requirement increases flexibility. Adding the language about relevant approvals ensures appropriate courses will be selected; 2nd bullet – moving PUBH courses into a separate bullet should contribute to increased clarity; 3rd bullet – Adding 'credit' is a housekeeping change.

CMN concentration: 1st bullet - We propose removing NUTR 505 (now NUTR 524) from the CMN thesis requirements, as this wording is quite cumbersome, is an option that has not been selected in recent memory, and is something that could be petitioned should a student have reason to take that course in place of NUTR 616 (now NUTR 626). We believe this will reduce confusion in the catalog and can be addressed in our Graduate Handbook. In addition, we propose adding NUTR 621, as this has long been a recommended elective for these students. Addition of 2 hours of NUTR 549 better reflects the expectation that students participate in special topics; 2nd bullet - Moving the course work to be completed outside of the department into a separate bullet should contribute to increased clarity. The changes to the first bullet also allow us to be more specific with the credits in this second bullet (i.e., removing the somewhat confusing phrase "...and 6-7 additional hours in Nutrition or in a cognate area outside the department"). Adding the language about relevant approvals ensures appropriate courses will be selected.

Impact on other units: None. All proposed new courses and modified courses are taken by program students only. Dropped courses were taken by program students only.

Financial Impact: These courses will be taught by existing faculty as part of their regular course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either the department or college budget.

Additional documentation: The Nutrition faculty have agreed to these course and program changes and these changes will increase the ability of our program to meet the needs of the MS thesis student. No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

REVISE TEXT AND REQUIREMENTS – NUTRITION MAJOR, MS – NON-THESIS OPTION

In the 2018-2019 Graduate Catalog, under the Non-Thesis Option heading, remove current text and replace with the following:

Non-Thesis Option

Public Health Nutrition concentration

- Public health nutrition students must take NUTR 509, NUTR 515, NUTR 519, NUTR 522, NUTR 524, NUTR 543, NUTR 626 and at least 6 additional credits of graduate course work in NUTR, as identified by faculty advisor and approved by the Director of the Public Health Nutrition Graduate Program.
- PUBH 520, PUBH 530, and PUBH 540.
- 3 graduate credit hours in social/behavioral science or education electives are required.
- A written comprehensive examination is required for completion of the program.
- A culminating experience is required. This culminating experience will be fulfilled upon successful completion of NUTR 519, Analysis of Practice in Community Nutrition.

Cellular and Molecular Nutrition concentration

- Cellular and molecular nutrition students must take NUTR 511, NUTR 512, NUTR 543, NUTR 549 (for 3 credit hours), NUTR 626, and either NUTR 618 or NUTR 621.
- 3 credit hours of graduate-level statistics, BCMB 440, LFSC 520 and an additional 3 credit hour graduate course outside the NUTR department, as identified by faculty advisor and approved by the Departmental Director of Graduate Studies. Appropriate substitutions for BCMB 440 or LFSC 520, if required, must be approved by the Departmental Director of Graduate Studies.
- 3 additional credit hours in graduate-level electives.
- A culminating experience is required as approved by the student's committee (must register for at least 3 hours of NUTR 548).
- A written comprehensive examination is required for completion of the program.

Rationale: These changes to the MS non-thesis program (PHN and CMN concentrations) incorporate the proposed course changes resulting from regular curricular review and student feedback, and support SLO#1 of the MS in Nutrition. Removal of the sentence under "Non-thesis Option" should reduce confusion for students, as each program has slightly different credit requirements. In addition, suggested revisions to bullet order (e.g., grouping departmental and non-departmental courses into separate bullets, putting course numbers in sequential order, when possible, etc.) should result in increased clarity of requirements for each program. All changes have been approved by the Nutrition faculty. Rationale for specific changes to each program are outlined below:

PHN concentration: 1st bullet - We propose removing NUTR 511 and NUTR 512 from the list of required credits, and replacing these hours with 6 NUTR graduate credits. PHN students may still take these courses, but removing this requirement increases flexibility. Adding the language about relevant approvals ensures appropriate courses will be selected; 2nd bullet – moving the PUBH courses into a separate bullet should contribute to increased clarity; 3rd bullet – Adding 'graduate credit' is a housekeeping change.

CMN concentration: 1st bullet - We propose removing NUTR 505 (now NUTR 524) from the CMN non-thesis requirements, as this wording is quite cumbersome, is an option that has not been selected in recent memory, and is something that could be petitioned should a student have reason to take that course in place of NUTR 616 (now NUTR 626). We believe this will reduce confusion in the catalog and can be addressed in our Graduate Handbook. In addition, we propose requiring students to take either NUTR 621 or NUTR 618, rather than both, which will increase flexibility for these students. Revising the language requiring NUTR 618 OR NUTR 621 eliminates the need for the second sentence in the first bullet (re: course substitutions) so that has been removed. Addition of 3 hours of NUTR 549 better reflects the expectation that students participate in special topics courses; 2nd bullet - Moving the course work to be completed outside of the department into a separate bullet should contribute to increased clarity. The changes to the first bullet also allow us to be more specific with the credits in this second bullet (i.e., removing the somewhat confusing phrase "...and 6-7 additional hours in Nutrition or in a cognate area outside the department"). Revision to the sentence regarding relevant approvals reflects the correct title for the Director position in the department (e.g., "Director of the Graduate Program" should be "Departmental Director of Graduate Studies"); 3rd bullet – clarifies that 3 hours of graduate credits may be inside or outside of the department.

Impact on other units: None. All proposed new courses and modified courses are taken by program students only. Dropped courses were taken by program students only. Financial Impact: These courses will be taught by existing faculty as part of their regular course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either the department or college budget.

Additional documentation: The Nutrition faculty have agreed to these course and program changes and these changes will increase the ability of our program to meet the needs of the MS non-thesis student. No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

REVISE REQUIREMENTS – NUTRITIONAL SCIENCES MAJOR, PHD

In the 2018-2019 Graduate Catalog, under the Coursework (Minimum) heading, delete the current text and replace with the following:

Coursework (Minimum)

Cellular and Molecular Nutrition concentration

- NUTR 511, NUTR 512, NUTR 543, NUTR 626, and NUTR 645.
- BCMB 440, LFSC 520, and an additional 3 credit graduate course (graded A-F) outside the NUTR department, as identified by faculty advisor and approved by the Departmental Director of Graduate Studies. Appropriate substitutions for LFSC 520 or BCMB 440, if required, must be approved by the Departmental Director of Graduate Studies.
- 6 credit hours of graduate-level statistics.
- Additional courses at the graduate level, exclusive of dissertation, to make up any credit hour deficiencies.
- At least 9 credit hours must be at the 600-level (exclusive of dissertation NUTR 600).
- A minimum of 24 credit hours of dissertation (NUTR 600).

Community Nutrition concentration

- NUTR 511, NUTR 512, NUTR 522, NUTR 543, NUTR 624, NUTR 626, NUTR 645.
- PUBH 640.
- 6 credit hours of graduate-level statistics.
- Additional courses at the graduate level, exclusive of dissertation, to make up any credit hour deficiencies.
- A minimum of 24 credit hours of dissertation (NUTR 600).

Rationale: These changes to the PhD program (CMN and Community Nutrition (CN) concentrations) incorporate the proposed course changes resulting from regular curriculum review conducted by the Nutrition faculty as well as student feedback requesting increased differentiation between the MS and PhD degrees. These changes have been approved by the Nutrition faculty and support SLO's 1, 2, and 3 of the PhD in Nutritional Sciences. We have also separated out the two concentrations, and removed unnecessary bullets, in order to decrease confusion. For example, we are removing reference to a cognate area, as this is not a University requirement, and the current format is often interpreted as an additive list, which is incorrect. Rationale for specific changes to each program are outlined below:

CMN concentration: 1st bullet - We propose removing NUTR 505 (now NUTR 524) from the CMN PhD requirements, as this wording is quite cumbersome, is an option that has not been selected in recent memory, and is something that could be petitioned should a student have reason to take that course in place of NUTR 616 (now NUTR 626). We believe this will reduce confusion in the catalog and can be addressed in our Graduate Handbook. The remaining changes in this bullet reflect course adds and drops (addition of advanced research methods NUTR 645) and replacement of NUTR 616 with NUTR 626; 2nd bullet - Moving the course work to be completed outside of the department into a separate bullet, and requiring the elective to be graded A-F, should contribute to increased clarity of requirements. Revision to the phrase regarding relevant approvals ensures appropriate course selection and reflects the correct title for the Director position in the department (e.g., "Director of the Graduate Program" should be "Departmental Director of Graduate Studies"); 3rd bullet – Adding 'credit' is a housekeeping change; 4th bullet – this language ensures any credit discrepancies must be identified and addressed; 5th bullet – ensures the requirement is met, as only 6 specified credits are at the 600 level; 6th bullet – clarifies the need for an additional 24 hours of NUTR 600.

CN concentration: The entire content is "new" and so is all underlined. However, specific changes are as follows: 1st bullet – reflects course adds and drops (addition of NUTR 6XX (624) Public Health Nutrition Systems, Programs & Services PHN Systems Level; and

replacement of NUTR 545 with NUTR 6XX (645) Advanced Research Methods, and NUTR 616 with NUTR 626); 2nd bullet – Moving the PUBH course into a separate bullet should contribute to increased clarity; 3rd bullet – Adding 'credit' is a housekeeping change; 4th bullet – Ensures any credit discrepancies are identified and addressed; 5th bullet – Clarifies need for an additional 24 hours of NUTR 600.

Removing the last line of this section, re: GTA seminar, removes a requirement we no longer enforce.

Impact on other units: None. All proposed new courses and modified courses are taken by program students only. Dropped courses were taken by program students only. Impacts on students pursuing the MS/MPH Dual degree (or the identical MPH/MS Dual degree) will be presented in another item. Financial Impact: These courses will be taught by existing faculty as part of their regular course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either the department or college budget.

Additional documentation: The Nutrition faculty have agreed to these changes and these changes will increase the ability of our program to meet the needs of the PhD student. No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC.

REVISE REQUIREMENTS – DUAL MS-MPH PROGRAM – NUTRITION/PUBLIC HEALTH MAJOR

In the 2018-2019 Graduate Catalog, under the Requirements heading and the Approved Dual Credit heading, delete the current text and replace with the following:

Requirements

A dual degree candidate must satisfy the requirements for both the Master of Science (public health nutrition concentration) and the Master of Public Health degree, as well as the requirements for the dual program. All candidates for the dual degree must successfully complete PUBH 510, PUBH 537, and PUBH 555; 2 credit hours (1 credit hour each) of PUBH 509 and NUTR 509; and a minimum of 56-59 graduate credit hours (depending on the program of interest), which includes core MPH courses and required MS courses (may also include thesis hours). The Department of Nutrition will award a maximum of 9 credit hours toward the MS for successful completion of approved graduate-level public health courses offered in the Department of Public Health. The Department of Public Health will award a maximum of 12 (non-thesis) - 14 (thesis) graduate credit hours toward the MPH for successful completion of approved courses offered in the Department of Nutrition.

All courses for which such cross-credit is awarded must be approved by the MPH Academic Program Committee and the student's graduate committee. A single block field experience (or public health internship) is required of all students and the analytical field paper incorporates public health nutrition and the student's public health concentration.

Dual-degree students who withdraw from the program before completion of the requirements for both degrees will not receive credit towards the MS or MPH for courses taken in the other program, except as such courses qualify for credit without regard to the dual program.

Approved Dual Credit

For thesis students, MS courses to be counted toward the MPH program would include up to 9 credit hours of NUTR 524 and NUTR 515, 1 credit hour of NUTR 509, 3 credit hours of NUTR 543, and 3 credit hours of NUTR 626 (14 graduate credit hours).

For non-thesis students, MS courses to be counted toward the MPH program must include a maximum of 10 credit hours of NUTR 524, NUTR 515 and NUTR 519, 1 credit hour of NUTR 509, and 3 credit hours of NUTR 626 (12 graduate credit hours).

For thesis and non-thesis students MPH courses to be counted toward the MS include PUBH 520, PUBH 530 and PUBH 540.

Rationale: These changes to the MS/MPH Dual program reflect course revisions proposed by the NUTR faculty, following regular curricular review as well as feedback from students in the program resulting in identification of redundancies and the need to increase differentiation between the MS and PhD programs. In addition, these changes result in a net decrease of 2 credit hours for both concentrations (i.e., going from 58-61 credits to 56-59 credits, depending on the program of interest). This will bring our Dual program into better alignment with peer institutions. These revisions to the MS/MPH Dual program have been approved by the Nutrition faculty and by the MPH Academic Program Committee in their meeting on 9/22/17. PUBH has submitted duplicate language for their identical MPH/MS Dual program. This proposed change will increase the ability of the Dual program to meet student needs. In addition, formatting revisions will increase the similarity of presentation of this dual degree in both the NUTR and the PUBH catalog showcases. This supports SLO#3 of the MS in Nutrition.

Impact on other units: This change will impact students in the MS/MPH Dual Program (called the MPH/MS Dual Program in Public Health's materials). The NUTR faculty has worked closely with the PUBH faculty and both programs have put forth an identical Program Change proposal for their respective Dual programs.

Financial Impact: These courses will be taught by existing faculty as part of their regular course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either departments or the college budget.

Additional documentation: No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC. The reduction of 2 credit hours does not violate a minimum credit threshold requirement for a dual degree, as noted in an email communication with Heather Hartman at the Office of the Provost.

DEPARTMENT OF PUBLIC HEALTH

Student Learner Outcomes

Learning objectives for the DrPH Program –

Students completing the DrPH program should be able to:

1. Students will demonstrate clarity of scientific writing skills.
2. Students will demonstrate clarity of verbal expression and the ability to respond to scientific questions in a clear and accurate manner.
3. Students will demonstrate mastery of complex scientific and technical issues relevant to the student's area of research.
4. Students will demonstrate mastery of complex scientific and technical skills relevant to the student's broader foundation in health behavior and health education.

Learning objectives for the MPH Program.

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.

REVISE REQUIREMENTS – PUBLIC HEALTH MAJOR, DRPH

In the 2018-2019 Graduate Catalog, remove current 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. In addition to the 20 DrPH competencies of the Council on Education for Public Health (see <https://ceph.org/assets/2016.Criteria.pdf>), graduates of the DrPH program will be able to:

- Explore, critique, and apply evidence-based information from multiple sources to Public Health products/issues.
- Demonstrate ability to write funding applications to support Public Health initiatives, applying one or more theories or models.
- Demonstrate skills for economic and financial management relevant to health organizations or programs, incorporating internal and external evidence.
- Compare and contrast the quantitative study designs most commonly used to investigate the determinants of disease and health or the evaluation of programs and policies.
- Identify and analyze ethical issues (e.g., personal liberty, social justice, and human rights) in protecting and improving the public's health, applying an ecological framework.

Admission Requirements

- General requirements set forth by the University of Tennessee, Graduate School (see <http://gradschool.utk.edu/admissions/>).
- 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). GRE scores must be recent; no more than five years before the intended semester of entry.
- International students must meet the graduate school's requirement for 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 the applicant's academic and research capabilities, job performance or professional promise.
- A personal statement to demonstrate the evolution of your interest in public health and how DrPH program will prepare you to work in the field of public health;
- Ability to clearly articulate a defined career pathway, which incorporates practice and research experience and skills, upon interview;
- Demonstrated skill in a professional, research, or academic writing sample. A writing sample of scientific writing should be submitted (preferably the applicant is either the sole author or first authored approximately 2,000-3,000 words). A published article is acceptable only if the applicant discloses the nature of his/her contribution;
- A current curriculum vitae.

Admission Preferences

- MPH degree from a CEPH accredited school or program of Public Health. Public health or relevant work experience at local, state or federal level highly desirable.
- Applicants without the MPH degree may be admitted to the DrPH program. For example, exceptional applicants who meet one of the following requirements may also be considered for admission:
 - Applicants with a master's degree or an advanced professional degree in a field related to public health from an officially recognized domestic or international institution; The aforementioned graduate degree must be conferred prior to enrollment to DrPH; or

- Applicants without a graduate degree must have at least two years of full-time work experience in public health or a related field.

An online application must be submitted to the Graduate Admissions Office. Admission form links are available at <https://gradschool.utk.edu/admissions/applying-to-graduate-school/>.

Review of applications will begin on November 1 and continue until March 1. Limited financial support is available for highly competitive, full-time students. Students interested in financial support should submit their applications no later than January 15.

Please send all inquiries to: Director of the DrPH, Department of Public Health, 390 HPER, 1914 Andy Holt Avenue, The University of Tennessee, Knoxville, TN 37996; Phone: (865)-974-5041, Fax: 865-974-6439, E-mail: dph@utk.edu

Requirements for the DrPH degree are satisfactory completion of the following:

Foundation Courses (or equivalent courses if taken outside of the University of Tennessee, Knoxville, as approved by Director of the DrPH Program)

- PUBH 509, Graduate Seminar in Public Health (2 semesters, 1 credit/semester), 2 credit hours
- PUBH 510, Environmental Health Science, 3 credit hours
- PUBH 520, Public Health Policy and Administration, 3 credit hours
- PUBH 530, Biostatistics, 3 credit hours
- PUBH 537, Fundamentals of Program Evaluation, 3 credit hours
- PUBH 540, Principles of Epidemiology, 3 credit hours, and
- PUBH 555, Health and Society, 3 credit hours

Core Courses

- PUBH 536, Research Methods in Health, 3 credit hours
- PUBH 540, Epidemiology, 3 credit hours
- PUBH 552, Community Health Assessment, 4 credit hours
- PUBH 609, (2 credit hours over 2 semesters), Public Health Doctoral Seminar
- PUBH 610, Scientific Writing for the Health Sciences, 1 credit hour
- PUBH 611, Leadership in Public Health, 1 credit hour
- PUBH 613, Public Health Ethics and Law, 1 credit hour
- PUBH 636, Advanced Research Methods, 3 credit hours
- PUBH 637, Applications in Program Evaluation, 3 credit hours
- PUBH 640, Advanced Epidemiological Methods, 3 credit hours
- PUBH 656, Comparative Theories in Health Behavior, 3 credit hours
- PUBH 687, Advanced Field Practice, 3 credit hours
- STAT 537 OR SOWK 605, 3 credit hours (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 to insure that PUBH 530 will fulfill the course prerequisite).
- STAT 538 (STAT537 prerequisite) OR SOWK 606 (SOWK 605 prerequisite), 3 credit hours.
- One additional graduate statistics course selected in consultation with faculty advisor, 3 credit hours.

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.

Other Course Requirements

- Cognate Courses (9 credit hours): The DrPH is a generalist degree, but requires a cognate to include 9 semester credit hours that are thematically related. This usually amounts to three 3-credit hour courses. The cognate coursework can include graduate-level independent study, public health graduate courses, and/or graduate coursework from other academic units. The academic advisor and the Director of the DrPH must formally approve the proposed cognate courses.
- PUBH 600, 24 credit hours.

Graduate School Non-Course Requirements

- Completed comprehensive exam
- Admission to candidacy
- Fulfill residence
- Completed defense of dissertation

Departmental Non-Course Requirements

- Complete a minimum of 12 credit hours toward DrPH prior to PUBH 687
- Pass Part A comprehensive examination before completing 27 credit hours toward DrPH degree or dismissed from DrPH program
- Formal presentation of dissertation
- Successful defense of dissertation
- Minimum overall grade point average of 3.25 or academic probation
- Minimum grade point average of 3.25 for doctoral PUBH courses or academic probation

Rationale: (1) Changes in the DrPH competencies: In November 2016 the Public Health accrediting body (Council on Education for Public Health or CEPH) revealed competencies for DrPH programs. In addition to the 20 prescribed competencies, CEPH also requires a minimum of five faculty-selected competencies. Following a careful review of the DrPH competencies of other institutions, the existing CEPH competencies and knowledge areas, recommendations from the Association of Schools and Programs of Public Health (ASPPH), and faculty capacity and strengths, the Public Health faculty selected the five competencies included in the program description. (2) Changes of PUBH 687: The DrPH committee reviewed field practice descriptions and requirements of 5 other CEPH accredited DrPH programs. The name of PUBH 687 was changed to better reflect the doctoral level ("advanced") and highlight the applied "practice" required of the course work. The minimum of 3 credit hours for PUBH 687 was in keeping with the majority of DrPH programs that were available for review. (3) Reorganization of course requirements: This formatting is to meet the Graduate DARS guidance. (4) Addition of PUBH 640, Advanced Epidemiological Methods, to the DrPH core coursework. This is a standard course in a Public Health doctoral program, given our review of the five CEPH accredited DrPH programs. Given the reduction of the credit hour requirement for PUBH 687 (from 6 credit hours to 3 credit hours), we now have room in the core curriculum to make PUBH 640 a requirement without incorporating more credit hours into the DrPH degree. We also have two faculty members who are capable of teaching this course consistently. (5) Addition of Graduate School Non-Course Requirements. This addition is to meet the Graduate DARS guidance for formatting catalog information. (6) Addition of Departmental Non-Course Requirements. Faculty have reviewed this academic standards proposal, its implications, and approved through voting. These changes will enhance the accountability of students and academic advisors, and increase the transparency of assessing student competence. These changes will be reflected in the Fall 2018 DrPH Graduate Handbook.

Impact on Other Units: (1) The change in the DrPH competencies will only impact Public Health courses, as all competencies must be addressed within the PUBH courses to ensure that the annual assessment of the competencies is feasible. (2) Given that PUBH 687 is a PUBH course without prescribed prerequisites, there is no foreseen impact on other units. (3) This change is simply formatting without content change. Hence there will be no impact on other units. (4) The addition of PUBH 640, Advanced Epidemiological Methods, as a core course will not impact other units. The course is currently an elective that is taught annually by faculty in the Department of Public Health. (5) This change is simply formatting without content change. Hence, there will be no impact on other units. (6) These enhanced expectations for the PUBH GPA are internal to the PUBH courses so there will be no impact on units outside of Public Health. The enhanced overall GPA for doctoral work to 3.25 informs students and advisors that an even split of A's and C's is not an acceptable outcome for doctoral coursework in Public Health.

Financial impact: Points 1-6 will have no financial impact. Faculty advisors will be responsible for the facilitation of PUBH687, working in collaboration with Advanced Field Practice preceptors. **Additional Documentation:** Proposed changes do not require any additional approvals and do not need to be reported to SACSCOC.

REVISE REQUIREMENTS – DUAL MPH-JD PROGRAM – PUBLIC HEALTH

In the 2018-2019 Graduate Catalog, revise program text to be consistent with the department's other dual-degree programs descriptions and revise required hours, to remove the contact information section, and revise the placement of the Law Courses Approved as Electives for the MPH degree section. Delete current text and replace as follows:

Dual MPH-JD Program – Public Health Major, Health Policy and Management concentration (JD/MPH)

The College of Law and the Department of Public Health (College of Education, Health, and Human Sciences) offer a dual-degree program that reflects the interrelationship between the legal system and the protection and promotion of the public's health. In particular, the program emphasizes the role that policy, public and private, plays in creating the conditions in which people can be healthy.

Typically, the Juris Doctor (JD) degree requires a minimum of 89 semester credit hours and is completed in three years of full-time study. The Master of Public Health (MPH) degree requires 42 semester credit hours and can be completed in two to three years, depending on full-time or part-time study. The dual-degree program offers students the opportunity to pursue both degrees simultaneously and to complete all requirements in four years, rather than in the longer period required to obtain each degree independently. Students pursuing the dual degree should plan to be enrolled in course work or an internship for 1-3 summer terms in addition to taking normal course loads for four academic years.

By combining the programs, students develop specialized knowledge in public health-related legal issues while retaining the flexibility of professional training in the broad disciplines of law and public health. For example, a graduate of the dual-degree program may work as a public health professional with an acute awareness of legal and policy issues, while another may work as an attorney focusing his or her practice on health care issues. Yet others may go on to teach at schools of law or public health.

The Health Policy and Management (HPM) concentration of the Public Health Major, MPH degree provides students with the skills necessary to manage an array of human, capital, and material resources and to provide leadership within a guiding framework of established organizational goals to achieve positive outcomes related to health. In addition, HPM students develop the ability to understand policy formulation and policy impacts, a necessary skill for health managers and policy planners seeking to address important issues, such as access to care, quality improvement and assurance, cost containment, and partnerships with others to improve the health of the public.

Admission

To be admitted to the dual-degree program, an applicant must have received a baccalaureate-level degree. The applicant must also apply and be admitted separately to the College of Law, the Graduate School, and the MPH Program.

For purposes of admission to the JD-MPH dual-degree program, the applicant only needs to take the LSAT (Law School Admission Test), but must submit the test scores to the College of Law, the Graduate School, and the MPH Program. Applicants are welcome to submit their GRE scores if they so wish.

Requirements

- All students are expected to be full-time students. A student may not work in excess of 20 hours per week while attending school on a full-time basis.
- Students are required to complete a minimum of 89 semester credit hours for the JD degree and 42 semester credit hours for the MPH degree.
- During the first year of study, students will be solely enrolled in the prescribed curriculum for the College of Law.
- The College of Law will accept nine credit hours from approved Public Health courses as electives and the Department of Public Health will accept six credit hours from approved Law courses as electives.
- The required MPH Field Practice requirement (PUBH 587, PUBH 588) may be fulfilled by placement in an approved legal or community organization.
- Students are required to pass a MPH comprehensive exam.

Dual degree students who withdraw from the program before completion of the requirements for both degrees will not receive credit toward either the JD or the MPH for courses taken in the other program, except as such courses qualify for credit without regard to the dual-degree program.

Law Courses Approved as Electives for the MPH Degree

Students must plan carefully when selecting electives that count toward the MPH degree (a total of six credit hours), as these electives may not be offered every year. Additional electives may also be selected with approval of the College of Law advisor and the MPH Program Director.

Awarding of Grades

For grade recording purposes in the College of Law and the Department of Public Health, grades awarded in courses in the other unit will be converted to either Satisfactory/No Credit and will not be computed in determining a student's GPA or class standing. The College of Law will award a grade of Satisfactory for an approved Public Health course in which the student earns a grade of B or higher and a grade of No Credit for any lower grade. The Public Health Department will award a grade of Satisfactory for an approved law course in which the student earns a grade of 2.7 or higher on a 4.3 scale and a grade of No Credit for any lower grade. The official academic record of the student maintained by the Office of the University Registrar shall show the actual grade assigned by the instructor without conversion.

Different rules apply to students enrolled in the dual JD-MPH, JD-MBA, or JD-MPA Programs. Grades must be earned according to the grading system of the respective college, e.g. numerical grades for law courses but letter grades for graduate courses. Refer to the grading policy of the College of Law and the Department of Public Health, respectively, for the grading scale acceptable toward meeting degree requirements. Cumulative GPA for law courses only will be carried until graduation, at which time both graduate and law cumulative GPAs will be shown on the student's permanent record.

Rationale: Providing a year-by-year course plan in the catalog is not consistent with other catalog descriptions of our dual-degree programs. The actual plan comes best when a student works with the advisor to determine an individual plan of study. The aforementioned plan provides basic guidance and is best shared in advising session. Again, based on the experience of our two other dual degree program advisors, this approach has worked successfully for multiple years.

Impacts on Other Units: There is no impact on other units. Faculty responsible for advising are already in place and will continue to meet with students to devise an individual academic plan. **Financial impact:** There is no financial impact on other units. **Additional Documentation:** This is a change to bring consistency across catalog descriptions of our dual-degree programs and requires no additional approval.

REVISE REQUIREMENTS – DUAL MPH-MS PROGRAM – PUBLIC HEALTH / NUTRITION MAJORS

In the 2018-2019 Graduate Catalog, under the Requirements heading and the Approved Dual Credit heading, delete the current text and replace with the following:

Requirements

A dual degree candidate must satisfy the requirements for both the Master of Science (public health nutrition concentration) and the Master of Public Health degree, as well as the requirements for the dual program. All candidates for the dual degree must successfully complete PUBH 510, PUBH 537, and PUBH 555; 2 credit hours (1 credit hour each) of PUBH 509 and NUTR 509; and a minimum of 56-59 graduate credit hours (depending on the program of interest), which includes core MPH courses and required MS courses (may also include thesis hours). The Department of Nutrition will award a maximum of 9 credit hours toward the MS for successful completion of approved graduate-level public health courses offered in the Department of Public Health. The Department of Public Health will award a maximum of 12 (non-thesis) - 14 (thesis) graduate credit hours toward the MPH for successful completion of approved courses offered in the Department of Nutrition.

All courses for which such cross-credit is awarded must be approved by the MPH Academic Program Committee and the student's graduate committee. A single block field experience (or public health internship) is required of all students and the analytical field paper incorporates public health nutrition and the student's public health concentration.

Dual-degree students who withdraw from the program before completion of the requirements for both degrees will not receive credit towards the MS or MPH for courses taken in the other program, except as such courses qualify for credit without regard to the dual program.

Approved Dual Credit

For thesis students, MS courses to be counted toward the MPH program would include up to 9 credit hours of NUTR 524 and NUTR 515, 1 credit hour of NUTR 509, 3 credit hours of NUTR 543, and 3 credit hours of NUTR 626 (14 graduate credit hours).

For non-thesis students, MS courses to be counted toward the MPH program must include a maximum of 10 credit hours of NUTR 524, NUTR 515 and NUTR 519, 1 credit hour of NUTR 509, and 3 credit hours of NUTR 626 (12 graduate credit hours).

For thesis and non-thesis students MPH courses to be counted toward the MS include PUBH 520, PUBH 530 and PUBH 540.

Rationale: These changes to the MPH/MS Dual program reflect course revisions proposed by the NUTR faculty, following regular curricular review as well as feedback from students in the program resulting in identification of redundancies in some of their coursework. These changes result in a net decrease of 2 credit hours for both concentrations in the Dual program (i.e., going from 58-61 credits to 56-59 credits, depending on the program of interest). This will bring our Dual program into better alignment with peer institutions. These revisions to the MPH/MS Dual program have been approved by the Nutrition faculty and by the MPH Academic Program Committee in their meeting on 9/22/17. NUTR has submitted duplicate language for their identical MS/MPH Dual program. This proposed change will increase the ability of the Dual program to meet student needs. In addition, formatting revisions will increase the similarity of presentation of this dual degree in both the NUTR and the PUBH catalog showcases. This supports SLO#3 of the MS in Nutrition.

Impact on other units: This change will impact students in the MPH/MS Dual Program (called the MS/MPH Dual Program in Nutrition's materials). The NUTR faculty has worked closely with the PUBH faculty and both programs have put forth an identical Program Change proposal for their respective Dual programs.

Financial Impact: These courses will be taught by existing faculty as part of their regular course load. This is a reorganization of existing resources. Therefore, there is no financial impact expected on either departments or the college budget.

Additional documentation: No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC. The reduction of 2 credit hours does not violate a minimum credit threshold requirement for a dual degree, as noted in an email communication with Heather Hartman at the Office of the Provost.

REVISE REQUIREMENTS – DUAL MPH-DVM PROGRAM – PUBLIC HEALTH

In the 2018-2019 Graduate Catalog, revise the number of elected hours and revise first sentence of the Approved Dual Credit Section. The Approved Dual Credit Section text should now read as follows:

Accelerated DVM-MPH Program

Students must be currently enrolled in the professional DVM degree program at the University of Tennessee (DVM students) to enter the dual DVM-MPH program; all requirements for both the DVM and MPH degrees must be met for admission. DVM students may enroll in the program at any time during years 1 - 3, but progress and time to completion will be affected by when a student starts the dual program and how many courses are satisfactorily completed each semester. Students will be expected to complete MPH-specific courses during the two summers following the first and second years of veterinary school. Students will pay graduate tuition fees during the summer semester and professional DVM tuition during the fall and spring semesters. Degrees do not need to be awarded simultaneously; if a student has not completed the requirements for the MPH, the student may still receive the DVM but must complete the MPH requirements within one year to take advantage of the shared credits. If a dual student completes the MPH requirements, but does not complete the DVM, the student may still be awarded the MPH.

All core courses for the MPH program and requirements for the DVM program must be completed. Dual MPH-DVM students must also complete CEM 611, CEM 506, and EITHER CEM 507 or CEM 508. An additional 2 elective credit hours approved by the advisor must also be completed.

Approved Dual Credit

Seven credit hours from the DVM program can be shared between the two degrees and applied to the MPH total credit count. These seven credit hours can be shared from any of the following courses: VMD 833, VMD 836, VMD 837, VMD 864, VMD 867, or VMD 897. Eight credit hours from the MPH program can be shared between the two degrees and applied to the DVM total credit count as electives. These eight credit hours can be shared from any of the following courses: CEM 506, CEM 507, CEM 508, PUBH 587, or PUBH 588.

Rationale: The Comparative Medicine faculty are proposing to increase the number of credits of CEM 506, CEM 507, and CEM 508 to 3 credits from the current designation of 2 credits. This change is based on student workload feedback and assessment by the instructing faculty members. This would decrease the number of credits needed by dual students needed to reach the required 42 credits for the MPH.

Impact on other units: There is no impact on any other units as few if any students outside the DVM program take this course. This proposal will be submitted simultaneously by the College of Veterinary Medicine and Department of Public Health for approval.

Financial impact: None. Courses taught by existing faculty members. **Additional Documentation:** This is a low-impact course and as such, does not require additional approvals for this change.

REVISE REQUIREMENTS – PUBLIC HEALTH MAJOR, MPH

In the 2018-2019 Graduate Catalog, revise the requirements section to revise the number of credit hours for the Concentration of Study and Electives requirement listings and to revise footnote 2 for the Public Health Major, MPH program requirements section. The requirements section and the text for footnote 2 should now read as follows:

<u>Requirements</u>	<u>Credit Hours</u>
¹ Public Health Foundations	20
² Concentration of Study (Community Health Education Health Policy and Management, or Veterinary Public Health)	10 - 13
³ Electives	3 - 6
⁴ Internship	6
Total	42

²Community Health Education: PUBH 536, PUBH 550, PUBH 552.

Health Policy and Management: PUBH 525, PUBH 527, PUBH 526, PUBH 612.

Veterinary Public Health: Comparative and Experimental Medicine CEM 506, CEM 611, and either CEM 507 OR CEM 508.

Rationale: Over the past several years, student feedback indicated that the HPM concentration courses as currently provided were insufficient for providing a robust focus on, and learning opportunities about, policy. Other concerns were also expressed specific to each of the required HPM courses. Discussions between HPM and other departmental faculty identified similar concerns, and the HPM faculty conducted a thorough review of the Health Policy and Management concentration. The faculty recommended adding a new course, PUBH 526, which focuses on the U.S. healthcare system as well as some global context of healthcare. Some of the content from PUBH 521 has been added to PUBH 527 and the faculty determined that PUBH 526 and PUBH 612 are the best fits for the concentration.

Impact on Other Units: Our dual degree program with the Department of Nutrition (MS-MPH) has students who select the HPM concentration. The nutrition faculty are not responsible for the development or delivery of the course and as such, no impact is anticipated. This course is required for the JD-MPH dual degree program. While the addition of the course has no direct impact on the College of Law per se, the required number of course hours will increase by three and students may incur the cost of an additional course. The College of Law has provided their support and approval for the change. Our third dual degree program (DVM-MPH) housed in the College of Veterinary Medicine will not be affected, as those students do not complete the HPM concentration. Faculty representation to the MPH Academic Program Committee includes members from each dual degree program who voted to approve the change in fall 2016.

Financial impact: None, existing faculty will teach the courses.

Additional Documentation: This is a "Change to Concentration" which requires no additional approvals beyond program level. The College of Law will be submitting curricular changes to reflect these revisions simultaneously.

DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

Student Learner Outcomes

MS Track I Learner Outcomes

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

MS Track II Learner Outcomes

1. The candidate understands the central concepts, tools of inquiry, structures of the discipline 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)

Rehabilitation Counseling for the Deaf Learner Outcomes

1. Students will understand advanced topics related to the deaf community to enhance practice as rehabilitation counselors for persons who are deaf or hard of hearing.
2. Students will understand advanced topics related to public and private services available through community agencies for persons who are deaf or hard of hearing, with an emphasis upon vocational rehabilitation services.
3. Students will gain a deep understanding of special populations within the deaf community, including but not limited to persons who are deaf and blind, late-deafened individuals, and veterans who have become deaf or hard-of-hearing through service-connected circumstances.
4. Students will learn appropriate counseling skills using American Sign Language (ASL).
5. Students will be immersed in American Sign Language (ASL) by virtue of courses being taught using ASL as the means of delivering lecture materials.

Urban Learner Outcomes

1. Understand and acquire leadership abilities and change strategies to improve teaching and learning in urban school contexts.
NBPTS Standard 1: Teachers are committed to students and their learning.
NBPTS Standard 5: Teachers are members of learning communities.
2. Demonstrate an array of teaching/learning strategies or instructional models aligned with the needs of students and families in urban school communities.
NBPTS Standard 4: Teachers think systematically about their practice and learn from experience.
3. Demonstrate the ability to assess student learning and achievement in urban school contexts
NBPTS Standard 3: Teachers are responsible for managing and monitoring student learning.

❖ **DROP ALL CONCENTRATIONS – TEACHER EDUCATION, MS (TRACK 1, NON-LICENSURE)**

Art Education Concentration
Cultural Studies of Educational Foundations Concentration
Education of the Deaf and Hard of Hearing Concentration
Elementary Education Concentration
English Education Concentration
Literacy Education Concentration
Mathematics Education Concentration
Science Education Concentration
Science Education (Informal Education) Concentration
Science, Technology, Engineering, and Mathematics Concentration
Social Science Education Concentration
Special Education Concentration
Teaching and Learning Concentration
World Language/ESL Education Concentration

❖ **ADD NEW CONCENTRATION – TEACHER EDUCATION, MS (WITH SPECIALIZATIONS)**

Educational Studies Concentration

Art Education *specialization*
Cultural Studies of Educational Foundations *specialization*
Education of the Deaf and Hard of Hearing *specialization*
Elementary Education *specialization*
English Education *specialization*
Literacy Education *specialization*
Mathematics Education *specialization*
Science Education *specialization*
Science Education (Informal Education) *specialization*
Science, Technology, Engineering, and Mathematics *specialization*
Social Science Education *specialization*
Special Education *specialization*
Teaching and Learning *specialization*
World Language/ESL *specialization*

DROP HEADING – LICENSURE TRACK 2, FOR TEACHER EDUCATION MAJOR, MS

❖ **DROP ALL CONCENTRATIONS – TEACHER EDUCATION, MS (TRACK 2, LICENSURE)**

Art Education Concentration
Education of the Deaf and Hard of Hearing Concentration
Elementary Teaching Concentration
English as a Second Language Education Concentration
Mathematics Grades 6-8 Teaching Concentration
Science Grades 6-8 Teaching Concentration
Secondary Teaching concentration
Special Education Concentration
World Language Education Concentration

ADD HEADING – PROFESSIONAL INTERNSHIP INITIAL LICENSURE, FOR TEACHER EDUCATION MAJOR, MS

❖ ADD CONCENTRATIONS – TEACHER EDUCATION, MS (FOR PROFESSIONAL INTERNSHIP INITIAL LICENSURE)

Art Education Professional Internship Concentration
ASL Education Professional Internship Concentration
Education of the Deaf and Hard of Hearing Professional Internship Concentration
Elementary Education Professional Internship Concentration
English as a Second Language Education Professional Internship Concentration
English Education Professional Internship Concentration
Mathematics Education Professional Internship Concentration
Mathematics Grades 6-8 Education Professional Internship Concentration
Science Education Professional Internship Concentration
Science Grades 6-8 Education Professional Internship Concentration
Social Sciences Education Professional Internship Concentration
Special Education Professional Internship Concentration
World Language Education Professional Internship Concentration

❖ ADD NEW CONCENTRATION – TEACHER EDUCATION, MS (WITH SPECIALIZATIONS)

Practitioner Concentration

English as a Second Language *specialization*
Math Education *specialization*
Science Education *specialization*
Special Education *specialization*
World Languages *specialization*

REVISE REQUIREMENTS – TEACHER EDUCATION, MS

In the 2018-2018 Graduate Catalog, delete all text and replace with the following:

Teacher Education Major, MS

The Master of Science with a major in Teacher Education offers Professional Internship concentrations that lead to teacher licensure. The Professional Internship concentrations are designed for students seeking initial teacher licensure in several concentrations and a master's degree in Teacher Education.

Licensure may also be sought through the Practitioner concentration, which is designed for students who are earning an initial teaching credential while serving as an instructor of record in a school. In areas of teacher shortage, state licensure requirements allow a partnership school system (or private school) to employ an individual as "instructor of record," provided content/subject knowledge has been met, and the candidate has been admitted to an approved educator preparation program. The teacher would enter a graduate-level teacher licensure program, while carrying out the duties and responsibilities of a first-year teacher, with school system and UT faculty as mentors. The teacher has three years to complete licensure requirements. The Tennessee Department of Education's Office of Educator Licensing will issue the license only at the recommendation of the approved educator preparation program. Contact the Office of Advising and Student Services for more information (<http://cehhsadvising.utk.edu/licensure/>).

The department also offers a concentration in Educational Studies. The Educational Studies concentration does not lead to initial teacher licensure. This concentration is designed for students who hold a valid Tennessee teaching license, for those wishing to enhance their professional knowledge and expertise, for those preparing to teach on the post-secondary level, or for those preparing for careers that do not require teacher licensure. Depending on the student's program of study, this concentration may lead to an additional endorsement area for an already licensed teacher.

The Master of Science in Teacher Education offers thesis and non-thesis options and require students to submit a written comprehensive examination. In addition, students completing theses must sit for an oral examination of their theses.

Admission

For all programs, students must meet all current graduate school admission requirements and departmental requirements in addition to submitting a graduate school and departmental application. Three letters of recommendation are also required for the Educational Studies concentration.

Professional Internship Initial Licensure concentrations

The Professional Internship concentrations are intended for individuals seeking initial teacher licensure. Applicants to any of the professional internship concentrations must first interview with a teacher education admissions board and be admitted to teacher education. Individuals are encouraged to contact the college's Student Services Center, A332 Bailey Education Complex, for a diagnostic interview and to develop a tentative course of study and time line.

Requirements**Teacher Education, MS: Professional Internship concentrations common course requirements**

Master's Internship concentrations are 36 graduate credit hours (non-thesis); 42 graduate credit hours (thesis). Students, regardless of teaching concentration (e.g., elementary, secondary, etc.), complete a common teacher licensure core of 24 graduate credit hours during the Professional Internship year (see below).

Professional Internship Year common core courses (24 credit hours)

TPTE 574 (2-3), TPTE 575 (12), TPTE 591 (3-4), concentration specific courses as approved by advisor (6)

Additional course concentration requirements to earn a master's degree (12 credit hours)

In addition to the Professional Internship Year common core courses listed above, students must complete an additional 12 credit hours of graduate coursework that is unique to their concentration field to earn a master's degree. Additional courses required for each concentration are listed below.

Art Education Professional Internship concentration

ARED 510, ARED 520, ARED 530, ARED 540

ASL Education Professional Internship concentration

Candidates need a minimum score of Advanced level on SLPI or 4 on ASLPI.

ASL 421 (offered summer term only), ASL 422, ASL 545, ENED 509 or REED 543

Education of the Deaf and Hard of Hearing Professional Internship concentration

Research elective (3); non-specified electives (9).

Elementary Education Professional Internship concentration

6 credit hours chosen from MEDU 530, REED 530, SCED 531, or SSCE 521, 6 credit hours of educational electives chosen from historical, philosophical, or social foundations; educational technology; reading education; language arts education; science education; social science education; elementary education; issues in teacher education.

English as a Second Language Education Professional concentration

TPTE 517; advisor approved electives (9).

English Education Professional Internship concentration

TPTE 517, TPTE 549, TPTE 588 or an elective in the history of sociology or philosophy of education; 6 credit hours of specialty area electives (see faculty advisor).

Mathematics Education Professional Internship concentration

TPTE 517; TPTE 549, TPTE 588 or an elective in the history of sociology or philosophy of education; 6 credit hours of specialty area electives (see faculty advisor).

Mathematics Grades 6-8 Education Professional Internship concentration

TPTE 517; REED 543; 6 credit hours of electives (see faculty advisor).

Science Education Professional Internship concentration

TPTE 517; TPTE 549, TPTE 588 or an elective in the history of sociology or philosophy of education; 6 credit hours of specialty area electives (see faculty advisor).

Science Grades 6-8 Education Professional Internship concentration

TPTE 517; REED 543; 6 credit hours of electives (see faculty advisor).

Social Sciences Education Professional Internship concentration

TPTE 517; TPTE 549, TPTE 588 or an elective in the history of sociology or philosophy of education; 6 credit hours of specialty area electives (see faculty advisor).

Special Education Professional Internship concentration

SPED 553, SPED 556; 6 credit hours of electives (see advisor).

World Language Education Professional Internship concentration

TPTE 517; ETEC 586 or ETEC 587 (or approved educational technology course); approved graduate class in the World Language; WLEL 445 and WLEL 455 (Teaching World Languages, PreK-5).

Practitioner Concentration

The Practitioner concentration leads to licensure in high needs content areas, math education, science education, special education, world languages, and English as a second language. It is designed for students who are earning an initial teaching credential while serving as an instructor of record in a school. In areas of teacher shortage, state licensure requirements allow a partnership school system (or private school) to employ an individual as "instructor of record," provided content/subject knowledge has been met, and the candidate has been admitted to an approved educator preparation program (EPP). The student would enter a graduate-level teacher EPP, while carrying out the duties and responsibilities of a first-year teacher, with school system and UT faculty as mentors, and has three years to complete licensure requirements. The Tennessee Department of Education's Office of Educator Licensing will issue the license only at the recommendation of the approved educator preparation program. Contact the Office of Advising and Student Services for more information (<http://cehhsadvising.utk.edu/licensure/>).

The Practitioner concentration common core courses are listed below. Students must complete an additional 12 credit hours of graduate coursework that is unique to their concentration field to earn a master's degree.

EDPY 401 (3), ETEC 486 (3), SPED 402 (3), SPED 557 (3), EDUC 576 (4-7), Concentration specific courses (6-12).

Educational Studies Concentration

The Educational Studies concentration does not lead to initial teacher licensure but, depending on the student's program of study, may lead to an additional endorsement area for an already licensed teacher. It is for students seeking to enhance their professional knowledge and expertise, for those preparing to teach on the post-secondary level, or for those preparing for careers that do not require teacher licensure. The Educational Studies concentration does not lead to initial teacher licensure but, depending on the student's program of study, may lead to an additional endorsement area for an already licensed teacher. Thesis and non-thesis options are available as are specializations in several subject and specialty areas. Both the thesis and non-thesis options require students to submit a written comprehensive examination and 2/3 of total hours must be 500-level or above. In addition, students completing theses must sit for an oral examination of their theses.

Thesis: Minimum 30 graduate credit hours, satisfactory completion of written thesis and oral defense of thesis; 2/3 of total hours for MS degree must be 500-level or above.

Non-Thesis: Minimum 33 graduate credit hours, satisfactory completion of written comprehensive examination; 2/3 of total hours for MS must be 500-level or above.

English Education, Mathematics Education, Science Education, Social Science Education, and World Language/ESL SpecializationsThesis Option

Minimum 30 credit hours of approved graduate coursework, 6 hours of TPTE 500, and satisfactory completion of written thesis and oral defense of thesis. Two-thirds of the total credit hours for the MS must be 500-level courses or above.

Non-Thesis Option

Non-Thesis: Minimum 33 credit hours of approved graduate coursework and satisfactory completion of written and/or oral comprehensive examination. Two-thirds of the total hours for the MS must be 500-level courses or above.

Non-Thesis Option	Credit Hours
* Core Area	9
Specialization Area	12
Related Studies	12

All classes must be approved by major advisor.

*TPTE 517; EDPY 550, EDPY 577, EDAM 520, or other approved research course; ETEC 586, ETEC 587 or other approved educational technology course.

Art Education SpecializationAdvising Note for Thesis and Non-Thesis Options

An exhibition, instead of a thesis, must be of work directed by art and art education faculty. The artwork must be completed while pursuing the master's degree. A written paper must accompany the exhibition.

Art Education (Thesis Option)	Credit Hours
¹ Core	6
² Specialization	18
TPTE 500 (Thesis)	6
Total	30

¹TPTE 517, Educational Psychology EDPY 577, or other approved research design course.

²ARED 510, ARED 520, ARED 530, ARED 540; art history 400- or 500-level (3); studio art courses 400- or 500-level (3).

Art Education (Non-Thesis Option) Credit Hours

¹ Core	6
² Specialization	21
500-Level Electives	6
Total	33

¹TPTE 517; EDAM 520; EDPY 550, EDPY 577, or other committee approved research design.

²ARED 510, ARED 520, ARED 530, ARED 540; art history 400- or 500-level (3); studio art courses 400- or 500-level (3); TPTE 593 or TPTE 595.

Cultural Studies of Educational Foundations Specialization (thesis or problems option)

The specialization'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 Credit Hours

¹ Concentration	15
² Specialization (choose one)	9
³ Research	6
⁴ Thesis or Problems in Lieu of Thesis	6
Total	36

¹CSE 591, CSE 592. Select two from CSE 504, CSE 511, CSE 539, CSE 545, CSE 549, CSE 550 OR CSE 639.

²Students can design their own specialization area such as gender studies in education; multicultural education; rural education; or religion, ethics and morality.

³Select two courses from CSE 526, EDPY 559, EDPY 506, EDPY 682, or advisor approved substitute.

⁴CSE 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.

Education of the Deaf and Hard of Hearing Specialization

Contact the department head for information on this concentration.

Elementary Education Specialization

Thesis Option Credit Hours

¹ Core	9
² Specialization	12
³ Related Studies	3
TPTE 500	6
Total	30

¹EDPY 577 or other approved research design course; TPTE 517; 3 credit hours determined by student and advisor.

²Choose from at least three areas – reading education, language arts education, mathematics education, science education, social studies education, elementary curriculum, middle school curriculum.

³Determined by student and advisor.

Non-Thesis Option Credit Hours

¹ Core	12
² Specialization	15
³ Related Studies	6
Total	33

¹EDPY 550, EDPY 577, EDAM 520, or other approved research design course; TPTE 517; 6 credit hours determined by student and advisor.

²Choose from at least three areas – reading education, language arts education, mathematics education, science education, social studies education, elementary curriculum, middle school curriculum

³Determined by student and advisor.

Literacy Education Specialization

Thesis Option Credit Hours

¹ Core	9
Specialization (reading education courses)	12
² Related Studies	3
TPTE 500	6
Total	30

¹EDPY 577 or other approved research design course; TPTE 517; 3 credit hours determined by student and advisor.

²Choose 3 graduate credit hours from language arts education, English education, elementary curriculum, elementary education, middle school curriculum, special education, or educational psychology.

<u>Non-Thesis Option</u>	<u>Credit Hours</u>
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¹ Core	12
Specialization (reading education courses)	12
² Related Studies	9
Total	33

¹EDPY 550, EDPY 577, EDAM 520, or other approved research design course; TPTE 517; 6 credit hours determined by student and advisor.

²Choose 9 credit hours from language arts education, English education, elementary curriculum, elementary education, middle school curriculum, special education, or educational psychology.

Science Education (Informal Education) Specialization

<u>Thesis Option</u>	<u>Credit Hours</u>
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¹ Core	9
² Specialization	12
³ Related Studies	3
TPTE 500 (Thesis)	6
Total	30

¹EDPY 577 or other approved research design course; TPTE 517; 3 credit hours determined by student and advisor.

²SCED 509, SCED 510; 3 credit hours determined by student and advisor.

³Determined by student and advisor.

<u>Non-Thesis Option</u>	<u>Credit Hours</u>
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¹ Core	12
² Specialization	15
³ Related Studies	6
Total	33

¹EDPY 550, EDPY 577, EDAM 520, or other approved research design course; TPTE 517; 6 credit hours determined by student and advisor.

²SCED 509, SCED 510; 6 credit hours determined by student and advisor.

³Determined by student and advisor.

Science, Technology, Engineering, and Mathematics Specialization

Note: STEM offers a specialization in gifted education. Specific course selection and sequence should be determined in consultation with student's advisor. This concentration is offered via distance education (DE).

<u>Thesis Option Only</u>	<u>Credit Hours</u>
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¹ Core	12
² Specialization	12
Related Studies	6
TPTE 500 (Thesis)	6
Total	36

¹TPTE 517; TPTE 540; ETEC 586; TPTE 588

²SCED 572; SCED 509; MEDU 543 or SCED 543; MEDU 583 or SCED 565; ELED 524; EDDE 504 or SPED 506 (3 credit hours); SPED 574; SPED 575

Special Education Specialization

<u>Thesis Option</u>	<u>Credit Hours</u>
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¹ Core	12
² Specialization	12
TPTE 500 (Thesis)	6
Total	30

¹SPED 556; EDPY 505, SPED 590, SPED 553.

²Select appropriate courses with major advisor.

Courses in Gifted Education specialization are available via distance education: SPED 574; SPED 575; ELED 524; SCED 572; SPED 506. Specific course selection and sequence should be determined in consultation with the student's advisor. Gifted courses may be taken in partial fulfillment of degree requirements in other degree programs upon approval of the student's graduate committee.

<u>Non-Thesis Option</u>	<u>Credit Hours</u>
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¹ Core	12
² Specialization	24
Total	36

¹SPED 556; EDPY 505, SPED 590, SPED 553.

²Select appropriate courses with major advisor.

Courses in Gifted Education specialization are available via distance education: SPED 574; SPED 575; ELED 524; SCED 572; SPED 506. Specific course selection and sequence should be determined in consultation with the student's advisor. Gifted courses may be taken in partial fulfillment of degree requirements in other degree programs upon approval of the student's graduate committee.

Teaching and Learning Specialization

<u>Thesis Option</u>	<u>Credit Hours</u>
¹ Core	9
² Specialization	9
³ Related Studies	6
TPTE 500	6
Total	30

¹EDPY 577 or other approved research design course; TPTE 517; approved educational technology course.

²Faculty approved graduate courses in curriculum or instructional pedagogy.

³Faculty approved graduate courses in leadership, strategic planning, adult education, or other committee approved topics.

<u>Non-Thesis Option</u>	<u>Credit Hours</u>
¹ Core	9
² Specialization	12
³ Related Studies	9
Total	30

¹EDPY 550, EDPY 577, EDAM 520, or other approved research design course; TPTE 517; approved educational technology course.

²Faculty approved graduate courses in curriculum or instructional pedagogy.

³Faculty approved graduate courses in leadership, strategic planning, adult education, or other committee approved topics.

Formerly: Teacher Education Major, MS

The Master of Science with a major in teacher education has two tracks. Non-Licensure Track 1 is for students who hold a valid Tennessee teaching license, or for those preparing to teach on the post-secondary level, or for those preparing for careers that do not require teacher licensure. Licensure Track 2 is designed for students seeking initial teacher licensure.

Both Non-Licensure Track 1 and Licensure Track 2 offer thesis and non-thesis options and require students to submit a written comprehensive examination. In addition, students completing theses must sit for an oral examination of their theses.

Non-Licensure Track 1

Non-Licensure Track 1 concentrations are art education; cultural studies of education foundations; education of the deaf and hard of hearing; elementary education; English education; literacy education; mathematics education; science education; science education (informal education); science, technology, engineering, and mathematics; social science education; special education; teaching and learning and world language/ESL education.

Admission

Students must meet all current graduate school admission requirements in addition to submitting a departmental application and three rating forms.

Requirements

Completion of a prescribed set of graduate courses: Core area (9 credit hours minimum) TPTE 517, approved research course, ETEC 586, ETEC 587 or approved educational or instructional technology course.

Concentration area (12 credit hours).

Related studies (3-12 credit hours).

Completion of thesis or non-thesis option.

Thesis: Minimum 30 graduate credit hours, satisfactory completion of written thesis and oral defense of thesis; 2/3 of total hours for MS degree must be 500-level or above.

Non-Thesis: Minimum 33 graduate credit hours, satisfactory completion of written comprehensive examination; 2/3 of total hours for MS must be 500-level or above.

Content Fields Teaching • Teacher Education major, MS - Non-Licensure Track 1

Concentrations are: English Education, Mathematics Education, Science Education, Social Science Education, and World Language/ESL education.

Thesis Option

Minimum 30 credit hours of approved graduate coursework, 6 hours of TPTE 500, and satisfactory completion of written thesis and oral defense of thesis. Two-thirds of the total credit hours for the MS must be 500-level courses or above.

Non-Thesis Option

Non-Thesis: Minimum 33 credit hours of approved graduate coursework and satisfactory completion of written and/or oral comprehensive examination. Two-thirds of the total hours for the MS must be 500-level courses or above.

Non-Thesis option	Credit Hours
*Core Area	9
Concentration Area	12
Related Studies	12

All classes must be approved by major advisor.

*TPTE 517; EDPY 550, EDPY 577, EDAM 520, or other approved research course; ETEC 586, ETEC 587 or other approved educational technology course.

Art Education concentration • Non-Licensure Track 1 Advising Note for Thesis and Non-Thesis Options

The Non-Licensure Track I MS serves those students who have a BS, BA, or BFA and desire a master's degree, but do not wish to pursue certification to teach art, or who already have certification to teach art and wish to pursue a master's.

An exhibition, instead of a thesis, must be of work directed by art and art education faculty. The artwork must be completed while pursuing the master's degree. A written paper must accompany the exhibition. The paper includes a philosophical statement; process and media explanation (demonstration of knowledge); compositional analysis of each work; and how the work relates to one's personal artist statement.

For both tracks, a comprehensive written examination is required during the final semester of work. An oral exam is given over the thesis. Students are expected to read and meet requirements in the Graduate School section of the current catalog, with regard to admission applications, candidacy forms, scheduling comprehensive exam, as well as meeting all requirements regarding the courses in their graduate program.

Art Education concentration (Thesis Option) • Non-Licensure Track 1	
1 Core	6
2 Concentration	18
Theory and Practice in Teacher Education TPTE 500 (Thesis)	6
Total	30

1 Theory and Practice in Teacher Education TPTE 517, Educational Psychology EDPY 577, or other approved research design course.
2 Art Education ARED 510, ARED 520, ARED 530, ARED 540; art history 400- or 500-level (3); studio art courses 400- or 500-level (3).

Art Education concentration (Non-Thesis Option) • Non-Licensure Track 1	
1 Core	6
2 Concentration	21
500-Level Electives	6
Total	33

1 TPTE 517; EDAM 520; EDPY 550, EDPY 577, or other committee approved research design.

2 ARED 510, ARED 520, ARED 530, ARED 540; art history 400- or 500-level (3); studio art courses 400- or 500-level (3); TPTE 593 or TPTE 595.

Cultural Studies of Educational Foundations concentration (thesis or problems option) • Non-Licensure Track 1

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.

1 Concentration	15
2 Specialization (choose one)	9
3 Research	6
4 Thesis or Problems in Lieu of Thesis	6
Total	36

1 CSE 591, CSE 592. Select two from CSE 504, CSE 511, CSE 539, CSE 545, CSE 549, CSE 550 OR CSE 639.

2 Students can design their own specialization area such as gender studies in education; multicultural education; rural education; or religion, ethics and morality.

3 Select two courses from CSE 526, EDPY 559, EDPY 506, EDPY 682, or advisor approved substitute.

4 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.

Education of the Deaf and Hard of Hearing concentration • Non-Licensure Track 1 Contact the department head for information on this concentration.

Elementary Education concentration • Non-Licensure Track 1

Thesis Option	Credit Hours
1 Core	9
2 Concentration	12
3 Related Studies	3
TPTE 500	6
Total	30

1EDPY 577 or other approved research design course; TPTE 517; 3 credit hours determined by student and advisor.

2Choose from at least three areas – reading education, language arts education, mathematics education, science education, social studies education, elementary curriculum, middle school curriculum.

3Determined by student and advisor.

Non-Thesis Option	Credit Hours
1 Core	12
2 Concentration	15
3 Related Studies	6
Total	33

1EDPY 550, EDPY 577, EDAM 520, or other approved research design course; TPTE 517; 6 credit hours determined by student and advisor.

2Choose from at least three areas – reading education, language arts education, mathematics education, science education, social studies education, elementary curriculum, middle school curriculum.

3Determined by student and advisor.

Literacy Education concentration • Non-Licensure Track 1

Thesis Option	Credit Hours
1 Core	9
Concentration (reading education courses)	12
2 Related Studies	3
TPTE 500	6
Total	30

1EDPY 577 or other approved research design course; TPTE 517; 3 credit hours determined by student and advisor.

2Choose 3 graduate credit hours from language arts education, English education, elementary curriculum, elementary education, middle school curriculum, special education, or educational psychology.

Non-Thesis Option	Credit Hours
1 Core	12
Concentration (reading education courses)	12
2 Related Studies	9
Total	33

1EDPY 550, EDPY 577, EDAM 520, or other approved research design course; TPTE 517; 6 credit hours determined by student and advisor.

2Choose 9 credit hours from language arts education, English education, elementary curriculum, elementary education, middle school curriculum, special education, or educational psychology.

Science Education (Informal Education) concentration • Non-Licensure Track 1

Thesis Option	Credit Hours
1 Core	9
2 Concentration	12
3 Related Studies	3
TPTE 500 (Thesis)	6
Total	30

1EDPY 577 or other approved research design course; TPTE 517; 3 credit hours determined by student and advisor.

2SCED 509, SCED 510; 3 credit hours determined by student and advisor.

3Determined by student and advisor.

Non-Thesis Option	Credit Hours
1 Core	12
2 Concentration	15
3 Related Studies	6
Total	33

1EDPY 550, EDPY 577, EDAM 520, or other approved research design course; TPTE 517; 6 credit hours determined by student and advisor.

2SCED 509, SCED 510; 6 credit hours determined by student and advisor.

3Determined by student and advisor.

Science, Technology, Engineering, and Mathematics concentration • Non-Licensure Track 1

Note: STEM offers a specialization in gifted education. Specific course selection and sequence should be determined in consultation with student's advisor. This concentration is offered via distance education (DE).

Thesis Option Only	Credit Hours
1 Core	12
2 Concentration	12
Related Studies	6
TPTE 500 (Thesis)	6
Total	36

1 TPTE 517; TPTE 540; ETEC 586; TPTE 588

2 SCED 572; SCED 509; MEDU 543 or SCED 543; MEDU 583 or SCED 565; ELED 524; EDDE 504 or SPED 506 (3 credit hours); SPED 574; SPED 575

Special Education concentration • Non-Licensure Track 1

Thesis Option	Credit Hours
1 Core	12
2 Concentration	12
TPTE 500 (Thesis)	6
Total	30

1 SPED 556; EDPY 505, SPED 590, SPED 553.

2 Select appropriate courses with major advisor.

Courses in Gifted Education specialization are available via distance education: SPED 574; SPED 575; ELED 524; SCED 572; SPED 506. Specific course selection and sequence should be determined in consultation with the student's advisor. Gifted courses may be taken in partial fulfillment of degree requirements in other degree programs upon approval of the student's graduate committee.

Non-Thesis Option	Credit Hours
1 Core	12
2 Concentration	24
Total	36

1 SPED 556; EDPY 505, SPED 590, SPED 553.

2 Select appropriate courses with major advisor.

Courses in Gifted Education specialization are available via distance education: SPED 574; SPED 575; ELED 524; SCED 572; SPED 506. Specific course selection and sequence should be determined in consultation with the student's advisor. Gifted courses may be taken in partial fulfillment of degree requirements in other degree programs upon approval of the student's graduate committee.

Teaching and Learning concentration • Non-Licensure Track 1

Thesis Option	Credit Hours
1 Core	9
2 Concentration	9
3 Related Studies	6
TPTE 500	6
Total	30

1 EDPY 577 or other approved research design course; TPTE 517; approved educational technology course.

2 Faculty approved graduate courses in curriculum or instructional pedagogy.

3 Faculty approved graduate courses in leadership, strategic planning, adult education, or other committee approved topics.

Non-Thesis Option	Credit Hours
1 Core	9
2 Concentration	12
3 Related Studies	9
Total	30

1 EDPY 550, EDPY 577, EDAM 520, or other approved research design course; TPTE 517; approved educational technology course.

2 Faculty approved graduate courses in curriculum or instructional pedagogy.

3 Faculty approved graduate courses in leadership, strategic planning, adult education, or other committee approved topics.

Licensure Track 2: Initial Licensure Programs

The Licensure Track 2 master's is intended for individuals desiring to earn teacher licensure. Applicants to this program must first be admitted to teacher education. Elementary, or secondary English and social sciences education applicants must complete the equivalent of an undergraduate minor in either elementary or secondary education while applicants for either of the grades 6-8 teaching concentrations complete the grades 6-8 minor. Applicants interested in a grades 6-8 concentration for mathematics complete an undergraduate major in mathematics and applicants interested in a grades 6-8 teaching concentration in one of the sciences complete an undergraduate major in that area. Applicants interested in a grades 6-8 teaching concentration for both mathematics and science should consult with a CEHHS advisor. Applicants interested in secondary math or science education should contact the CEHHS Office of Student Services for further guidance on available options at both the undergraduate and graduate levels. Post-baccalaureate students interested in seeking licensure in art education, special education, world language education, or in other fields that require students to earn an undergraduate major would be expected to complete an equivalent undergraduate program of study. Please

refer to the catalog for complete details. Individuals are encouraged to contact the college's Student Services Center, A332 Bailey Education Complex, for a diagnostic interview and to develop a tentative course of study and time line.

Requirements

Teacher Education, MS: Licensure Track 2 common course requirements

Master's Track 2 programs are 36 graduate credit hours (non-thesis); 42 graduate credit hours (thesis). Students, regardless of teaching area (e.g., elementary, secondary, etc.), complete a common teacher licensure core of 24 graduate credit hours during the professional year (see below).

Professional Year Teacher Licensure common core courses (24 credit hours)

TPTE 574 (2-3), TPTE 575 (12), TPTE 591 (3-4), specialty studies (6)

Additional Course Requirements (12 credit hours)

In addition to the Professional Year Teacher Licensure common core courses listed above, students must complete an additional 12 credit hours of graduate coursework that is unique to their particular teacher preparation field.

Art Education concentration

ARED 510, ARED 520, ARED 530, ARED 540

Education of the Deaf and Hard of Hearing concentration

Research elective (3); non-specified electives (9).

Elementary Teaching concentration

6 credit hours chosen from MEDU 530, REED 530, SCED 531, or SSCE 521, 6 credit hours of educational electives chosen from historical, philosophical, or social foundations; educational technology; reading education; language arts education; science education; social science education; elementary education; issues in teacher education.

English as a Second Language Education concentration

TPTE 517; advisor approved electives (9).

Mathematics Grades 6-8 Teaching concentration

TPTE 517; REED 543; 6 credit hours of electives (see faculty advisor).

Science Grades 6-8 Teaching concentration

TPTE 517; REED 543; 6 credit hours of electives (see faculty advisor).

Special Education concentration

SPED 553, SPED 556; 6 credit hours of electives (see advisor).

Secondary Teaching concentration

TPTE 517; TPTE 549, or TPTE 588, or an elective in the history of sociology or philosophy of education; 6 credit hours of specialty area electives (see faculty advisor).

World Language Education concentration

TPTE 517; ETEC 586 or ETEC 587 (or approved educational technology course); approved graduate class in the World Language; WLEL 445 and WLEL 455 (Teaching World Languages, PreK-5).

Rationale: Currently the MS in Teacher Education has two tracks: Track 1 and Track 2 with each track having several content area specializations. We propose to change the organization of our Teacher Education major to eliminate the Track 1 and Track 2 nomenclature and list the specialty area concentrations. However, these specialty area concentrations are organized into pathways for teacher licensure and/or pathways to a master's degree. Therefore, the descriptions of each pathway have also changed to add explicitness and clarity.

Briefly, the former Track 2 program which leads to initial licensure is labeled as Professional Internship Concentration preceded by the content area specialty. Students in these programs earn an undergraduate degree in their specialty area and return for the fifth-year professional internship year and are eligible for a teaching license after completing this internship. Completion of an additional 12 hours of coursework is then needed to earn a master's degree. We are also adding an ASL Professional Internship Concentration because a state bill, HB0462/SB0524, was passed and signed into law effective 7/1/17, which allows high school students to take ASL as a world language. A concentration in ASL Education allows us to begin filling the demand in the state of TN for licensed ASL teachers, Pre K-12. In addition, the Secondary Teaching Concentration has been delineated by content area (English, Mathematics, Science, and Social Science).

The state has now provided an alternate pathway to initial license in high needs areas, such as math, science, special education, world language, and English as a second language. Therefore, the practitioner pathway to initial license has been added. This pathway to licensing can also lead to a master's degree with additional coursework. However, these students do not participate in the internship program. Instead, they have been hired by a local education agency (LEA) and are teaching full-time under the supervision of UTK faculty and LEA administrators.

The former Track 1 program is now referred to as Educational Studies with content area specializations as listed above. This program attracts far fewer students than the current Track 1 program so it makes sense to consolidate under one concentration.

A curricular revision changing the names of Track 1 and Track 2 will support future students by providing a clearer distinction between the options available and better descriptions. The only other university program using a Track 1/Track 2 format is the Master's in Landscape Architecture. Changing the name and organization of the MS in Teacher Education will also provide more clarity to program review personnel and accreditation bodies such as the Council for Accreditation of Educator Preparation (CAEP).

The majority of our students are seeking initial license which suggested to us that the Professional Internship Concentration should be listed first in the catalogue, followed by the Practitioner Program which keeps the pathways to licensing together. The former Track 1

(now Educational Studies) program is listed last as it does NOT lead to licensing. All three pathways lead to a master's degree. This order is different than the current catalogue listing which explains why so much of the proposed change is underlined.

Impact on Other Units: The proposed name changes do not change required courses from other programs or any other units outside of TPTE, as all programs are housed in our department.

Financial Impact: The proposed change of the major does not affect faculty loads. As a result, there is no financial impact of the name change of the major other than reprinting advising materials. However, this is already done on an annual basis to keep names and office locations of faculty and administrative assistants current.

Additional Documentation: Because all changes are in the department of TPTE, no other documentation or approvals are required. Faculty are consistently receiving applications in which the student has indicated the wrong program and/or are receiving inquiries as to which program they should apply. It is our intent that this name change will help applicants distinguish between the two pathways to initial teacher licensure and the three pathways to a master's degree. These changes are also a result of state licensing changes, i.e. Practitioner Concentration. The change is not substantive and does not need to be reported to SACSCOC.

+ ADD CERTIFICATE – REHABILITATION COUNSELING FOR THE DEAF

In the 2018-2019 Graduate Catalog, add heading, text, and requirements for the new certificate.

Rehabilitation Counseling for the Deaf Graduate Certificate

The Rehabilitation Counseling for the Deaf Graduate Certificate is a distance education program available to students whose career interests relate to working with individuals who are deaf or hard of hearing. This 12 credit-hour certificate is limited to those students who demonstrate at least an intermediate level of skill with the Sign Language Proficiency Inventory (SLPI) prior to admission to the certificate. Courses specific to the Rehabilitation Counseling for the Deaf Graduate Certificate are taught via distance education and integrate American Sign Language (ASL) as the primary means of delivery of lecture material.

Required courses are:

ASL 421 - History and Culture of the Deaf (offered summer term only)

RCDE 521 - Rehabilitation Services in the Deaf Community

RCDE 522 - Communication with Persons who are Deaf or Hard of Hearing

RCDE 523 - Special Populations and Topics in Rehabilitation of the Deaf

Program contact: Program contact information can be found at <https://centerondeafness.utk.edu/>

Rationale: This revision is to add the Rehabilitation Counseling for the Deaf (RCDE) Certificate program with a title change and to add three courses for the certificate. This graduate certificate was originally created in 2016 and housed under the Department of Educational Psychology and Counseling (EPC) under their Rehabilitation Counseling program. In 2017 the College administration decided to discontinue the Rehabilitation Counseling Program (RHCO). Therefore, EPC is dropping the certificate because the program has closed. EPC and TPTE are both of the opinion that TPTE would be a better fit for this program and are in agreement with TPTE going forward with the submission to add the certificate and the necessary courses.

The Chair of EPC, Dr. Jeff Cochran has offered TPTE and the Center on Deafness the option of taking over the Deafness Rehabilitation Graduate Certificate and three of the four courses that make it up (RHCO 521, RHCO 522, RHCO 523). One course, ASL 421 Deaf Culture and Community, is currently part of the TPTE graduate and undergraduate catalog.

Impact on other units: The three courses (RCDE 521, 522 and 523) are needed for the Rehabilitation Counseling for the Deaf Graduate Certificate program. As this graduate certificate program will be housed entirely within TPTE (if approved) there will not be an impact on other units. NOTE: Dr Sherry Bell is aware of this proposal and has had discussions with Dr. Jeff Cochran of EPC and they are in agreement with this change.

Financial impact: There is no impact on staffing for AY semesters as these courses will be offered during the summer sessions only. Courses will be taught by existing faculty or qualified adjuncts. The Rehabilitation Counseling for the Deaf certificate will be completed via distance education and the certificate would be self-sustaining via student fees. We could also have funding coming back to the department via the distance education incentive which would be adequate to cover the summer salary expenses of department faculty or the salary of adjuncts as needed.

Additional documentation: The change requires no additional approval. The change is not substantive and will not need to be reported to SACSCOC.

This graduate certificate program is moving from the EPC department to the TPTE department. This change has been discussed and agreed upon by Dr. Bell from TPTE and Dr. Cochran from EPC.

REVISE URBAN EDUCATION GRADUATE CERTIFICATE

In the 2018-2019 Graduate Catalog, delete current text for the Urban Education Graduate Certificate and replace with the following:

The Department of Theory and Practice in Teacher Education offers a graduate certificate in urban education for aspiring and experienced educators. The certificate gives educators an opportunity to serve diverse urban communities by strengthening their knowledge, skills, and dispositions related to educational equity. Urban and urbanizing communities are often characterized by racial, ethnic, linguistic, and cultural diversity. However, school curricula, instructional strategies, and the racially homogenous teaching force rarely address the needs of urban communities and represent a

growing cultural gap between communities and schools. Educators who complete the Urban Education Graduate Certificate will be prepared to leverage the assets of students and families from diverse backgrounds to engage in meaningful change in the classroom, community, and beyond. The certificate prepares educational professionals to work in urban environments through a focus on developing a deep understanding of various marginalized groups, collaborating with community members and organizations to form strong partnerships, and building strategies for teaching and leadership that promote academic achievement and positive social change in urban schools. A group is competitively selected each year. Participants complete a 12-credit hour, four-course program of study over a one-year period. Required courses include Introduction to Urban Education, TPTE 595; Diversity Pedagogy, TPTE 540; Social Justice and Social Action, TPTE 540; and a 3-credit hour elective course.

Rationale: This change is to revise the catalog description for the Urban Education Graduate Certificate. The revision updates the following: The program is now being offered to "aspiring" educators and not just experienced educators. We are now offering the certificate to current students. We have broadened the description to include "educators" and not only "teachers." Given that the program will be open to current students ("aspiring teachers"), we may not follow a cohort model from year-to-year. The program has changed from a two-year program to a one-year program. Lastly, we have updated description of required courses.

Faculty members reviewed and revamped the Urban Education Graduate Certificate curriculum and discussed subsequent changes with Department Head, Dr. Sherry Bell and Associate Dean, Dr. Susan Benner. The changes were agreed upon to help revive a program in an area of critical need. Additionally, students have expressed that there are few opportunities for individuals in middle and secondary education programs to focus on urban education issues. The new changes provide one avenue for students in those programs to get urban education training. This change is not connected to a formal SACS assessment. Impact on other units: In our review of the graduate catalog, we determined that there is no impact on other units. All courses will be taught within the department and given that we have allowed for one elective course within the department, students can more easily add the Urban Certificate and other endorsements without having to add too many additional courses. Additionally, these courses will draw students from outside the institution such as in-service teachers. Financial impact: No additional resources will be required. The courses will be taught by current faculty. Additional documentation: No additional approvals are required for this change. The change is not substantive and does not need to be reported to SACSCOC. Additionally, it is a certificate program and as such reporting to SACSCOC is not required.

TICKLE COLLEGE OF ENGINEERING

All Changes Effective Fall 2018.

I. COURSE CHANGES

DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING

(CBE) Chemical and Biomolecular Engineering

ADD

CBE 589 Biomolecular Engineering Laboratory (3) Interdisciplinary molecular techniques commonly applied to bioengineering problems, including DNA isolation and manipulation, delivery of engineered genetic constructs to cells, fermentation for recombinant protein expression, and downstream processing of cell culture products.

Contact Hour Distribution: 1 hour lecture and 4 hours lab.

(DE) Prerequisite: CBE 579 or equivalent.

Recommended Background: Broad understanding of cell biology concepts, basic laboratory proficiency consistent with graduate or upper-division standing in CBE, BCMB, or Microbiology.

Registration Restriction(s): Graduate student standing or Undergraduate Honors.

Registration Permission: Consent of instructor.

Rationale: Course addresses a need for practical training in bioengineering experimental skills required for ~20% of our PhD students. This course will begin in Spring 2018 as CBE 590 Special Topics and will be offered every spring thereafter, making use of space in the Eastman Unit Operations Laboratory that is currently unused in the spring semester. Course location and format: Course offered on campus. Course offered in standard format. Impact on other academic units: None. Financial impact: None.

DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

(COSC) Computer Science

ADD

COSC 521 Computational Cognitive Neuroscience (3) Survey of computational cognitive neuroscience. The focus is on the neuroscience of cognitive processes, including perception, categorization, memory, language, action, and executive control. Course work makes use of computer simulations of neural networks to model cognitive processes and to test hypotheses about their neural implementations. This course will require graduate level assignments.

Credit Restriction: Students cannot receive credit for both COSC 421 and 521.

Rationale: The course has been taught a half-dozen times in various forms, most recently in spring 2017 as a COSC 494/594 special topics course with 25 undergraduate and four graduate students. By having an assigned number, it will be available to neuroscience students, and therefore is expected to have a larger undergraduate enrollment (all but one were CS in S17). Impact on other academic units: None. Financial impact: None, course will be taught by the current faculty.

REVISE HOURS

COSC 502 Registration for Use of Facilities (1-3)

Formerly: COSC 502 Registration for Use of Facilities (1-15)

COSC 592 Off-campus Study (1)

Formerly: (1-6)

Rationale: This appears to be an overlooked issue that was identified this year. In conjunction with the elimination of "focus areas" from the catalog degree requirements, this change will provide opportunity for registration in additional courses. Impact on other units: None. Financial impact: None.

REVISE HOURS AND REPEATABILITY MAXIMUM HOURS

COSC 593 Independent Study (1-3)

Repeatability: May be repeated. Maximum 9 hours.

Formerly: (1-15)

Repeatability: May be repeated. Maximum 45 hours.

Rationale: This appears to be an overlooked issue that was identified this year. In conjunction with the elimination of "focus areas" from the catalog degree requirements, this change will provide opportunity for registration in additional courses. Impact on other units: None. Financial impact: None.

REVISE REPEATABILITY MAXIMUM HOURS

COSC 594 Special Topics in Computer Science (1-3)

Repeatability: May be repeated. Maximum 12 hours.

Formerly: Repeatability: May be repeated. Maximum 45 hours.

COSC 620 Advanced Topics in Intelligent Systems (1-6)

Repeatability: May be repeated. Maximum 9 hours.

Formerly: Repeatability: May be repeated. Maximum 45 hours.

COSC 650 Advanced Topics in Pattern/Image Analysis (1-6)

Repeatability: May be repeated. Maximum 9 hours.

Formerly: Repeatability: May be repeated. Maximum 45 hours.

COSC 660 Advanced Topics in Software Systems (1-6)

Repeatability: May be repeated. Maximum 9 hours.

Formerly: Repeatability: May be repeated. Maximum 45 hours.

COSC 670 Advanced Topics in Scientific Computing (1-6)

Repeatability: May be repeated. Maximum 9 hours.

Formerly: Repeatability: May be repeated. Maximum 45 hours.

COSC 680 Advanced Topics in Theory and Foundations (1-6)

Repeatability: May be repeated. Maximum 9 hours.

Formerly: Repeatability: May be repeated. Maximum 45 hours.

COSC 690 Advanced Topics in Computer Science (1-6)

Repeatability: May be repeated. Maximum 9 hours.

Formerly: Repeatability: May be repeated. Maximum 45 hours.

Rationale: The repeatability appears to be an overlooked issue that was identified this year. In conjunction with the elimination of "focus areas" from the catalog degree requirements, this change will provide opportunity for registration in additional courses. Impact on other units: None. Financial impact: None.

(ECE) Electrical and Computer Engineering

ADD

ECE 583 Modeling and Control of AC Three-phase PWM Converters (3) Power conversion principles for three-phase pulse-width modulation techniques, control and converters. Development of averaged models of three-phase rectifiers and inverters in stationary and rotating coordinates. Small-signal models in rotating coordinates and control design. Introduction of switching state vectors and different modulation schemes. Three-phase inverter and rectifier applications. Parallel and multi-level three-phase converters.

(RE) Prerequisite(s): 482 or consent of instructor.

Rationale: This is formerly ECE 523. Course number is being change to reflect topic area and course title and description are being updated to reflect current course content. Impact on other units: None. Financial impact: None.

ECE 683 Electric Drive System Control and Converter Design (3) Design of three-phase power converters. Control design, semiconductor device selection, passive components design and selection, loss calculation, thermal design, protection, and auxiliary circuits. Interface issues with source and load. Harmonic and EMI filters. Drive system design.

(RE) Prerequisite(s): ECE 583 or consent of instructor.

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

Rationale: Formerly ECE 623. Updated to have a more systematic course number and a more accurate course title. Impact on other units: None. Financial impact: None.

ECE 686 Solid State Power Semiconductors (3) Semiconductor physics and circuit models. Power diodes, power MOSFETs, thyristors, GTO thyristors, IGBTs, emerging devices and circuits. Wide band gap power semiconductors. Solar cell device physics.

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

Rationale: Formerly ECE 626. Changed to have a more systematic course number and a more accurate course title. Removing unnecessary prerequisite. Impact on other units: None. Financial impact: None.

DROP COURSES

ECE 523 Power Electronics and Drives (3)

ECE 623 Advanced Power Electronics and Drives (3)

ECE 626 Solid State Power Semiconductors (3)

Rationale: In an attempt to clarify subject area for students, all power electronics courses are being consolidated within the x8x course numbering scheme for 400, 500, and 600-level courses. These three courses are being moved to new course numbers, and the titles and descriptions are being updated to reflect current course contents. Note: These DROPs are tied to the following three ADDs, please only implement them together. Impact on other units: None. Financial impact: None.

ENGINEERING FUNDAMENTALS

ADD NEW 400-LEVEL COURSE FOR GRADUATE CREDIT

EF 430 Engineering Education Practicum (1) Professional development opportunity for engineering teaching assistants to advance their teaching and mentoring skills while learning about and applying education theories, research-based practices, and human-centered design principles.

Grading Restriction: Satisfactory/No Credit grading only.

Repeatability: May be repeated. Maximum 2 hours.

Registration Restriction: Consent of instructor.

Rationale: Teaching Assistants play a vital role in many courses within the Tickle College of Engineering. There is currently no formal mechanism for these TAs to learn about education theory and current research based practices for supporting student learning. Additionally, engineering TAs will have the opportunity to see human centered design applied in a new context, helping them identify connections between their TA experience and engineering more broadly. Impact on other units: None. Financial impact: None.

DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING

(ENMG) Engineering Management

ADD

ENMG 602 Supply Chain and Logistics Systems Engineering (3) Introduces the concepts, methods and techniques of supply chain management and logistics support from a systems engineering perspective. The discussion of different topics in the course will focus on the different stages in a system life cycle.

(RE) Prerequisite(s): 537.

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

Rationale: Course will be a valuable addition to our existing graduate courses, especially to those students who are interested in our systems engineering course series. The course is designed to prepare students to think and deal with supply chain and logistics support issues for a complex system through its life cycle. This new course will support the Engineering Management Concentration at the Ph.D. level. Impact on other units: None. Financial Impact: None.

(IE) Industrial Engineering

ADD

IE 531 Systems Thinking and Modeling (3) Introduces students to a systems thinking approach to problem-solving. It provides students with the key concepts of systems thinking and theory. The students learn the importance of the identification of the elements of a system, their interconnectivity, stocks, feedback and balancing loops. Students also learn to model through an introduction to systems dynamics using causal loop diagrams, stock and flow diagrams, and simulation. Concepts studied include systems environment, boundaries, and the emergence of their hierarchical structure.

Rationale: The educational objectives of this course are to present students with the major concepts and techniques involved in general system theory and systems engineering. This course is designed to prepare students to think and evaluate the critical issues involved in systems and their management from an engineering point of view. This new course will support the Systems Engineering Concentration at the MS level. Impact on other units: None. Financial Impact: None.

IE 532 Systems Based Requirements Engineering (3) Focus of this course is to help students develop a conceptual understanding of the systems engineering life-cycle process and familiarity with analysis techniques used in that process. We will discuss systematically establishing, defining and managing the requirements for complex and changing systems from a technical and administrative perspective. We address the techniques used to capture, validate and understand all requirement specifications at all stages of a systems life cycle. Introduction to process design, with an emphasis in the requirements stage.

(RE) Prerequisite(s): 531.

Rationale: The educational objectives of this course are to provide students with the strategies for planning, development, and implementation of improvement and/or change within processes using a holistic approach to systems thinking principles. The application of these methodologies are utilized to obtain, structure, segregate, prioritize and translate into action items of the requirements for a

successful project. This new course will support the Systems Engineering Concentration at the MS level. Impact on other units: None. Financial Impact: None.

REVISE DESCRIPTION

IE 522 Optimization Methods in Industrial Engineering (3) Development and application of fundamental deterministic optimization methods including linear programming, dynamic programming, introductory integer programming, basic game theory, and classical optimization theory applied to constrained and unconstrained models.

Formerly: Optimization Methods in Industrial Engineering (3) Classical optimization applied to constrained and unconstrained, non-linear, multi-variable functions; search techniques; decision making under uncertainty; game theory; and dynamic programming.

Rationale: The new description represents the content of the course better. Impact on other units: None. Financial Impact: None.

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

(MSE) Materials Science and Engineering

ADD COURSE AS SECONDARY CROSS-LISTING

+MSE 520 Introduction to Nuclear Fuels and Materials (3) Introduction to nuclear fuels and materials in light water reactors, with a focus on the effect of irradiation on properties and performance. This is the graduate version of NE 440 (cross-listed as Materials Science and Engineering 450) and requires additional assignments and expectations for graduate students.

Cross-listed: (See Nuclear Engineering 520.)

Credit Restriction: Students cannot receive credit for both MSE 450 and 520.

Rationale: MSE 450 (cross listed as NE 440) was originally available for graduate credit. Since graduate students typically enter from institutions other than UTK, they needed to request a corequisite override in order to sign up for MSE 450 / NE 440. They have typically taken courses equivalent to the corequisites at their prior institutions, but this is not recognized when they register; consequently, a manual override had to be performed. This problem is being solved by adding NE / MSE 520 as the graduate versions of NE 440 / MSE 450 which can have these corequisites dropped. Impact on other units: None. Financial impact: None.

DROP 400 LEVEL COURSE FOR GRADUATE CREDIT (REMAINING IN UNDERGRADUATE CATALOG)

MSE 450 Introduction to Nuclear Fuels and Materials (3)

Rationale: MSE 450 (cross listed as NE 440) was originally available for graduate credit. Since graduate students typically enter from institutions other than UTK, they needed to request a corequisite override in order to sign up for MSE 450 / NE 440. They have typically taken courses equivalent to the corequisites at their prior institutions, but this is not recognized when they register; consequently, a manual override had to be performed. This problem is being solved by adding NE / MSE 520 as the graduate versions of NE 440 / MSE 450 which can have these corequisites dropped. Impact on other units: none. Financial impact: none.

DEPARTMENT OF MECHANICAL, AEROSPACE, AND BIOMEDICAL ENGINEERING

(AE) Aerospace Engineering

REVISE GRADING OPTION FROM LETTER GRADE TO S/NC AND ADD REPEATABILITY

AE 601 Doctoral Research Methodology (3)

Grading Restriction: Satisfactory/No Credit grading only.

Repeatability: Maximum 6 hours. May be repeated once.

Formerly: Letter grade only and no repeatability.

Rationale: The faculty decided that the S/NC grading option was more appropriate for this course, which is used for the Qualifying Exam. Impact on other units: none. Financial impact: none.

(BME) Biomedical Engineering

ADD

BME 677 Biofunctionalization of Nanomaterials (3) Various aspects and techniques for functionalization of different nanomaterials with a variety of biomolecules; biofunctionalization of fluorescent, magnetic, polymeric, metallic and gelatin nanoparticles and carbon nanotubes; nanoparticles in tumor-targeted gene therapy; DNA attachment on nanocomposites.

Recommended Background: Biomaterials; cell and tissue-biomaterials interaction and/or thin film enhancement of biomedical devices.

Registration Permission: Consent of instructor is required if from a different background than BME.

Rationale: This new course will benefit PhD students whose research focus on Nano-Biomaterial applications. Impact on other units: None. Financial impact: None.

REVISE GRADING OPTION FROM LETTER GRADE TO S/NC AND ADD REPEATABILITY

BME 601 Doctoral Research Methodology (3)

Grading Restriction: Satisfactory/No Credit grading only.

Repeatability: Maximum 6 hours. May be repeated once.

Formerly: Letter grade only and no repeatability.

Rationale: The faculty decided that the S/NC grading option was more appropriate for this course, which is used for the Qualifying Exam. Impact on other units: None. Financial impact: None.

(ME) Mechanical Engineering

ADD

ME 514 Nanoscale Heat Transfer (3) Fundamentals in thermal energy storage, transport, and conversion from atomic-scale perspectives. Physics of thermal energy carriers (phonon, electron, fluid particle, and photon). Introduction to atomic-scale simulations (molecular dynamics, density functional theory, etc.) for nanoscale heat transfer.

Recommended Background: Heat transfer, thermodynamics, nanomaterials and engineering.

Registration Restriction: Consent of instructor is required if from a different background than ME or Aerospace Engineering.

Rationale: This course is essential to graduate students who work on nanoscale heat transfer problems in our ME program. Impact on other units: None. Financial impact: None.

ME 560 Introduction to Micro-Nano Manufacturing (3) Fundamentals of nanotechnology and nano fabrication, experimental methods of nano science and technology, advanced manufacturing overview, additive manufacturing (3D printing), electromechanical device fabrications, printable sensors and energy devices, biomedical printing.

Recommended Background: Engineering Mechanics (ME202), Introduction to Materials Science and Engineering (MSE201), Introduction to Chemical Research (CHEM 200).

Rationale: The course has been taught twice as a Special Topic. Impact on other units: None. Financial impact: None.

REVISE GRADING OPTION FROM LETTER GRADE TO S/NC AND ADD REPEATABILITY

ME 601 Doctoral Research Methodology (3)

Grading Restriction: Satisfactory/No Credit grading only.

Repeatability: Maximum 6 hours. May be repeated once.

Formerly: Letter grade only and no repeatability.

Rationale: The faculty decided that the S/NC grading was more appropriate for this course, which is used for the Qualifying Exam. Impact on other units: None. Financial impact: None.

DEPARTMENT OF NUCLEAR ENGINEERING

(NE) Nuclear Engineering

ADD

NE 512 Space Radiation (3) Overview of galactic cosmic rays, solar energetic particles and trapped belt radiation in the solar system and beyond and their effects on space exploration.

Rationale: Course is needed in the graduate curriculum to support the training of students engaged in space-related research topics in the department such as space radiation protection, space radiation effects modeling, surface reactor power sources for lunar and Martian habitats, nuclear thermal propulsion, general purpose heat sources (RTG), spacecraft and habitat design. This course is also envisioned as a core course for planned concentration in space exploration sciences and engineering that we will be coordinating with other departments and colleges within UTK.

The course was taught as a special topics course in the fall of 2016 to 14 graduate students. Impact on other units: None. Financial Impact: None.

NE 517 Isotope Production (3) Overview of the production methods of radioactive isotopes, their uses in society, and assay methods used to quantify their production.

Rationale: This course will provide a general overview of the theory and methods of production of radioactive isotopes. The use of isotopes is present in many areas of research within the department, including medical physics, cross section measurements, nuclear forensics, nuclear security, nuclear detection, and nuclear batteries. The use of isotopes is present in many nuclear engineering careers, as well, and as such provides training applicable to the career goals of many of our graduate students. The course has been taught twice as a special topics course, once in 2015 and currently in 2017. Enrollment has been capped at 12 students in both cases to accommodate laboratory exercises. Impact on other units: None. Financial Impact: None.

ADD PRIMARY CROSS-LISTED COURSE

+NE 520 Introduction to Nuclear Fuels and Materials (3) Introduction to nuclear fuels and materials in light water reactors, with a focus on the effect of irradiation on properties and performance. This is the graduate version of NE 440 (cross-listed as Materials Science and Engineering 450) and requires additional assignments and expectations for graduate students.

Cross-listed: (Same as Materials Science and Engineering 520.)

Credit Restriction: Students cannot receive credit for both NE 440 and 520.

Rationale: MSE 450 (cross listed as NE 440) was originally available for graduate credit. Since graduate students typically enter from institutions other than UTK, they needed to request a corequisite override in order to sign up for MSE 450 / NE 440. They have typically taken courses equivalent to the corequisites at their prior institutions, but this is not recognized when they register; consequently, a manual override had to be performed. This problem is being solved by adding NE / MSE 520 as the graduate versions of NE 440 / MSE 450 which can have these corequisites dropped. Impact on other units: None. Financial impact: None.

DROP 400 LEVEL COURSE FOR GRADUATE CREDIT (REMAINING IN UNDERGRADUATE CATALOG)

NE 440 Introduction to Nuclear Fuels and Materials (3)

Rationale: MSE 450 (cross listed as NE 440) was originally available for graduate credit. Since graduate students typically enter from institutions other than UTK, they needed to request a corequisite override in order to sign up for MSE 450 / NE 440. They have typically taken courses equivalent to the corequisites at their prior institutions, but this is not recognized when they register; consequently, a manual override had to be performed. This problem is being solved by adding NE / MSE 520 as the graduate versions of NE 440 / MSE 450 which can have these corequisites dropped. Impact on other units: none. Financial impact: none.

REVISE TO REMOVE (RE) PREREQUISITE

NE 522 Nuclear Reactor Dynamics and Controls (3)

Formerly: (RE) Prerequisite(s): 521.

Rationale: The recent curriculum changes involved revising the course description, title, and content of NE 521 and NE 522, both. The current NE 522 consists of much of the base content of the former NE 521, while the new content of NE 521 contains substantial new material with some elements of the prior scope. Consequently, NE 522 no longer requires NE 521 as a prerequisite and the two courses can be taken independently of each other. Impact on other units: None. Financial Impact: None.

II. PROGRAM CHANGES

DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING

REVISE DEGREE REQUIREMENTS – CHEMICAL ENGINEERING MAJOR, MS (THESIS OPTION)

In the 2017-2018 Graduate Catalog, revise the first bullet point under the Requirements heading as follows:

- A total of at least 21 credit hours in graduate-level courses (excluding CBE 500) in chemical and biomolecular engineering and related areas beyond the baccalaureate. These courses must include the core courses specified in the Chemical and Biomolecular Engineering Graduate Student Handbook.

Formerly: A total of at least 21 credit hours in graduate-level courses (excluding CBE 500, CBE 501) in chemical and biomolecular engineering and related areas beyond the baccalaureate. These courses must include the four core courses (CBE 506, CBE 531, CBE 547, and CBE 579).

REVISE DEGREE REQUIREMENTS – CHEMICAL ENGINEERING MAJOR, MS (NON-THESIS OPTION)

In the 2017-2018 Graduate Catalog, revise the first bullet point in Requirements as follows:

- Completion of a total of 30 credit hours of graduate course work. At least 18 of those credit hours must be in the department and must include the core courses specified in the Chemical and Biomolecular Engineering Graduate Student Handbook.

Formerly: Completion of a total of 30 credit hours of graduate course work. At least 18 of those credit hours must be in the department and must include the four core courses (CBE 506, CBE 531, CBE 547, and CBE 579).

REVISE DEGREE REQUIREMENTS – CHEMICAL ENGINEERING MAJOR, PHD

In the 2017-2018 Graduate Catalog, revise the first bullet point in Requirements:

- A minimum of 36 credit hours in graduate-level courses (excluding CBE 600) in chemical engineering and related fields beyond the baccalaureate. These courses must include the core courses specified in the Chemical and Biomolecular Engineering Graduate Student Handbook, and at least 6 credit hours of courses at the 600 level from the University of Tennessee, Knoxville.

Formerly: A minimum of 36 credit hours in graduate-level courses (excluding CBE 600) in chemical engineering and related fields beyond the baccalaureate. These courses must include the four core courses (CBE 506, CBE 531, CBE 547, and CBE 579), and at least 6 credit hours of courses at the 600 level from the University of Tennessee, Knoxville.

Rationale: All students, including thesis-option MS students, are required to take CBE 501 every semester it is offered; we consider it inappropriate to require these students to take this course without being allowed to count the credits toward their degree. Removing the specification of our core courses from the catalog and directing students to the graduate student handbook simplifies the catalog description to focus on the requirement itself and more appropriately leaves elaboration of the details to the graduate handbook, in parallel to typical handling of other requirements such as the qualifying and comprehensive exams. Furthermore, this change will allow us greater speed and flexibility in making changes to our core courses, which will allow us to more quickly respond to some potential issues illuminated by our graduate degree assessment data. Impact on other academic units: None. Financial impact: None.

DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

REVISE REQUIREMENTS – COMPUTER SCIENCE MAJOR, PHD

In the 2017-18 Graduate Catalog, under the Requirements heading, revise the third sentence as follows:

Students with MS degrees from other fields or universities will be required to take a minimum of 48 total graduate credit hours, including at least 24 credit hours of graduate course work.

Formerly: Students with MS degrees from other universities will be required to take a minimum of 48 total graduate credit hours, including at least 24 credit hours of graduate course work.

Rationale: As worded, students are divided into three categories (1) BS Only, (2) MS in EE, CE, or CS from UTK, or (3) MS from other university. This classification neglects UTK students with MS degrees in other disciplines outside of the department, so is being edited to clarify which category they should examine to determine degree requirements. Impact on other units: None. Financial impact: None.

REVISE REQUIREMENTS – COMPUTER ENGINEERING MAJOR, PHD

In the 2017-18 Graduate Catalog, under the Requirements heading, revise the third sentence as follows:

Students with MS degrees from other fields or universities will be required to take a minimum of 48 total graduate credit hours, including at least 24 credit hours of graduate course work.

Formerly: Students with MS degrees from other universities will be required to take a minimum of 48 total graduate credit hours, including at least 24 credit hours of graduate course work.

Rationale: As worded, students are divided into three categories (1) BS Only, (2) MS in EE, CE, or CS from UTK, or (3) MS from other university. This classification neglects UTK students with MS degrees in other disciplines outside of the department, so is being edited to clarify which category they should examine to determine degree requirements. Impact on other units: None. Financial impact: None.

REVISE REQUIREMENTS – COMPUTER ENGINEERING MAJOR, MS - NON-THESIS PROJECT OPTION

In the 2017-18 Graduate Catalog, under the Non-Thesis Project Option revise item number 1 as shown below:

1. 27 credit hours of graduate course work.

Formerly: 27 credit hours of graduate course work. Of these credit hours, at least 3 must be in a third area of focus separate from those in (c), above.

REVISE REQUIREMENTS – COMPUTER ENGINEERING MAJOR, MS - NON-THESIS COURSES ONLY OPTION

In the 2017-18 Graduate Catalog, under the Non-Thesis Courses Only Option revise item number 1 as shown below:

1. 30 credit hours of graduate course work.

Formerly: 1. 30 credit hours of graduate course work. Of these credit hours, at least 6 must be in a third area of focus separate from those in (c), above.

Rationale: The only changes are to Requirement 1 of both non-thesis options. "Areas of focus" are not formally defined in the department, which has led to some confusion among students. After discussion by the faculty, it has been decided that the breadth of the coursework is best left to the major advisor to dictate, and the examining committee to approve. Impact on other units: None. Financial impact: None.

REVISE REQUIREMENTS – ELECTRICAL ENGINEERING MAJOR, PHD

In the 2017-18 Graduate Catalog, under the Requirements heading, revise the third sentence as follows:

Students with MS degrees from other fields or universities will be required to take a minimum of 48 total graduate credit hours, including at least 24 credit hours of graduate course work.

Formerly: Students with MS degrees from other universities will be required to take a minimum of 48 total graduate credit hours, including at least 24 credit hours of graduate course work.

Rationale: As worded, students are divided into three categories (1) BS Only, (2) MS in EE, CE, or CS from UTK, or (3) MS from other university. This classification neglects UTK students with MS degrees in other disciplines outside of the department, so is being edited to clarify which category they should examine to determine degree requirements. Impact on other units: None. Financial impact: None.

REVISE REQUIREMENTS – ELECTRICAL ENGINEERING MAJOR, MS

In the 2017-18 Graduate Catalog, under the Requirements heading, remove item (c) from the list. There will now only be items A and B.

Formerly: C. At least 6 graduate credit hours must be in each of two separate areas of focus in electrical engineering and computer engineering.

REVISE REQUIREMENTS – ELECTRICAL ENGINEERING MAJOR, MS – NON-THESIS PROJECT OPTION

In the 2017-18 Graduate Catalog, under the Non-Thesis Project Option heading, revise sentence (1) as follows:

1. 27 credit hours of graduate course work.

Formerly: 27 credit hours of graduate course work. Of these credit hours, at least 3 must be in a third area of focus separate from those in (c), above.

REVISE REQUIREMENTS – ELECTRICAL ENGINEERING MAJOR, MS, NON-THESIS COURSES ONLY OPTION

In the 2017-18 Graduate Catalog, under the Non-Thesis Courses Only Option, revise sentence (1) as follows:

1. 30 credit hours of graduate course work.

Formerly: 30 credit hours of graduate course work. Of these credit hours, at least 6 must be in a third area of focus separate from those in (c), above.

Rationale: Bullet (c) from the requirements is being eliminated and requirement 1 on both non-thesis options are being amended (these are the only changes). "Areas of focus" are not formally defined in the department, which has led to some confusion among students. After discussion by the faculty, it has been decided that the breadth of the coursework is best left to the major advisor to dictate, and the examining committee to approve. Impact on other units: None. Financial impact: None.

DEPARTMENT OF MECHANICAL, AEROSPACE, AND BIOMEDICAL ENGINEERING

REVISE REQUIREMENTS – AEROSPACE ENGINEERING MAJOR, MS, THESIS AND NON-THESIS OPTIONS

In the 2017-18 Graduate Catalog, under the Thesis Option, revise footnote 1 as follows:

¹ Courses in major (500-level or above) – 12 credit hours minimum. Mathematics (400-graduate level or above excluding Math 400) – 6 credit hours minimum. Engineering courses below 500-level (Only those courses that are listed in the Graduate Catalog are allowed) - 3 credit hours maximum.

Formerly: ¹. Courses in program (500-level or above) – 12 credit hours minimum. Mathematics (400-graduate level or above) – 6 credit hours minimum.

In the 2017-18 Graduate Catalog, under the Non-Thesis Option, revise footnote 1 as follows and revise option name to: Non-Thesis Option I, as we are adding (see below) a Non-Thesis Option II

¹ Courses in major (500-level or above) – 18 credit hours minimum. Mathematics (400-graduate level or above excluding Math 400) – 6 credit hours minimum. Engineering courses below 500-level (Only those courses that are listed in the Graduate Catalog are allowed) - 3 credit hours maximum.

Formerly: ¹. Courses in program (500-level or above) – 18 credit hours minimum. Mathematics (400-graduate level or above) – 6 credit hours minimum.

REVISE REQUIREMENTS – AEROSPACE ENGINEERING MAJOR, MS, TO ADD A NON-THESIS OPTION II

Non-Thesis – Option II

	Credit Hours
¹ Course work total	30
Total credit hours	30

¹ Courses in major (500-level or above) – 15 (or 12) credit hours minimum.
Independent Research (ME/AE/BME 590) - 3 (or 6) credit hours.
Mathematics (400-graduate level or above excluding Math 400) – 6 credit hours minimum.
Engineering courses below 500-level (Only those courses that are listed in the Graduate Catalog are allowed) - 3 credit hours maximum.

Rationale: MABE faculty decided to make this option available to all MS students in the program. Previously, it was only available for BME majors. In addition, this non-thesis option gives the students to have research experience during their graduate education. Impact on other units: None. Financial impact: None.

REVISE REQUIREMENTS – BIOMEDICAL ENGINEERING MAJOR, MS, THESIS OPTION

In the 2017-18 Graduate Catalog, under the Thesis Option, revise coursework hours (from 21 to 24) and thesis hours (from 9 to 6) and revise footnote as shown below.

Thesis Option	Credit Hours
¹ Course work total	24
Thesis credit hours (minimum)	<u>6</u>
Total hours	30

¹ Courses in major (500-level or above) – 12 credit hours minimum.
Mathematics (400-graduate level or above excluding Math 400) – 6 credit hours minimum.
Engineering courses below 500-level (Only those courses that are listed in the Graduate Catalog are allowed) - 3 credit hours maximum.

Formerly: Thesis

¹ Course work total	21
Thesis credit hours (minimum)	<u>9</u>
Total	30

¹ Courses in program (500-level or above) – 12 credit hours minimum. Mathematics (400-graduate level or above) – 6 credit hours minimum.

REVISE REQUIREMENTS – BIOMEDICAL ENGINEERING MAJOR, MS, NON-THESIS OPTION

In the 2017-18 Graduate Catalog, under the Non-Thesis Option, revise footnote as shown below.

¹ Courses in major (500-level or above) – 18 credit hours minimum.
Mathematics (400-graduate level or above excluding Math 400) – 6 credit hours minimum.
Engineering courses below 500-level (Only those courses that are listed in the Graduate Catalog are allowed) - 3 credit hours maximum.

Formerly:

¹ Courses in program (500-level or above) – 18 credit hours minimum. Mathematics (400-graduate level or above) – 6 credit hours minimum.

REVISE REQUIREMENTS – BIOMEDICAL ENGINEERING MAJOR, MS, TO ADD A NON-THESIS OPTION II

Non-Thesis – Option II

	Credit Hours
¹ Course work total	30
Total credit hours	30

¹ Courses in major (500-level or above) – 15 (or 12) credit hours minimum.
Independent Research (ME/AE/BME 590) - 3 (or 6) credit hours.
Mathematics (400-graduate level or above excluding Math 400) – 6 credit hours minimum.
Engineering courses below 500-level (Only those courses that are listed in the Graduate Catalog are allowed) - 3 credit hours maximum.

Rationale: MABE faculty decided to make this option available to all MS students in the program. Previously, it was only available for BME majors. In addition, this non-thesis option gives the students to have research experience during their graduate education. Impact on other units: None. Financial impact: None.

REVISE REQUIREMENTS – MECHANICAL ENGINEERING MAJOR, MS, THESIS AND NON-THESIS OPTIONS

In the 2017-18 Graduate Catalog, under the Thesis Option, revise footnote 1 as follows:

¹ Courses in major (500-level or above) – 12 credit hours minimum. Mathematics (400-graduate level or above excluding Math 400) – 6 credit hours minimum. Engineering courses below 500-level (Only those courses that are listed in the Graduate Catalog are allowed) - 3 credit hours maximum.

Formerly: ¹. Courses in program (500-level or above) – 12 credit hours minimum. Mathematics (400-graduate level or above) – 6 credit hours minimum.

In the 2017-18 Graduate Catalog, under the Non-Thesis Option, revise footnote 1 as follows and revise option name to: Non-Thesis Option I, as we are adding (see below) a Non-Thesis Option II

¹ Courses in major (500-level or above) – 18 credit hours minimum. Mathematics (400-graduate level or above excluding Math 400) – 6 credit hours minimum. Engineering courses below 500-level (Only those courses that are listed in the Graduate Catalog are allowed) - 3 credit hours maximum.

Formerly: ¹. Courses in program (500-level or above) – 18 credit hours minimum. Mathematics (400-graduate level or above) – 6 credit hours minimum.

REVISE REQUIREMENTS – MECHANICAL ENGINEERING MAJOR, MS, TO ADD A NON-THESIS OPTION II

Non-Thesis – Option II

	Credit Hours
¹ Course work total	30
Total credit hours	30

¹ Courses in major (500-level or above) – 15 (or 12) credit hours minimum.
Independent Research (ME/AE/BME 590) - 3 (or 6) credit hours.
Mathematics (400-graduate level or above excluding Math 400) – 6 credit hours minimum.
Engineering courses below 500-level (Only those courses that are listed in the Graduate Catalog are allowed) - 3 credit hours maximum.

Rationale: MABE faculty decided to make this option available to all MS students in the program. Previously, it was only available for BME majors. In addition, this non-thesis option gives the students to have research experience during their graduate education. Impact on other units: None. Financial impact: None.

DEPARTMENT OF NUCLEAR ENGINEERING

REVISE DEPARTMENT INTRODUCTORY TEXT

In the 2017-2018 Graduate Catalog, revise second paragraph of department introductory text as follows:

All entering students must have, as a minimum, competency in mathematics through ordinary differential equations. Admitted applicants will be advised of any prerequisite undergraduate courses that may be required for their graduate studies. In addition, students without a BS in nuclear engineering, or the equivalent, must take NE 433, NE 470 both of which may be taken for graduate credit. However, students in the radiological engineering concentration will take NE 551 in place of NE 433. Students electing the radiological engineering concentration must take NE 550, NE 551, NE 552 and NE 490 in their course of study. The department head is the contact for all interested students, both those with nuclear engineering degrees and those from other disciplines.

Formerly: All entering students must have, as a minimum, competency in mathematics through ordinary differential equations. Admitted applicants will be advised of any prerequisite undergraduate courses that may be required for their graduate studies. In addition, students without a BS in nuclear engineering, or the equivalent, must take NE 433, NE 470 both of which may be taken for graduate credit. However, students in the radiological engineering concentration will take NE 551 in place of NE 433. Students electing the radiological engineering concentration must take NE 401, NE 551, NE 552 and NE 490 in their course of study. The department head is the contact for all interested students, both those with nuclear engineering degrees and those from other disciplines.

Rationale: This paragraph is being updated to reflect the availability of the graduate level laboratory course NE 550, which is more appropriate. Impact on other units: none. Financial Impact: none.

REVISE REQUIREMENTS – NUCLEAR ENGINEERING MAJOR, MS

In the 2017-2018 Graduate Catalog, under Requirements heading, revise first bullet as follows:

- 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 or NE 522, NE 540, NE 542, NE 551, NE 563, NE 571.

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 563, NE 571.

Rationale: The recent curriculum changes involved revising the course description, title, and content of NE 521 and NE 522, both. The current NE 522 consists of much of the base content of the former NE 521, while the new content of NE 521 contains substantial new material with some elements of the prior scope. Consequently, NE 522 no longer requires NE 521 as a prerequisite (change also being implemented within this catalog proposal), and thus, each one of these two courses can independently fulfill the above requirements, but not both. Impact on other units: none. Financial Impact: none.

In the 2017-2018 Graduate Catalog, under Requirements heading, remove the last paragraph.

Formerly: The MS with a major in nuclear engineering is also available to distance students via selected courses that are delivered over the web to the student's computer.

Rationale: The NE Department has suspended support of its distance education courses and the DE program has been phased out. Impact on other units: none. Financial Impact: none.

REVISE TO ADD CATALOG TEXT TO THE NUCLEAR ENGINEERING MAJOR, PHD

In the 2017-2018 Graduate Catalog, add the following heading and text for the Radiological Engineering concentration. Insert this information before the Energy Science and Engineering concentration text.

Radiological Engineering concentration

This concentration is offered to students wishing to pursue a career in health physics or related field. Students electing the radiological engineering concentration must take NE 550, NE 551, NE 552 and NE 490 in their course of study.

Rationale: The concentrations available and requirements under the PhD program are being consolidated into a single section of the catalog in a consistent manner. Impact on other units: none. Financial Impact: none.

REVISE REQUIREMENTS – NUCLEAR SECURITY SCIENCE AND ANALYSIS GRADUATE CERTIFICATE

In the 2017-2018 Graduate Catalog, under the Nuclear Security Science and Analysis (NSSA) electives heading add the following three courses to the list:

NE 531 Global Nuclear Security Culture

NE 535 Radio and Nuclear Chemistry

NE 536 Export Control and Nonproliferation

Rationale: The list of NSSA electives is being updated to reflect the availability of new courses which have been developed and taught. Impact on other units: none. Financial Impact: none.

COLLEGE OF LAW

All changes effective Fall 2018

I. COURSE CHANGES

ADD

Law 849 Constitutional Law Seminar (1-3) Selected topics in American constitutional law. Specific course offerings vary.

Repeatability: May be repeated if topic differs. Maximum 9 hours.

(RE) Prerequisite(s): 812.

Registration Restriction(s): Law students only.

Rationale: Expands curricular offerings in the area. Impact on other units: None. Financial impact: None expected.

Additional Documentation: Learning outcomes: Upon conclusion of the course, each student will 1) have attained the knowledge sufficient to begin the competent practice of law with respect to the legal issues covered; 2) have demonstrated competence in writing a substantial research paper that proposes and defends a solution to an important legal problem or presents a sensible way of thinking about an important legal question; and 3) have demonstrated understanding of how economic and social policy and political dynamics affect the development of the law.

REVISE TITLE AND DESCRIPTION

Law 847 Constitutional Rights and Liberties (2-3) Advanced study of constitutional rights as protected by the Bill of Rights and 14th Amendment.

Formerly: Advanced Constitutional Law (2-3) Advanced study of issues in American constitutional law. Specific course offerings vary. Subjects include: constitutional structure of American governmental institutions, federalism, separation of governmental powers: relationship between legislative and executive branches, relationship among states and between states and federal government, and constitutional amendment process; state constitutional law, Tennessee constitution and differences between state and federal constitutional law; Bill of Rights and 14th Amendment to Constitution: constitutional rights as protected by Bill of Rights and 14th Amendment.

Rationale: Revises title and description to more accurately reflect course content. Impact on other units: None expected. Financial impact: None expected. Additional Documentation: None required.

LAW 866 Environmental Law: Administrative Regulation and Policy (3) Study, through methods of public policy analysis, of responses of legal system to environmental problems: environmental regulation and its alternatives; Clean Air Act; Clean Water Act; National Environmental Policy Act; Endangered Species Act; Superfund; and selected regulatory issues.

Formerly: Environmental Law and Policy (3) Study, through methods of public policy analysis, of responses of legal system to environmental problems: environmental litigation; Clean Air Act; Clean Water Act; National Environmental Policy Act; and selected regulatory issues.

Rationale: Revises title and description to more accurately reflect course content. Impact on other units: None expected. Financial impact: None expected. Additional Documentation: None required.

LAW 886 International Law (3) Seminar course introduces the laws, norms, institutions, and procedures that regulate state interactions on the international level. As part of this introduction, students will consider how international law sources, including customary and treaty law, operate in the context of the U.S. Constitution. Various themes to be explored include: state sovereignty, human rights, the law of war and use of force, law of the sea, trade, the environment, and the adjudication and arbitration of international disputes.

Formerly: Public International Law (3) Seminar course introduces the system of norms, rules, institutions, and procedures that regulate interactions among and between state and non-state actors on the international level. As part of this introduction, a number of themes will be explored, including the tensions between international law and municipal law, state sovereignty and individual human rights, and the use of force and settlement of international disputes. These themes will emerge through an examination of a variety of sources, including customary and treaty law, international and regional adjudication and arbitration, and the activity of international and regional intergovernmental bodies.

Rationale: Revises title and description to more accurately reflect course content. Impact on other units: None expected. Financial impact: None expected. Additional Documentation: None required.

REVISE HOURS

LAW 953 Wills Clinic (4)

Formerly 3

Rationale: Reflects increased number of credit hours offered, which are commensurate with student work as established by the recording of student time. Impact on other units: None expected. Financial impact: None expected. Additional Documentation: None required.

REVISE NUMERICAL GRADING (FROM NUMERICAL GRADE (0-4.3) TO S/NC GRADING ONLY)

LAW 820 Transactional Lawyering Lab (1)

Grading Restriction: Satisfactory/No Credit grading only.

Rationale: Reflects the consensus of the faculty that it is difficult to assign meaningful grades in the course and that students will still have sufficient incentive to perform without grading. Impact on other units: None expected. Financial impact: None expected.

Additional Documentation: None required.

REVISE REGISTRATION RESTRICTION

LAW 873 American Legal History (3)

Registration Restriction: Law students and graduate students only. Priority given to law students.

LAW 886 Public International Law (3)

Registration Restriction: Law students and graduate students only. Priority given to law students.

LAW 888 International Religious Freedom (3)

Registration Restriction: Law students and graduate students only. Priority given to law students.

LAW 890 European Union Law (3)

Registration Restriction: Law students and graduate students only. Priority given to law students.

LAW 891 Global Constitutionalism (3)

Registration Restriction: Law students and graduate students only. Priority given to law students.

LAW 892 International Human Rights Law (3)

Registration Restriction: Law students and graduate students only. Priority given to law students.

Formerly: Registration Restriction: Law students only.

Rationale: Reflects decision that graduate students in some disciplines may benefit from the courses. Impact on other units: May require additional advising in terms of course selection. Financial impact: None expected. Additional Documentation: None required.

II. PROGRAM CHANGES

REVISE CATALOG TEXT – DUAL JD-MPH PROGRAM

[submitted simultaneously with Department of Public Health]

In the 2018-19 Graduate Catalog, revise the accelerated dual MPH-JD Program in the following areas:

- 1) Under the Requirements heading, add the following as the last paragraph:

Law Courses Approved as Electives for the MPH Degree: students must plan carefully when selecting electives that count toward the MPH degree (a total of six credit hours), as these electives may not be offered every year. Additional electives may also be selected with approval of the College of Law advisor and the MPH Program Director.

- 2) Remove the current two names for the Contact Information and replace with the following two names:

Kathleen Brown
Associate Professor and MPH Program Director
Department of Public Health
(865) 974-5041
kcbrown@utk.edu

Zack Buck
Assistant Professor of Law
College of Law
(865) 974-8637
zbuck@utk.edu

- 3) Remove all the catalog text after the contact names (to remove the individual courses listed).

Rationale: Providing a year-by-year course plan in the catalog is not consistent with other catalog descriptions of our dual-degree programs. The actual plan comes best when a student works with the advisor to determine an individual plan of study. The aforementioned plan provides basic guidance and is best shared in advising session. Again, based on the experience of our two other dual degree program advisors, this approach has worked successfully for multiple years.

Impacts on Other Units: There is not impact on other units. Faculty responsible for advising are already in place and will continue to meet with students to devise an individual academic plan. Financial impact: There is no financial impact on other units. Additional Documentation: This is a change to bring consistency across catalog descriptions of our dual-degree programs and requires no additional approval. College of law is in agreement with these changes.

COLLEGE OF NURSING

All changes effective Fall 2018

I. COURSE CHANGES

ADD

NURS 602 Advanced Statistical Methods for Health Care Research (3) Apply foundational knowledge of inferential statistics to multivariate analyses of health care data, including multiple linear regression, repeated measures analysis, mixed linear models, and factor analysis.

(RE) Prerequisite(s): 511.

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

Rationale: In conjunction with NURS 511, replaces STAT 531 and STAT 532 previously required for CON PhD degree. Impact on other units: None. Financial impact: New course in Nursing Distance Ed program means course fees.

NURS 604 Principles of Population Health (3) Exploration of concepts and competencies related to population health for advanced practice nursing.

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

Rationale: Replaces current required epidemiology course. Expands content to include epidemiological principles, social determinants of health and theoretical perspectives of health promotion & disease prevention. Impact on other units: None. Financial impact: New course in Nursing Distance Ed program means course fees.

NURS 615 Research Ethics in the Health Sciences (2) Issues relevant to conducting health sciences research with an emphasis on conflict of interest, responsible authorship, policies for handling misconduct, policies handling safe recruitment and retention of study participants, and data management.

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

Rationale: Currently, human subject research and responsible conduct of research (RCR) principles are taught across several courses in the PhD curriculum. This new course will allow for a more streamlined and comprehensive approach to research ethics content that will prepare students as nurse scientists. This course will also be designed to meet the requirements for federal agencies requiring an RCR course for individual National Research Service Award (NRSA) or other funding. Impact on other units: None. Financial impact: New course in Nursing Distance Ed program means course fees.

NURS 626 Health Systems Finance (3) Application of financial management concepts and techniques in decision-making in health services organizations.

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

Rationale: Microanalysis of financial systems facilitates design and implementation of scholarly project through development of realistic business plan that is congruent with industry practice. Impact on other units: None. Financial impact: None – this course while new will replace NURS 625 as a degree requirement.

REVISE TITLE

NURS 620 Philosophical and Theoretical Foundations for Practice (3)

Formerly: Philosophy of Scientific Practice

Rationale: Expands content to include contemporary theories from nursing and other disciplines guiding advanced practice nursing. Eliminates need for 500 level course in current degree requirements. Impact on other units: None. Financial impact: None.

REVISE TITLES AND DESCRIPTIONS

NURS 511 Statistical Methods for Health Care Research (3) Develop the foundational descriptive and inferential statistical skills required to analyze health-related data and report results.

Formerly: Statistics for Evidence-based Practice in Nursing (3) Develop the foundational descriptive and inferential statistical skills required to analyze health-related data and report results.

Rationale: In conjunction with NURS 602, replaces STAT 531 and STAT 532 previously required for CON PhD degree. Meets pre-requisite requirement for DNP admission. Impact on other units: None. Financial impact: None.

NURS 622 Evidence Based Practice I (3) Identification, critique, and evaluation of existing evidence related to clinical problem of interest to determine best practices.

Formerly: Evidence Based Practice and Translational Research (3) Evaluation and synthesis of existing research in a focused area of nursing practice.

NURS 624 Evidence Based Practice II (3) Examination of current practices in project design, management, implementation, evaluation and sustainability.

Formerly: Technology and the Transformation of Healthcare (3) Supports the use information systems /technology to improve patient care outcomes and transform health care systems.

Rationale: NURS 624 EBP II builds upon NURS 622 by examining how to design and implement change project. Impact on other units: None. Financial impact: None.

REVISE TITLE, HOURS, AND DESCRIPTION

NURS 630 DNP Scholarly Project Proposal (2) Advanced planning for the DNP Scholarly Project.

Formerly: Project Organization Seminar I (1) Conceptualization of a problem in nursing practice and initial planning for the DNP Scholarly Project.

Rationale: Previously there were three 1 credit hour courses labeled as Project Organization seminars which began with conceptualization of the project and culminated in a proposal. Now the conceptualization work will be accomplished in NURS 622 & NURS 624. Impact on other units: None. Financial impact: None.

REVISE TITLE, HOURS, DESCRIPTION, AND ADD (RE) PREREQUISITE

NURS 623 Population Health in a Global Society (3) Application of theory, research, and intervention strategies to improve global health.

(RE) Prerequisite(s): 604.

Formerly: Ethical and Societal Issues within Healthcare (2) A critical analysis of ethical, cultural, and societal issues within healthcare.

Rationale: Ethical, cultural, and societal issues incorporated into this course, which builds on principles learned in NURS 604. Impact on other units: None. Financial impact: None

REVISE TITLE, DESCRIPTION, AND REGISTRATION RESTRICTION

NURS 610 Review and Critique of Scientific Literature (3) Development of competencies for critical analysis and synthesis of literature in selected focus area within nursing science.

Registration Restriction(s): Doctor of Nursing Practice or Doctor of Philosophy – nursing major. Minimum student level – graduate.

Formerly: State of the Science Seminar (3) Critical Analysis and synthesis of literature in selected focus area within nursing science.

Registration Restriction(s): Doctor of Philosophy - nursing major. Minimum student level – graduate.

Rationale: NURS 610 instructs doctoral students in processes of literature review, as such it is not a seminar. Title change more accurately reflects course content and outcomes. Impact on other units: None. Financial impact: None.

DROP COURSES

NURS 631 Project Organization Seminar II (1)

NURS 632 Project Organization Seminar III (1)

Rationale: Content of these courses now in NURS 630 DNP Scholarly Project Proposal. Impact on other units: None. Financial impact: None.

NURS 530 Adult Health Nursing I

NURS 531 Adult Health Nursing II

NURS 575 Adult Gerontology CNS I

NURS 576 Adult Gerontology CNS II

Rationale: Adult Gerontology CNS concentration in MSN program dropped last year due to lack of students and faculty. Impact on other units: None. Financial impact: None.

II. PROGRAM CHANGES

REVISE RESIDENCE REQUIREMENT – NURSING MAJOR, DNP

In the 2018-19 Graduate Catalog, revise the resident requirement paragraph as shown below:

Residence Requirement

Residence is defined as full-time registration for a given semester on the campus where the program is located. The summer term is included in this period. For the doctoral degree, a minimum of two consecutive semesters of residence is required. A statement as to how and during what period of time the residence requirement has been met will be presented with the Application for Admission to Candidacy along with signatures of approval from the major professor and the department head/program director.

Formerly: Residence is defined as a minimum of 6 credit hours of registration for a given semester on the campus where the program is located. The summer term is included in this period. During residence, it is expected that the student will be engaged in at least 6 credit hours on-campus study toward a graduate degree. For the doctoral degree, a minimum of two consecutive semesters of residence is required, except in programs where alternative or additional residence requirements have been approved. A statement as to how and during what period of time the residence requirement has been met will be presented with the Application for Admission to Candidacy along with signatures of approval from the major professor and the department head/program director.

Rationale: To meet requirement as stated by Graduate School. Previously the DNP program was part-time only. It is being transitioned to a full-time program with a part-time option. Impact on other units: None. Financial impact: None.

REVISE ADMISSIONS TEXT – NURSING MAJOR, DNP

In the 2018-19 Graduate Catalog, under the Admissions heading, revise the 6th bullet as shown below:

- Have completed 3 credit hours of graduate-level statistics within 2 years of admission.

Formerly: Have completed 3 credit hours of graduate-level statistics.

Rationale: To assure that completion of graduate level statistics is within recent time. Impact on other units: None. Financial impact: None.

REVISE REQUIREMENTS – NURSING MAJOR, DNP

In the 2018-19 Graduate Catalog, under the Requirements heading, remove current list of courses and replace with the following. The revision increases the credit hours from 30 - 42 to 33 - 44.

The following courses are required for all students.	Credit Hours
NURS 604 Principles of Population Health	3
NURS 610 Review and Critique of Scientific Literature	3
NURS 612 Health and Health Care Policy	3
NURS 613 Nursing Leadership in Complex Systems	3
NURS 620 Philosophical & Theoretical Foundations for Practice	3
NURS 622 Evidence Based Practice I	3
NURS 623 Population Health in a Global Society	3
NURS 624 Evidence Based Practice II	3
NURS 626 Health Systems Finance	3
NURS 630 DNP Scholarly Project Proposal	2
NURS 633 DNP Practice Immersion	1-12
NURS 634 DNP Scholarly Project	3
Total credit hours	33-44

Formerly: The following courses are required for all students.	
NURS 612 Health and Health Care Policy	3
NURS 613 Nursing Leadership in Complex Systems	3
NURS 620 Philosophy of Scientific Practice	3
NURS 622 Evidence Based Practice and Translational Research	3
NURS 623 Ethical and Societal Issues within Healthcare	2
NURS 624 Technology and the Transformation of Healthcare	3
NURS 625 Healthcare Economics	3
NURS 630 Project Organization Seminar I	1
NURS 631 Project Organization Seminar II	1
NURS 632 Project Organization Seminar III	1
NURS 633 DNP Practice Immersion	1-12
NURS 634 DNP Scholarly Project	3
NURS 579 Epidemiology for Clinical Practice	3
Total credit hours	30-42

Rationale: Align degree requirements with AACN Essentials of Doctoral Education for Advanced Nursing Practice [accreditation standards] and best practices of aspirational schools. Impact on other units: None. Financial impact: Two additional credit hours may slightly increase program fees.

REVISE STUDENT LEARNING OUTCOMES – NURSING MAJOR, DNP

In the 2018-19 Graduate Catalog, delete current list Student Learning Outcomes and replace with the following.

Student Learning Outcomes (SLO) - Graduates of the program are expected to:

- Integrate nursing science with other disciplines as the basis for the provision of the highest level of evidence-based advanced nursing care.
- Demonstrate and promote professionalism, advocacy, social justice, equity, ethical principles, and scientific integrity in advanced nursing practice.

- Engage in and promote intra and inter-professional collaboration in clinical practice models, health policy, and standards of care for individuals, families, and communities across culturally diverse populations.
- Generate ethically responsible system and outcomes research and analyze evidence from nursing and related sciences to translate findings into practice.
- Utilize current and emerging information systems/technology to support, evaluate, and improve: 1) nursing care, 2) healthcare systems, and 3) patient and population health.
- Synthesize and use appropriate theories, concepts and scientific data to support, evaluate and improve patient and population health.
- Assume leadership in advanced practice, health policy, mentoring, scholarship, and scientific inquiry.
- Disseminate credible and relevant evidence supporting decisions using various forms of communication.

Formerly: Student Learning Outcomes (SLO) - Graduates of the program are expected to:

Integrate nursing science with other disciplines as the basis for the highest level of evidence-based advanced nursing practice to address health disparities and to improve the quality of healthcare.
 Demonstrate and promote professionalism, advocacy, social justice, equity, ethical principles, and scientific integrity in advanced nursing practice.
 Engage in and promote intra and inter-professional collaboration in clinical practice models, health policy, and standards of care for individuals, families, and communities across culturally diverse populations.
 Generate system and outcomes research and analyze evidence from nursing and related sciences to translate findings into practice.
 Utilize current and emerging information systems/technology to support, evaluate, and improve: 1) nursing care, 2) healthcare systems, and 3) patient and population health.
 Synthesize and use appropriate theories, concepts and scientific data to support, evaluate and improve patient and population health.
 Assume leadership in advanced practice, health policy, mentoring, scholarship, and scientific inquiry.

Rationale: Align SLOs with AACN Essentials of Doctoral Education for Advanced Nursing Practice [accreditation standards], the revised CON Mission and Vision statement as well as 2017 CON Strategic Plan. Impact on other units: None. Financial impact: None.

REVISE STUDENT LEARNING OUTCOMES – NURSING MAJOR, PHD

In the 2018-19 Graduate Catalog, delete current list Student Learning Outcomes and replace with the following.

Student Learning Outcomes – Graduates of the program are expected to:

- Analyze, test, refine and expand the theoretical basis of nursing.
- From multiple modes of inquiry, select the most appropriate and conduct research that generates knowledge and advances nursing as a discipline.
- Provide culturally competent leadership as nurse scientists in transforming health and healthcare.
- Collaborate with members of other disciplines in theory development, health-related research, and other scholarly activities, recognizing diversity of ideas.
- Maintain professional standards, ethical principles and scientific integrity in scholarly activities.
- Communicate outcomes and implications of scholarly activities to professional and general audiences through multiple modes of dissemination.

Formerly: Student Learning Outcomes – Graduates of the program are expected to:

Analyze, test, refine and expand the theoretical basis of nursing.
 From multiple modes of inquiry, select the most appropriate to conduct research that generates knowledge and advances nursing as a discipline.
 Provide leadership as nurse scientists in transforming health and healthcare.
 Collaborate with members of other disciplines in theory development, health-related research, and other scholarly activities.
 Maintain professional standards, ethical principles and scientific integrity in scholarly activities.
 Communicate outcomes and implications of scholarly activities to professional and general audiences through multiple modes of dissemination.

Rationale: Align SLOs with revised CON Mission and Vision statement as well as 2017 Strategic Plan. Impact on other units: None. Financial impact: None.

REVISE PROGRAM TEXT – NURSING MAJOR, PHD

In the 2018-19 Graduate Catalog, in the introductory text, revise the last paragraph as shown below.

The program offers part-time as well as full-time study options. The program is delivered by a mix of onsite and distance education modalities. Students spend two intensive sessions in residence each term, while participating in distance learning the remainder of the time.

Formerly: The program offers part-time as well as full-time study options. The PhD program in nursing can be completed in an accelerated option of four consecutive semesters of course work (15 months), followed by the dissertation. Part-time and BSN-to-PhD options are also available. The program is delivered by a mix of onsite and distance education modalities. Students spend two intensive weeks in residence each term, while participating in distance learning the remainder of the time.

Rationale: Up-dated to reflect current practices related to onsite classes. Impact on other units: None. Financial impact: None.

REVISE ADMISSIONS TEXT – NURSING MAJOR, PHD

In the 2018-19 Graduate Catalog, under the Admissions heading, delete current text and replace with the following:

Admission

All applicants must hold a Bachelor's degree in nursing from a program accredited by the National League for Nursing Accrediting Commission [NLNAC] or the Collegiate Commission on Nursing Education [CCNE]. Post-graduate applicants must hold a master's degree in nursing or a business or health related field [e.g., MBA, MPH, MHA].

- Have a minimum cumulative graduate grade point average of 3.3 on a 4.0 scale for previous college work.
- Achieve a competitive score on the Graduate Record Examination (GRE).
- Have successfully completed a basic statistics course and graduate nursing theory and research courses prior to enrollment in nursing doctoral level courses.
- Have TOEFL score of at least 550 on the paper test or 80 on the Internet-based Test if native language is not English.
- Complete Graduate Program Data Form, College of Nursing.
- Submit Graduate Rating Forms from three college level instructors and/or nurses and administrators who have supervised applicant's professional work.
- Submit a sample of scholarly writing (e.g., thesis, published paper).
- Submit an essay describing personal and professional aspirations.
- Submit Graduate Application for Admission by the deadline for fall admission.
- Schedule a personal interview with the College of Nursing PhD Student Admissions Committee. Applicants may be interviewed by telephone or teleconferencing at the discretion of the PhD Admissions Committee after all required items have been submitted to the Graduate School.

Formerly: 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].

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.

Submit online application to Graduate Admissions Office. Meet admission requirements of the Graduate School.

Hold a master's degree in nursing from a program accredited by the National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education. Some outstanding applicants who are prepared at the bachelor's level in nursing may be considered. In such cases, graduate level courses in nursing theory, concentration specialty, and/or research will be integrated into the formal program of doctoral degree requirements.

Have a minimum cumulative graduate grade point average of 3.3 on a 4.0 scale for previous college work.

Achieve a competitive score on the Graduate Record Examination (GRE).

Have successfully completed a basic statistics course and graduate nursing theory and research courses prior to enrollment in nursing doctoral level courses.

Have TOEFL score of at least 550 on the paper test or 80 on the Internet-based Test if native language is not English.

Complete Graduate Program Data Form, College of Nursing.

Submit Graduate Rating Forms from three college level instructors and/or nurses and administrators who have supervised applicant's professional work.

Submit a sample of scholarly writing (e.g., thesis, published paper).

Submit an essay describing personal and professional aspirations.

Submit Graduate Application for Admission, academic transcript(s), Graduate Record Examination scores, and, if required, TOEFL scores to the Office of Graduate Admissions. Submit three Graduate Rating Forms, sample of scholarly writing, and Graduate Program Data Form with essay to Chair of the PhD program prior to February 1 in the year of expected fall admission.

Schedule a personal interview with the College of Nursing PhD Student Admissions Committee prior to February 1 in the year of expected fall admission. Applicants may be interviewed by telephone or teleconferencing at the discretion of the PhD Admissions Committee.

Rationale: Up-dated to reflect program changes. Impact on other units: None. Financial impact: None.

REVISE REQUIREMENTS – NURSING MAJOR, PHD

In the 2018-19 Graduate Catalog, under the Requirements heading, remove current list of courses and replace with the following. The revision increases the number of program hours.

Requirements

The following courses are required for all students.

	Credit Hours
NURS 511 Statistical Methods for Health Care Research	3
NURS 601 Philosophy and Knowledge Development for Nursing Science	3
NURS 602 Advanced Statistical Methods for Health Care Research	3
NURS 603 Nursing Inquiry and Research Design	3
NURS 605 Middle-Range Theoretical Formulations for Nursing Science Development	3
NURS 606 Nursing Research Seminar	3
NURS 607 Qualitative Nursing Research	3
NURS 608 Quantitative Nursing Research	3
NURS 611 Advanced Quantitative Nursing Research	3
NURS 609 Research Practicum	3

NURS 610 Review and Critique of Scientific Literature	3
NURS 612 Health and Health Care Policy	3
NURS 613 Nursing Leadership in Complex Systems	3
NURS 615 Research Ethics in the Health Sciences	2
- Cognates*	6
NURS 600 Doctoral Research and Dissertation	<u>24</u>
Total	71

Requirements for BSN to PhD students	
All courses listed as required for all students	71
NURS 566 Education Principles and Strategies for Healthcare Professionals	3
NURS 614 Nursing Preceptorship	3
Cognates*	<u>6</u>
Total	83

* Possible cognate areas include, but are not limited to, anthropology, child and family studies, psychology, education, management, public health, social work, philosophy, and statistics.

Formerly:	
NURS 601 Philosophy and Knowledge Development for Nursing Science	3
NURS 603 Nursing Inquiry and Research Design	3
NURS 605 Middle-Range Theoretical Formulations for Nursing Science Development	3
NURS 606 Nursing Research Seminar	3
NURS 607 Qualitative Nursing Research	3
NURS 608 Quantitative Nursing Research	3
NURS 611 Advanced Quantitative Nursing Research	3
NURS 609 Research Practicum	3
NURS 610 State of the Science Seminar	3
NURS 612 Health and Health Care Policy	3
NURS 613 Nursing Leadership in Complex Systems	3
- Inferential Statistics	3
- Multivariate Statistics	3
- Cognates*	6
NURS 600 - Doctoral Research and Dissertation	<u>24</u>
Total	69

* Possible cognate areas include, but are not limited to, anthropology, child and family studies, psychology, education, management, public health, social work, philosophy, and statistics.

Rationale: Although not detailed in the catalog, the current BSN-PhD program at UTK College of Nursing requires 95-100 credit hours and includes a clinical specialty [Nurse Practitioner or Nursing Administration]. In response to Academic Program Review, the PhD curriculum is being revised to focus on the preparation of nurse scientists, rather than nurse practitioners. In addition, when comparing our requirements with peer and aspirational schools, our current program exceeds the number of credit hours by 14-42 credit hours (mean 28 credit hours in excess) which affects our ability to be competitive. Impact on other units: None. Financial impact: None.

REVISE SPECIAL POLICIES TEXT – NURSING MAJOR, PHD

In the 2018-19 Graduate Catalog, under the Special Policies heading, remove the last two bullets. There will now be three bullets instead of five.

Formerly:

The College of Nursing requires all students to have professional liability insurance coverage before enrolling in nursing courses. BSN to PhD students must be eligible to practice nursing in Tennessee or one of the interstate compact states.

Rationale: Clinical concentration requirement removed from PhD program so liability insurance and licensure in Tennessee not mandatory. Impact on other units: None. Financial impact: None.

❖ DROP CONCENTRATION – NURSING MAJOR, MSN

Adult Gerontology Clinical Nurse Specialist

+ DROP CERTIFICATE

Adult Gerontology Clinical Nurse Specialist Graduate Certificate

Rationale: For the MSN concentration: admissions to MSN suspended as we transition to BSN to DNP degree for advanced practice nursing and also, lack of applicants. For certificate: as we are dropping the concentration, we are also dropping the certificate due to lack of students and faculty. Impact on other units: None. Financial impact: None.

COLLEGE OF SOCIAL WORK

All changes effective Fall 2018

I. COURSE CHANGES

(SOWK) Social Work

REVISE TITLE

SOWK 564 Substance Use Disorders (3)

Formerly: Evidence-based Substance Abuse Treatment

REVISE TITLE AND DESCRIPTION

SOWK 533 Trauma Treatment for Adults (3) A concentration elective course. Emphasis is placed on understanding biopsychosocial influences on the incidence, course and treatment of PTSD and complex PTSD and the differential effect of these factors on diverse adult populations at risk. Will focus on the acquisition of diagnostic skills as they relate to comprehensive social work assessment of adults. Evidence-based interventions to treat victims of trauma will be presented. Knowledge of psychopharmacology and the roles social workers play regarding medication with clients as part of an interdisciplinary treatment team will be covered. This three credit hour advanced elective course examines roles, assessments, and intervention strategies for social workers in treating PTSD and complex PTSD in a variety of service settings.

Formerly: Treatment of Trauma (3) Elective course. Will present current bio-ecological research findings that inform our understanding of trauma. Emphasis is placed on understanding biopsychosocial influences on the incidence, course and treatment of acute stress and PTSD and the differential effect of these factors on diverse populations at risk. The course focuses on the acquisition of diagnostic skills as they relate to comprehensive social work assessment of adults, adolescents, and children. Assessment and interventions skills are taught for specific types of trauma, e.g. rape, war, natural disasters. Evidence-based interventions to treat victims of trauma will be presented. The treatment of trauma in this course is family focused and emphasizes the impact of trauma on family and provision of psychoeducation and support for family members. Knowledge of psychopharmacology and the roles social workers play regarding medication with clients as part of an interdisciplinary treatment team will be covered. This two credit advanced elective course examines roles, assessments, and intervention strategies for social workers in treating acute stress disorder and PTSD in a variety of service settings.

Rationale: Revisions necessary to accurately reflect the content of these courses, as measured by the course competencies. Financial Impact: None. Impact on other units: None.

II. PROGRAM CHANGES

REVISE REQUIREMENTS – TRAUMA TREATMENT GRADUATE CERTIFICATE

In the 2018-19 Graduate Catalog under the Requirements heading, revise the first paragraph as shown below:

The certificate requires 15 credit hours of graduate course work: 9 elective credit hours specifically designated as trauma specific, 3 selective course credit hours with one assignment in the course on a trauma-specific topic (for OL students, this assignment will be done in an additional concentration course), 3 concentration course credit hours with one assignment in the course on a trauma-specific topic, and 12 credit hours in a trauma-specific field placement (i.e., a placement in which more than half of the student's time is spent working with traumatized clients client systems). All graduate certificates require 3 credit hours (1 course) over and above that which is required for the MSSW program.

Formerly: The certificate requires 12 credit hours of graduate course work: 6 elective credit hours specifically designated as trauma specific, 3 selective course credit hours with one assignment in the course on a trauma-specific topic, 3 concentration course credit hours with one assignment in the course on a trauma-specific topic, and 12 credit hours in a trauma-specific field placement (i.e., a placement in which more than half of the student's time is spent working with traumatized clients client systems).

Under the Requirements heading, revise numbered items 1, 2, and 3 as shown below:

- 1) The selective course and the concentration course must include a trauma-specific assignment approved prior to completing the assignment by the Trauma Treatment Administrator for that program. Trauma Treatment students will also work with their instructors to identify an appropriate assignment for their class.

- 2) Trauma treatment students must take three trauma electives (9 credit hours)
SOWK 531 (3 credit hours) and two of the following:
SOWK 529 (3 credit hours) or SOWK 533 (3 credit hours) or SOWK 540 (3 credit hours)

All students must take SOWK 531. However, students may petition the Trauma Treatment Chair to substitute another trauma-based graduate course for the second or third trauma elective.

- 3) Attend 3 hours of approved online or face-to-face seminars or webinars a semester, for a total of 6 hours. These need to be approved by the Trauma Treatment Administrator for that program. Three hours need to be a macro focus and three hours need to be a micro focus.

Formerly:

1) The selective course and one concentration course must include a trauma-specific assignment approved prior to completing the assignment by the Trauma Treatment Administrator for that program. Trauma Treatment students will also work with their instructors to identify an appropriate assignment for their class.

2) Trauma treatment students must take two trauma electives (6 credit hours)
SOWK 531 (3 credit hours) and
SOWK 529 (3 credit hours) or SOWK 533 (3 credit hours) or SOWK 540 (3 credit hours)

All students must take SOWK 531. However, students may petition the Trauma Treatment Chair to substitute another trauma-based graduate course for second trauma elective.

3) Attend 2 approved online or face-to-face seminars or webinars a semester, for a total of 3 credit hours each semester. These need to be approved by the Trauma Treatment Administrator for that program.

REVISE VETERINARY SOCIAL WORK GRADUATE CERTIFICATE

In the 2018-19 Graduate Catalog under the Program of Study heading, revise the last 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. All graduate certificates require 3 credit hours (1 course) over and above that which is required for the MSSW program.

Formerly: Other courses may, where appropriate, be substituted for the courses listed above with the permission of the director of the VSW-CP.

REVISE GERONTOLOGY GRADUATE CERTIFICATE

In the 2018-19 Graduate Catalog revise description of certificate as follows

The graduate certificate in gerontology is intended for those interested in working with and/or on behalf of older adults and their family members. The 21-credit hour certificate follows the guidelines of the Association of Gerontology in Higher Education and is offered under the purview of the College of Social Work. The completed "Gerontology Certificate Program Application" must be submitted and signed off by the chair of the Gerontology Certificate Program. All graduate certificates require 3 credit hours (1 course) over and above that which is required for the MSSW program. Contact the chair of the Gerontology Certificate Program at the College of Social Work for assistance, 615-256-1885.

Formerly: The graduate certificate in gerontology is intended for those interested in working with and/or on behalf of older adults and their family members. The 21-credit hour certificate follows the guidelines of the Association of Gerontology in Higher Education and is offered under the purview of the College of Social Work. The completed "Gerontology Certificate Program Application" must be submitted and signed off by the chair of the Gerontology Certificate Program. Contact the chair of the Gerontology Certificate Program at the College of Social Work for assistance, 615-256-1885.

Rationale: Revisions necessary to reflect changes in the Graduate School's certificate policy. Financial Impact: None. Impact on other units: None.

COLLEGE OF VETERINARY MEDICINE

All changes effective Summer 2018

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.

I. COURSE CHANGES

(VMP) VETERINARY MEDICINE – Pre-Clinical

REVISE HOURS

VMP 856 Veterinary Nutrition (1)

Formerly: 2

Rationale: Course hours were submitted erroneously in November curricular change. The College of Veterinary Medicine faculty voted to approve the new curriculum, with the reduction of the Veterinary Nutrition course from 2 hours to 1 hour. The original 2-hour submission was an oversight, and we are requesting to correct that mistake with this change. Impact on other units. None. Financial impact: None.

(VMC) VETERINARY MEDICINE – Clinical

REVISE HOURS AND ADD REPEATABILITY

VMC 800- Clinical Rotation in Pathology (1–2)

Repeatability: May be repeated. Maximum 4 hours.

Formerly: 2

REVISE HOURS

VMC 802 Clinical Rotation in Diagnostic Imaging (1–4)

Formerly: 2–4

VMC 810 Clinical Rotations in Small Animal Clinical Sciences I (1–4)

Formerly: 2–4

Rationale: Due to the curricular change from 2- and 3-week clinical rotations to 2- and 4-week clinical rotations, some contract students (not following UT's academic calendar) will be affected during the transition period and will need 1 hour of one of the above rotations. Adding the ability to provide 1 hour of credit for these three clinical courses will solve this transition issue. Impact on other units: None. Financial impact: None.

II. PROGRAM CHANGES

REVISE REQUIREMENTS, DVM

Requirements text, last paragraph, revise as follows:

In the 2018-19 Graduate Catalog, under the Requirements heading, last paragraph, delete current paragraph and replace with the following:

Students in the second semester of the 3rd year are required to pass a comprehensive examination prior to transitioning to clinical training. The curriculum requires demonstrated competency of a minimum of 200 clinical skills by the conclusion of the 9th semester and successful completion of 165 credit hours, with the following exceptions: With the Class of 2020, beginning in fall 2018, the curriculum requires successful completion of 161 credit hours. With the Class of 2021, beginning in fall 2018, the curriculum requires successful completion of 160 credit hours.

Formerly: Students in the second semester of the 3rd year are required to pass a comprehensive examination prior to transitioning to clinical training. The curriculum requires demonstrated competency of a minimum of 200 clinical skills by the conclusion of the 9th semester and successful completion of 165 credit hours.

Rationale: The UTCVM curricular revision traces its origins to a 2014 faculty retreat, when several key areas for improvement emerged, most notably reducing curricular bloat (too many contact hours) to improve student quality of life, increase amount of time for preparation, study, and wellness; and increase flexibility in clinical training. Ideas for curricular improvement were developed further by a 2015 Curriculum Envisioning task force, and specific models for curricular revision were developed by faculty teams in 2016. The final faculty vote for a new curricular model, and subsequent refinements prior to submission to the UT Graduate Curriculum Committee, occurred in 2017. These large curricular changes were approved by the Graduate Curriculum Committee during its Nov. 2, 2017, meeting. Some course coordinators wish to begin reducing their course credits earlier in order to reduce their teaching load by avoiding the need to teach the same course twice to two different cohorts of students. Specifically, the Classes of 2020 and 2021 will enroll in VMP 833: Public Health & Epidemiology, reducing their epidemiology requirement from 4 credit hours to 3 hours. Likewise, the Classes of 2020 and 2021 will enroll in VMP 843: Integumentary System and VMP 840: Musculoskeletal System, reducing those requirements from 3 credit hours to 2 hours and 6 credit hours to 3 hours, respectively. Impact on other units: None. Financial impact: Veterinary medical student maintenance and tuition are charged at a flat rate per semester; therefore, maintenance and tuition income will not be affected. Negligible costs exist in paperwork changes. Dual teaching that would have occurred within the curricular transition period has been compensated with reduction in overall credit hours for some courses. In these instances, a reduction in faculty workload will result in cost savings. Overall, financial impact is negligible.

INTERCOLLEGIATE

All Changes Effective Fall 2018

I. COURSE CHANGES

(CEM) COMPARATIVE AND EXPERIMENTAL MEDICINE

ADD

CEM 505 Problems in Lieu of Thesis (1-6) Per email from unit, they want to withdraw the course add of CEM 505

~~Grading Restriction: Satisfactory/No Credit Grading only.~~

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

~~Credit Level Restriction: Graduate credit only.~~

~~Registration Restriction: Minimum student level—graduate.~~

~~Registration Permission: Consent of advisor.~~

~~Rationale: CEM is adding the option of a non-thesis master's degree. This course will provide supervised study of a subject relevant to the student's subject area. Impact on Other Units: None. Financial Impact: None.~~

DROP

CEM 542 Cellular and Molecular Basis of Disease (2)

Rationale: This course is being combined with CEM 541 to create a 3-credit-hour course that is more focused and relevant to students' educational needs.

Impact on Other Units: Entomology & Plant Pathology: listed as an elective for the Bioinformatics, Genomics, and Molecular Interactions concentration. Nutrition: listed as a potential course for Nutrition graduate students. Public Health: just a note that 541 is a required course for the Food Safety Graduate Certificate. Financial Impact: None.

REVISE HOURS

CEM 506 One Health (3)

Formerly: (2)

CEM 507 Epidemiology of Vector-Borne, Bacterial, and Viral Zoonotic Diseases (3)

Formerly: (2)

CEM 508 Epidemiology of Parasitic, Foodborne, and Bacterial Zoonotic Diseases (3)

Formerly: (2)

Rationale: With increasing information available related to the course topic, additional material will be presented and more assignments will be required. Students will be spending 3 hours per week viewing the online material and 6 hours per week studying and completing assignments.

Impact on Other Units: Entomology & Plant Pathology – 507 is listed as an elective for the Organismal Biology, Ecology, and Systematics concentration. Public Health – 506 and 507 or 508 (either) are required for the Veterinary Public Health concentration. Financial Impact: None.

REVISE HOURS AND DESCRIPTION

CEM 541 Cellular and Molecular Basis of Disease (3) Disease at the molecular level. Changes in molecular events in cells that lead to disease and occur as a result of disease. Correlation with clinical and pathological states. Systems covered: neurological, structural, respiratory, circulatory, metabolic, endocrine, reproductive, and immunological. Correlation with clinical pathological states.

Formerly: (2) Disease at the molecular level. Changes in molecular events in cells that lead to disease and occur as a result of disease. Correlation with clinical and pathological states. Systems covered: neurological, muscular, bone, respiratory, hematology.

Rationale: CEM 541 (2) and CEM 542 (2) are being combined into one course to create a 3-credit-hour course that is more focused and relevant to students' educational needs. Impact on Other Units: Entomology & Plant Pathology – listed as an elective for the Bioinformatics, Genomics, and Molecular Interactions concentration. Nutrition – listed as a potential course for Nutrition graduate students. Public Health – required course for the Food Safety Graduate Certificate. Financial Impact: None.

REVISE ACADEMIC DISCIPLINE NAME OF SECONDARY CROSS-LISTED COURSE

CEM 531 Wildlife Medicine: Conservation and Policy (2-3)

Cross-listed: (Same as Veterinary Medicine – Pre-clinical 875.)

Formerly: Cross-listed: (Same as Veterinary Medicine 820.)

Rationale: The College of Veterinary Medicine's curriculum has been revised and all of their pre-clinical courses have been renumbered with a new subject code (academic discipline). Impact on Other Units: None. Financial Impact: None.

REVISE TO ADD RECOMMENDED BACKGROUND AND COMMENT(S):

CEM 601 Advanced Epidemiology (3)

Recommended Background: Graduate-level epidemiology course or statistics course.

Comment(s): Consent of instructor.

Rationale: Having the appropriate background is essential for a student to be successful in this course. A discussion with the instructor would also help both the instructor and the student determine his or her course-readiness. Impact on Other Units: None. Financial Impact: None.

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

CEM 610 Advanced Topics in Comparative and Experimental Medicine (1-3)

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

CEM 611 Journal Club in Emerging Infectious Diseases (1)

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

CEM 612 Journal Club in Biomedical and Diagnostic Sciences (1)

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

CEM 613 Journal Club in Large Animal Clinical Sciences (1)

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

CEM 614 Journal Club in Small Animal Clinical Sciences (1)

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

CEM 615 Journal Club in Comparative and Experimental Medicine (1)

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

Rationale: Changing the grading restriction to letter grade will increase the number of graded credit hours offered by the department. Impact on Other Units: None. Financial Impact: None.

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

CEM 501 Special Topics in Comparative and Experimental Medicine (1-6)

Repeatability: May be repeated. Maximum 12 hours.

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

Repeatability: May be repeated. Maximum 6 hours.

Rationale: Changing the grading restriction to letter grade will increase the number of graded credit hours offered by the department. Increasing repeatability will provide more opportunities for experiential training. Impact on Other Units: None. Financial Impact: None.

REVISE REPEATABILITY

CEM 510 Graduate Research Participation (1-3)

Repeatability: May be repeated. Maximum 12 hours.

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

CEM 515 Current Topics in Comparative and Experimental Medicine (1-6)

Repeatability: May be repeated. Maximum 12 hours.

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

Rationale: Increasing repeatability will provide more opportunities for experiential training. Impact on Other Units: None. Financial Impact: None.

REVISE RECOMMENDED BACKGROUND

CEM 602 GIS and Geographical Epidemiology (3)

Recommended Background: Graduate-level epidemiology course or statistics course.

Formerly: Recommended Background: Graduate-level epidemiology and statistics courses.

Rationale: Either a graduate-level epidemiology course or statistics course is recommended, but having both is not necessary. Impact on Other Units: None. Financial Impact: None.

II. PROGRAM CHANGES

ADD NON-THESIS OPTION – COMPARATIVE AND EXPERIMENTAL MEDICINE MAJOR, MS

A non-thesis option is requested for students who desire advanced didactic training at the master's level without performing an extensive research project.

In the 2018-2019 Graduate Catalog, add heading and text for the MS, Non-Thesis Option.

Non-Thesis Option

A total of 30 credit hours of coursework is required. Students must meet all requirements for the MS degree in Comparative and Experimental Medicine. This includes courses CEM 504, CEM 541, CEM 616 (1 credit hour), 4 credit hours of 500- or 600-level journal clubs, 3 credit hours of 500- or 600-level statistics, and an additional 10 credit hours of graduate coursework in a relevant discipline. In lieu of a thesis, 6 credit hours in CEM 503 is required in which the student prepares an analytic research paper that thoroughly identifies and explores a scientific, technical, or social science issue associated with the field. This paper will be presented as a seminar, which is followed by an oral comprehensive exam by the student's committee.

Rationale: Non-thesis degree options are useful to students employed within the field of biomedical science or engaged in resident training. Impact on Other Units: None. Financial Impact: None.

REVISE REQUIREMENTS – COMPARATIVE AND EXPERIMENTAL MEDICINE MAJOR, MS

In the 2017-2018 Graduate Catalog, under Requirements, remove the first paragraph and replace it with the following:

Thesis Option

Students must complete a minimum of 24 credit hours of graduate coursework and 6 credit hours of CEM 500 Thesis. Comparative and Experimental Medicine courses CEM 504, CEM 541, and CEM 616 (1 credit hour) are required, as are 4 credit hours of 500- or 600-level journal clubs, 3 credit hours of 500- or 600-level statistics, and an additional 10 credit hours of graduate coursework in a relevant discipline. Areas of emphasis may include hematology, oncology, pathology, pharmacology, toxicology, immunology, genetics, infectious disease, epidemiology, metabolism, public health or other areas of medicine. Exceptions to accommodate students with specific interests must be approved by the director of the program.

Formerly: Students must complete a minimum of 24 credit hours of graduate course work and 6 credit hours of Thesis (CEM 500). Comparative and Experimental Medicine courses CEM 504, CEM 541, CEM 542, and CEM 616 (1 credit hour) are required, as are 4 credit hours of 600-level graduate journal clubs. In addition, students must take at least 3 credit hours of 500- or 600-level statistics and a minimum of 8 credit hours of graduate course work in a specified discipline. Areas of emphasis may include hematology, oncology, pathology, pharmacology, toxicology, immunology, genetics, infectious disease, epidemiology, metabolism, public health or other areas of medicine. Exceptions to accommodate students with specific interests must be approved by the director of the program.

Rationale: Rationale: CEM 541 (2) and 542 (2) are being combined into one course, CEM 541 (3). This 1-hour reduction also changes the minimum additional hours required. 500-level journal clubs have been added as being acceptable in meeting program requirements. Impact on Other Units: None. Financial Impact: None.

REVISE REQUIREMENTS – COMPARATIVE AND EXPERIMENTAL MEDICINE MAJOR, MS (FORENSIC ODONTOLOGY CONCENTRATION)

In the 2017-2018 Graduate Catalog, remove the last paragraph and replace it with the following:

Students must meet all requirements for the MS degree in Comparative and Experimental Medicine. This includes courses CEM 504, CEM 541, 4 credit hours of 500- or 600-level journal clubs, and 3 credit hours of 500- or 600-level statistics. The CEM 504 course may be substituted with another relevant and appropriate course, as approved by the student's committee and the director of the program. The CEM 616 course is encouraged, but not required, for forensic odontology students. In lieu of a thesis, at least 1 credit hour in CEM 535 Capstone Experience is required in which the student prepares an analytic research paper that thoroughly identifies and explores a scientific, technical, or social

science issue associated with the field. This paper will be presented as a seminar, which is followed by an oral comprehensive exam by the student's committee.

Formerly: Students must meet all requirements for the MS degree in Comparative and Experimental Medicine. This includes courses CEM 504, CEM 541, CEM 542, 4 credit hours of journal clubs, and 500- or 600-level statistics. The CEM 504 course may be substituted with another relevant and appropriate course, as approved by the student's committee and the director of the program. The CEM 616 course is encouraged, but not required, for forensic odontology students. In lieu of a thesis, a capstone experience is required in which the student prepares an analytic research paper that thoroughly identifies and explores a scientific, technical, or social science issue associated with the field. This paper will be presented as a seminar, which is followed by an oral comprehensive exam by the student's committee

Rationale: CEM 541 (2) and 542 (2) are being combined into one course, CEM 541 (3). This 1-hour reduction will be filled by requiring at least 1 credit hour in CEM 535 Capstone Experience. 500-level journal clubs have been added as being acceptable in meeting program requirements. Impact on Other Units: None. Financial Impact: None.

REVISE REQUIREMENTS – COMPARATIVE AND EXPERIMENTAL MEDICINE MAJOR, PHD

In the 2017-2018 Graduate Catalog, under Requirements, second paragraph, revise the first and second sentence into one sentence as shown below:

Comparative and Experimental Medicine courses CEM 504, CEM 541, and CEM 616 (1 credit hour) are required, as are 6 credit hours of 500- or 600-level journal clubs, 3 credit hours of 500- or 600-level statistics, and a minimum of 8 credit hours of graduate coursework in a relevant discipline.

Formerly: Comparative and Experimental Medicine courses CEM 504, CEM 541, CEM 542, and CEM 616 (1 credit hour) are required, as are 6 credit hours of 600-level graduate journal clubs. In addition, students must take at least 3 credit hours of 500- or 600-level statistics and a minimum of 7 credit hours of graduate course work in a specified discipline.

Rationale: CEM 541 (2) and 542 (2) are being combined into one course, CEM 541 (3). This 1-hour reduction also changes the minimum additional hours required. 500-level journal clubs have been added as being acceptable in meeting program requirements. Impact on Other Units: None. Financial Impact: None.

REVISE REQUIREMENTS– COMPARATIVE AND EXPERIMENTAL MEDICINE MAJOR, PHD

In the 2017-2018 Graduate Catalog under PhD with Concurrent MS Degree, Path 2: MS with problems in lieu of thesis option; PhD with dissertation – revise the first sentence to include CEM 503 and 515 as shown below:

Students will progress through the MS program with 6 credit hours in CEM 501, CEM 503, CEM 510, or CEM 515....)

Rationale: CEM 503 and CEM 515 are likewise appropriate for the Path 2 option. Impact on Other Units: None. Financial Impact: None.

REVISE REQUIREMENTS – COMPARATIVE AND EXPERIMENTAL MEDICINE, DUAL PHD-DVM PROGRAM

In the 2017-2018 Graduate Catalog, last paragraph, add the following text after the third sentence:

Students in the dual program who also hold a master's degree may use up to 24 credit hours from their master's program as part of the 31 credit hours awarded toward the PhD, as approved by the student's committee.

Rationale: This clarifies that dual students who have a master's degree also have the option to use credits from their master's program, in conjunction with credits from their veterinary program, toward the PhD. Impact on Other Units: None. Financial Impact: None.