Curriculum Committee Report - January 23, 2020

Graduate Council

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Graduate Curriculum Committee Meeting Report  
Andy Holt Tower, 8th Floor Conference Room,  
2:00 p.m., Thursday, January 23, 2020

Members present: Khalid Alshibli, Sue Choi (GSS Vice-President), George Dodds (proxy for Avigail Sachs), Paul Dittmann, Laurie Meschke (Chair), Nathan Preuss, Martina Ward.

College representatives: Allie Burns / Russell Zaretzki (Bredesen Center for Interdisciplinary Research and Graduate Education), Chuck Collins (College of Arts and Sciences), Paul Dittmann (Haslam College of Business), George Dodds (College of Architecture and Design), Mary Gunther (College of Nursing), Stephen Kania (Comparative and Experimental Medicine), Katie Kavanagh (College of Education, Health, and Human Sciences), Ozlem Kilic (Tickle College of Engineering), Claudia Kirk (College of Veterinary Medicine), Virginia Kupritz (College of Communication and Information), Paula Schaefer (College of Law), John Stier (Herbert College of Agriculture), Martina Ward (College of Social Work)

Others in attendance: Sara Bradberry (Graduate School), Dixie Thompson (Dean of the Graduate School), and Catherine Cox (Graduate Council Liaison).

Laurie Meschke called the meeting to order at 2:00 p.m.

After review and discussion of all college proposals, the following curriculum proposals were approved as presented for recommendation to Graduate Council.

**Herbert College of Agriculture**
- Course adds: 7
- Course drops: 3
- Course revisions: 8  
  course changes = 18

  Normal Program changes for various departments

**College of Architecture and Design**
- Course adds: 6
- Course revisions: 21  
  course changes = 27

  *School of Architecture*
  - Drop four (4) certificates
  - Drop concentration: High Performance Buildings
  - Add concentration: Computational Design and Fabrication

**College of Arts and Sciences**
- Course adds: 40
- Course drops: 19
- Course revisions: 57  
  course changes = 116

  *Department of Mathematics*
  - Drop concentration: Mathematical Ecology and Evolution, (PhD)
  - Add concentration: Mathematical Biology, (PhD)

  *Department of Modern Foreign Languages and Literatures*
  - Add Five-Year BA/MA Program – Spanish Major, MA

  *School of Music*
  - Drop concentration: Pedagogy
Haslam College of Business
Course adds: 6
Course drops: 3
Course revisions: 8
course changes = 17

Department name change: The Department of Management changed their department name to:
Department of Management & Entrepreneurship.

Department of Management & Entrepreneurship
Add concentration: Consulting (Business Administration major, MBA)

Department of Marketing
Drop concentration: Marketing (Business Administration major, MBA)

College of Communication and Information
Course adds: 6
Course drops: 0
Course revisions: 10
course changes = 16
Add concentration: Strategic and Digital Communication (Communication & Information major, MS)

College of Education, Health, and Human Sciences
Course adds: 5
Course drops: 2
Course revisions: 16
course changes = 23

Department of Educational Leadership and Policy Studies
Add concentration: Higher Education Administration (Educational Administration major, MS)
Add concentration: Instructional Leadership (Educational Administration major, MS)
Drop certificate: Educational Administration (PreK-12)
Add certificate: Instructional Leadership

Department of Theory and Practice in Teacher Education
Drop concentration: English as a Second Language Education Professional Internship (Teacher Education major, MS)
Drop concentration: English Education Professional Internship (Teacher Education major, MS)
Add concentration: English Education and English as a Second Language Professional Internship (Teacher Education major, MS)
Add concentration: Practitioner (Teacher Education major, EdS)

Tickle College of Engineering
Course adds: 28
Course drops: 20
Course revisions: 12
course changes = 60

Department of Civil and Environmental Engineering
Add concentration: Transportation and Infrastructure Engineering (Civil Engineering Major, MS)
Drop certificate: Contractual and Legal Affairs in Engineering and Construction

Department of Nuclear Engineering
Add concentration: Nuclear Safety (Nuclear Engineering Major, MS)
Add concentration: Radiological Engineering (Nuclear Engineering Major, MS)
Add concentration: Nuclear Safety (Nuclear Engineering Major, PhD)
Drop certificate: Nuclear Criticality Safety
College of Law
Course adds:  2
Course drops:  0
Course revisions:  110 course changes =  112
Add certificate: Legal Studies
Add major and degree: Law major, Master of Legal Studies (MLS) degree (pending THEC approval)  

College of Nursing
Course adds:  18
Course drops:  27
Course revisions:  18 course changes =  63
Drop four (4) concentrations: Nursing Major, MSN
Family Nurse Practitioner
Nursing Administration
Pediatric Nurse Practitioner
Psychiatric Mental Health Nurse Practitioner
Drop concentration: Pediatric Nurse Practitioner (Nursing Major, DNP)
Add concentration: Pediatric Primary Care Nurse Practitioner (Nursing Major, DNP)
Add concentration: Pediatric Primary/Acute Care Nurse Practitioner (Nursing Major, DNP)
Drop certificate: Nursing Administration
Add certificate: Nurse Executive Practice
Drop Minor: Nursing Education

College of Social Work
Course adds:  2
Course drops:  6
Course revisions:  0 course changes =  8

College of Veterinary Medicine
Course adds:  0
Course drops:  1
Course revisions:  50 course changes =  51
Add Accelerated Program – Dual DVM-MS (Comparative & Experimental Medicine)  

Intercollegiate: Comparative and Experimental Medicine
Course adds:  4
Course drops:  0
Course revisions:  1 course changes =  5
Add Accelerated Program – Dual MS_DVM (Veterinary Medicine)  

Intercollegiate: Bredesen Center for Interdisciplinary Research and Graduate Education
Course adds:  0
Course drops:  0
Course revisions:  1 course changes =  1

Totals:
Course Adds =  124
Course Drops =  81
Course Revisions =  312
Total course changes =  517
AGENDA

Herbert College of Agriculture
College of Architecture and Design
College of Arts and Sciences
Haslam College of Business
College of Communication and Information
College of Education, Health, and Human Sciences
Tickle College of Engineering
College of Law
College of Nursing
College of Social Work
College of Veterinary Medicine
Intercollegiate: Comparative and Experimental Medicine
Intercollegiate: Bredesen Center for Interdisciplinary Research and Graduate Education

+ Indicates new major / degree / certificate being added
ϕ Indicates program / concentration / certificate being dropped
I. COURSE CHANGES

DEPARTMENT OF AGRICULTURAL LEADERSHIP, EDUCATION AND COMMUNICATIONS

(ALEC) Agricultural Leadership, Education and Communications

ADD

ALEC 521 Youth Development (3) Introduces youth development (ages 6-18) principles and focuses on the major developmental domains of physical, cognitive, emotional and social development. Major theories relevant to the domains of development are introduced and discussed and application of these principles in context of family, school and community.

Rationale: The department would like to expand the graduate course electives to better meet the needs of our students in the graduate program. 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 faculty member was hired to teach undergraduate/graduate courses in the areas of curriculum and youth development. Expected enrollment for this course is 35 students.

REVISE HOURS AND REPEATABILITY

ALEC 592 Internship in Agricultural Leadership, Education and Communications (1 - 6)
Repeatability: May be repeated. Maximum 6 hours.

Formerly: (1 – 3)
Repeatability: May be repeated. Maximum 3 hours.

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. Support from assessment activities: To align better with the course hours that are students would need to register for if they needed to graduate.

DEPARTMENT OF BIOSYSTEMS ENGINEERING AND SOIL SCIENCES

(BSE) Biosystems Engineering

DROP

BSE 516 Environmental Hydrology (3)

Rationale: This course has not been taught in years, since Civil and Environmental Engineering added a very similar class (ENVE 531 Hydrology) and invited us to put our students into it. We expect to continue this collaboration for the foreseeable future. Impact on other units: Only taken by students in this major. Response to assessment: None. No changes in Outcomes. Financial impact: none.

DEPARTMENT OF ENTOMOLOGY AND PLANT PATHOLOGY

(EPP) Entomology and Plant Pathology

ADD

EPP 509 Plant Health Diagnostics – Horticultural and Specialty Crops (3) Practical experience diagnosing plant health problems caused by insects, nematodes, microbial pathogens, and abiotic stresses. Students will use modern plant health diagnostics tools and techniques both in the laboratory and field to diagnose health problems of horticultural crops, orchard, and specialty crops in fields, orchards, forests, and urban landscapes.

Contact Hour Distribution: One week summer workshop.

Comment(s): Offered in odd years at the Soil, Plant and Pest Center in Nashville, TN.

Rationale: EPP 508 is currently being taught every year at alternating locations (Jackson and Nashville). The proposed course (EPP 509) is a course that evolved at the Nashville location. At both locations, the course is being taught by a team of two instructors. The instructors are different and the course emphasis and subject matter at the two locations have become very different over time.

Impact on other units: None. Financial impact: There are no financial impacts. EPP 509 and EPP 508 will continue to be taught every other year. Support from assessment activities: This is a popular course for EPP graduate students and other students in the plant sciences. Students have indicated that they would like to take the course at both locations because the course material is different, therefore it is appropriate to split this course into two courses to give students the opportunity to expand their knowledge on plant health diagnostics on a much broader range of plant species in two very different growing environments.
EPP 516 Biopesticides (3) Plant protection; natural products; international issues in crop protection. The history of biopesticides, their modes of actions, challenges and trends in biopesticide development, and biopesticides in integrated pest management systems will be discussed.

Rationale: As economies and populations expand, greater amounts of food must be produced to satisfy the global demand. Protection against losses in crop production, while reducing negative impacts on consumers, remains a key issue in meeting this challenge. Biopesticides can complement synthetic pesticides in conventional agricultural and can provide much needed alternatives in organic agricultural systems. According to the U.S. Environmental Protection Agency, biopesticides are “derived from such natural materials as animals, plants, bacteria, and certain minerals.” Biopesticides currently represent about 5% of the total pesticide market, but the biopesticides market is experiencing rapid growth of about three times the rate associated with conventional agricultural chemicals. The trend toward the use of biopesticides is growing stronger for several reasons: 1) biologicals alone and in combination with chemicals have the potential to provide superior yields and quality; and 2) increasing regulatory restriction on chemicals has established restrictive barriers to bringing new products to market; 3) some countries such as those in Europe are eliminating pesticide active ingredients at a rapid rate. This emerging field is not addressed in current courses.

Impact on other units: None. Financial impact: None. Program Learning Outcomes: This course supports EPP M.S. program learner outcome 3. Support from assessment activities: The course was taught as EPP 531 Special Problems in Entomology, Nematology and Plant Pathology in Spring 2019. All students enrolled in the course took a course survey. All felt that the course should be offered as a named course. Selected comments included, “I enjoyed the class. I recommend you keep teaching it due to the impact that biopesticides have on future markets and the importance they have now.” “Course was very well organized. Very interesting subject that is in the process of changing and adapting. Suggesting the course should continue to be taught.”

EPP 575 Introduction to RNASeq (1) Computational analysis of RNASeq data. Students will learn the basics of using a command line interface on UT’s Linux-based computational resources to analyze RNASeq data. Basic steps such as quality assessment, read mapping and differential gene expression statistical analysis will be covered.

Contact Hour Distribution: One-week summer workshop.

Rationale: This course has been taught two times as EPP 531 Special Problems in Entomology, Nematology and Plant Pathology to increase bioinformatics knowledge across UTIA and UTK, and help prepare students for EPP 622 Bioinformatics Applications, a high enrollment graduate course. Impact on other units: None. Financial impact: None. Support from assessment activities: This course has been taught two times experimentally as EPP 531 Special Problems in Entomology, Nematology and Plant Pathology and two times as a workshop. It has had good enrollment (10-22 students) and very good reviews. The course has been attended by students from over 12 different graduate school programs across three UTK colleges.

REVISE HOURS AND CONTACT HOUR DISTRIBUTION; DELETE CREDIT LEVEL RESTRICTION, REGISTRATION RESTRICTION, AND REGISTRATION PERMISSION

EPP 548 Taxonomy of Adult Insects (4)

Contact Hour Distribution: 2 hours lecture and 4 hours lab.

Formerly: (3)

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

Credit Level Restriction: Graduate credit only.

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

Registration Permission: Consent of instructor.

Rationale: The contact hours distribution was changed to more accurately reflect the in-class time commitment for students. The credit level restrictions, registration restrictions, and registration permission were dropped to more easily allow upper-level undergraduate students to enroll in this class. Impact on other units: None. Financial Impact: There are no financial impacts. Changing the course credit hours from 3 to 4 reflects what was already in practice for this course. Support from assessment activities: Not applicable.

REVISE TITLE, DESCRIPTION, AND COMMENT

EPP 508 Plant Health Diagnostics - Field Crops (3) Practical experience diagnosing plant health problems caused by insects, nematodes, microbial pathogens, and abiotic stresses of field crops. Students will use modern plant health diagnostics tools and techniques, both in the laboratory and field, to diagnose plant health problems of agronomic row crops.

Comment(s): Offered in even years at the West TN Research and Education Center in Jackson, TN.

Formerly: Plant Health Diagnostics (3) Practical experience diagnosing plant health problems caused by insects, nematodes, microbial pathogens, and abiotic stresses. Students will use modern plant health diagnostics tools and techniques, both in the laboratory and field in diverse ecosystems including field, vegetable, and orchard crops, forests, and urban landscapes.

Comment(s): Offered in odd years at the Soil, Plant and Pest Center in Nashville, TN, and in even years at the West TN Research and Education Center in Jackson, TN.

Rationale: EPP 508 is currently being taught every year at alternating locations (Jackson and Nashville). At both locations the course is being taught by a team of two instructors. The instructors are different and the course emphasis and subject matter at the two locations have become very different over time. Impact on other units: None. Financial Impact: There are no financial impacts. EPP 508 will continue to be taught every other year. Support from assessment activities: This is a popular course for EPP graduate students. Students have indicated that they would like to take the course at both locations, therefore it is appropriate to split this course into two courses to give students the opportunity to expand their knowledge on plant health diagnostics on a much broader range of plant species in two very different growing environments.
REVISE DESCRIPTION AND DELETE CONTACT HOUR DISTRIBUTION

EPP 505 Mycology (3)  Survey of the fungal kingdom and traditional allies in the context of phyla and taxonomic classes. Topics include: systematics, biology, reproduction, structure-function, physiology, genetics, mycotic diseases of animals and plants, mycotoxins, hallucinogens, and poisons, insect-fungal associations, composting, edible mushrooms, industrial uses of fungi, fermented food and beverages, and fungal ecology.

Formerly: Survey of the fungal kingdom and traditional allies in the context of phyla and classes. Systematics, biology, reproduction, structure-function, physiology, ecology illustrated with fresh and preserved material and cultural techniques in laboratories.
Contact Hour Distribution: 2 hours lecture and 2 hours lab.
Rationale: The lab associated with this course will be taught as a separate 1-hr course in order to give more time for exploration of additional topics in the lecture section. (The lab will be taught as EPP 531 Special Problems in Entomology, Nematology and Plant Pathology to gain student assessments prior to proposal as a new course). Separation of the lecture and lab will facilitate development of a duplicate on-line course as EPP moves toward development of an on-line non-thesis MS program. Impact on other units: None. Financial Impact: None. Support from assessment activities: Students have asked for additional mycology topics, more depth on those that are covered, and additional in-class time for group projects.

DEPARTMENT OF FOOD SCIENCE

(FDSC) Food Science

ADD

FDSC 511 Integrated Food Science (3)  Critical review of the key principles of food science and applications in the chemistry, microbiology, and processing of food. Understanding the impact of processing on the quality of foods with respect to composition, quality and safety. Course will build on food science principles from undergraduate food chemistry, food microbiology and food processing courses.
Rationale: Food Science is an interdisciplinary discipline requiring integration of concentration areas in food chemistry, food microbiology and safety, food process engineering, and food sensory science. This new course helps students to integrate knowledge areas to solve complex real life questions. Impact on other units: None. Financial impact: none. The course will be team-taught by current faculty. The course will mostly be attended by FDSC students. The course will not pull students from existing courses.

REVISE TITLE; ADD DESCRIPTION AND COMMENTS

FDSC 503 Project/Practicum (2-3)  Project or written comprehensive exam in lieu of thesis.
Comment(s): Only for students choosing Project Option or Course Only with Comprehensive Exam Option.
Formerly: Problems in Lieu of Thesis
Rationale: With the Graduate School’s proposal to remove wording “problems” for non-thesis MS program, FDSC 503 is revising to show the course is for Project or Course Only with Comp Exam students registered for their project or written comprehensive exam to meet the 30-hr degree requirement. Impact on other units: None. Financial impact: none.

REVISE TO REMOVE CREDIT RESTRICTION AND ADD REGISTRATION RESTRICTION

FDSC 504 Research Planning (1-3)
Registration Restriction: Minimum student level - graduate.
Formerly:
Credit Restriction: May not be used toward degree requirements.
Rationale: in past years, students doing preliminary thesis research registered for FDSC 503 as the previous restriction of FDSC 504 does not allow to use the credits for degree requirements. With the clarification of FDSC 503, FDSC 504, with the description of “Preliminary research and investigation of thesis research topic,” should award credits to students doing preliminary thesis research. Impact on other units: None. Response to assessment: none. Financial impact: none.
DEPARTMENT OF FORESTRY, WILDLIFE AND FISHERIES

(WFS) Wildlife and Fisheries Science

ADD

WFS 534 Ecology and Conservation of Tropical Mammals (3) Examines the tropical ecosystems and the taxonomy, diversity, life history, management, and conservation of associated mammal species.

Credit Restriction: Students may not receive credit for both 434 and 534.

Rationale: additional wildlife elective, also elective for international ag minor, added flexibility for students. Impact on other units: None. Financial impact: None, will be taught by existing faculty, whose teaching duties have been re-distributed to ensure courses taught by faculty align with expectations, in conjunction with WFW 434 course. Assessments of WFS thesis and dissertation defenses indicate students need to better achieve mastery of information relevant to the thesis.

DEPARTMENT OF PLANT SCIENCES

(PLSC) Plant Sciences

ADD

PLSC 535 Field and Forage Crops (3) Agronomic principles of forage and field crop production, establishment, fertilization and management practices will be discussed using forage crops as the primary model.

Credit Restriction: Cannot receive credit for both PLSC 435 and 535.

Recommended Background: Coursework in general agronomics or crop production.

Comment(s): Offered Fall semester in alternate, odd numbered years.

Rationale: Course has been offered as special topic in conjunction with PLSC 435 for two years and the instructor has requested a separate course number to enable PhD student access. Graduate Syllabus has been prepared for PLSC 535, which explains additional (graduate level) expectations and assignments. Impact on other units: None. Financial Impact: Taught by existing faculty.

DROP

PLSC 610 Advanced Plant Genomics (2)

Rationale: Course has not been taught in several years and there is not a faculty of record identified to offer this course in the future. Impact on other units: None Financial Impact: None.

DROP 400-LEVEL COURSE FOR GRADUATE CREDIT (RETAINING COURSE IN THE UNDERGRADUATE CATALOG)

PLSC 435 Field and Forage Crops (3)

Rationale: New course syllabus for PLSC 535 has been prepared to reflect instructor requested for a separate, graduate course number that is available to PhD students. Graduate Syllabus has been prepared for PLSC 535, which explains additional (graduate level) expectations and assignments. Impact on other units: None. Financial Impact: Taught by existing faculty.

REVISE TO ADD COMMENT

PLSC 653 Advanced Plant Breeding (3)

Comment: Offered Spring semester in alternate, odd numbered years.

REVISE TO ADD VARIABLE TITLE

PLSC 503 Non-Thesis Project (1-2)

Rationale: Adding variable title capability to this course will enable the student to better articulate the title/project undertaken within an Academic Transcript report. Impact on other units: None Financial Impact: None.
II. PROGRAM CHANGES

DEPARTMENT OF ANIMAL SCIENCE

REVISE ANIMAL SCIENCE MAJOR, MS

In the 2020-21 Graduate Catalog, under the Non-Course Requirements Heading, add the following paragraph.

Non-Course Requirements

Unless extenuating circumstances arise after thesis defense commences, two outcomes are possible - pass or fail. In case of failure, the student/candidate may not be reexamined or apply for defense until the following semester. Assistantship/employment may be terminated and student may be responsible for maintenance and other fees required for enrolling in another 3 credit hours of ANSC 500. The result of the second examination is final.

REVISE ANIMAL SCIENCE MAJOR, PHD

In the 2020-21 Graduate Catalog, under the Non-Course Requirements Heading, add the following 2 bullets.

Non-Course Requirements

- Unless extenuating circumstances arise after the comprehensive exam or dissertation defense commences, two outcomes are possible - pass or fail. In case of failure (comprehensive exam or dissertation defense), the student/candidate may not be reexamined or apply for defense until the following semester. Assistantship/employment may be terminated and student may be responsible for maintenance and other fees required for enrolling in 3 credit hours of ANSC 600. The result of the second examination is final.

- PhD students are required to present research proposal to the department.

DEPARTMENT OF FOOD SCIENCE

REVISE REQUIREMENTS – FOOD SCIENCE MAJOR, MS

In the 2020-21 Graduate Catalog, under the Additional Course Requirements Heading, add the following bullet:

- All students are required to complete at least 3 credit hours of graduate level statistics courses as approved by the graduate committee.

Rationale: Statistics is important to food science. Most graduate students take statistics courses for their research needs. Having a formal statistics requirement helps students to plan their study plan.

REVISE REQUIREMENTS – FOOD SCIENCE MAJOR, PHD

In the 2020-21 Graduate Catalog, under the Additional Course Requirements Heading, add the following bullet:

- All students are required to complete at least 6 hours of graduate level statistics courses.

Rationale: Statistics is important to food science. Most graduate students take statistics courses for their research needs. Having a formal statistics requirement helps students to plan their study plan.

DEPARTMENT OF PLANT SCIENCES

REVISE REQUIREMENTS – PLANT SCIENCES MAJOR, MS

In the 2020-21 Graduate Catalog,

1) under the Admissions Standards/Procedures Heading, revise the 5th bullet as follows:

- The online application procedure will direct the applicant to submit an updated resume or CV, a short statement of professional goals and reasons for applying to Plant Sciences, answers to a professional biosketch self-assessment, and contact information for three evaluators who will provide letters of reference.

Formerly: The online application procedure will direct the applicant to submit an updated resume or CV, a short statement of professional goals and reasons for applying to Plant Sciences, contact information for three evaluators who will provide letters of reference.
2) under the Academic Standards Heading, revise the 1st bullet as follows:

- Students must be fully committed to their graduate program: they are expected to participate in departmental seminars, activities, outreach functions, and professional development activities, and assume full responsibility for knowledge and compliance with rules and regulations of the Graduate Council and Department.

Formerly: Students must be fully committed to their graduate program, are expected to participate in departmental activities, outreach functions, and professional development activities, and assume full responsibility for knowledge and compliance with rules and regulations of the Graduate Council and Department.

3) under the Required Courses Heading, Thesis Option Requirement, add a 3rd bullet as shown below:

- PLSC 504 (2 credit hours) [for MS students matriculating in Fall 2020 and thereafter]

4) under the Required Courses Heading, Project Option Requirement, add a 3rd bullet as shown below:

- PLSC 504 (2 credit hours) [for MS students matriculating in Fall 2020 and thereafter]

5) under the Required Courses Heading, revise the 3rd bullet as shown below:

- Successful completion of 12 credit hours of graded course work in the major at the graduate level (400 or above), exclusive of Plant Sciences PLSC 500 (Thesis Option only), PLSC 502 (Thesis and Project Option), PLSC 503 (Project Option only), and PLSC 504 (Thesis and Project Option).

Formerly: Successful completion of 12 credit hours of graded course work in the major at the graduate level (400 or above), exclusive of Plant Sciences PLSC 500 (Project Option only), PLSC 502 (Thesis and Project Option), PLSC 503 (Thesis Option only)

6) under the Non-Course Requirements Heading revise as shown below:

- **Thesis Option**
  - Approval of an acceptable master’s graduate student advisory committee
  - If a minor is sought from another program, the student’s advisory committee must include a faculty member from the minor department*. *Note: See IGSP Program Guidelines (Committee membership of an IGSP faculty member may not be required for the IGSP Minor)
  - Members of the student’s advisory committee are expected to contribute expertise relevant to their academic discipline area, to assist in the planning of course work, aid in formulating an appropriate research project and will assess student achievement and performance toward accomplishing other degree requirements, including the thesis defense
  - Satisfactory presentation of a research proposal to the department
  - Approval of the academic program by the master’s committee
  - Satisfactory preparation of a written thesis proposal and its oral defense to the student’s committee
  - Satisfactory preparation of a written thesis and its oral defense to the student’s graduate committee

- **Project Option**
  - Approval of an acceptable master’s graduate student advisory committee
  - If a minor is sought from another program, the student’s advisory committee must include a faculty member from the minor department*. *Note: See IGSP Program Guidelines (Committee membership of an IGSP faculty member may not be required for the IGSP Minor)
  - Members of the student’s advisory committee are expected to contribute expertise relevant to their academic discipline area, to assist in the planning of course work, aid in formulating an appropriate project and will assess student achievement and performance toward accomplishing other degree requirements, including the thesis defense
  - Satisfactory presentation of a project proposal to the department
  - Approval of the academic program by the master’s committee
  - Satisfactory completion of a project, preparation of a written report summarizing the project, and its oral defense to the student’s advisory committee
  - Passing written and oral examinations covering the project and course work.

Formerly:

**Thesis Option**
- Approval of an acceptable master’s graduate student advisory committee
- If a minor is sought from another program, the student’s advisory committee must include a faculty member from the minor department.
- Members of the student’s advisory committee are expected to contribute expertise relevant to their academic discipline area, to assist in the planning of course work, aid in formulating an appropriate research project and will assess student achievement and performance toward accomplishing other degree requirements, including the thesis defense.
- Satisfactory presentation of a research proposal to the department
- Approval of the academic program by the master’s committee
- Satisfactory preparation of a written thesis proposal and its oral defense to the student’s committee.
- Satisfactory preparation of a written thesis and its oral defense to the student’s graduate committee.

**Non-Course Requirements**
- Approval of an acceptable master’s graduate student advisory committee
- If a minor is sought from another program, the student’s advisory committee must include a faculty member from the minor department.
- Members of the student’s advisory committee are expected to contribute expertise relevant to their academic discipline area, to assist in the planning of course work, aid in formulating an appropriate research project and will assess student achievement and performance toward accomplishing other degree requirements, including the thesis defense.
- Satisfactory presentation of a research proposal to the department
- Approval of the academic program by the master’s committee
- Satisfactory preparation of a written thesis proposal and its oral defense to the student’s committee.
- Satisfactory preparation of a written thesis and its oral defense to the student’s graduate committee.
Project Option
- Satisfactory completion of a project, preparation of a written report summarizing the project, and its oral defense to the student's advisory committee.
- Passing written and oral examinations covering the project and course work.

REVISE REQUIREMENTS – PLANT, SOIL, AND ENVIRONMENTAL SCIENCES MAJOR, PLANT SCIENCES CONCENTRATION, PHD

In the 2020-21 Graduate Catalog, under the Required Courses Heading, add the following course

- PLSC 504 (2 credit hours) [for PhD students matriculating in Fall 2020 and thereafter]

Under the Non-Course Requirements Heading, add the following as the second bullet point

- Satisfactory presentation of a research proposal to the department
I. COURSE CHANGES

SCHOOL OF ARCHITECTURE

(ARCH) Architecture

REVISE HOURS

ARCH 522 Special Topics in Urban Design (3)
Formerly: 1-6

ARCH 523 Special Topics in Interior Architecture (3)
Formerly: 1-6

ARCH 524 Special Topics in Landscape Architecture (3)
Formerly: 1-6

ARCH 525 Special Topics in Architecture (3)
Formerly: 1-6

ARCH 550 Special Topics in History, Theory and Criticism (3)
Formerly: 1-6

ARCH 552 Special Topics in Sustainable Design (3)
Formerly: 1-6

ARCH 554 Special Topics in Materials and Construction (3)
Formerly: 1-6

ARCH 555 Special Topics in Digital Fabrication
3 Credit Hours
Formerly: 1-6
Rationale: courses are only taught as a 3 credit course.

REVISE TITLE, DESCRIPTION, AND RE(COREQUISITE)

ARCH 538 Design Foundations (3) Foundations of spatial composition and design. Key concepts include ideation, spatial order, form, scale, craft, and three-dimensional thinking.
(RE) Corequisite(s): 501 and 518.

Formerly:
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.
(RE) Corequisite(s): 501.
Rationale: Change recognizes a wider range of approaches to teaching this course as well as changes in architectural discourse

REVISE TITLE AND DESCRIPTION

ARCH 541 Architectural Design I (6) Formal determinants in architectural design. Key concepts include creative exploration, material expression, structure, and performance.

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

Rationale: Change recognizes a wider range of approaches to teaching this course as well as changes in architectural discourse
ARCH 542 Architectural Design II (6)  Contextual determinants in architectural design. Key concepts include analytical methods, development of alternative design strategies, territorial identity, institutions, and agency.

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

Rationale: Change recognizes a wider range of approaches to teaching this course as well as changes in architectural discourse.

ARCH 571 Architecture and Urbanism (6)  Architectural design and urban complexity. Key concepts include: programming with emphasis on social and cultural interactions, public and civic space, interiority and experience, urban morphology and formal derivation.

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

Rationale: Change recognizes a wider range of approaches to teaching this course as well as changes in architectural discourse.

REVISE DESCRIPTION
ARCH 543 Design Charrette (3)  Field trip followed by fast-paced intense design activity. Key concepts include spatial tension, seriality, hierarchy, repetition, and site specificity.

Formerly: 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: Change recognizes a wider range of approaches to teaching this course as well as changes in architectural discourse.

REVISE DESCRIPTION AND DROP (RE)PREREQUISITES
ARCH 560 Seminar in Design Integration (3)  Building simulation and design development of technical aspects of structures, environmental controls, and construction methods supporting sustainability, experience, use, contextual fit, meaning and expression.

Formerly: 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 buildings. Bases for integrating design knowledge.

(Re) Prerequisite(s): 557 and 558 and 559

Rationale: Change recognizes a wider range of approaches to teaching this course as well as changes in architectural discourse. The (RE) changes allow our two year students who have studied at other universities to enroll in the course.

REVISE TITLE, DESCRIPTION, AND DROP (RE)PREREQUISITE
ARCH 572 Design Integration (6)  Active integration of cultural considerations, programmatic possibility, and technical exploration and precision as related to the development of the architectural project. Considerations of site, life safety, building structure, environmental systems, and high-performance building criteria are addressed within the context of ideas of resilience, abundance, and sustainability.

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

(Re) Prerequisite(s): 571.

Rationale: Change recognizes a wider range of approaches to teaching this course as well as changes in architectural discourse. The (RE) changes allow our two year students who have studied at other universities to enroll in the course.

REVISE TITLE AND DESCRIPTION. ADD REPEATABILITY; AND DROP (RE)PREREQUISITE
ARCH 583 Advanced Architectural Design: Urbanism (6)  A thematic studio requiring research, critical examination and individual engagement through design speculation of critical positions within the discipline addressing urbanism through the cultural, physical, environmental and community influences on architectural form, space and structure. Repeatability: May be repeated. Maximum 12 hours.


(Re) Prerequisite(s): 571.
Rationale: update to align course with the concentrations in the program. The (RE) changes allow our two year students who have studied at other universities to enroll in the course. Adding repeatability to 583.

**ARCH 586 Advanced Architectural Design: Sustainable Design (6)** A thematic studio requiring research, critical examination and individual engagement through design speculation of critical positions within the discipline addressing concern for the environment, consideration of energy conservation techniques, and use of renewable resources. 
*Repeatability: May be repeated. Maximum 12 hours.*

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

Rationale: update to align course with the concentrations in the program. The (RE) changes allow our two year students who have studied at other universities to enroll in the course. Adding repeatability to 586.

**ARCH 587 Advanced Architectural Design: Conservation and Stewardship (6)** A thematic studio requiring research, critical examination and individual engagement through design speculation of critical positions within the discipline addressing the roles cultural artifacts play in understandings public policies and other sustained responses stemming from the shared concern for plight of built and natural environments. 
*Repeatability: May be repeated. Maximum 12 hours.*

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

Rationale: Update to align course with the concentrations in the program. The (RE) changes allow our two year students who have studied at other universities to enroll in the course. Adds repeatability to 587.

**ARCH 588 Advanced Architectural Design: Computational Design and Fabrication (6)** A thematic studio requiring research, critical examination and individual engagement through design speculation of critical positions within the discipline pertaining to innovative materials, structural assemblies, computational design synthesis and optimization via additive manufacturing and robotic fabrication. 
*Repeatability: May be repeated. Maximum 12 hours.*

*(RE) Prerequisite(s): 571.*

Rationale: update to align course with the concentrations in the program. The (RE) changes allow our two year students who have studied at other universities to enroll in the course. Adds repeatability to 588.

**REVISE DESCRIPTION, ADD REPEATABILITY, AND DROP (RE)PREREQUISITE**

**ARCH 590 Advanced Architectural Design: Special Topics (6)** A thematic studio requiring research, critical examination and individual engagement through design speculation of critical positions within the discipline addressing topics outlined by individual instructors. 
*Repeatability: May be repeated. Maximum 12 hours.*

Formerly: Advanced architectural design based on special topics as defined by instructor.
*(RE) Prerequisite(s): 571.*

Rationale: Change recognizes a wider range of approaches to teaching this course as well as changes in architectural discourse.

**REVISE TITLE AND (RE)PREREQUISITES**

**ARCH 599 Diploma Thematic Studio (6)** Final culminating design studio experience for the M.Arch professional degree. In-depth, instructor-led themes, with significant options for student interpretation in project development. Required graphic and written products.
*(RE) Prerequisite(s): 572 and 529.*

Formerly: Design VII: Diploma Thematic Studio
*(RE) Prerequisite(s): 572 and 507.*

Rationale: Title change to align course with other courses in the program. Update of numbers of pre-required courses, which were changed last year.
SCHOOL OF LANDSCAPE ARCHITECTURE
(LAR) LANDSCAPE ARCHITECTURE

ADD

LAR 523 Visual Communication for Non-Designers (3) Provides instruction on the basics of visual communication for students in non-design disciplines. Students will explore a range of digital design techniques and workflows across software packages in order to prepare them to communicate effectively in a variety of common communication types and formats. Will primarily focus on the most-used industry, which are essential tools for the efficient creation and management of contemporary visual communications.

Contact Hour Distribution: 1.5 hours lecture and 1.5 hours lab.

LAR 530 Plants in the Landscape I (3) Provides students with an introduction to the use of plant materials in the built environment, drawing upon contemporary approaches to landscape architecture and sustainable landscape design. The course is structured to provide students with concrete working knowledge - identification and performative characteristics - of approximately 120 plants that are somewhat common in the southeast or across the United States with a particular emphasis on plants that are well-adapted to urban situations. In addition to plant identification, the course will provide students with a series of frameworks through which to consider how plants have been or could be utilized, as well as emerging ecological theories such as novel ecosystems.

Contact Hour Distribution: 2 hours lecture, 1 hour lab.

LAR 533 Plants in the Landscape II (3) Provides students with an introduction to the use of plant materials and their supporting bio-physical systems in order to harness their performative or bio-technological potentials in the built environment. The course draws from landscape architecture, environmental engineering, and other disciplines and practices currently exploring the utility of contemporary biotechnologies. The course is structured to provide students with concrete working knowledge - identification and performative characteristics - of approximately 120 plants that are commonly utilized in performative capacities such as constructed wetlands, bioswales, and other remediative situations.

Contact Hour Distribution: 2 hours lecture, 1 hour lab.

LAR 587 Contemporary Landscape Architecture (3) Intended to provide students with an awareness and appreciation for contemporary landscape architecture. While the primary focus of the course will be from 1950 to the present, we will periodically reach farther back into history in order to better understand key historical precedent projects and designers that were or are influential to contemporary designers and projects. This course situates current practices through a survey of precedents, events and spatial developments across cultures and scales. In order to understand the projective discipline of landscape architecture, we must study how it has been informed, influenced and shifted over its relatively short existence.

LAR 588 Contemporary Landscapes: Problems and Potentials (3) Will survey a wide range of issues impacting the landscape and the social-ecological systems it supports. Climate change, urbanization, population increases, and migrations of human and non-human species are among the many pressures currently affecting landscapes and informing the disciplines involved in their analysis, design, and management. The course will also provide a global survey of the people and projects that are engaging in these landscape changes. These projects will range across scales from site to system and provide students with a greater understanding of the potentials for engaging these landscape issues through design and related fields.

LAR 598 Master of Landscape Project (3-6) Students develop a thesis independently in consultation with their Master of Landscape Project (MLP) 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 MLP are met.

Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 24 hours.
(RE) Prerequisite(s): LAR 580.
Registration Restriction(s): Minimum student level – graduate.
Schedule Type: Personalized self-instruction.

Rationale: The proposed additions are for new courses developed in the landscape architecture curriculum. Impact on Other Academic Units: None. Financial Impact: None.
II PROGRAM CHANGES
SCHOOL OF ARCHITECTURE

DROP GRADUATE CERTIFICATES
- Conservation and Stewardship Graduate Certificate
- High Performance Buildings Graduate Certificate
- Sustainable Design Graduate Certificate
- Urbanism Graduate Certificate

Rationale: Due to no interest, we are dropping all our Graduate Certificates. The program cannot support these certificates. There are NO students in any of the dropped certificates.

DROP CONCENTRATION – ARCHITECTURE MAJOR, MArch
High Performance Buildings Concentration

Rationale: topics in this concentration have been folded into the new concentration “Computational Design and Fabrication” and into existing concentration “Sustainable Design” to better depict current interest in the discipline. There are 6 students in the concentration. The HPB courses taken will also apply to the other concentrations, so there will be no issue with the requirements.

ADD CONCENTRATION – ARCHITECTURE MAJOR, MARCH
Computational Design and Fabrication Concentration

In the 2020-21 Graduate Catalog add description and requirements for new concentration. This information replaces the text under the dropped High Performance Building concentration.

Computational Design and Fabrication Concentration
The Computational Design and Fabrication Concentration is a research and experiment-based focus that incorporates knowledge from a wide range of disciplines to develop advanced computational design tools, digital fabrication techniques and experimental spatial, structural and material systems.

Coursework for this concentration incorporates ideas of computational design thinking, scripting, algorithmic modeling, digital and analog form-finding, biomimetic, emergent digital fabrication technologies, construction automation, prototyping, materials and structures.

The Computational Design and Fabrication Concentration offers opportunities for topical study such as but not limited to:
- Computational design (Analysis, Simulation, Evaluation, and Generative Design.)
- Digital Modeling and Fabrication
- Additive Manufacturing
- Robotics: Sensing, Actuation and Feedback
- Construction automation
- Biomimicry
- Smart structures
- Novel Materials
- Lightweight Structures
- Virtual and Augmented Environments
- Emergent and Self Organizing Systems
- Responsive Environments

Potential Resources:
- CoAD FabLab including additive manufacturing (3D-printing), robotics and subtractive computer numerical control (CNC), augmented and virtual reality.
- Oak Ridge National Laboratory (ORNL)
- Joint Institute for Advanced Materials (JIAM)
- Fiber Composite Manufacturing Facility (FCMF)
- Entomology and Plant Pathology
- Institute for Smart Structures (ISS)
Requirements for Computational Design and Fabrication Concentration (12 credit hours)

To be included in the concentration, all courses must be approved by the Architecture Graduate Studies Chair in consultation with the faculty and will be based on the content of the specific course the student completed. 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 (6 credit hours)
ARCH 588 (6 credit hours)
ARCH 590 (6 credit hours)
ARCH 598 (6 credit hours)
ARCH 599 (6 credit hours)

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

ARCH 525 (3 credit hours)
ARCH 550 (3 credit hours)
ARCH 552 (3 credit hours)
ARCH 554 (3 credit hours)
ARCH 555 (3 credit hours)

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

ARCH 526 (3 credit hours)
ARCH 529 (3 credit hours)
ARCH 593 (1-9 credit hours)

Rationale: Concentration reflects new faculty hires and interest in the discipline.

REVISE REQUIREMENTS – ARCHITECTURE MAJOR, MARCH, SUSTAINABLE DESIGN CONCENTRATION

In the 2019-20 Graduate Catalog, revise requirements for the Sustainable Design concentration as follows:

Sustainable Design Concentration
1) Revise the first paragraph to add the following as the last sentence.

… underscoring the need for interdisciplinary dialogue and leadership at building, site, city, and regional scales. This responsibility usually entails attention to building performance, from design through development to evaluation.

2) Revise the second paragraph to delete the current 12 bullets and replace with the following 11 bullets.

- Environmental Ethics
- Environmental Policy
- Energy and Urbanism
- Energy Modeling, Simulation and Prototyping
- Design for Carbon Neutrality.
- Net Zero and Net Positive Buildings
- Resilient Design
- Passive Energy Design
- Sustainable and Renewable Materials and Methods
- High-Performance Building Envelopes
- Innovative Use of Traditional Materials

3) Under the Potential resources heading, delete current bullets and replace with the following bullets:

- Design | Build | Evaluate Initiative
- Joint Institute for Advanced Materials
- Institute for Smart Structures (ISS)
- Architecture Research Annex / GreenVision Studio
- UTK Smart Communities Initiative
- Institute for Secure and Sustainable Environments (ISSE)
- Nashville Civic Design Center (NCDC)
• Oak Ridge National Laboratory (ORNL)

4) Under the Requirements for Sustainable Design Concentration (12 hours), delete the current paragraph and replace with the following:

To be included in the concentration, all courses must be approved by the Architecture Graduate Studies Chair in consultation with the faculty and will be based on the content of the specific course the student completed. Documentation will be kept by the School of Architecture, but it is the student’s responsibility to solicit approval through the advising process.

Formerly: All courses must meet the approval of Architecture Graduate Studies Chair 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.

5) At the 3rd bullet: Of the six elective credit hours, up to three credit hours may be from:

Add course ARCH 529 (3 credit hours) to the list of courses

Rationale: Concentration reflects new faculty hires and interest in the discipline.

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

In the 2019-20 Graduate Catalog, revise requirements for the Conservation and Stewardship concentration as follows:

1) Under the concentration heading, delete current first paragraph and replace with the following:

Conservation and Stewardship Concentration

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

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

2) Under the second paragraph, delete the bulleted list and replace with the following list:

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

- Sustainable Urban and Rural Landscapes
- The Tennessee Valley Authority
- Cultural Resource Conservation and Development
- Architectural Preservation
- Social Justice and Design
- Monuments and Memory
- Appalachia
- Galleries, Libraries and Art Museums
- Regional Cultures and their Artifacts
- Identity Politics
- Engaged and Participatory Design

3) Under the Potential Resources heading delete current list and replace with the following:

Potential Resources:

- UTK Smart Communities Initiative
- Knox Heritage (including internships)
- Odd Fellows Cemetery Reclamation Initiative
- Knoxville Re-Animation Coalition
4) Under the Requirements for Conservation and Stewardship Concentration (12 credit hours), delete current paragraph and replace with the following paragraph.

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

To be included in the concentration, all courses must be approved by the Architecture Graduate Studies Chair in consultation with the faculty and will be based on the content of the specific course the student completed. Documentation will be kept by the School of Architecture, but it is the student’s responsibility to solicit approval through the advising process.

Formerly: All courses must meet the approval of Architecture Graduate Studies Chair 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.

5) Under the “Six credit hours from the following” heading, revise the credit hours on the first four courses listed from (1-3 credit hours) to (3 credit hours) as those courses were revised from variable hours to 3 credit hours.

6) Under the “Of the six elective credit hours, up to three credit hours may be from:” heading add course ARCH 529 (3 credit hours) to the list of courses. List will now appear as shown below:

ARCH 526 (3 credit hours)
ARCH 529 (3 credit hours)
ARCH 591 (1-9 credit hours)
ARCH 593 (1-9 credit hours)

Rationale: Concentration reflects new faculty hires and interest in the discipline.

REVISE REQUIREMENTS – ARCHITECTURE MAJOR, MARCH, URBANISM CONCENTRATION

In the 2019-20 Graduate Catalog, revise requirements for the Urbanism concentration as follows:

1) Under the Potential Resources heading, delete first bullet: Governor’s Chair for Energy + Urbanism.

2) Under the Requirements for Urbanism Concentration (12 credit hours), delete current paragraph and replace with the following paragraph.

To be included in the concentration, all courses must be approved by the Architecture Graduate Studies Chair in consultation with the faculty and will be based on the content of the specific course the student completed. Documentation will be kept by the School of Architecture, but it is the student’s responsibility to solicit approval through the advising process.

3) At the 3rd bullet: Of the six elective credit hours, up to three credit hours may be from:

Add course ARCH 529 (3 credit hours) to the list of courses

Rationale: Concentration reflects new faculty hires and interest in the discipline.

Mission: The mission of the School of Landscape Architecture at the University of Tennessee is to advance the discipline of landscape architecture as a robust field of inquiry and application.

We accomplish this mission by:

- Preparing a diverse population of students to critically and creatively engage the complex, multiscale, socio-ecological challenges and potentials of the 21st century, thereby positioning them for leadership across a range of career trajectories.
- Developing and disseminating scholarly research and creative activity that makes meaningful contributions to advancing the discourse of the discipline and elevating living conditions in the communities it serves.
• Engaging local, state, and regional communities as a means to educate and excite the public imagination, develop, demonstrate and deploy innovative planning and design practices, and advocate for the advancement of the field.

Values: The School of Landscape Architecture is guided by the following values:
1. We are committed to the engagement of the medium of landscape as a critical, cultural practice, mindful of the incredible diversity of precedents, practices, and populations that are inherent in it.
2. We are committed to a progressive, evolving, integrated curriculum, which prepares students for speculative and practical realms of planning and design and that is situated in the context of grand socio-ecological challenges facing contemporary society.
3. We are committed to a discursive educational environment that engenders respect for diversity in all of its forms and meanings, and which privileges the production of diverse ideas and new modes of thought and action.
4. We are committed to the development of relevant, contemporary, technical skills, which are critically informed by the evolving theories, influences, and technologies shaping the field.

SCHOOL OF LANDSCAPE ARCHITECTURE
REVISE REQUIREMENTS - LANDSCAPE ARCHITECTURE MAJOR, MLA

In the 2020-21 Graduate Catalog,
1) Under the heading, “Concentrations (Required) and Options Available, remove the word “Required”.
2) Under the “Admissions Standards/Procedures” heading, for the MLA – Track 1 (First Professional Degree), revise the three bullets pertaining to “Paths” as shown below:
   ▪ Path A is designed to accommodate students who have no previous formal study in landscape architecture.
   ▪ Path B - Advanced Placement Option is designed to accommodate students with a bachelor’s degree in landscape design or students in related design fields like architecture, urban design or interior design. Any advanced standing in this path is determined on a case by case basis by the director dependent upon the specific courses and content a student has already completed. Once advanced standing is determined, as little as two years may be required to complete the Path B program. Proof of a minimum of one year of studio design experience is required.
   ▪ Path C is designed specifically for students in the BArch program at the University of Tennessee, Knoxville, and it allows for students from the BArch to complete the MLA in as little as one year of graduate studies. To pursue this option, students must apply for acceptance to the School of Landscape Architecture in the Spring Term of their 4th year. This application must include all of the materials listed below which are required for admission to this degree track (see Admissions to MLA – Track 1 (First Professional Degree). Formerly: Admission to MLA, Track 1, Path B, Advanced Standing Option (First Professional Degree)

3) Under the Admissions Standards/Procedures heading, revise heading title of 3rd bullet, as shown below.
   • Admission to MLA, Track 1, Path C (First Professional Degree)
   Formerly: Admission to MLA, Track 1, Path B, Advanced Standing Option (First Professional Degree)

4) At the MLA, Track 1 (First Professional Degree) Path A, Thesis heading, add the word “Project” to the heading
   MLA, Track 1 (First Professional Degree) Path A, Thesis or Project
5) Under the Required Courses heading, revise 3rd bullet to add two additional courses as options as shown below.

**Required Courses**
- LAR 500 or LAR 598 or LAR 556 (6 credit hours)

Formerly: LAR 500 (6 credit hours)

6) Under the Additional Course Requirements heading, remove current text and replace with the following:

**Additional Course Requirements**
- 12 credit hours of open electives.
- 12 credit hours of approved graduate elective course work. Students are required to work with faculty advisors and the school director to choose courses that will best complement their specific degree trajectory. Electives must be approved by the student's primary advisor or the school director.

Formerly:
- 12 credit hours of directed and open electives.
- 6-9 credit hours of directed elective and 3-6 credit hours of open elective credit hours required. Students are required to work with faculty advisors and the school director to choose courses that will best complement their specific degree trajectory. A minimum of 6 credit hours of directed electives and 3 credit hours of open electives must be taken at the 500 level.
- Courses are selected in consultation with the major advisor.

7) Under the Non-Course Requirements heading, add “or project” to the end of the sentence as shown below.

**Non-Course Requirements**
A public presentation and oral defense of the thesis or project.

8) Add new heading: “Additional Information” along with corresponding course listing.

**Additional Information**
- A typical program is completed in the following schedule:
  - **FALL YEAR 1**
    - LAR 551 (6 credit hours)
    - LAR 521 (3 credit hours)
    - LAR 532 (3 credit hours)
    - LAR 587 (3 credit hours)
  - **SPRING YEAR 1**
    - LAR 552 (6 credit hours)
    - LAR 522 (3 credit hours)
    - GEOL 590 (3 credit hours)
    - Landscape Architecture approved elective (3 credit hours)
  - **SUMMER YEAR 1**
    - LAR 561 (3 credit hours)
  - **FALL YEAR 2**
    - LAR 553 (6 credit hours)
    - LAR 571 (4 credit hours)
    - LAR 581 (3 credit hours)
    - Landscape Architecture approved elective (3 credit hours)
  - **SPRING YEAR 2**
    - LAR 554 (6 credit hours)
    - LAR 534 (3 credit hours)
    - LAR 584 (3 credit hours)
    - Landscape Architecture approved elective (3 credit hours)
  - **SUMMER**
    - LAR 561 (3 credit hours)
  - **FALL YEAR 3**
    - LAR 555 (6 credit hours)
    - LAR 535 (3 credit hours)
    - LAR 580 or 583 (3 credit hours)
    - Landscape Architecture approved elective (3 credit hours)
  - **SPRING YEAR 3**
    - LAR 500 or 598 or 556 (6 credit hours)
    - LAR 572 (3 credit hours)
- LAR 582 (3 credit hours)
- Landscape Architecture approved elective (3 credit hours)

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.

9) Revise heading name from: MLA, Track 1 (First Professional Degree) Path B, Thesis to:

MLA, Track 1 (First Professional Degree) Path B – Advanced Placement Option, Thesis or Project

10) Revise Credit Hours. Revise from 58 credit hours to 64 credit hours.

   Formerly: 58 graduate credit hours

11) Under Required Courses Heading, revise to add LAR 598, LAR 556 as course options.

   Required Courses
   • LAR 500 or LAR 598 or LAR 556 (6 credit hours)

12) Under Additional Course Requirements heading, revise first bullet from 37 credit hours to 61 credit hours.

   • LAR coursework (61 credit hours)

   Formerly: LAR coursework (37 credit hours)

13) Under the Additional Course Requirements heading, remove/delete all text (the 3 bulleted items)

   Formerly:
   Additional Course Requirements
   • 12 credit hours of directed and open electives.
   • 6-9 credit hours of directed elective and 3-6 credit hours of open elective credit hours required. Students are required to work with faculty advisors and the school director to choose courses that will best complement their specific degree trajectory. A minimum of 6 credit hours of directed electives and 3 credit hours of open electives must be taken at the 500 level.
   • Courses are selected in consultation with the major advisor.

14) Add new heading: “Additional Information” along with corresponding course listing.

   Additional Information
   • A typical program is completed in the following schedule:
     o FALL YEAR 1
       • LAR 553 (6 credit hours)
       • LAR 521 (4 credit hours)
       • LAR 532
       • LAR 587 (3 credit hours)
     o SPRING YEAR 1
       • LAR 554 (6 credit hours)
       • LAR 522 (3 credit hours)
       • LAR 534 (3 credit hours)
       • GEOL 590
     o SUMMER YEAR 1
       • LAR 5611 (3 credit hours)
     o FALL YEAR 2
       • LAR 555 (6 credit hours)
       • LAR 535 (3 credit hours)
       • LAR 571 (4 credit hours)
       • LAR 580 or 583 (3 credit hours)
     o SPRING YEAR 2
       • LAR 500 or 598 (6 credit hours)
       • LAR 572 (3 credit hours)
       • LAR 582 (3 credit hours)
15) Under the MLA, Track 1 (First Professional Degree) Path B, Project heading, delete/remove all text.

Formerly:
MLA, Track 1 (First Professional Degree) Path B, Project
Credit Hours Required
58 graduate credit hours

Required Courses
- LAR coursework (43 credit hours)
- GEOL 590 (3 credit hours)

- Additional Course Requirements
  - 12 credit hours of directed and open electives
  - 6-9 credit hours of directed elective and 3-6 credit hours of open elective credit hours required. Students are required to work with faculty advisors and the school director to choose courses that will best complement their specific degree trajectory. A minimum of 6 credit hours of directed electives and 3 credit hours of open electives must be taken at the 500 level.
  - Courses are selected in consultation with the major advisor

16) Under the MLA, Track 1 (First Professional Degree) Path B, Advanced Standing Option, Project, revise heading and requirements as shown below.

MLA, Track 1 (First Professional Degree) Path C, Thesis or Project

Credit Hours Required
34 graduate credit hours

Required Courses
- LAR coursework (31 credit hours)
- GEOL 590 (3 credit hours)

Additional Course Requirements
- None

Additional Information
- A typical program is completed in the following schedule:
  - SUMMER YEAR 1
    - LAR 561* (3 credit hours)
  - FALL YEAR 1
    - LAR 555 (6 credit hours)
    - LAR 535 (3 credit hours)
    - LAR 571 (4 credit hours)
    - LAR 580 or 583 (3 credit hours)
  - SPRING YEAR 1
    - LAR 500 or 556 or 598 (6 credit hours)
    - LAR 572 (3 credit hours)
    - LAR 582 (3 credit hours)
    - LAR 584 (3 credit hours)

- LAR 561 can occur in summer before or after first year. The internship report must be completed before the end of the semester of registration.

Formerly:
MLA, Track 1 (First Professional Degree) Path B, Advanced Standing Option, Project
Credit Hours Required
58 graduate credit hours

Required Courses
- LAR coursework (43 credit hours)
- GEOL 590 (3 credit hours)

Additional Course Requirements
- 12 credit hours of directed and open electives
• 6-9 credit hours of directed elective and 3-6 credit hours of open elective credit hours required. Students are required to work with faculty advisors and the school director to choose courses that will best complement their specific degree trajectory. A minimum of 6 credit hours of directed electives and 3 credit hours of open electives must be taken at the 500 level.
• Courses are selected in consultation with the major advisor.

17) Revise heading title: MLA, Track 2 (Post-Professional Degree), Thesis to:

**MLA, Track 2 (Post-Professional Degree), Thesis or Project**

18) Under the Required Courses Heading, revise first bullet to add LAR 598, LAR 556 as course options and revise third bullet from 6 credit hours to 9-12 credit hours.

**Required Courses**
- LAR 500 or LAR 598 or LAR 556 (6 credit hours)
- LAR non-studio course work (9-12 hours)

19) Under the Additional Course Requirements heading, remove current text and replace with the following:

**Additional Course Requirements**
- 6-9 credit hours of open electives.
  - 6-9 credit hours of elective credit hours required. Students are required to work with faculty advisor or the school director to choose courses that will best complement their specific degree trajectory.
  - Courses are selected in consultation with the major advisor and must provide the student with graduate credit.

Formerly:
- 12 credit hours of directed and open electives.
- 6-9 credit hours of directed elective and 3-6 credit hours of open elective credit hours required. Students are required to work with faculty advisors and the school director to choose courses that will best complement their specific degree trajectory. A minimum of 6 credit hours of directed electives and 3 credit hours of open electives must be taken at the 500 level.
- Courses are selected in consultation with the major advisor.

20) Under the heading, MLA Track 2 (Post-Professional Degree), Project – remove/delete all text.

Formerly:
**MLA, Track 2 (Post-Professional Degree), Project**

Credit Hours Required
42 graduate credit hours

**Required Courses**
- LAR design studio (18 credit hours)
- LAR non-studio coursework (12 credit hours)

**Additional Course Requirements**
- 12 credit hours of directed and open electives
  - 6-9 credit hours of directed elective and 3-6 credit hours of open elective credit hours required. Students are required to work with faculty advisors and the school director to choose courses that will best complement their specific degree trajectory. A minimum of 6 credit hours of directed electives and 3 credit hours of open electives must be taken at the 500 level.
  - Courses are selected in consultation with the major advisor.

REVISE REQUIREMENTS – LANDSCAPE ARCHITECTURE MAJOR, MSLA

In the 2020-21 Graduate Catalog, revise the MSLA program as shown below:

1) Revise the introductory paragraph. Delete current paragraph and replace with the following.

The Master of Science in Landscape Architecture (MSLA) is intended for students interested in developing greater knowledge and understanding of landscape-related topics and skills such as design thinking, design communication, digital technologies, and urban ecology. Students engage in an intensive one-year experience to develop a wide range of technical skills and conceptual frameworks. This degree will not prepare students for professional licensure.

2) Under Option Available heading, revise to remove thesis option.

Option available: Course only without comp exam.
3) Under Credit Hours Required heading, revise hours from 42 to 30.

**Credit Hours Required**

30 graduate credit hours

Formerly: 42 graduate credit hours

4) Under the Required Courses heading, remove course LAR 500, add 2 bullets

**Required Courses**

- Landscape Architecture (LAR) graduate course work (24 graduate credit hours)
- GEOL 590 (3 credit hours)

Formerly: LAR 500 (6 credit hours)

5) Under the Additional Course Requirements heading, remove current 2 bullets and replace with one bullet:

- 3 credit hours graduate elective course work approved by primary advisor or school director.

Formerly:

- Minimum 33 semester credit hours of graduate course work from Landscape Architecture (LAR.)
- 3 credit hours (minimum) elective as appropriate chosen in consultation with the major advisor.

6) Under the Non-Course Requirements heading, delete current text (one bullet)

Formerly:

- Preparation and defense of a thesis. Topic chosen in consultation with major advisor and/or guidance committee.

7) Add new heading: “Additional Information” along with corresponding course listing.

**Additional Information**

- A typical program is completed in the following schedule:
  - **FALL YEAR 1**
    - LAR 551 (6 credit hours)
    - LAR 521 (3 credit hours)
    - LAR 587 (3 credit hours)
    - LAR 532 (3 credit hours)
  - **SPRING YEAR 1**
    - LAR 552 (6 credit hours)
    - LAR 522 (3 credit hours)
    - GEOL 590 (3 credit hours)
    - Landscape Architecture approved elective (3 credit hours)
PART I COURSE CHANGES

DEPARTMENT OF ANTHROPOLOGY

(ANTH) Anthropology

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

ANTH 431  Isotope Ecology (3)  Will give graduate students and advanced undergraduates a thorough background in the principles and applications of stable isotope analysis in archaeology, ecology, and paleontology.

Rationale: This is a new class, developed by a recently hired tenure-track faculty in the subdiscipline of archaeology and represents an area of her expertise. Impact on other units: none, financial impact: none.

REVISE TITLE, DESCRIPTION, AND DROP (RE)PREREQUISITES ON 400-LEVEL COURSE

ANTH 449  Big-data Social Sciences (3)  Big-data research is now a major part of the social sciences, including anthropology. This course combining 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.

Formerly: Big-data Anthropology (3)  Big-data research is now a major part of the social sciences, including anthropology. This 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: We want to change the title to more general "Big-data social sciences" so that the course can be offered as part of the new Data Science IDP. In any case, "Big-data social sciences" describes the content better than the previous title ("Big-data anthropology"). We also removed the pre-requisites, they were not needed to succeed in the course. Impact on other units: N/A, financial impact: N/A.

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT AS A SECONDARY CROSS-LISTED COURSE

ANTH 465  Archaeology of the Trojan War (3)  Seminar focusing on the physical and written evidence for the Trojan War and its historical context. Students compare cultural information from Homeric epics with archaeological and textual evidence from Troy, Anatolia, and the Aegean in the Late Bronze and Early Iron Ages in order to arrive at their own conclusions regarding the historicity of the Trojan War. Writing-Emphasis course.

Cross-listed: (See Classics 465.)

Rationale: This seminar has been taught as a special topics course (CLAS 461) in 2019 with excellent student evaluations. Giving it its own course number and cross-listing it in Anthropology, since it is an archaeology focused course, will increase its visibility. Impact on other units: Cross-list CLAS 465, CLAS is primary, financial impact: none.

SCHOOL OF ART

(Art) Art

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

ART 444  Studio Art Research (1-6)  Active research investigations in faculty-led initiatives.

Repeatability: May be repeated. Maximum 6 hours.

Registration Permit: Consent of instructor.

Rationale: This course will provide an opportunity for undergraduate and graduate students to participate in, and learn from, faculty creative work and research. Impact on other units: none, financial impact: none.

DROP

ART 551  Transmedia Design I (2-6)

Rationale: The term "transmedia design" is a holdover from an earlier time when the School of Art was beginning to integrate new media beyond the traditional two-dimensional and three-dimensional categories for art. Time-based art is now the accepted, and more appropriate, term for film, video, digital, sound and performance work. This material is now taught in ART 535 - Graduate Time-Based Art I. Impact on other units: none. Financial impact: none.

ART 552  Transmedia Design II (2-6)
Rationale: The term "transmedia design" is a holdover from an earlier time when the School of Art was beginning to integrate new media beyond the traditional two-dimensional and three-dimensional categories for art. Time-based art is now the accepted, and more appropriate, term for film, video, digital, sound and performance work. This material is now taught in ART 536 - Graduate Time-Based Art II. Impact on other units: none. Financial impact: none.

(ARTH) Art History

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

ARTH 410 Art and Image in the Age of Pharaohs (3) Explores four thousand years of Egyptian art from the building of the Great Pyramids and the splendor of the New Kingdom to the achievements of its Hellenistic successors and beyond. Focuses on royal monuments, images of life, death, and afterlife along the Nile, mummies and funerary art, religion and temples, sculpture, luxury arts as well as objects of everyday life.

Rationale: This is an area of great interest to our students, and there are no courses offered on Egyptian art as a discrete topic at UT. We also have a collection at the McClung Museum that could be used to support this course. Impact on other units: This course would be of particular interest to students in history and anthropology. It would also be of interest to those students taking arts and humanities courses. Financial impact: none.

DEPARTMENT OF BIOCHEMISTRY AND CELLULAR AND MOLECULAR BIOLOGY

(BCMB) Biochemistry and Cellular and Molecular Biology

REVISE DESCRIPTION AND COMMENT ON 400-LEVEL COURSE

BCMB 422 Computational Biology and Bioinformatics (3) An introduction to the cutting-edge tools and approaches biologists and clinicians use to extract information from the vast amounts of genomic and proteomic data becoming available. Students gain hands-on experience with computational biology tools such as data mining, protein structure manipulation and prediction, interaction network analysis, DNA sequence analysis, gene function analysis, R studio for statistics and data visualization, and dimensionality reduction for large datasets. Students apply these tools to biomedical research questions in course projects.

Comment(s): Helpful if students have taken or are taking BCMB 412. Registration without 401 co-requisites is possible with permission of instructor.

Formerly: Topics include Internet biological resources and databases; bioinformatics tools of analyzing and comparing sequences for nucleic acids and proteins; computational structural biology tools for analyzing protein 3D structures and functions; application of computational tools in drug design. Comment(s): Intended for seniors but open to juniors.

Rationale: This course is now being taught by a new faculty member who has adjusted the focus toward the analysis of genomics and big data in biology rather than protein structure modeling. The protein structure side is well covered by BCM8 333, so this change makes the two courses complementary. Impact on other units: The course will continue to fulfill its previous role as a bioinformatics course, even better adapted to students with interest in Data Science and with learning goals in line with Engaged Inquiries (separate proposal submitted to VolCore committees). Financial impact: none.

DEPARTMENT OF CLASSICS

(CLAS) Classics

ADD 400-LEVEL COURSES FOR GRADUATE CREDIT

CLAS 462 Ancient Greek and Roman Technology (3) From the harnessing of fire, sun, wind, and water energy to the creation of the world’s first computer, people of ancient Greece and Rome have developed a wide range of materials, machines, and constructions to make their lives easier, increase productivity or fulfill other needs in their increasingly complex societies. Many of their technological achievements have been influential in later times and are still admired today. Focuses on the technological achievements of the ancient Greek and Roman world from the Stone Age to the Roman empire, and at times it will include the Near East and Egypt. Writing Emphasis course.

Rationale: This course has been taught as a special topics course (CLAS 461) in 2016 and 2018 with excellent student evaluations. Giving it its own course number will increase its visibility and allow it to be included in the College’s Connections Packages related to the ancient world. Impact on other units: none. Financial impact: none.

ADD 400-LEVEL PRIMARY CROSS-LISTED COURSE FOR GRADUATE CREDIT

CLAS 465 Archaeology of the Trojan War (3) Seminar focusing on the physical and written evidence for the Trojan War and its historical context. Students compare cultural information from Homeric epics with archaeological and textual evidence from Troy, Anatolia, and the Aegean in the Late Bronze and Early Iron Ages in order to arrive at their own conclusions regarding the historicity of the Trojan War. Writing Emphasis course.

Cross-listed: (Same as Anthropology 465.)
DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY

(EEB) Ecology and Evolutionary Biology

ADD 400-LEVEL COURSES FOR GRADUATE CREDIT

EEB 410 Ecological and Evolutionary Developmental Biology (3) Course will discuss how organisms develop and interact with their surrounding environment as well as their evolutionary history.

Rationale: Previously taught under the Special Topics label. Providing this course with its own number will increase its profile making it more accessible to students. Impact on other units: none, financial impact: none.

EEB 444 Diversity of Fishes (4) Course will explore the rich diversity of fishes in Tennessee.

Recommended Background: Biology 260.

Rationale: Previously taught under the Special Topics label. Providing this course with its own number will increase its profile making it more accessible to students. Impact on other units: none, financial impact: none.

EEB 471 Aquatic Macroecology and Conservation (4) Course is designed to develop understanding of large-scale physical, chemical, and biological patterns and processes in different types of aquatic environments found on Earth. The impacts of anthropogenic activities on aquatic biodiversity and ecosystems will be explored. Students will be introduced to the collection and statistical analysis of publicly available data to answer important questions in aquatic ecology and conservation.

(RE) Corequisite(s): EEB 411, STAT 251, or permission of instructor.

Rationale: Course has been taught under special topics. We would like to make the course permanent with its own number. Impact on other units: none, financial impact: none.

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT AND REQUEST VARIABLE TITLE

EEB 476 Theoretical Ecology and its Applications (3) Ecosystems show an incredible diversity of dynamics. Theoretical ecology focuses on identifying generalizable principles that can help organize how we approach ecological data analyses and the design of experimental programs in the face of that complexity and richness. Ecological theory bounds what is possible, spotlights what is likely, and generates new hypotheses, thereby helping the ecological scientist to focus their research effort. Ecological theory also provides techniques that can help guide conservation management interventions. Topics may include but are not limited to: demographic modeling, community ecology, life history theory, protected area design, bioeconomics, behavioral ecology and more.

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

(RE) Prerequisite(s): BIOL 260 and Math 152 or MATH 142.

Rationale: As a course, Theoretical Ecology and its Applications will help students to identify cross-cutting themes and linkages across the EEB concentration and other fields. It will integrate ideas from applied mathematics, engineering, statistics and other disciplines and apply them to develop process-based models of ecological systems. Ecologists use these techniques to generate new hypotheses, bridge scales, integrate disparate data types, design statistical analyses, and to inform conservation and natural resource management practice. While some of the material can be touched on in other subject area courses (e.g., Invasive Species, Community Ecology), the risk inherent with such an idiosyncratic approach is that students miss opportunities to identify shared concepts and techniques and to organize their learning. Ecological theory provides an organizing spine around which students can organize more context specific ideas and concepts. For this reason, Theoretical Ecology is a major recognized subdiscipline within EEB with its own peer reviewed journals and sections of major professional societies. Many peer and aspirational peer institutions offer at least one specialized course in Theoretical Ecology for upper level undergraduate students. Ancillary benefits for students include that while exploring ecological research questions they will also be enriching their mathematical, statistical and computational training, all high demand skills area for subsequent careers. Impact on other units: none, financial impact: none.

ADD

EEB 601 Natural History Collections Research (1) Introduces students to cutting-edge collections-based research. Will explore topics such as biodiversity, conservation management, invasive species biology, anthropology, paleontology, ecology, evolution, scientific ethics, and advocacy that are informed by data from natural history collections.

Registration Restriction: Minimum student level – graduate.

Rationale: Previously taught under the Special Topics label. Providing this course with its own number will increase its profile making it more accessible to students. Impact on other units: none, financial impact: none
ADD SECONDARY CROSS-LISTED COURSES

EEB 589 Seminar in Mathematical Biology (1-3)
Cross listed: (See Mathematics 589.)
Repeatability: May be repeated. Maximum 12 hours.

Rationale: Course previously taught as EEB 504-Special Topics in conjunction with MATH 589. It would be better suited to be EEB 589 and cross-listed with MATH 589. Impact on other units: cross-listed with MATH 589. Math is primary. Financial impact: none.

EEB 683 Advanced Topics in Mathematical Biology II (3) Continuation of 681.
Cross listed: (See Mathematics 682.)
Repeatability: May be repeated. Maximum 6 hours.
(DE) Prerequisite(s): 681.
Registration Restriction(s): Minimum student level – graduate.

Rationale: Course previously taught as EEB 610-Special Topics in conjunction with MATH 682. It would be better suited to be EEB 683 and cross-listed with MATH 682. Impact on other units: cross-listed with MATH 682. Math is primary. Financial impact: none.

REVISE TO REQUEST VARIABLE TITLE

EEB 602 Advanced Topics in Ecological Process and Structure (1-3) Exposure and in-depth training in contemporary topics and approach important to advanced research in ecological process and structure. Consult departmental listing for offerings.
Repeatability: May be repeated with consent of department. Maximum 12 hours.
Registration Restriction(s): Minimum student level – graduate.

EEB 603 Advanced Topics in Evolutionary Biology (1-3) Exposure and in-depth training in contemporary topics and approaches important to advanced research in ecological process and structure. Consult departmental listing for offerings.
Repeatability: May be repeated with consent of department. Maximum 12 hours.
Registration Restriction(s): Minimum student level – graduate.

EEB 606 Advanced Topics in Conservation Biology (1-3) Exposure and in-depth training in contemporary topics and approaches important to advanced research in conservation biology. Consult departmental listing for offerings.
Repeatability: May be repeated with consent of department. Maximum 12 hours.
Registration Restriction(s): Minimum student level – graduate.

EEB 609 Advanced Topics in Comparative Animal Behavior (1-3) Exposure and in-depth training in contemporary topics and approaches important to advanced research in conservation biology. Consult departmental listing for offerings.
Repeatability: May be repeated with consent of department. Maximum 12 hours.
Registration Restriction(s): Minimum student level – graduate.

EEB 610 Advanced Topics in Mathematical, Theoretical and Computational Ecology (1-3) Exposure and in-depth training in contemporary topics and approaches important to advanced research in mathematical, theoretical, and computational ecology. Consult departmental listing for offerings.
Repeatability: May be repeated with consent of department. Maximum 12 hours.
Registration Restriction(s): Minimum student level – graduate.

EEB 611 Advanced Topics in Organismal Biology (1-3) Exposure and in-depth training in contemporary topics and approaches important to advanced research in organismal biology. Consult departmental listing for offerings.
Repeatability: May be repeated with consent of department. Maximum 12 hours.
Registration Restriction(s): Minimum student level – graduate.

Rationale: Add variable title so course title can be changed to properly reflect what the course for that semester includes and how it is different from prior courses taught under the same number. Impact on other units: none. Financial impact: none.

REVISE TITLE ON SECONDARY CROSS-LISTED COURSES

EEB 581 Mathematical Biology I (3)
Cross-listed: (See Mathematics 581.)
Formerly: Introduction to Mathematical Ecology I (3)

EEB 582 Mathematical Biology II (3)
Cross-listed: (See Mathematics 582.)
Formerly: Introduction to Mathematical Ecology II (3)

EEB 681 Advanced Topics in Mathematical Biology I (3)
Cross-listed: (See Mathematics 681.)
Formerly: Advanced Topics in Mathematical Ecology I (3)
Rationale: Revised titles per Math Dept request. The proposed name change better reflects the inclusiveness of the course with respect to a diverse range of mathematical biology topics in which our faculty currently do research. The proposed name change would also make these courses sound less niche to students both inside and outside of the mathematics department and better reflect the reality that the courses represent a broad introduction to applied mathematics and modeling, within the context of ecology and other biological sciences. Impact on other units: cross listed with MATH 681. Math is primary. Financial impact: none.

DEPARTMENT OF MATHEMATICS

(MATH) Mathematics

REVISE TITLE AND DESCRIPTION ON PRIMARY CROSS-LISTED COURSES

Math 581 Mathematical Biology I (3) Development and mathematical analysis of linear and nonlinear mathematical models arising from biological systems, emphasizing ecological theory and including difference equations, ordinary and partial differential equations, probabilistic models, and other relevant topics.
Cross-listed: (Same as Ecology and Evolutionary Biology 581.)
Formerly: Mathematical Ecology I (3)
Deterministic and stochastic models of populations, communities, and ecosystems.

MATH 681 Advanced Topics in Mathematical Biology I (3) Selected topics in theoretical and applied mathematical biology: including ecology, epidemiology, immunology, network dynamics, social and behavioral science, and the integration and comparison of models to experimental and field data.
Cross-listed: (Same as Ecology and Evolutionary Biology 681.)
Formerly: Advanced Topics in Mathematical Ecology I (3)
Selected topics in theoretical and applied mathematical ecology: population, community, ecosystem ecology and applied topics such as demography, ecotoxicology, epidemiology, environmental change, and resource management.

Rationale: The proposed name changes better reflect the inclusiveness of the courses with respect to a diverse range of mathematical biology topics in which our faculty currently do research. The proposed change would also make these courses sound less niche to students both inside and outside of the mathematics department and better reflect the reality that the courses represent a broad introduction to applied mathematics and modeling, within the context of ecology and other biological sciences. Impact on other units: cross listed with EEB 581 and EEB 681. MATH is primary. Financial impact: none.

REVISE TITLE ON PRIMARY CROSS-LISTED COURSE

MATH 582 Mathematical Biology II (3)
Cross-listed: (Same as Ecology and Evolutionary Biology 582.)
Formerly: Mathematical Ecology II (3)

Rationale: The proposed name change better reflects the inclusiveness of the courses with respect to a diverse range of mathematical biology topics in which our faculty currently do research. The proposed change would also make these courses sound less niche to students both inside and outside of the mathematics department and better reflect the reality that the courses represent a broad introduction to applied mathematics and modeling, within the context of ecology and other biological sciences. Impact on other units: cross-listed with EEB 581 and EEB 582. MATH is primary. Financial impact: none.

REVISE TITLE AND ADD A SECONDARY CROSS-LIST

MATH 589 Seminar in Mathematical Biology (1-3)
Cross-listed: (Same as Ecology and Evolutionary Biology 589.)
Formerly: Seminar in Mathematical Ecology

Rationale: The proposed minor name changes better reflect the inclusiveness of the seminar with respect to a diverse range of mathematical biology topics discussed in which our faculty currently do research. The proposed change would also make the seminar sound less niche to students both inside and outside of the mathematics department and better reflect the reality that the seminar represents broad topics in applied mathematics and modeling, within the context of ecology and other biological sciences. Impact on other units: cross list EEB 589. MATH is primary. Financial impact: none.

MATH 682 Advanced Topics in Mathematical Biology II (3)
Cross-listed: (Same as Ecology and Evolutionary Biology 683.)
Formerly: Advanced Mathematical Ecology II (3)

Rationale: The proposed minor name changes better reflect the inclusiveness of the courses with respect to a diverse range of mathematical biology topics in which our faculty currently do research. The proposed change would also make these courses sound less niche to students both inside and outside of the mathematics department and better reflect the reality that the courses represent a broad introduction to applied mathematics and modeling, within the context of ecology and other biological sciences. Impact on other units: cross-listing with EEB 683. MATH is primary. Financial impact: none.
REVISE TITLE
MATH 689 Concentration in Mathematical Biology (3)
Formerly: Seminar in Mathematical Ecology (3)
Rationale: The proposed revision will make the concentration name more consistent with the proposed associated new course names and be more general to reflect the diverse research our students engage in with faculty who have a diverse range of research within the field of mathematical biology. The proposed change would also make the concentration sound less niche to students and better reflect the reality that the concentration is a more broadly defined program within the greater context of ecology and other biological sciences. Impact on other units: none. Financial impact: none.

DEPARTMENT OF MODERN FOREIGN LANGUAGE AND LITERATURE
(FREN) French
ADD 400-LEVEL COURSE FOR GRADUATE CREDIT
FREN 455 Special Topics in French and Francophone History and Culture (3) Selected topics in French studies. Repeatability: May be repeated if topic differs. Maximum 9 hours.
(R-E) Prerequisite(s): 353.
Rationale: This new class will complement FREN 450, which was "Special Topics" and will now become "Special Topics in French and Francophone Literature". Impact on other units: none, financial impact: none.

ADD
FREN 585 Critical Moments in French and Francophone Culture and History (3) Analysis of major events and ideas in the Francophone world. Repeatability: May be repeated. Maximum 9 hours.
Rationale: We are adding this course to allow more variety in course offerings at the graduate level, as an addition to 580, a topics course. Impact on other units: none. Financial impact: none.

DROP 400-LEVEL COURSE FOR GRADUATE CREDIT
FREN 430 Theatrical French (4)
Rationale: No faculty able to teach this course and no plans to hire a replacement. Impact on other units: none. Financial impact: none.

DROP
FREN 519 Bibliography and Methods Research (3)
Rationale: 519 is no longer required for the MFLL PhD and we do not have faculty to offer it. Impact on other units: none. Financial impact: none.

REVISE TITLE ON 400-LEVEL COURSE
FREN 450 Special Topics in French and Francophone Literature (3)
Formerly: Special Topics (3)
Rationale: Students regularly need to petition this topics class as a literature requirement; we are adding a new class, FREN 455 - Special Topics in French and Francophone History and Culture, to cover topics that are not literature oriented. Impact on other units: none, financial impact: none.

REVISE TITLE, DESCRIPTION, AND REPEATABILITY
FREN 580 Critical Moments in French and Francophone Literature or Linguistics (3) Analysis of crucial aspects of French literature or linguistics. Repeatability: May be repeated. Maximum 9 hours.
Formerly: Critical Moments in French and Francophone Studies, or Linguistics (3)
Contribution of France and Francophone world to evolution of literature, society, and ideas. Repeatability: May be repeated. Maximum 12 hours.
Rationale: We are modifying this to distinguish it from a new course that we are adding, FREN 585, that will allow us to vary our course offerings at the graduate level. Impact on other units: none. Financial impact: none.
(GERM) German

ADD
GERM 595 Graduate Colloquium (1) All German MA students and all PhD students with a German concentration are expected to enroll in the German Graduate Colloquium. Graduate students share and discuss work in progress, resources, and professional opportunities. Grading Restriction(s): Satisfactory/No Credit grading only. Repeatability: May be repeated. Maximum 15 hours. Comment(s): A maximum of 3 credit hours of German 595 may be counted towards graduate degrees in German.

Rationale: In 2018-19, German started to offer a one-hour graduate colloquium based on student demand in the fall and the spring semesters under the independent study course number. In order to be able to limit the number of credit hours students can apply towards their graduate degree in German, we are adding a designated course number for the German "Graduate Colloquium" (GERM 595). We are changing the curriculum/program descriptions for the following degree options accordingly: M.A. Program Thesis Option. M.A. Program Non-Thesis Option. MFLL PhD First Concentration: German. Impact on other units: none. Financial impact: none.

REVISE TO ADD REPEATABILITY ON PRIMARY 400-LEVEL CROSS-LISTED COURSE
GERM 423 Themes and Genres in German Cinema (3)
Repeatability: May be repeated if topic differs. Maximum 6 hours.

The course title is intentionally broadly defined to make it possible to offer courses that focus on different themes and genres in German cinema under this course number. The requested change will allow students to repeat this course if the topic is different. Impact on other units: Cross listed with CNST 423. GERM is primary. Financial impact: none.

(PORT) Portuguese

ADD
PORT 501 Portuguese for Graduate Students of Another Romance Language (3) Accelerated class for beginning graduate students of Portuguese with a strong background in another Romance language. Introduction to grammar, reading, and the cultural plurality of Portugal and Brazil. Recommended Background: 3 hours at the 300-level in another Romance language.

Rationale: Port 501 is replacing Port 400 which is being dropped. We want graduate students to get 500-level credit for the course. Students have an extended list of readings, exams, oral presentations and a final research paper. Impact on other units: none. Financial impact: none.

DROP 400-LEVEL COURSE FOR GRADUATE CREDIT
PORT 400 Portuguese for Speakers of Another Romance Language (3)

Rationale: Port 400 will be replaced by Port 300 in the Undergraduate programs and by Port 501 in the Graduate Catalog. Impact on other units: MFLL: LWB/Hispanic Studies Concentration and LWB/Portuguese concentration. LACS: Brazilian Studies Track, General studies Track. Financial impact: none.

(SPAN) Spanish

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT
SPAN 410 Introduction to Hispanic Linguistics (3) Topics may include first and second language acquisition, phonetics, phonology, syntax, history of the Spanish language, semantics, pragmatics and linguistic variation, among others. (RE) Prerequisite(s): 309 or 312

Rationale: The Hispanic Studies section is revising its curriculum in light of current faculty and enrollment; this course will be a required course for the major. Impact on other units: Course likely to be added as fulfilling Phonetics or elective requirements for Linguistics IDP. Financial impact: none.

DROP 400-LEVEL COURSES FOR GRADUATE CREDIT
SPAN 421 Phonetics (3)

Rationale: The Hispanic Studies section is revising its curriculum in light of current faculty and enrollment. This course is being replaced by a course at the 300-level (SPAN 315). Impact on other units: Linguistics uses SPAN 421 to fulfill major requirements and/or electives. They are attaching parallel forms to add the replacement course (SPAN 315) into their curriculum. This course will no longer be available for graduate credit in the Linguistics Graduate Certificate. Financial impact: none.
SPAN 479 Disenchanted Texts in Hispanic Literature (3)

SPAN 480 Social Forces in Hispanic Literary Expression (3)

SPAN 482 Trends in Hispanic Thought (3)

SPAN 486 Literary and Artistic Movements in the Hispanic World (3)


REVISE (RE) PREREQUISITES ON 400-LEVEL COURSES

SPAN 420 Applied Linguistics (3)
(RE) Prerequisite(s): 309 or 312.
Formerly: (RE) Prerequisite(s): 323
Rationale: SPAN 312 will be replacing SPAN 323. Impact on other units: none. Financial impact: none

SPAN 422 Advanced Grammar and Translation (3)
(RE) Prerequisite(s): 309 or 312 and three additional Spanish courses chosen from SPAN 315, SPAN 330, SPAN 331, SPAN 332, SPAN 333, SPAN 334, SPAN 346, SPAN 410, SPAN 420, SPAN 422, SPAN 423, SPAN 430, SPAN 433, SPAN 434, SPAN 461, SPAN 484, SPAN 489, SPAN 491, SPAN 493, SPAN 494S, SPAN 495S.
Formerly: (RE) Prerequisite(s): 323 and three additional Spanish courses above 323.

SPAN 423 Advanced Composition and Conversation (3)
(RE) Prerequisite(s): 309 or 312.
Formerly: (RE) Prerequisite(s): 323

REVISE (RE) PREREQUISITE ON 400-LEVEL PRIMARY CROSS-LISTED COURSE

SPAN 430 Topics in Hispanic Linguistics (3)
Cross-listed: (Same as Linguistics 431.)
(RE) Prerequisite(s): 309 or 312.
Formerly: (RE) Prerequisite(s): 323
Rationale: SPAN 312 is replacing SPAN 323. Impact on other units: cross listed as LING 431, SPAN is primary. Financial impact: none.

REVISE TITLE, DESCRIPTION, (RE)PREREQUISITE, AND ADD REPEATABILITY ON 400-LEVEL COURSE

SPAN 433 Gender and Sexuality in Hispanic Literature and Culture (3) Examines literary texts that address issues of gender and sexuality in the Hispanic world, especially with regard to personal and cultural identities. This course may address the role of sexual minorities in society as well as patriarchy, nationhood, masculinity, and feminist theoretical issues. Writing-emphasis course.
Repeatability: May be repeated with consent of department. Maximum 6 hours.
(RE) Prerequisite(s): SPAN 309 or SPAN 312, and SPAN 330.
Formerly: Images of Woman in Hispanic Literature (3)
Examines major Hispanic texts (and/or women authors) in the light of the relation of female individuality to a particular social context, the role of women in society, patriarchal tradition, woman as cultural and as aesthetic value (the feminine symbolic), and feminist theoretical issues. Writing-emphasis course.
(Re) Prerequisite(s): 323 and 330.

REVISE TITLE, DESCRIPTION AND (RE)PREREQUISITE ON 400-LEVEL PRIMARY CROSS-LISTED COURSE

SPAN 434 Film and Visual Culture in the Hispanic World (3) Analysis of recent film and other visual media concerning life, culture, and artistic traditions in the Hispanic world. These artistic productions provide social, historical, political and ideological frameworks to explore the changes that have taken place in contemporary Latin America. Taught in Spanish. Writing-emphasis course.
Cross-listed: (Same as Cinema Studies 434.)
(Re) Prerequisite(s): SPAN 309 or SPAN 312, and SPAN 330.
Formerly: Hispanic Culture through Film (3) Analysis of selected films on subjects concerning life, culture, and artistic traditions in the Hispanic world; exploration of ideological, philosophical, social, and political implications of films and a comparison of them with treatments of related subjects in other types of artistic production. Taught in Spanish. Writing-emphasis course. (RE) Prerequisite(s): 323 and 330.


REVISE DESCRIPTION AND REMOVE (RE)PREREQUISITES ON 400-LEVEL COURSE

SPAN 461 Special Topics (3) Focus on some aspect of Hispanic American thought, literature, or culture. Topics vary. (RE)Prerequisite(s): 309 or 312, and 330.


REVISE DESCRIPTION AND (RE) PREREQUISITE ON 400-LEVEL COURSE

SPAN 484 Race, Ethnicity, and Nation in Hispanic Literature (3) Critical approaches to topics about race, ethnicity, and writing that define Spanish-speaking nations and communities across the globe. This course can include all texts and issues that dialogue with appropriate aspects of the diverse (Hispanic-based) racial and ethnic compositions and distinctions in Latin America, Spain, North America, Africa, and beyond. Also, a Latino Studies course. Writing-emphasis course. (RE) Prerequisite(s): SPAN 309 or SPAN 312, and SPAN 330.


REVISE DESCRIPTION, (RE) PREREQUISITE, AND DELETE COMMENT ON 400-LEVEL COURSE

SPAN 489 Topics in Hispanic Civilization (3) Analysis and discussion of major trends, issues and/or movements in the civilizations of Spain and Spanish America. Political, literary, and cultural perspectives dealing with topics from the Middle Ages to the present day may be explored. Writing-emphasis course. (RE) Prerequisite(s): SPAN 309 or SPAN 312, and SPAN 330.


REVISE TITLE AND ADD REPEATABILITY

SPAN 531 From Latin to Spanish (3) Repeatability: May be repeated with consent of department. Maximum 6 hours.

Formerly: Old Spanish


REVISE TITLE AND DESCRIPTION

SPAN 532 Medieval Spanish Culture and Literature (3) Literary works from the 11th through 15th-centuries considered in cultural, historical and theoretical contexts. Formerly: Medieval Spanish Literature (3) Literary works of the 11th through 15th-century. Application of literary theories to understanding of literature, nature and evolution of major literary genres during Spanish Middle Ages, and socio-historical contexts of medieval works.

REVISE TITLE, DESCRIPTION, AND DROP REPEATABILITY

SPAN 533 Cervantes and the Novel (3) Narrative works of Miguel de Cervantes with special emphasis on Don Quijote in the socio-cultural milieu of early modern Spain. Cervantes’ contribution to the history of fiction and the novel a key area of focus. Course taught in English.

Formerly: Studies in Golden Age Prose (3) Wide range of prose fiction in Spain during the 16th and 17th centuries: Moorish, picaresque, sentimental, pastoral and exemplary novels, and Cervantes.

Repeatability: May be repeated with consent of department. Maximum 6 hours.


REVISE TITLE, DESCRIPTION, AND ADD REPEATABILITY

SPAN 542 Literary and Cultural Modernism in 20th-Century Spain (1898-1939) (3) Analysis of literary works and other cultural products from the 1890’s to the end of the Civil War in 1939, with special emphasis on the study of feminism, the literary avant-garde, and gender and sexuality. Topic varies.

Repeatability: May be repeated with consent of department. Maximum 6 hours.

Formerly: 20th-Century Spanish Literature: Generation of ‘98 through Civil War (3) Principal achievements and representative directions in literature of Spain from Civil War through Civil War years.

SPAN 543 History, Politics, and Society in 20th-Century Spanish Literature and Culture (3)

Analysis of literary works and other cultural products from the 1930’s to the present in the context of the socio-political history of Spain. Topic varies.

Repeatability: May be repeated with consent of department. Maximum 6 hours.

Formerly: 20th-Century Spanish Literature: Post-Civil War through Present (3) Principal achievements and representative directions in literature of Spain from Post-Civil War to present.


REVISE TITLES AND DESCRIPTIONS

SPAN 534 Studies in 16th- and 17th-Century Iberian Literature, Culture, and Thought (3) Content varies. Examination of trends in the cultural production of 16th- and 17th-century Spain. Emphasis on critical approaches to literary and dramatic texts as well as the socio-historical contexts determining their production and reception.

Formerly: Studies in Golden Age Drama and Poetry (3) Major dramatists and poets of the period, which may include: Lope de Vega, Tirso de Molina, Calderón de la Barca, Garcilaso, Fray Luis de Leon, San Juan de la Cruz, Quevedo, and Gongora.

SPAN 540 Spanish Romanticism: Literature and Culture (3) Dramatists, poets, and artists representative of the Romantic movement are studied within the historical context of the late 1700s through the 1860s: Goya, Cadalso, Larra, Duque de Rivas, Espronceda, Zorrilla, Bécquer, Rosalía de Castro.


SPAN 541 Spanish Prose: Realism and Beyond (3) Realism, Naturalism, and the early Twentieth Century are studied through the novel as a cultural product: Galdós, Oller, Clarín, Pardo Bazán, Blasco Ibáñez, Unamuno, Pérez de Ayala.

Formerly: SPAN 541 19th-Century Spanish Prose (3) Costumbrismo, realism, and naturalism in the novel, short story, and essay as represented in major authors: Larra, Mesonero Romanos, Fernán Caballero, Alarcón, Valera, Palacio Valdés, Pereda, Galdós, Pardo Bazán. Content varies.


SPAN 563 Latin American and Caribbean Cultural Studies: Discourses of Colonization and Resistance (3)

Exploration of cultural productions of Latin America and the Caribbean up to 1620. Possible readings will be taken from indigenous texts existing before the arrival of Europeans in 1492, the works written by the early Spanish explorers and conquistadors and the texts created by indigenous, mestizo and criollo writers of the period. Topic varies.

Formerly: Colonization and Resistance (3) Exploration of the literatures of Latin America and the Caribbean up to 1620. Possible readings will be taken from indigenous literatures existing before the arrival of Europeans in 1492, the works written by the early Spanish explorers and conquistadors and the texts created by indigenous, mestizo and criollo writers of the period. Topic varies.
SPAN 564 Latin American and Caribbean Cultural Studies: Processes of Emancipation (3) Examination of the processes of Emancipation of Latin America and the Caribbean from 1620-1825. Topics may include: the Baroque of the Indies, indigenous literature, the discourses of science and the Enlightenment. Texts will be studied in their historical context and in the light of Latin American cultural identity leading up to the wars of Independence. Topic varies.

Formerly: Processes of Emancipation (3) Examination of the literatures of Latin America and the Caribbean from 1620-1825. Topics may include: The Baroque of the Indies, indigenous literature, the discourses of science and the Enlightenment. Texts will be studied in their historical context and in the light of Latin American cultural identity leading up to the wars of Independence. Topic varies.

SPAN 581 Latin American and Caribbean History in Literature and Film (3) Analysis of the dynamic relationship between historical events and artistic representations in Latin American and Caribbean works from the 1940s to the present. Topic varies.

Formerly: Literature and Historicity (3) Analysis of the dynamic relationship between historical events and literary representations in Latin American and Caribbean works from the 1940s to the present, emphasizing the categories of “history” and “literature” as cultural constructs that are shaped according to chronological and artistic considerations. Topic varies.

SPAN 587 Cultural Constructions of Race and Gender in the Hispanic World (3) Examination of cultural representations of race and gender in the Caribbean, Latin America and the Hispanic and Latino communities in the United States. Topic Varies.

Formerly: Studies in Selected Topics from Latin American and Caribbean Literatures, Cultures, and Societies (3) Studies in Latin American and Caribbean Literatures, Cultures and Societies. Topics may include gender, race, mestizaje, non-canonical discourses, etc. Topic varies.


REVISE TITLES

SPAN 566 Latin American and Caribbean Cultural Studies: Independence, and the Struggles of Nation-building (3)

Formerly: Latin American and Caribbean Literatures, Independence, and the Struggles of Nation-building (3)

SPAN 568 Latin American and Caribbean Cultural Studies: Cosmopolitismo (Latin American Modernismo and Vanguardismo) (3)

Formerly: Cosmopolitismo (Latin American Modernismo and Vanguardismo) (3)

SPAN 582 Discourses of Identity and Difference in Latin America and the Caribbean (3)

Formerly: Identity Discourses, 1940 to Present Day (3)


SCHOOL OF MUSIC

(MUCO) Musicology

DROP 400-LEVEL COURSE FOR GRADUATE CREDIT (ALSO DROPPING FROM THE UG CATALOG)

MUCO 460 Music Aesthetics (3)

Rationale: Musicology 460: Music Aesthetics has not been offered in several years. The musicology area has no intention of offering it in the future and it is misleading to keep in the catalogs. Impact on other units: none. Financial Impact: none.

REVISE (DE) COREQUISITE TO (RE) COREQUISITE

MUCO 540 Medieval and Renaissance Music (3)

Formerly: (DE) Corequisite(s): Music General 510.

MUCO 550 Music in the Baroque Period (3)

Formerly: (DE) Corequisite(s): Music General 510.
MUO 580  Music in the 20th-Century (3)
Formerly: (DE) Corequisite(s): Music General 510.

MUO 587  Music, Ethnography and the South (3)
Formerly: (DE) Corequisite(s): Music General 510.

MUO 590  Introduction to Ethnomusicology (3)
Formerly: (DE) Corequisite(s): Music General 510.

MUO 595  Seminar in Ethnomusicology (3)
Formerly: (DE) Corequisite(s): Music General 510.

Rationale: Musicology proposes to strengthen the enrollment requirement for these MUO 500-level courses by making MUSC 510 Bibliography a "RE" co-requisite. Currently, Bibliography's listed as a "departmental" co-req and less clearly enforced. This change would help students be better prepared for these seminar classes and their research-oriented activities. It would also parallel the co-req requirement that music theory is making for 500-level courses. Impact on other units: none. Financial impact: none.

REVISE TO ADD (RE) COREQUISITE
MUO 586  Topics in Opera (3)

MUO 596  Seminar in Historical Musicology (3)

REVISE CREDIT HOURS
MUO 593  Independent Study (1-3)
Credit hours: 1-3
Formerly: (1-15)

Rationale: Many of our independent study sections in the School of Music are 1-3 variable credits hours and many are 1-15, and one is 1-5. We are creating uniformity among all independent study offerings and we do not envision scenarios where students would need to register for less or more than 1-3 credits, respectively. Impact on other units: none. Financial impact: none.

(MUEN) Music Ensemble
ADD
MUEN 509  Tuba Ensemble (1)
Repeatability: May be repeated. Maximum 6 hours.
Comment(s): Audition or consent of instructor required.

Rationale: There are already graduate students participating in MUEN 309. This addition would give them credit at the appropriate graduate level. Impact on other units: none. Financial impact: none.

MUEN 512  Balinese Gamelan (1) A hands-on introduction to the gamelan (orchestra) music of Bali, Indonesia, its performance and culture. Through performance and discussion, this course introduces students to gamelan instruments, techniques of performance, and the cultural importance of the music within Bali and the world. No previous knowledge of Bali or gamelan expected.
Repeatability: May be repeated. Maximum 6 hours.

Rationale: In Dec 2018, UT acquired its own Balinese gamelan set of instruments, which arrived on campus from Bali. This course has been offered every term for several years (with rented instruments since 2015) under a Chamber Music number (MUEN 315, MUEN 515). A designated number for gamelan is needed for visibility in the catalog. Impact on other units: none. Financial impact: none.

(MUIN) Music Instrumental
REVISE CREDIT HOURS
MUIN 593  Independent Study (1-3)
Formerly: (1-15)
(MUJZ) Music Jazz

REVISE CREDIT HOURS

MUJZ 593 Independent Study (1-3)

Formerly: (1-1.5)

(MUKB) Music Keyboard

REVISE CREDIT HOURS

MUKB 593 Independent Study (1-3)

Formerly: (1-1.5)

Rationale: Many of our independent study sections in the School of Music are 1-3 variable credits (not listed in this form), many are 1-1.5, and one is 1-5. We are creating uniformity among all independent study offerings and we do not envision scenarios where students would need less or more than 1-3 credits, respectively. Impact on other units: none. Financial impact: none.

(MUSC) Music General

REVISE CREDIT HOURS

MUSC 500 Thesis (1-3)

Formerly: (1-1.5)

Rationale: We envision no scenarios where a student would need more than 3 credit hours for a semester of thesis. Impact on other units: none. Financial impact: none.

MUSC 593 Independent Study (1-3)

Formerly: (1-1.5)

Rationale: Many of our independent study sections in the School of Music are 1-3 variable credits (not listed in this form), many are 1-1.5, and one is 1-5. We are creating uniformity among all independent study offerings and we do not envision scenarios where students would need less or more than 1-3 credits, respectively. Impact on other units: none. Financial impact: none.

(MUTH) Music Theory

ADD

MUTH 594 Music Theory Practicum II (1) Experience in teaching through peer teaching and supervised experience in the theory classroom.

Grading Restriction: Satisfactory/No Credit grading only.

(RE)Prerequisite: MUTH 590.

Recommended Background: Music Theory 400 or passing grade on music theory diagnostic exam.

Rationale: Revision of Practicum course into a sequence of two courses allows for more teaching experience for the students as peer teaching instead of teaching in a real classroom. Having two courses allows students to have more practice in peer teaching before students teach in a real classroom setting. Impact on other units: none. Financial impact: none.

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

MUTH 494 Music Theory Practicum II (1) Experience in teaching through peer teaching and supervised experience in the theory classroom.

Grading Restriction: Satisfactory/No Credit grading only.

(RE)Prerequisite: MUTH 490.

Rationale: Revision of Practicum course into a sequence of two courses allows for more teaching experience for the students as peer teaching instead of teaching in a real classroom. Having two courses allows students to have more practice in peer teaching before students teach in a real classroom setting. Impact on other units: none. Financial impact: none.
REVISE TITLE AND DESCRIPTION; ADD (DE)COREQUISITE; AND REMOVE REGISTRATION PERMISSION

MUTH 590  Music Theory Practicum I (1)  Experience in teaching through peer teaching and observation/critiques of teaching. Also includes theatrical improvisation exercises.
(DE)Corequisite: MUTH 530 or 531.

Formerly: Music Theory Practicum  Supervised experience in the theory classroom including tutoring, test construction and grading, materials preparation. Weekly meetings with faculty.
Registration Permission: Consent of instructor.

Rationale: Revision of Practicum course into a sequence of two courses allows for more teaching experience for the students as peer teaching instead of teaching in a real classroom. Having two courses and aligning Practicum I with a pedagogy course also allows for the inclusion of theatrical improvisation exercises in the class. Impact on other units: none. Financial impact: none.

REVISE CREDIT HOURS

MUTH 593  Independent Study (1-3)

Formerly:  Independent Study (1-15)

Rationale: Many of our independent study sections in the School of Music are 1-3 variable credit hours, many are 1-15, and one is 1-5. We are creating uniformity among all independent study offerings and we do not envision scenarios where students would need less or more than 1-3 credits, respectively. Impact on other units: none. Financial impact: none.

(MUVC) Music Voice

REVISE CREDIT HOURS

MUVC 593  Independent Study (1-3)

Formerly:  Independent Study (1-15)

Rationale: Many of our independent study sections in the School of Music are 1-3 variable credits (not listed in this form), many are 1-15, and one is 1-5. We are creating uniformity among all independent study offerings and we do not envision scenarios where students would need less or more than 1-3 credits, respectively. Impact on other units: none. Financial impact: none.

DEPARTMENT OF POLITICAL SCIENCE

(POLS) Political Science

ADD

POLS 632  Presidency (3)  Systematic examination of the structure, functions and powers of the American presidency as they have evolved from the founding to the present.
Registration Restriction: Minimum student level – graduate.

Rationale: Formerly POLS 532. The content of the course has changed over the years in line with the composition of our student body, which is now almost exclusively PhD students. The course content and expectations are in line with 600-level courses and so should be numbered as such. Impact on other units: none. Financial Impact: none.

POLS 633  Congress (3)  Formal, empirical and theoretical approaches to and models of the institutional workings of Congress and the behavior of legislators.
Registration Restriction: Minimum student level – graduate.

Rationale: Formerly POLS 533. The content of the course has changed over the years in line with the composition of our student body, which is now almost exclusively PhD students. The course content and expectations are in line with 600-level courses and so should be numbered as such. Impact on other units: none. Financial Impact: none.

POLS 635  Public Opinion and Political Socialization (3)  Explores the meaning and measurement of public opinion and contemporary research on the topic; including questions of rationality, tolerance, and party identification.
Registration Restriction: Minimum student level – graduate.

Rationale: Formerly POLS 535. The content of the course has changed over the years in line with the composition of our student body, which is now almost exclusively PhD students. The course content and expectations are in line with 600-level courses and so should be numbered as such. Impact on other units: none. Financial Impact: none.

POLS 636  Campaigns, Elections, and Voting Behavior (3)  Surveys theory and research of American campaigns and elections, with an emphasis on presidential and congressional contests.
Registration Restriction: Minimum student level – graduate.
Rationale: Formerly POLS 536. The content of the course has changed over the years in line with the composition of our student body, which is now almost exclusively PhD students. The course content and expectations are in line with 600-level courses and so should be numbered as such. Impact on other units: none. Financial impact: none.

**POLS 637 Political Parties and Interest Groups (3)** Theoretical and empirical examination of the structure, functions and operations of political parties and interest groups.
*Registration Restriction: Minimum student level – graduate.*

Rationale: Formerly POLS 537. The content of the course has changed over the years in line with the composition of our student body, which is now almost exclusively PhD students. The course content and expectations are in line with 600-level courses and so should be numbered as such. Impact on other units: none. Financial impact: none.

**POLS 640 Courts and Judicial Processes (3)** Examination of published research dealing with judicial behavior, judicial policymaking, and courts and political actors.
*Registration Restriction: Minimum student level – graduate.*

Rationale: Formerly POLS 540. The content of the course has changed over the years in line with the composition of our student body, which is now almost exclusively PhD students. The course content and expectations are in line with 600-level courses and so should be numbered as such. Impact on other units: none. Financial impact: none.

**POLS 697 Readings in Two Fields of Political Science (3)** Selected topics in two fields from among American Politics, Comparative Politics and International Relations.
*Repeatability: May be repeated with consent of instructor and department. Maximum 9 hours.*
*Registration Restriction: Minimum student level – graduate.*

Rationale: Formerly POLS 597. The content of the course has changed over the years in line with the composition of our student body, which is now almost exclusively PhD students. The course content and expectations are in line with 600-level courses and so should be numbered as such. Impact on other units: none. Financial impact: none.

**DROP**

**POLS 532 Presidency (3)**
Rationale: Being replaced by POLS 632.

**POLS 533 Congress (3)**
Rationale: Being replaced by POLS 633.

**POLS 535 Public Opinion and Political Socialization (3)**
Rationale: Being replaced by POLS 635.

**POLS 536 Campaigns, Elections, and Voting Behavior (3)**
Rationale: Being replaced by POLS 636.

**POLS 537 Political Parties and Interest Groups (3)**
Rationale: Being replaced by POLS 637.

**POLS 540 Courts and Judicial Processes (3)**
Rationale: Being replaced by POLS 640.

**POLS 597 Readings in Two Fields of Political Science (3)**
Rationale: Being replaced by POLS 697. The content of the above dropped courses have changed over the years in line with the composition of our student body, which is now almost exclusively PhD students. The course content and expectations are in line with 600-level courses and so should be numbered as such. Impact on other units: none. Financial impact: none.

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**Equivalency table, effective fall 2020**

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<thead>
<tr>
<th>Current Courses</th>
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<td>POLS 532</td>
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DEPARTMENT OF PSYCHOLOGY

(PSYC) Psychology

REVISE TO ADD (RE) PREREQUISITE ON 400-LEVEL COURSE

PSYC 484 Sleep and Dreaming (3)
(Re) Prerequisites: PSYC 301 or BCMB 415 or permission of instructor.

Rationale: Instructor request based on insufficient preparation in basic neuroscience in previous students, interfering with ability to be successful in the course. Impact on other units: The course is an elective for the Neuroscience major, but the new pre-requisites are already requirements for the major. Financial impact: none.

DEPARTMENT OF SOCIOLOGY

ADD R DESIGNATION TO EXISTING 400-LEVEL COURSE

SOCI 431R Applied Sociological Research (3) Survey of advanced topics in sociological research, and hands-on application of research methods.
(Re) Prerequisite(s): 331.
Comment(s): Encouraged for students interested in graduate school. Required for sociology honors students.

Rationale: Sociology 431 instructors build the course around either a particular, collective research project or students' own research, at the discretion of the instructor. This research-intensive course requires of students a significant time investment between data collection and analysis, reading the assigned material, collecting/reading/synthesizing additional background research, and writing (from early reflections and field notes to producing a finished piece and preparing presentations)—certainly 5-10 hours per week over the course of the semester. Students receive extensive training in methodology, ethics (integrated into material throughout the semester), and sociological concepts and theories, as well as how to find and assess the relevant academic literature on a topic. They learn by doing, which they have, in past, noted has been extremely effective for them. Students are also trained in supporting skills/tools like qualitative data analysis software and bibliographic citation manager programs. Impact on other units: none. Financial impact: none.

Learning outcomes/objectives are as follows:
· Construct an original research design
· Find academic literature related to a topic and successfully synthesize it in a literature review
· Set achievable and challenging goals
· Gain proficiency in data collection/analysis
· Develop writing skills and good writing habits
· Gain skills in sociological theory development through empirical research and regular writing
· Think carefully about ethics, including one’s role as a researcher in the research setting
· Understand the professional environment of the academic
· Consider possible applications for these research projects

The course material is tied to the instructor’s ongoing research, so the instructor is well-equipped to train students and provide context for the work. The instructor also discusses career goals, graduate work, and other professionalization aspects, and explains how research can be used in related non-academic settings. Students regularly write reflections on their work, with “field notes” assignments and memos, weekly check-ins on progress, and multiple self and peer assessments of projects (rough and final drafts). Students' work over the whole semester builds toward a final research project. Students present research findings either in faculty/graduate student departmental colloquium or other location (past venue was a community forum organized by the students. The course trains students in constructing presentations. The course also covers the academic publication process and encourages publication in venues such as Pursuit. Students' final written product is designed either to follow academic journal article format (to encourage revision as an academic manuscript) or another format designed for wider dissemination, depending on the topic and specific course goals.

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

SOCI 433 Participatory Action Research (3) Participatory Action Research (PAR) is a collaborative approach to research that brings together researchers and community members to identify, analyze, and act upon community challenges. Students will learn about the origins, processes, and epistemological underpinnings of PAR as we work with local community partners to carry out a community-based research project.

Rationale: New course reflects expertise in the Dept and its social justice curriculum. Impact on other units: N/A. Financial Impact: N/A

ADD R DESIGNATION ON 400-LEVEL COURSE

SOCI 433R Participatory Action Research (3) Participatory Action Research (PAR) is a collaborative approach to research that brings together researchers and community members to identify, analyze, and act upon community challenges. Students will learn about the origins, processes, and epistemological underpinnings of PAR as we work with local community partners to carry out a community-based research project.

Rationale: Students in Sociology 433 conduct original research in collaboration with the community partner(s) and community stakeholder(s). The nature of the research project and the types of community collaborators may change each semester, in keeping with the spirit of community-based participatory research. For example, students in the Spring 2019 Participatory Action Research
class worked in teams to organize and conduct focus groups with key stakeholders and interviews with key informants. Future iterations of this course may include other research methods, including survey-based methods.

The course is built around the research project. Students learn collaborative community-based research methods through organization and implementation of the project as well as analysis and presentation of the data. Class time is devoted to the research project on a weekly basis. Students are required to complete additional research-related tasks outside of class (e.g., reading and compiling an annotated bibliography of secondary research sources; developing an interview guide; interviewing key informants; transcribing and analyzing interviews). Students are expected to work an average of 10 hours per week on their research. Impact on other units: none. Financial Impact: none.

Students explore the origins, methods, ethics, and challenges of community-based participatory research, including how to be good community partners, through engagement with the academic literature and application to a real community research project. Students learn research methods pertinent to the specific project identified in collaboration with community partners. During the Spring 2019 iteration of this course, students learned how to conduct focus groups and interviews, and how to analyze data stemming from these approaches.

Student learning objectives include: understanding the origins and epistemological underpinnings of participatory action research and community collaborative research; thinking critically about power and equity in research relationships with community partners, and the skills needed to be a collaborative community researcher; learning how to collaborate on a community-focused research; and developing an understanding of the literature related to the topic of research (in the case of the Spring 2019 course, this content focused on immigration policies in local context; however, the nature of the research project may change, and thus the literature review may also change).

The instructors who teach this course have expertise and experience in collaborative community research. In addition, the class meets several times over the course of the semester with the community partner(s) and stakeholder(s) to understand the community-specific nature of the issue being researched.

Students complete regular self-reports (e.g., on a weekly basis), as well as a final self-reflection, to reflect on their research process. The final project takes the form of a report, or other approved output defined in collaboration with the community partner(s), which is then presented to the community partner. The final project is presented and distributed to the community partner(s) and community stakeholder(s) at the end of the semester.

DROP 400-LEVEL COURSE FOR GRADUATE CREDIT
SOCI 433 Participatory Action Research (3)

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT
SOCI 461 Immigration Politics and Policies (3) Examines US immigration history, politics, and policies in sociological context, with particular attention to how social, political, and economic factors have shaped our national understanding of immigrants and immigrant rights, and how immigrants and advocates organize around policies.

DEPARTMENT OF THEATRE
(THEA) Theatre

ADD
THEA 540 Master Class in Costume Design (3) Theory, practice, and technique. Repeatability: May be repeated. Maximum 18 hours.
Rationale: The Costume Design Concentration is the only design element that doesn’t currently have a core class outside of the collaborative courses. New faculty in costume design wants to clean up the curriculum. Impact on other units: none. Financial impact: none.

REVISE CREDIT HOURS
THEA 580 Design Seminar (3)
Formerly: (1-6)
Rationale: It is always taught as 3 credit hours. Impact on other units: none. Financial impact: none.
II. PROGRAM CHANGES

SCHOOL OF ART

REVISE ADMISSIONS PROCEDURES AND REQUIREMENTS – ART HISTORY MINOR

In the 2020-21 Graduate Catalog, revise as shown below:

1.) Under the Admissions heading, delete current bullet and replace with the following:
   Students must state their intention to pursue the graduate minor in art history before the end of their first year of graduate study. Consent of the student’s area instructors and the art history faculty is required.

2) Under the Required Courses heading, revise the first bullet and add a second bullet as shown below:
   - Students must complete a minimum of 12 credit hours in (ARTH) Art History, the specific components of which will be agreed upon by the art history faculty after review of the student’s previous undergraduate and graduate course work.
   - No more than 3 credit hours of independent study may be applied to the minor.

3) Under the Non-Course Requirements heading, delete/remove the first bullet. There will now only be one bullet.
   Formerly: A reading knowledge of French, German, or Italian is a prerequisite, unless waived by the art history faculty.

DEPARTMENT OF MATHEMATICS

Drop Concentration – Mathematics Major, PhD

Mathematical Ecology and Evolution concentration

+ Add Concentration – Mathematics Major, PhD

Mathematical Biology concentration

In the 2020-21 Graduate Catalog, delete the dropped name and replace with the new concentration name in all appropriate areas.

DEPARTMENT OF MODERN FOREIGN LANGUAGES AND LITERATURES

REVISE REQUIREMENTS – FRENCH MAJOR, MA

In the 2020-21 Graduate Catalog, revise as shown below:

1) Under the Thesis Option, Non-Course Requirements heading, delete the fourth bullet listed below.
   Any student who fails to receive a passing grade in FREN 500 in their third and fourth semesters will be required to complete the Project Option.

2) Under the Course Only with Comprehensive Exam Option heading, delete description paragraph as shown below.
   Students who choose this option need to submit a paper from a course taken with one of the members of his/her committee, developed to approximately twenty-five pages in length. An oral examination will follow, covering the research paper.

3) Under the Non-Course Requirements heading, delete first and third bullets. The bullet below will be the only bullet listed.
   - A written examination covering the course work and selected items from a master reading list (three fields)

Formerly:
- A research paper from a course, which the candidate substantially expands with the approval of the committee.
- A written examination covering the course work and selected items from a master reading list (three fields)
- A final oral examination to discuss the research paper.
REVISE REQUIREMENTS – GERMAN MAJOR, MA

In the 2020-21 Graduate Catalog, revise as shown below:

1) Under the Thesis Option, Required Courses heading, add the following as a last bullet under that heading.
   
   Enrollment in GERM 595 for 1 credit hour per semester for the duration of the degree, whenever GERM 595 is offered.

2) Under the Non-Course Requirements heading, add the following as a last bullet under that heading.
   
   A maximum of 3 credit hours of GERM 595 can be counted towards the degree requirements.

3) Under the Course Only with Comprehensive Exam Option, Required Courses heading, add the following as a last bullet.
   
   Enrollment in GERM 595 for 1 credit hour per semester for the duration of the degree whenever GERM 595 is offered.

4) Under Course Only with Comprehensive Exam Option, Non-Course Requirements heading, add the following as a last bullet.
   
   A maximum of 3 credit hours of GERM 595 can be counted towards the degree requirements.

ADD ACCELERATED FIVE-YEAR BA/MA PROGRAM – SPANISH MAJOR, MA

In the 2020-21 Graduate Catalog, add heading and requirements for the Five-Year BA/MA – Spanish Major, MA

Five-Year BA/MA Program – Spanish Major

For qualified students, the Department of Modern Foreign Languages and Literatures offers a five-year BA-MA program with a BA major in Modern Foreign Languages and Literatures with a concentration in Hispanic Studies and a Spanish major, MA (course only option with comp exam). The primary component of the program is that a qualified student may take up to 9 credit hours of approved graduate courses for their senior undergraduate electives and have them count toward both the BA degree and the MA degree. Qualifications for admission to the program are:

The student must have an overall cumulative GPA of 3.0 and a cumulative GPA of 3.5 in undergraduate Spanish courses to be considered for admission to the program. Conditional and full admission of a student into this program must be approved by the Department of Modern Foreign Languages and Literatures and by the Graduate School. Conditional admission may be granted after completing 64 credit hours of the requirements for the BA in Spanish and Hispanic Studies, as specified by any Undergraduate Catalog in effect during that student’s attendance at the University of Tennessee, Knoxville, provided that the Catalog has been in effect within six years of the date of graduation. Conditional admission must be obtained before taking a graduate course that is to be used to satisfy the requirements of both the BA degree and the MA degree. Qualifications for admission to the program are:

Full admission may be granted after completing 96 credit hours of the requirements for the BA in Spanish and Hispanic Studies, as specified by any Undergraduate Catalog in effect during that student’s attendance at the University of Tennessee, Knoxville, provided that the Catalog has been in effect within six years of the date of graduation. A cumulative GPA of 3.5 in undergraduate Spanish courses is required for full admission.

Any course taken for graduate credit prior to satisfying all requirements for the BA degree must be approved by the department head (or designee) and by the Graduate School.

A student will not be eligible for a graduate assistantship until the student has satisfied all of the requirements for the BA degree.

Rationale: The proposed combined BA/MA degree has been approved by the Spanish program of the MFLL department and follows to the letter the structure and requirements of similar pre-existing programs in French and German. Impact on other units: none. Financial impact: none.

REVISE REQUIREMENTS – MODERN FOREIGN LANGUAGES MAJOR, PHD

In the 2020-21 Graduate Catalog, under the Required Courses, First Concentration: German heading, 500-level bullet, revise as follows:

500-level – A minimum of 21 credit hours must be taken. These must include MFLL 512, MFLL 594, GERM 519, and GERM 595. Whenever GERM 595 is offered, students must enroll for a minimum of 1 credit hour per semester until the degree is earned. Thesis credit hours are excluded, and a maximum of 3 credit hours of GERM 595 can be counted towards the degree requirements. If MFLL 512 is used as part of a second concentration in applied linguistics, another course must be substituted in the first concentration.
Formerly: A minimum of 21 credit hours must be taken. These must include MFLL 512, MFLL 584, and GERM 519. Thesis credit hours are excluded. If MFLL 512 is used as part of a second concentration in applied linguistics, another course must be substituted in the first concentration.

SCHOOL OF MUSIC

DROP CONCENTRATION – MUSIC MAJOR, MMUSIC

Pedagogy concentration

Rationale: The School of Music no longer offers this graduate concentration. Impact on other units: none. Financial impact: none. There are NO students in this concentration.

DEPARTMENT OF POLITICAL SCIENCE

REVISE REQUIREMENTS – PUBLIC POLICY AND ADMINISTRATION MAJOR, MPPA

In the 2020-21 Graduate Catalog, revise as shown below:

Under the Public Policy Track heading, remove bullet, Global Security Specialization and all information below it and replace with the following:

Customized Policy Specialization
Must complete any two graduate courses in a particular policy area in Political Science or another department with prior approval.

Formerly:
Global Security Specialization, must complete two of the following courses
POLS 571
POLS 573
POLS 580
POLS 684
POLS 685
POLS 686
NOTE. One course may be taken in another department with prior approval.

DEPARTMENT OF THEATRE

REVISE REQUIREMENTS – THEATRE MAJOR, MFA

In the 2020-21 Graduate Catalog, under the Required Courses heading, under each concentration (except Acting concentration) remove the following two courses.

THEA 491
THEA 492

Rationale: The course requirement is not always valid, and we end up forgiving the requirement as often as we include it. Impact on other units: none. Financial impact: none.
HASLAM COLLEGE OF BUSINESS

I. COURSE CHANGES

(BUAD) Business Administration

DROP

BUAD 518 Innovation in Practice (1.5)

Rationale: To update the MBA core curriculum to reflect the changing needs of MBA students. Financial impact: None. Impact on other units: None. Evidence from assessment activities: N/A.

DEPARTMENT OF ACCOUNTING AND INFORMATION MANAGEMENT

(ACCT) Accounting

ADD

ACCT 599 Special Topics in Accounting (1-3) Seminar designed to study new and innovative areas of interest in accounting. 
Repeatability: May be repeated. Maximum 9 hours. 
Registration Permission: Consent of Instructor. Admission to the Haslam College of Business. Minimum student level-graduate.

Rationale: Course will provide lacking schedule flexibility and the opportunity to explore new topics relevant to the accounting discipline. Currently no course in accounting at the graduate (Masters) level exists to provide flexibility in course content or course scheduling. Financial impact: None. This course is mainly self-study. Impact on other units: None.

ACCT 610 Doctoral Seminar in Accounting Research Methods (3) Study and application of contemporary accounting research methods. This project-based course introduces students to the study and application of software, data sources, and methods used in contemporary accounting research. 
Comment(s): Or consent of PhD program advisor. 
Registration Restriction(s): Doctor of Philosophy – Haslam College of Business. Minimum student level – graduate.

Rationale: To enhance the quality of the PhD program. Financial impact: None. We have faculty on staff with capacity and knowledge to teach this seminar. Impact on other units: None. Evidence from Assessment Activities: A review of courses offered by competing PhD programs and verification of the skills sets needed for accounting researcher success confirm the need for this content in our program.

(INMT) Information Management

REVISE DESCRIPTION

INMT 545 E-Enterprise (3) This hands-on, project-based course introduces students to key information management trends and challenges related to established and emerging technologies, and overviews key business applications and algorithms that support the flow of data in businesses, with a focus on Internet enabled business processes that connect buyers, suppliers, and trading partners in dynamic, real-time information sharing partnership. Students work with a variety of tools to enhance their knowledge and technology skills. 
Formerly: This hands on, project-based course introduces students to transaction processing basics, the flow of data in businesses, business application software, and key information management trends and challenges, with a focus on Internet enabled business processes that connect buyers, suppliers, and trading partners in dynamic, real-time information sharing partnership. Students work with a variety of tools to enhance their knowledge and technology skills (e.g., power spreadsheet modeling, corporate application (ERP, CRM, SCM) software, data analytics software, etc.).

Rationale: This change provides a more accurate description of the course content and approach. Financial Impact: None. Impact on other units: None. Evidence from assessment activities: N/A.

INMT 546 Business Application Logic and Tools (3) This ‘hands-on’, projects-based course introduces students to business application logic and object programming. Topics include fundamentals of business application logic, business application architectures, and project management. Students use application development tools and programming languages/scripts to write algorithms (including linking apps to databases and other file types). 
Formerly: This ‘hands-on’, projects-based course introduces students to business application logic and object programming. Topics include fundamentals of business application logic, business application architectures, and project management. Students use application development tools to write Visual Basic algorithms which link to databases and other file types.

Rationale: This change provides a more accurate description of the course content and approach. Financial Impact: None. Impact on other units: None. Evidence from assessment activities: N/A.
DEPARTMENT OF BUSINESS ANALYTICS AND STATISTICS

ADD

(BZAN) Business Analytics

BZAN 507 Supply Chain Models (1.5) Will demonstrate data-driven modeling approaches for effective decision-making in supply chains. Using realistic industry-based problems, particular emphasis is placed on the identification of appropriate data and data sources, and identification of appropriate descriptive, predictive, and prescriptive analytics techniques to support value creation in supply chains.

(RE)Prerequisite: BZAN 505.

Registration Restriction(s): Admission to Master of Business Administration program.

Rationale: Organizations in general, and the supply chain function in particular, generate and accumulate vast amounts of data. However, extracting insight and value from data is a non-trivial task that organizations grapple with regularly. Therefore, there is a growing need in the market place for MBA graduates who can leverage data and analytics modeling to extract actionable insights and also understand how to leverage the insights gained from analytics efforts for superior value creation in supply chains. While the MBA curriculum includes currently several required analytics classes, these classes (1) focus on particular tactical analytical techniques, such as optimization or regression modeling (2) are not tailored to the unique decision-making challenges specific to the supply chain function and (3) do not integrate strategic and tactical perspectives on data and analytical modeling and decision making. Thus, this new class seeks to fill both a market opportunity for analytics talent and an existing knowledge gap in the MBA curriculum in the area of supply chain modeling.

Impact on other units: None. Financial impact: This 1.5-hour course will be co-taught by the BAS and SCM departments. So, each department will be responsible for providing a faculty member each year to teach ¼ of this ½-semester course (i.e., ¼ of a course each year). Since these ¼ courses do not fit well into the HCB workload system, the plan is to provide ESP to each faculty member for teaching ¼ of a course, which represents a relatively minor financial impact.

Staffing impact: This 1.5-hour course will be co-taught by the BAS and SCM departments. So, each department will be responsible for providing a faculty member each year to teach ¼ of this ½-semester course (i.e., ¼ of a course each year). Both departments are aware of this relatively minor staffing impact and are committed to fulfilling it.

REVISE TITLE, DESCRIPTION, (RE)PREREQUISITE, AND RECOMMENDED BACKGROUND

BZAN 554 Deep Learning for Business Applications (3) Fundamentals of predictive analytics with business applications using deep learning techniques such as shallow and deep neural networks, convolutional neural networks, and sequence models such as recurrent and long short-term memory neural networks. Special focus will be on making deep learning work on real-life business data.

(RE) Prerequisite(s): Business Analytics 545.

Recommended Background: Experience with a programming language such as Python or with deep learning.

Formerly: Customer Analytics (3) Introduction to predictive modeling for customer relationship management using data mining and supervised machine learning techniques with applications such as acquisition, up-sell, cross-sell, churn and customer lifetime value.

(RE) Prerequisite(s): 542.

Recommended Background: Experience with a programming language such as R or with data mining.

Rationale: Update the name and content of BZAN 554 to incorporate the latest techniques in deep learning relevant to Marketing Analytics to ensure course relevance. Staffing impact: None. Financial Impact: None. Impact on other units: None. Support from assessment activities: N/A.

DEPARTMENT OF FINANCE

(FINC) FINANCE

ADD

FINC 507 Essentials of Financial Statement Analysis (1.5)Designed to focus on the key or essential components of financial statements analysis and the implications of same.

(RE)Prerequisite(s): FINC 505 and FINC 506.

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

Rationale: This course is intended to apply functional knowledge and skills developed in the first year MBA curriculum to address critical, real-world business issues. Impact on other units: None. Financial impact: None due to dropping of FINC 520. Evidence from Assessment Activities: N/A.

FINC 555 Financial Management: Theory and Practice (3) Decision-making topics in financial management, including forecasting, financial planning, and valuation.

(RE)Prerequisite(s): FINC 505, and FINC 506, and FINC 507 and BZAN 507.

Comment(s): Prior knowledge may satisfy prerequisite with consent of instructor.
Rationale: Course is intended to develop financial modeling and valuation skills as part of the full-time MBA concentration in consulting
and support the application of functional knowledge and skills developed in the first year MBA curriculum. Impact on other units:
None. Financial Impact: None due to dropping of FINC 520. Evidence from Assessment Activities: N/A.

DROP
FINC 520 - Financial Statement Analysis (3)
Rationale: FINC 520 is being replaced by FINC 507 (1.5 credit hours). Financial Impact: None. Impact on Other Units: None.

REVISE (DE)PREREQUISITE(S) AND ADD REGISTRATION PERMISSION
FINC 593 Independent Study (3)
(DE) Prerequisite(s): Business Analytics 507.
Registration Permission: Consent of instructor is required for registration.
Formerly: (DE) Prerequisite(s): Business Administration 518.

DEPARTMENT OF MARKETING
ADD
MARK 540 Market Opportunity Analysis (3) 
Teaches how to use foundational marketing concepts to rigorously evaluate market opportunities in domestic and international markets. Emphasis placed on leveraging market insights most relevant to small and medium-sized enterprises operating in both the business-to-business and business-to-consumer markets. Using a hands-on approach, the course teaches students how to develop market strategies that take advantage of market opportunities and how to sell such strategies within and across organizations.
Registration Restriction(s): Admission to a graduate business program in the Haslam College of Business.
Rationale: Updates the course number, title and description for MARK 537 (which is being dropped below). Financial Impact: The Marketing concentration being dropped and this course being an option for new Consulting concentration.

DROP
MARK 537 MBA Brand and Shopper Marketing Management (3)
Rationale: Financial Impact: None.

REVISE TO ADD (DE)PREREQUISITE(S), REGISTRATION RESTRICTION AND REGISTRATION PERMISSION
MARK 538 Marketing Insights (3)
(DE) Prerequisite(s): BZAN 507.
Registration Restriction(s): Admission to a graduate business program in the Haslam College of Business.
Registration Permission: Or consent of instructor.
Rationale: This course requires the use of statistical analysis tools and general business-related domain knowledge. Without this restriction, enrollment was comprised of both Haslam students and less qualified non-Haslam students, even undergraduate students without sufficient background in either applied statistics or business. In some cases enrollment by these non-Haslam students resulted in qualified Haslam students being excluded from the class due to over-enrollment. Because we work with a client firm on a hands-on professional project, it is critical that students have the appropriate qualifications so that class time can be used effectively in making regular progress on various project components. Further, identical prereq/restriction/permission requirements will be adopted for MARK 540; therefore, these proposed changes will provide consistency across Marketing electives.
Financial Impact: None. Impact on other units: none/minimal, this course is intended for Haslam College of Business graduate students. The “Or consent of instructor” provision leaves open the possibility for otherwise qualified non-MBA students to enroll in appropriate circumstances at the discretion of the instructor. Evidence from assessment activities: Input from client firms.

REVISE TITLES AND DESCRIPTIONS
MARK 505 Marketing Strategy I (1.5) Provides students with an introduction to key marketing concepts and tools pertaining to demand generation, and an opportunity to apply that understanding. To that end, a framework for examining contemporary marketing practices is presented. The framework can be used as a means by which to systematically evaluate the factors that can influence a firm's marketing strategy, and guide managers to pursue those initiatives that create value for customers, and in turn, the firm.
Formerly: Marketing and Demand Management I (1.5) Introduction to the basic principles and techniques of marketing and demand management. Emphasis on marketing mix essentials and determination of customer value.
MARK 506  Marketing Strategy II (1.5) Builds upon the foundational framework introduced in the MARK 505, and delves into the action plan needed in order to create, communicate, and deliver value for customers, and in turn, drive key business outcomes for the firm. Course culminates with the marketing plan, which permits students to apply the learning from the Marketing Strategy course sequence.

Formerly: Marketing and Demand Management II (1.5) Continuing focus the basic principles and techniques of marketing and demand management. Emphasis on delivering and communicating customer value.

MARK 538  Customer Insights (3) Provides an advanced experience for students interested in more complex techniques for generating customer insights for strategic decision-making; it trains students how to identify and apply the appropriate data and tools to back up strategic recommendations.

Formerly: Marketing Insights (3) Provides an advanced experience for students interested in more complex techniques for marketing research and strategic decision-making; it trains students how to identify and apply the appropriate data and tools to back up strategic marketing recommendations.

Rationale: The revised descriptions better reflects the content of the courses. Impact on other units: None. Financial Impact: None.

REVISE TO REMOVE EQUIVALENCY ON COURSES
The following courses are no longer considered equivalent and therefore, the equivalency can be removed.

MGSC 502 and BZAN 502
OMS 505 and BZAN 505
MGSC 506 and BZAN 506
OMS 541 and BZAN 520
MGSC 551 and BZAN 521
STAT 544 and BZAN 522
MGSC 530 and BZAN 530
MGSC 531 and BZAN 531
STAT 565 and BZAN 533
STAT 571 and BZAN 535
STAT 572 and BZAN 540
STAT 566 Split into BZAN 543 and 547
MGSC 532 Split into BZAN 544 and 546
MGSC 534 and BZAN 550
MGSC 533 and BZAN 556

Rationale: None of the course equivalencies still hold because the content of all the BZAN courses have changed significantly. Thus, we need to remove all course equivalencies from the Banner system. Note the only course in the left column still active is MGSC 502, Registration for Use of Facilities. Staffing Impact: None. Impact on other units: None. Financial Impact: None.
II. PROGRAM CHANGES

DEPARTMENT OF BUSINESS ANALYTICS AND STATISTICS

REVISE REQUIREMENTS – STATISTICS MAJOR, MS

In the 2020-2021 Graduate Catalog, under the Required Courses heading, revise the last bullet as shown below:

- 3 additional approved level B courses offered by UT units and listed on IGSDSP website

Formerly: 6 additional approved level B courses offered by UT units and listed on IGSDSP website.

Rationale: Courses must add up to 33 hours total. Program requirements: STAT 537-538 (6 hours), STAT 563-564 (6 hours), an additional Level B STAT course (3 hours), additional Level B courses (9 hours), and technical courses form the student’s concentration (9 hours). Impact on other units: None. Financial impact: None. Evidence from assessment activities: NA.

REVISE REQUIREMENTS – INTERCOLLEGIATE GRADUATE STATISTICS AND DATA SCIENCE MINOR

In the 2020-2021 Graduate Catalog, under the Required Courses heading, revise the last bullet as shown below:

- PhD students seeking a minor are expected to complete two IGSDSP introductory (Level A) courses and three (Level B) courses; see the IGSDSP website for more details.

Formerly: PhD students seeking a minor are expected to complete two IGSDSP introductory (Level A) courses and one (Level B) course; see the IGSDSP website for more details.

Rationale: Courses must add up to 15 hours total. Financial impact: None. Impact on other units: None. Support from assessment activities: NA.

INFORMATIONAL ITEM – DEPARTMENT NAME CHANGE

FORMER DEPARTMENT NAME (DROP): DEPARTMENT OF MANAGEMENT

NEW DEPARTMENT NAME (ADD): DEPARTMENT OF MANAGEMENT & ENTREPRENEURSHIP

Supporting Information: The Dept of Management faculty voted (9-27-19) (votes: 16 for, 1 against/for another name) to change the department name. A copy of the letter requesting the name change from Dean Stephen Mangum to Provost Manderscheid and Chancellor Plowman was provided showing their approval of the department name change.

DEPARTMENT OF MANAGEMENT & ENTREPRENEURSHIP

ADD CONCENTRATION – BUSINESS ADMINISTRATION MAJOR, FULL-TIME MBA

Consulting

Rationale: The Marketing concentration (under Department of Marketing) is being dropped. The new Consulting concentration is being added under the Department of Management & Entrepreneurship.

REVISE REQUIREMENTS – BUSINESS ADMINISTRATION MAJOR, PHD, STRATEGY, ENTREPRENEURSHIP AND ORGANIZATIONS CONCENTRATION

In the 2020-2021 Graduate Catalog, under the Additional Course Requirements heading, revise the bullet for minimum course requirements to state that 5 of the 6 are required as shown below:

- Minimum course requirements are five of the following:
  MGT 617, MGT 618, MGT 619, MGT 620, MGT 623, and MGT 625.

Formerly: Minimum course requirements are MGT 617, MGT 618, MGT 619, MGT 620, MGT 623, and MGT 625.

Rationale: These changes to the Strategy, Entrepreneurship, and Organizations (SEO) PhD program minimum required courses reflect that faculty changes, sabbaticals, and other events may make it difficult to offer all six seminars within a PhD student’s time in the program. This change provides additional flexibility to the department offering the courses as well as the students taking them. This
DEPARTMENT OF MARKETING / BUSINESS ADMINISTRATION, FULL-TIME MBA

DROP CONCENTRATION – BUSINESS ADMINISTRATION MAJOR, FULL-TIME MBA

Marketing

Rationale: Due to the focus on a consulting and supply chain management concentration. Financial Impact: Marketing courses will still be taught. Impact on other units: None. Evidence from assessment activities: This is based on input from corporate customers. This concentration should also be deleted in the catalog under programs offered by the Department of Marketing, Haslam College of Business. New concentration name of “Consulting” is being added under the Department of Management & Entrepreneurship.

REVISE BUSINESS ADMINISTRATION MAJOR, FULL-TIME MBA

In the 2020-21 Graduate Catalog, revise the Full-Time MBA program as referenced below:

1. For the program description, revise the 2nd paragraph as shown below:

   The objective of the MBA program is to develop leaders who are prepared to enhance the success of their global organizations. Concentrations are offered in a variety of areas, including business analytics, consulting, entrepreneurship and innovation, finance, and supply chain management. Custom concentrations are also possible.

   Formerly: The objective of the MBA program is to develop leaders who are prepared to enhance the success of their global organizations. Concentrations are offered in a variety of areas, including business analytics, entrepreneurship and innovation, finance, marketing, and supply chain management. Custom concentrations are also possible.

2. Add heading and text for the Consulting concentration

Consulting Concentration, Course Only without Comprehensive Exam

The consulting concentration provides an integration of various functional disciplines for students interested in complex techniques for strategic decision-making. The consulting concentration builds expertise in organizational assessment and strategy development.

Required Courses

The MBA concentration in Consulting requires a total of 9 credit hours (3 courses)

- FINC 555 (3 hours)
- MARK 538 OR MARK 540 (3 hours)
- MGT 595 OR ENT 551 (3 hours)

Rationale: These changes reflect the changing needs of recruiters and students, and input from them. Financial impact: No additional impact. Impact on other units: None. Evidence from assessment activities: This change reflects the advice and input from corporate partners.

Supporting information: This concentration should also be listed in the catalog under programs offered by the Department of Management, Haslam College of Business. Financial impact: None. Savings from dropping the Marketing concentration offsets the addition of the Consulting concentration. Impact on other units: None. The Marketing courses will continue to be taught in Fall 2020.

Evidence from assessment activities: The consulting concentration was strongly recommended by the many business partners of the business school.

3. Under the Required Courses heading, for the Common First-Year Core courses

   Delete courses BULW 505 and BUAD 518
   Replace with courses FINC 507 and BZAN 507

Supporting information: The Common First-Year Core course adds/drops will affect the following dual program listings: MBA-JD, MBA-MS (Ag), MBA-MS Engineering (Aerospace, Biomedical, Chemical, Civil, Computer, Computer Science, Electrical, Engineering
4. Under the Additional Course Requirements heading,

Remove the Marketing concentration name and replace with the Consulting concentration name

Formerly: Concentration (Business Analytics, Entrepreneurship and Innovation, Finance, Marketing, Supply Chain Management) and Electives

5. Under the Business Analytics Concentration, Course Only without Comprehensive Exam heading

Under the Required Courses heading revise as follows:

- The MBA concentration is Business Analytics requires a total of 9 credit hours (3 courses) in Business Analytics.
- BZAN 522 (3 hours)
- BZAN 531 OR BZAN 535 (3 hours)
- Choose one additional course (3 credit hours) from the following 5 courses:
  - BZAN 520
  - BZAN 531
  - BZAN 535
  - BZAN 555
  - BZAN 556

Formerly: Required Courses
The MBA concentration in Business Analytics requires a total of 9 credit hours (3 courses) in Business Analytics.
An MBA student pursuing a concentration in Business Analytics should enroll in BZAN 522.
In addition, the student must then choose 2 more graduate courses from the following 4 courses:
BZAN 520
BZAN 521
BZAN 531
BZAN 535

REVISE DUAL MBA-MS PROGRAM, BUSINESS ADMINISTRATION – BUSINESS ANALYTICS

In the 2020-2021 Graduate Catalog, under the Required Courses heading, under the Core Requirements for MBA (24 credit hours)

Delete courses BULW 505 and BUAD 518
Replace with courses FINC 507 and BZAN 507

Under the Non-course Requirements heading, under the Program Enrollment heading, delete the two current paragraphs and replace with:

Students must begin their studies in the MS Business Analytics program. During the first year in the MSBA program, students register as Master of Science in Business Analytics program students. After the first year, they are classified and registered as MBA students.

Formerly:
Students may begin their studies in either the MS Business Analytics or the MBA program, but may not enroll in MS Business Analytics course work while completing the first year of the MBA curriculum.

During the first year in the MBA program, students register as Master of Business Administration program students. After the first year, any term in which students take a mixture of MBA and MS Business Analytics courses, they are classified and registered as MS Business Analytics students.

Supporting information: These course adds/drops will also affect the following dual program listing: Dual MS-MBA Program, Business Analytics-Business Administration. Rationale: To reflect the changing needs of recruiters and students. Financial Impact: None. Impact on other units: None.
I. COURSE CHANGES

SCHOOL OF ADVERTISING AND PUBLIC RELATIONS

(ADVT) Advertising

ADD

ADVT 610 Advertising and Society (3) Seminar that explores advertising as an institution in a free-enterprise democratic society and its relation to social, legal, cultural, and economic institutions. Emphasis on development of original research.
Comments: Doctoral students only.
Registration Restriction(s): Minimum student level – graduate.

ADVT 620 Advertising and Communications Theory (3) Seminar on contemporary communications theories of attitude change, information-processing, and persuasion as applied to creative strategy decisions and advertising effects. Emphasis on development of original research.
Comments: Doctoral students only.
Registration Restriction(s): Minimum student level - graduate.

ADVT 640 Advertising Decision Making (3) Seminar in advertising management. Analysis of decision making in budgeting, creative strategy, media strategy, research, evaluation, and agency-client relationships. Advertising response functions. Emphasis on development of original research.
Comments: Doctoral students only.
Registration Restriction(s): Minimum student level - graduate.

REVISE TO ADD COMMENTS

ADVT 510 Advertising and Society (3) Comments: 510 is for MS students only. Doctoral students must register for ADVT 610.

ADVT 520 Advertising and Communications Theory (3) Comments: 520 is for MS students only. Doctoral students must register for ADVT 620.

ADVT 540 Advertising Decision Making (3) Comments: 540 is for MS students only. Doctoral students must register for ADVT 640.

Rationale: Currently, the 500-level courses serve both MS and PhD students, but by having a single course number for the two groups we are not recognizing the fact that Ph.D. students are also expected to develop original scholarship. Adding the 600-level course numbers with a statement about the emphasis on development of original research communicates expectations for Ph.D. students in our area of study as well as those outside of our area. Some programs at UT require that Ph.D. students have a minimum number of 600-level courses in their cognate field. The 600-level listing will give our Ph.D. program more visibility in the UT Graduate Catalog for Ph.D.-seeking students and allow us to be of greater service to the University’s graduate education mission. Impact on other units: None. Financial impact: None.

(PBRL) Public Relations

ADD

PBRL 630 Issues and Crisis Management (3) Seminar on theoretical and practical applications to preparing for and engaging in issues, risk and crisis communication and management. Emphasis on development of original research.
Comments: Doctoral students only.
Registration Restriction(s): Minimum student level - graduate.

PBRL 640 Public Relations Management (3) Seminar on the theories and research of leadership and management and organizational structure and functions of public relations agencies and departments in public, private, and non-profit sectors. Analysis and management of problems in communication between organizations and their publics with emphasis on ethics and standards of the profession. Emphasis on development of original research.
Comments: Doctoral students only.
Registration Restriction(s): Minimum student level - graduate.
PBRL 650 Public Relations Strategies (3)  Seminar on strategic communication planning to achieve overall goals of organizations. Emphasis on decision making, the budgeting process, including cost-benefit analysis of tactics, and managerial execution of public relations plans. Measurement and evaluation of effectiveness of communication programs. Emphasis on development of original research.  
Comments: Doctoral students only.  
Registration Restriction(s): Minimum student level - graduate.

REVISE TITLE, DESCRIPTION, AND ADD COMMENTS
PBRL 530 Issues and Crisis Management (3) Seminar on theoretical and practical applications to preparing for and engaging in issues, risk and crisis communication and management.  
Comments: 530 is for MS students only. Doctoral students must register for PBRL 630.  
Formerly: Crisis Communication (3) Emphasis on theoretical and practical applications to preparing for and engaging in crisis communication and management, including risk communication and issues management.

REVISE TO ADD COMMENTS
PBRL 540 Public Relations Management (3)  
Comments: 540 is for MS students only. Doctoral students must register for PBRL 640.  

PBRL 550 Public Relations Strategies (3)  
Comments: 550 is for MS students only. Doctoral students must register for PBRL 650.  
Rationale: Currently, the 500-level courses serve both MS and PhD students, but by having a single course number for the two groups we are not recognizing the fact that Ph.D. students are also expected to develop original scholarship. Adding the 600-level courses number with a statement about the emphasis on development of original research communicates expectations for Ph.D. students in our area of study as well as those outside of our area. Some programs at UT require that Ph.D. students have a minimum number of 600-level courses in their cognate field. The 600-level listing will give our Ph.D. program more visibility in the UT Graduate Catalog for Ph.D.-seeking students and allow us to be of greater service to the University’s graduate education mission.

(ADPR) Advertising and Public Relations

REVISE DESCRIPTION
ADPR 562 Social Media Strategy and Tactics (3) Provides students with practical knowledge and analytical skills necessary to create, evaluate and execute social media campaigns. Course will include lectures, case studies, assignments and engaged activities that will help in the development of a strong social media skill set. State-of-the-art social listening software will be used for social listening assignments and provide a hands-on learning experience for enrolled students.  
Formerly: Salesforce’s Marketing Cloud Social Studio technology will be used for social listening assignments and provide a hands-on learning experience for enrolled students.

SCHOOL OF INFORMATION SCIENCES  
(INSC) INFORMATION SCIENCES

REVISE TO REMOVE (RE)PREREQUISITE
INSC 598 Web Design (3)  
Formerly: (RE) Prerequisite(s): 581 or instructor’s consent.  
Rationale: The course is being added to the new CCI Master’s program online concentration. Course content is being revised to eliminate the need for a prerequisite.

COMMUNICATION AND INFORMATION

(CCI) Communication and information

REVISE TO ADD REGISTRATION RESTRICTION
CCI 590 Project (1-6)  
Registration Restriction(s): Enrollment is limited to students in the College of Communication and Information Distance Education concentration.
CCI 592 Practicum (1-6)
Registration Restriction(s): Enrollment is limited to students in the College of Communication and Information Distance Education concentration.

II. PROGRAM CHANGES

+ ADD CONCENTRATION – COMMUNICATION AND INFORMATION MAJOR, MS

  Strategic and Digital Communication

In the 2020-2021 Graduate Catalog, add program information and requirements for the new Distance Education MS concentration.

Communication and Information Major, MS
Strategic and Digital Communication concentration

The strategic and digital communication concentration is a Distance Education program and does not require students to come to Knoxville. The concentration is designed for career starters and career changers who want a flexible degree that is professionally oriented and that cuts across the college disciplinary areas. The strategic and digital communication concentration is practitioner focused and provides stand-alone courses that are asynchronous and fully online. Courses build upon what all four Schools—Advertising and Public Relations, Communication Studies, Information Sciences, and Journalism and Electronic Media—bring to the contemporary job market.

Concentration option: course only without comprehensive exam

Campus Code: Distance Education

Admissions Standards/Procedures
Students are admitted every semester. Applicants must submit an online graduate application to the Office of Graduate Admissions. Applicants must also submit their CV/Resume, Letter of Introduction, and Goal Statement. International applicants are required to take the Test of English as a Foreign Language (TOEFL).

Academic Standards
Must meet Graduate School requirements.

Strategic and Digital Communication Concentration - Course only option without comprehensive exam

The strategic and digital communication concentration requires that students select from the list of courses that are specific to this concentration. The Distance Education concentration requires a minimum of 30 graduate credit hours of approved course work. Students in the strategic and digital communication concentration are not allowed to take Knoxville Campus course sections.

Credit Hours Required
30 graduate credit hours

Required Courses:
The students must choose from the Distance Education courses listed below:
ADPR 541
ADPR 542
ADPR 562
CMST 524
CMST 526
CMST 554
INSC 542
INSC 597
INSC 598
JREM 513
JREM 516
JREM 557
CCI 590
CCI 592
Non-Course Requirements  (None)

Rationale: The concentration is a Distance Education concentration that is fully online and does not require students to come to Knoxville. All of the content courses already exist. The concentration builds upon each of the four School’s strengths to address concerns about the size, quality, and direction of our CCI MS program; operates within the constraints of extended college resources; and addresses strategic priorities of the university to increase graduate enrollment and create E-learning opportunities. Impact on other Units: None. Financial Impact: None. Additional Documentation: No additional approvals are required for this change.
I. COURSE CHANGES

DEPARTMENT OF CHILD AND FAMILY STUDIES

(CFS) Child and Family Studies

REVISE HOURS AND DESCRIPTION

CFS 672 Professional Seminar 2: Professional Socialization (3) Preparing for a position in a professional setting: finding and understanding job announcements; preparing curriculum vitae, teaching philosophy, and research statements; navigating the interview process; negotiating and accepting a position; and transitioning to a professional occupation.

Formerly: (2) Preparing for a position in a professional setting: finding and understanding job announcements, preparing curriculum vitae, teaching philosophy and research statements, navigating the interview process, accepting a position and transitioning to a professional occupation.

Rationale: A careful review of the course syllabus, readings, assignments, and in-class instruction indicated that the student and faculty workload was consistent with that of a three-credit hour course than that of a two-credit hour course. The course description also needed to more accurately reflect the breadth of the content covered. Impact on Other Units: The proposed change does not alter courses required by other programs. Financial Impact: This change will not require additional resources. Additional Documentation: This is not a substantive change and should not require additional approval.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING

(SCHP) SCHOOL PSYCHOLOGY

ADD

SCHP 551 Introductory Practicum in School Psychology (1-3) This practicum requires applied experience in K-12 schools learning about the roles of professionals in school settings. Includes school-based interactions, interviews, and observations with school psychologists and related educational professionals.

Repeatability: May be repeated. Maximum 6 hours.
Comment(s): Requires admission to the school psychology major or consent of instructor.

Rationale: After faculty curriculum review, it was determined that this practicum needed to be separated from the didactic course (SCHP 540). Currently, students outside of school psychology cannot enroll in SCHP 540 due to the practicum requirement (i.e., placement in K-12 schools). If the course and practica are offered separately, non-school psychology students could choose to enroll in SCHP 540 without the practicum requirement. In addition, the supervision required for the practicum and the time required by students is better represented with a 3-credit practicum course. This change is not driven by the SACs assessment. Impact on Other Units: None. This course is not required by other programs and departments. Financial Impact: None; This change will not affect the department or college budget. Current faculty will teach the course and practica. Additional Documentation: This is not a substantive change and should not require additional approval.

SCHP 547 Psychoeducational Consultation (3) Designed to provide students with the knowledge and background in consultation and supervision theories and models so that they can apply consultation procedures in educational, clinical, and other applied settings.

Rationale: After faculty curriculum review, it was determined that the course work delivered in the area of consultation needed to be taught as a didactic course outside of the practica activities (SCHP 546). Currently, students outside of school psychology cannot enroll in SCHP 546 due to the practicum requirement (i.e., placement in K-12 schools). If the course and practica are offered separately, non-school psychology students could choose to enroll in SCHP 547 without the practicum requirement. This change is not driven by the SACs assessment. Impact on Other Units: None. This course is not required by other programs and departments. Financial Impact: None; This change will not affect the department or college budget. Current faculty will teach the course and practica. Additional Documentation: This is not a substantive change and should not require additional approval.

SCHP 552 Professional Practice in School Settings (1-3) Supervised experience delivering school psychology services within school settings.

Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 12 hours.
Comment(s): Requires admission to the school psychology major or consent of instructor.
Registration Restriction(s): Minimum student level – graduate.
Rationale: The school psychology program has a practicum for advanced doctoral students (SCHP 652). Originally, we intended for EdS students to enroll in that practicum. After further review, we determined that we need a practicum specifically for the EdS students and 3rd year PhD students. This change is not driven by the SACs assessment. Impact on Other Units: None. This course is not required by other programs and departments. Financial Impact: None: This change will not affect the department or college budget. Current faculty will teach the course and practica. Additional Documentation: This is not a substantive change and should not require additional approval.

REVISE TITLE, HOURS AND DESCRIPTION

SCHP 540 Seminar in School Psychology (3)  Introduction to the field of school psychology, including foundational research, roles that school psychologists assume, clients served, and effective services for diverse populations.

Formerly: Seminar and Practicum in School Psychology (4)  Introduction to the field of school psychology, including the roles that school psychologists assume, clients served, and effective services for diverse populations. Includes school-based interactions, interviews and observations with school psychologists and related educational professionals.

Rationale: After faculty curriculum review, it was determined that this course needed to be separated from the practicum. Currently, students outside of school psychology cannot enroll in this course due to the practicum requirement (i.e., placement in K-12 schools). If the course and practica are offered separately, non-school psychology students could choose to enroll in the course without the practicum requirement. In addition, the supervision required for the practicum and the time required by students is better represented with a 3-credit practicum course. This change is not driven by the SACs assessment. Impact on Other Units: None. This course is not required by other programs and departments. Financial Impact: None: This change will not affect the department or college budget. Current faculty will teach the course and practica. Additional Documentation: None. This is not a substantive change and should not require additional approval.

REVISE TITLES

SCHP 652 Advanced Professional Practice in School Settings

Formerly: Advanced Professional Practice within School Psychology

SCHP 651 Professional Practice in Clinical Settings

Formerly: Professional Practice in School Psychology: Clinic

Rationale: In advance of an accreditation review, the school psychology faculty are coordinating practicum course titles for consistency. Impact on Other Units: None. Financial Impact: None: This change will not affect the department or college budget. Current faculty will continue to teach these practica. Additional Documentation: None. This is not a substantive change and should not require additional approval.

DEPARTMENT OF KINESIOLOGY, RECREATION, AND SPORT STUDIES

(RSM) Recreation and Sport Management

DROP

RSM 560 Sport Governance (3)

Rationale: The content of this course is being combined with RSM 544. Impact on Other Units: This will not have an impact on units outside units. Financial Impact: The change will not have an impact on department or college budgets. Additional Documentation: No additional approvals are required for this change.

RSM 505 Therapeutic Recreation in Public Schools (3)

Rationale: RSM 405 has been approved for graduate credit so the graduate version of this course is no longer needed. Impact on Other Units: This will not have an impact on units outside units. Financial Impact: The change will not have an impact on department or college budgets. Additional Documentation: No additional approvals are required for this change.

REVISE DESCRIPTION

RSM 544 Leadership Theories (3)  Introduction to principles of interpersonal and organizational leadership in the context of sport and coaching environments. Students will explore leadership theory, strategic planning, and motivation through the lens of successful coaches including Pat Summitt and John Wooden.

Formerly: Integration of various theoretical approaches to leadership styles within cultural contexts, research, and field experiences.

Rationale: The description is modified to be more reflective of the content of the course. Impact on Other Units: This will not have an impact on units outside units. Financial Impact: The change will not have an impact on department or college budgets. Additional Documentation: No additional approvals are required for this change.
DEPARTMENT OF NUTRITION

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

NUTR 415 Clinical Nutrition I (3) Nutritional genomics in practice; obesity, diabetes, cardiovascular disease, and cancer risk factors, prevention, pathophysiology, treatment, and evidence-based nutrition intervention.

(RE)Prerequisite(s): 313 and 314 and 315, with a C or better.

Registration Restriction(s): Nutrition majors only.

Rationale: Based on ongoing curricular review and student feedback, the faculty has long recognized the need for a graduate-level offering of the content covered by this newly revised course. Therefore, pending approval of this revision at the 10/23/19 UG CRC meeting, we are proposing to allow this course to be taken for graduate credit, and have submitted a revised syllabus to illustrate how credit will be differentiated between the two levels. We recognize that keeping the current prerequisites listed as “RE” will require a manual override for students taking this for graduate credit if they are not matriculating in from our UG program. Impact on Other Units: None. This course is available to NUTR students only and should not impact other units. Financial Impact: None. This course will continue to be taught as part of the normal course load of existing faculty. Additional Documentation: No additional approvals are required for this change. This change is not substantive and does not need to be reported to SACSCOC. Please see the attached draft syllabi.

REVISE TO ADD (DE)PREREQUISITE

NUTR 516 Clinical Practice Experience (4)

(DE) Prerequisite(s): NUTR 420.

Rationale: This is a house-keeping issue. We proposed NUTR 420, as an “RE” prerequisite, when adding the course to the 2019-2020 catalog, but it was inadvertently left off. Because we added several courses, with “RE” prerequisites from our UG program, that were subsequently changed to “DE” (see NUTR 513, 525, and 530), we believe this is how NUTR 516 was to be handled, but instead the prerequisite was simply dropped in error. Impact on Other Units: None. This course is available only to students in the Clinical Nutrition and Dietetics concentration (noted as a comment in the catalog), and should not impact other units. Financial Impact: None. This change does not impact the existing course load. Additional Documentation: No additional approvals are required for this change.

REVISE TO ADD (RE)PREREQUISITES

NUTR 520 Clinical Nutrition Outcomes Data Analysis and Interpretation (3)

(RE) Prerequisites: NUTR 516 and NUTR 526.

Rationale: This is a house-keeping issue. We proposed, and were approved, to add NUTR 516 and NUTR 526 as prerequisites when adding the course to the 2019-2020 catalog, but they were inadvertently left off when the catalog was published. We are requesting these prerequisites be added. Impact on Other Units: None. This course is available only to students in the Clinical Nutrition and Dietetics concentration (noted as a comment in the catalog), and should not impact other units. Financial Impact: None. This change does not impact the existing course load. Additional Documentation: No additional approvals are required for this change. This change is not substantive and does not need to be reported to SACSCOC.

DEPARTMENT OF PUBLIC HEALTH

(PUBH) Public Health

REVISE DESCRIPTION

PUBH 552 Assessment and Planning (3) Applies an ecological framework to health assessment and program planning to address health disparities.

Formerly: Applies an ecological framework to health assessment and program planning to address health disparities. Requires 25 or more hours of community service learning.

Rationale: The description of this graduate course has been revised to eliminate the reference to a service learning component. This will allow greater flexibility to the teaching approach in relation to the instructors and their skillset. Currently there is no graduate level service learning course designation that would be impacted. Impact on Other Units: None expected; existing course. Financial Impact: None. This change is not substantive and does not need to be reported to SACSCOC. Additional Documentation: None.

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DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

(ARED) Art Education

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

ARED 401 Theory & Practice in Art Education II (3)  Advanced instruction and hands on microteaching practice that includes elementary, middle, and secondary theme or centrally focused unit plans based upon diversity, multiculturalism, visual culture, technology and interdisciplinary methods.

(RE) Prerequisite(s): 350, 400.
Registration Restriction(s): Admission to teacher education.

(ENED) ENGLISH EDUCATION

REVISE TITLE AND DESCRIPTION OF 400-LEVEL COURSE

ENED 459 Secondary English and ESL Methods (3)  Techniques of teaching composition, language, and literature in English and ESL classrooms.
Formerly: Teaching English in the Secondary School (3)  Techniques of teaching composition, language, and literature.

Rationale: This course is being used to satisfy completion of the new English Education/ESL Education program. State licensure requirements include a course in “ESL Methods.” The content of this course is not changing, as both secondary English and ESL teaching methods are currently covered in course content. The name needs to be changed so that “ESL Methods” appears on student transcripts.

Impact on other units: The proposed change does not affect any other programs or course offerings. The course is a required course for ENED/ESL dual certification in the MS Educational Studies program and a popular class among other students seeking English endorsement. The course is neither a prerequisite or corequisite for other courses. The course is not cross listed. Financial Impact: None because we are only changing the title and description of an existing course. Additional documentation: This change is necessary to comply with state licensing requirements. The change is not substantive and does not need to be reported to SACSCOC.

REVISE TITLE AND DESCRIPTION

ENED 508 Teaching Composition and Grammar in the Secondary School (3)  Teaching various modes of writing (e.g., argumentative, narrative) and grammar.
Formerly: Teaching Composition in the Secondary School (3)  Teaching narration, description, exposition, and argumentation; writing process and marking of student papers.

Rationale: This course is being used to satisfy completion of the new English Education/ESL Education program. State licensure requirements include a course in “Grammar.” The content of this course is not changing, as grammar is currently covered in course content. The name just needs to be changed so that “Grammar” appears on student transcripts. Impact on other units: The proposed change does not affect any other programs or course offerings. The course is a required course for ENED/ESL dual certification in the MS Educational Studies program and a popular class among other students seeking English endorsement. The course is neither a prerequisite or corequisite for other courses. The course is not cross listed. Financial Impact: None because we are only changing the title and description of an existing course. Additional documentation: This change is necessary to comply with state licensing requirements. The change is not substantive and does not need to be reported to SACSCOC.

(SCED) SCIENCE EDUCATION

REVISE TITLE OF 400-LEVEL COURSE

SCED 496 Teaching Science in the Secondary School (3)
Formerly: Teaching Science Grades 7-12 (3)

Rationale: When this course title was developed, the term “secondary school” was defined as grades 7-12. The TN Department of Education revised the grade bands for licensure since then. This course title change reflects the focus of the course as meeting the needs of secondary teacher candidates without attributing the term “secondary” to a specific grade band. Impact on other units: There is no impact on other units because this is only a course title change that reflects the focus of the course (secondary science) rather than identifying a particular grade band targeted in the course. Financial Impact: None as this is just a title change. Additional documentation: No additional approvals needed. The change is not substantive and does not need to be reported to SACSCOC.

REVISE DESCRIPTION

SCED 531 Teaching Science in the Elementary School (3)  Recent trends in methods, materials and content in teaching science to elementary students.
Formerly: SCED 531 Teaching Science in the Elementary School (3)  Recent trends in methods, materials and content in teaching science to students grades K-4.
Rationale: When this course title was developed, the term “elementary school” was defined as grades K-4. The TN Department of Education revised the grade bands for licensure since then. This course description change reflects the focus of the course as meeting the needs of elementary teacher candidates without attributing the term “elementary” to a specific grade band. Impact on other units: There is no impact on other units because this is only a course description change that reflects the focus of the course (elementary science) rather than identifying a particular grade band targeted in the course. Financial Impact: None as this is only a change in the description of the existing course. Additional documentation: No additional approvals needed. The change is not substantive and does not need to be reported to SACSCOC.

SCED 543 Teaching Science in the Middle Grades (3) Activities in this class are intended to promote the professional growth of pre-service and in-service science teachers by studying science curriculum and instructional strategies. In particular, methods of teaching contemporary middle grades science content will be explored.

Formerly: SCED 543 Teaching Science in the Middle Grades (3) Activities in this class are intended to promote the professional growth of pre-service and in-service science teachers by studying science curriculum and instructional strategies. In particular, methods of teaching contemporary science content in grades 4-8 will be explored.

Rationale: When this course description was developed, the term “middle school” was defined as grades 4-8. The TN Department of Education revised the grade bands for licensure since then. This course description change reflects the focus of the course as meeting the needs of middle grades teacher candidates without attributing the term “middle grades” to a specific grade band. Impact on other units: There is no impact on other units because this is only a course description change that reflects the focus of the course (middle grades science) rather than identifying a particular grade band targeted in the course. Financial Impact: None as this is only a change in the description of the existing course.

REVISE TO DROP (RE) PREREQUISITE

SCED 565 Instructional Trends and Issues in Science Education (3)

Formerly: (RE) Prerequisite(s): 496.

Rationale: The condition of the prerequisite was established when the previous pathway of a fifth-year teacher licensure program was in place. When ValsTeach was created as a pathway for undergraduates to complete their secondary science teacher licensure requirements, the fifth year program was reconfigured to the current MS in Teacher Education, Science Education Practitioner and MS in Teacher Education, Science Education Professional Internship pathways. Students entering as post-baccalaureates in these two secondary science teacher pathway programs now typically enroll in SCED 565 a semester before they enroll in SCED 496. The coursework in SCED 565 is not dependent on the content in SCED 496. Impact on other units: There is no impact on other units because this is only a course prerequisite change is in line with the sequence in which students now typically enroll in their science education courses. Financial Impact: None as this is only a change in the prerequisite requirement of the existing course. Additional documentation: No additional approvals needed. The change is not substantive and does not need to be reported to SACSCOC.

(SPED) SPECIAL EDUCATION

REVISE HOURS

SPED 506 Internships: Teaching Special Education (1-15)

Formerly: (3-15)

Rationale: Licensed teachers who are adding special education endorsements enroll in the Special Education program to complete provisional licensure requirements. They must take this course to meet supervision and program requirements. However, due to financial aid and other issues, many students only need 1-2 credit hours each semester. Currently, the course has variable registration between 3-15 hours. By changing the variability to 1-15 hours, we could better meet the diverse needs of our provisional candidates. Upon reflecting on student feedback as part of our periodic review of courses, we realize that there is a need for greater flexibility in registration hours. Impact on other units: This course will only be taken by students in the SPED program so this change will not affect other units. Financial Impact: This change should not have a financial impact for the program. It may have a positive financial impact for JEP candidates. Additional documentation: The change is not substantive and does not need to be reported to SACSCOC.

(TPTE) THEORY AND PRACTICE IN TEACHER EDUCATION

REVISE HOURS

TPTE 610 Internship in College Teaching and Supervision (1-9)

Formerly: (3-9)

Rationale: We need to change the variable credit hours from 3-9, to 1-9 in order to meet new criteria for course expectations and seminars. Mainly, the department would like to offer a 1 credit hour TPTE 610 option for any PhD students that will be involved in internship supervision with our teacher education masters students. The 1 credit hour option would allow us the flexibility to offer an orientation to the unique responsibilities associated with supervising student teachers in public schools. Impact on other units: The proposed change does not affect or require courses offered by any other programs. The course is not cross-listed with other programs or units. Financial Impact: None as the course is already offered — we are only changing the credit hours. Additional documentation: This is a minor change that will offer students in our department a more comprehensive and supportive supervision experience. The change is not substantive and does not need to be reported to SACSCOC.
II. PROGRAM CHANGES

DEPARTMENT OF CHILD AND FAMILY STUDIES

REVISE PROGRAM REQUIREMENTS – CHILD AND FAMILY STUDIES MAJOR, PHD

In the 2020-2021 Graduate Catalog, revise the program credit hour requirements from 72 to 73 credit hours. This change is from course CFS 672 revising from 2 to 3 credit hours.

Credit Hours Required
A minimum of 73 graduate credit hours beyond the baccalaureate degree.

Required Courses:
CFS 672 (3 credit hours)

Formerly:
A minimum of 72 graduate credit hours beyond the baccalaureate degree.
CFS 672 (2 credit hours)

Rationale: To make our credit hour requirement consistent with increasing CFS 672 from a two-credit to a three-credit hour requirement we also needed to increase the overall credit hour requirement for the PhD in Child and Family Studies. Impact on Other Units: The proposed change does not alter courses required by other programs. Financial Impact: This change will not require additional resources. Additional Documentation: This is not a substantive change and should not require additional approval.

DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

+ ADD CONCENTRATION – EDUCATIONAL ADMINISTRATION MAJOR, MS

Higher Education Administration

In the 2020-2021 Graduate Catalog, add heading, text and requirements for the new Higher Education Administration concentration under Educational Administration Major, MS, as follows:

Concentration:
Higher Education Administration – Course only without Comprehensive Exams

Campus Code:
Distance Education

Program Description
The University of Tennessee offers a Distance Education Master of Science degree with a major in Educational Administration with a concentration in Higher Education Administration. The degree offers advanced graduate study for individuals who aspire to work in higher education settings including postsecondary institutions, policy and research centers, and government agencies. In addition, professionals who currently work in a higher education setting but do not possess a higher education degree can enhance their leadership knowledge and skill for service in their current positions. Coursework is delivered in a personalized, engaging format blending theoretical study with application through case study, reflection, thoughtful debate, and guided review of readings. The program features a core sequence in educational leadership, a specialized focus on higher education administration, policy, and legal aspects and a research concentration on evaluation and data use. Students pursuing this degree will enhance their leadership and management ability, develop policy knowledge toward effective practice, and build a practical research and evaluation skillset. The coursework is delivered in an online format through distance education and can be completed in 12-15 months.

Admissions Standards/Procedures
A completed online application must be received by both the Office of Graduate Admissions and the Department of Educational Leadership and Policy Studies with a current resume or CV and a letter of introduction addressing the following prompts (limited to 500 words).

- Identify your career goals related to work in a higher education setting.
- Identify ways you believe this degree can assist you in reaching your goals.
- Describe the strengths you possess for completing a graduate degree online.
- Describe the challenges you anticipate for completing a graduate degree online.

A grade point average (GPA) of 2.70 or higher for undergraduate course work or GPA 3.00 or higher for prior graduate course work is required.

Three letters of recommendation. Raters should assess your academic background and likely success in a rigorous program. If you are a recent graduate, you should include one or more faculty members who can attest to your work as a
student. Other appropriate raters include work supervisors. Family members and personal friends are not appropriate raters. You need to prompt your raters to submit their forms to the Graduate Admissions.

Admissions will be each August and January and include an online orientation prior to the start of coursework.

Credit Hours Required
30 graduate credit hours

Required Courses
Core Requirements (6 credit hours)
EDAM 513
EDAM 515

Specialization (18 credit hours)
EDAM 585
EDAM 587
HEAM 572
HEAM 619
HEAM 650
ELPS 595

Research (6 credit hours)
HEAM 517
EDAM 521

Rationale: The VOLS Lead program has been a successful degree option for students. In the years since its inception, we have learned valuable lessons in administering an online degree program. Since we launched the program, we have received numerous inquiries about a higher education option as a complement to the K-12 administrative focus. In addition, our College Student Personnel (CSP) master’s program is considered a top tier degree for higher education professionals in the nation based on placement rate of graduates, longevity, faculty reputation, and professional engagement of students and alumni. The program receives far more applications than we can accommodate and many of those aspiring students are unable to complete the residency requirement for the program. This proposed degree would serve those students. Finally, students in the CSP master’s and Higher Education Administration PhD program are increasingly requesting online course options. This proposed program would add up to 6-8 course options not currently available in an online format.

Impact on Other Units: We do not anticipate an impact on other units. Financial Impact: There is no anticipated financial impact for other units. Classes will be taught by current faculty and adjuncts and no new courses will be needed. All courses required are already existing courses which will be offered as online courses.

* ADD CONCENTRATION – EDUCATIONAL ADMINISTRATION MAJOR, MS

Instructional Leadership

In the 2020-2021 Graduate Catalog, add heading, text and requirements for the new Instructional Leadership concentration under the Educational Administration Major, MS, as follows:

Concentration:
Instructional Leadership – Course only with Comprehensive Exams
Course only without Comprehensive Exams

UNDER THE OPTIONS AVAILABLE HEADING: REVISE NAME OF SPECIALIZATION

1) Revise the specialization name Volunteer Online Leadership Studies (V.O.L.S.) TO Online Leadership Studies Leadership Academy
2) Leadership Academy specialization name remains as is.

Everywhere the name Volunteer Online Leadership Studies is listed, change to Online Leadership Studies

Campus Code
Instructional Leadership concentration – Leadership Academy specialization – Knoxville Campus
Instructional Leadership concentration – Online Leadership Studies specialization – Distance Education

Online Leadership Studies Specialization
The Master of Science degree with a major in Educational Administration, specialization in Online Leadership Studies, requires 36 credit hours of graduate course work. The internship includes 350 hours of field-based experience under the mentor’s direction, and is supervised through course EDAM 580.
Rationale: In an effort to ensure consistency and clarity throughout the ELPS materials in the Graduate Catalog, this section was revised to change the title of the online leadership studies specialization name. Impact on Other Units: There is no impact on other units as this revision only includes clarifying language. Financial Impact: There is no financial impact as this revision only includes clarifying language.

REVISE NAME OF SPECIALIZATION – EDUCATION MAJOR, EDS, EDUCATIONAL ADMINISTRATION CONCENTRATION

Revise the specialization name: Volunteer Online Leadership Studies (V.O.L.S.) TO: Online Leadership Studies Leadership Academy specialization name remains as is.

Everywhere the name Volunteer Online Leadership Studies is listed, change to: Online Leadership Studies

Rationale: In an effort to ensure consistency and clarity throughout the ELPS materials in the Graduate Catalog, this section was revised to change the title of the online leadership studies program. There are no changes in the program itself. Impact on Other Units: There is no impact on other units as this revision only includes clarifying language. Financial Impact: There is no financial impact as this revision only includes clarifying language. Additional Documentation: This change does not require additional documentation as this is a revision that only includes clarifying language.

DROP CERTIFICATE

Educational Administration (PreK-12)

ADD CERTIFICATE

Instructional Leadership

In the 2020-2021 Graduate Catalog, drop the Education Administration (PreK-12) Graduate Certificate and add back as Instructional Leadership Graduate Certificate. All certificate requires remains the same. No change in requirements.

Rationale: To ensure consistency and clarity throughout the ELPS materials in the Graduate Catalog and to mirror the language of the most recent changes to the Professional Standards for Educational Leaders, we will change all educational administration references to instructional leadership. There are no changes in the program itself. Impact on Other Units: There is no impact on other units as this revision only includes clarifying language. Financial Impact: There is no financial impact as this revision only includes clarifying language. Additional Documentation: This change does not require additional documentation as this is a revision that only includes clarifying language.

REVISE REQUIREMENTS – EDUCATION MAJOR, PHD, LEADERSHIP STUDIES IN EDUCATION CONCENTRATION

In the 2020-2021 Graduate Catalog, under the Admissions Standards/Procedures section, revise to remove 3rd bullet (which stated GRE scores were required).

Rationale: After an annual student performance review conducted by the program faculty, we determined that the Graduate Record Exam (GRE) scores were not an indicator of student success in the program. Thus, the faculty voted to remove the GRE requirement for admission across all programs. These changes are not driven by the SACs assessment. Impact on Other Units: These changes do not impact other units. Financial Impact: These changes will have no financial impact on the department or the college.

REVISE REQUIREMENTS – EDUCATIONAL LEADERSHIP MAJOR, EDD

In the 2020-2021 Graduate Catalog, under the Admissions Standards/Procedures heading, revise to remove the 5th and 8th bullets (which stated GRE scores were required).

Rationale: After an annual student performance review conducted by the program faculty, we determined that the Graduate Record Exam (GRE) scores were not an indicator of student success in the program. Thus, the faculty voted to remove the GRE requirement for admission across all programs. These changes are not driven by the SACs assessment. Impact on Other Units: These changes do not impact other units. Financial Impact: These changes will have no financial impact on the department or the college. Additional Documentation: None.

REVISE REQUIREMENTS – COLLEGE STUDENT PERSONNEL MAJOR, MS

In the 2020-2021 Graduate Catalog, under the Admissions Standards/Procedures heading, revise to remove the 3rd bullet (which stated GRE scores were required).

Rationale: After an annual student performance review conducted by the program faculty, we determined that the Graduate Record Exam (GRE) scores were not an indicator of student success in the program. Thus, the faculty voted to remove the GRE requirement for admission across all programs. These changes are not driven by the SACs assessment. Impact on Other Units: These changes do not impact other units. Financial Impact: These changes will have no financial impact on the department or the college.
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING

REVISE REQUIREMENTS – EDUCATION MAJOR, EDS, SCHOOL PSYCHOLOGY CONCENTRATION

In the 2020-2021 Graduate Catalog, revise as shown below:

1) Revise the number of credit hours for Foundational Coursework from 33 to 36
2) Under the “Foundational Coursework” heading, add a bullet point under “EDPY 517” that lists “SCHP 540”
3) Revise the number of credit hours for the “Applied Practicum and Internship” from 18 to 15
4) remove the first bullet point “SCHP 540 (4 credit hours)”
5) revise the number of credit hours for “SCHP 546” from 4 to 1
6) add two new bullet points – “SCHP 551 (3 credit hours)” and “SCHP 552 (3 credit hours)”
7) remove the bullet point “SCHP 652 (2 credit hours)”

Text should now read as follows:

Required Courses (All courses are 3 credits unless otherwise specified.)

- Foundational Coursework (36 credit hours)
  - SPED 530
  - EDPY 510
  - EDPY 516
  - EDPY 517
  - SCHP 540
  - SCHP 541
  - EDPY 547
  - SPE 555
  - COUN 570
  - EDPY 636
  - SCHP 690
  - One course in systems consultation approved by major professor.

- Applied Practicum and Internship (15 credit hours)
  - SCHP 542 (6 credit hours)
  - SCHP 546 (1 credit hour)
  - SCHP 551 (3 credits)
  - SCHP 552 (3 credits)
  - SCHP 649 (2 credit hours)

Rationale: In anticipation of an accreditation review and after faculty curriculum review, these program changes will clean up language in the catalog, separate practicum from didactic courses, provide consistency to the practicum course titles.

Impact on Other Units: None. The courses related to these program changes are not required by other programs and departments.

Financial Impact: None. The program changes will not affect the department or college budget. Current faculty will continue to teach these courses and practica. Additional Documentation: None. These are not substantive changes and should not require additional approval.

DEPARTMENT OF KINESIOLOGY, RECREATION, AND SPORT STUDIES

REVISE PROGRAM REQUIREMENTS – KINESIOLOGY MAJOR, MS, BIOMECHANICS CONCENTRATION

In the 2020-2021 Graduate Catalog, revise the program requirements for the Thesis, Project, Course Only with Comprehensive Exam as follows:

- For the biomechanics concentration, thesis option:
  - Under required courses:
    - Revise the number of required courses from 16 credit hours to 17 credit hours
    - Remove the “KNS 515 (3 credit hours)” bullet point
    - Add “KNS 575 (3 credit hours)” bullet point
    - Revise the number of credit hours for KNS 662 from 1 to 2 credit hours
  - Under electives:
    - Revise the number of credit hours from 8 to 7 credit hours

- For the biomechanics concentration, project option:
  - Under required courses:
    - Revise the number of required courses from 16 credit hours to 17 credit hours
    - Remove the “KNS 515 (3 credit hours)” bullet point
• Add “KNS 575 (3 credit hours)” bullet point
• Revise the number of credit hours for KNS 662 from 1 to 2 credit hours
• Add a bullet point “KNS 501 (3 credit hours)”
• Under electives:
  • Revise the number of credit hours from 14 to 10
  • Move the first bullet point, “KNS 501”

• For the Biomechanics Concentration, Course Only with Comprehensive Exam option:
  • Under required courses:
    • Revise the number of credit hours from 16 to 17
    • Remove the “KNS 515 (3 credit hours)” bullet point
    • Add bullet point, “KNS 575 (3 credit hours)”
    • Revise credit hours for KNS 662 from 1 to 2
  • Under electives:
    • Revise number of credit hours from 14 to 13

Text should now read as follows:

Biomechanics Concentration, Thesis Option
Required Courses

• Required Courses (17 credit hours)
  o KNS 508 (3 credit hours)
  o KNS 513 (3 credit hours)
  o KNS 531 (3 credit hours)
  o KNS 575 (3 credit hours)
  o KNS 634 (3 credit hours)
  o KNS 662 (2 credit hour)

• KNS 500 (6 credit hours)
• Electives (7 credit hours), thesis option students must take a statistics course approved by the advisor.
  o KNS 521
  o KNS 532
  o KNS 533
  o KNS 534
  o KNS 535
  o KNS 536
  o KNS 543
  o KNS 567
  o KNS 569
  o KNS 593
  o KNS 622
  o KNS 635
  o KNS 664
  o KNS 693
  o BME 529
  o BME 531
  o BME 631
  o BME 632
  o SOWK 605
  o SOWK 606
  o STAT 531
  o STAT 532

Biomechanics Concentration, Project Option
Required Courses

• Required Courses (17 credit hours)
  o KNS 508 (3 credit hours)
  o KNS 513 (3 credit hours)
  o KNS 531 (3 credit hours)
  o KNS 575 (3 credit hours)
  o KNS 634 (3 credit hours)
  o KNS 662 (2 credit hours)

• KNS 501 (3 credit hours)
• Electives (10 credit hours) project option requires a minimum of one additional 3 credit hour Kinesiology course
  o KNS 521
  o KNS 532
  o KNS 533
  o KNS 534
  o KNS 535
Biomechanics Concentration, Course Only with Comprehensive Exam

Required Courses

- Required Courses (17 credit hours)
  - KNS 508 (3 credit hours)
  - KNS 513 (3 credit hours)
  - KNS 531 (3 credit hours)
  - KNS 575 (3 credit hours)
  - KNS 634 (3 credit hours)
  - KNS 662 (2 credit hours)

- Electives (13 credit hours) project option requires a minimum of one additional 3 credit hour Kinesiology course
  - KNS 521
  - KNS 532
  - KNS 533
  - KNS 534
  - KNS 535
  - KNS 536
  - KNS 543
  - KNS 567
  - KNS 569
  - KNS 593
  - KNS 622
  - KNS 635
  - KNS 664
  - KNS 693
  - BME 529
  - BME 531
  - BME 631
  - BME 632
  - SOWK 605
  - SOWK 606
  - STAT 531
  - STAT 532

Rationale: The increase of the credit hours for the required courses is necessary due to the increased 1 credit hour for KNS 662. KNS 662 is now taught every semester and is a 1 credit hour course (Seminar). The MS students will need two registrations, one per semester. KNS 515 is being removed from the curriculum because it does not service the graduate students in Biomechanics. It is being replaced by KNS 575. Students in the Project Option will be required to complete a 3 credit hour project by registering for KNS 501. This course therefore, is being moved from the list of electives to a stand-alone course as a required component of the Project Option track. Impact on other units: The changes of the credit hour requirement will not have an impact on units outside of the KNS Major. Financial impact: No financial impact on department or college budget is anticipated. Additional Documentation: No additional approvals are needed.

REVISE PROGRAM REQUIREMENTS – KINESIOLOGY AND SPORT STUDIES MAJOR, PHD, SPORT STUDIES CONCENTRATION

In the 2020-2021 Graduate Catalog, revise as follows:

1) Revise the number of graduate credit hours from 72 to 78
2) Add the following new bullet points under the Cognate section:
   - Professional Seminar (6 credit hours)
     - SPST 640
Text should now read as follows:

Credit Hours Required

78 graduate credit hours beyond the baccalaureate degree (At least 24 of these credit hours, exclusive of the dissertation, must be beyond the Master’s level)

Required Courses
- Cognate (6 credit hours)
  - Must come from an area related to and supportive of the concentration and specialization
- Professional Seminar (6 credit hours)
  - SPST 640

Rationale: Review of the curriculum by the faculty deemed it necessary to include a professional development course in the curriculum. Impact on other units: The addition of the courses will not have an impact on units outside of the Sport Studies program. Financial impact: No financial impact on department or college budgets’ anticipated. Additional Documentation: No additional approvals are needed.

REVISE PROGRAM REQUIREMENTS- RECREATION AND SPORT MANAGEMENT MAJOR, MS (SPORT MANAGEMENT CONCENTRATION)

In the 2020-2021 Graduate Catalog, revise Thesis and Course Only without Comprehensive Exam options to:

1) remove course RSM 560 from the Recreation and Sport Management Electives lists.

Rationale: RSM 560 is being dropped because the content is being combined with RSM 544. Impact on other units: The dropping of the course will not have an impact on units outside of the RSM Major. Financial impact: No financial impact on department or college budgets’ anticipated. Additional Documentation: No additional approvals are needed.

DEPARTMENT OF PUBLIC HEALTH

REVISE PROGRAM REQUIREMENTS – PUBLIC HEALTH MAJOR, MPH, COMMUNITY HEALTH EDUCATION CONCENTRATION AND THE HEALTH POLICY AND MANAGEMENT CONCENTRATION

In the 2020-2021 Graduate Catalog, reduce the number of required concentration courses and increase the number of required elective hours as shown below:

- Community Health Education Concentration — Course Only with Comprehensive Exam
  Under the Community Health Education Concentration Courses
  1) Revise the number of credit hours from 13 to 16
  2) Remove the PUBH 550 bullet point
  3) Revise the number of elective credit hours from 3 to 6

- Health Policy and Management Concentration — Course Only with Comprehensive Exam
  Under the Health Policy and Management Concentration Courses
  1) Revise the number of credit hours from 13 to 16
  2) Remove the PUBH 526 bullet point
  3) Revise the number of elective credit hours from 3 to 6

Text should now read as follows:
- Community Health Education Concentration Courses (16 credit hours)
  o PUBH 536
  o PUBH 555
  o PUBH 556 (4 credit hours)
  o Electives (6 credit hours), consult with academic advisor for selection and approval of elective.

- Health Policy and Management Concentration Courses (16 credit hours)
  o PUBH 525
  o PUBH 527 (4 credit hours)
  o PUBH 612
  o Electives (6 credit hours), consult with academic advisor for selection and approval of elective.

Rationale: The Council on Education for Public Health (CEPH) requires specific competencies be addressed in the MPH Foundation courses. This has resulted in redundancy of content within two concentration courses i.e. students are receiving similar content in both foundation and concentration courses. As such, we are eliminating the redundancy by removing the aforementioned courses as required courses for the concentrations. The associated credit hours will be converted to elective hours allowing more flexibility for a student to
seek coursework specific to their interest and/or career trajectory. Impact on other units: None as evidenced by statement form the MS-MPH and JD-MPH programs (see attached email communication). Financial impact: None. Additional Documentation: None required.

DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

TEACHER EDUCATION MAJOR, MS

♣ DROP CONCENTRATION
   English as a Second Language Education Professional Internship Concentration

♣ DROP CONCENTRATION
   English Education Professional Internship Concentration

+ ADD CONCENTRATION
   English Education and English as a Second Language Professional Internship Concentration

REVISE TEACHER EDUCATION MAJOR, MS

In the 2020-2021 Graduate Catalog, revise the Teacher Education Major, MS page as follows:

1) To remove the “English as a Second Language Education Professional Internship Concentration” listing and add “English Education and English as a Second Language Professional Internship Concentration” under the Professional Internship Concentration for Initial Licensure – Thesis

2) Under the Professional Internship Concentrations – thesis or course only with comprehensive examination paragraph, add the following statement to end of the paragraph:

   Note that several of the concentrations have dual or triple pathway options that lead to additional licensure in English as a Second Language and/or Special Education. Program contact information can be found at the Theory and Practice in Teacher Education webpage: https://tpte.utk.edu/msprograms/.

3) At the appropriate bullet, remove the dropped concentration names and replace with the new concentration name.

4) Under the “Practitioner Concentration – revise to add the following two specializations:
   Art Education Specialization
   American Sign Language Specialization

5) Course Only without Comprehensive Exams heading, revise to add two paragraph to read as follows:

   The Practitioner concentration is designed for students who are earning an initial teaching credential while serving as an instructor of record in a school (i.e. as a “Job-Embedded Practitioner”). 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. The Practitioner concentration in Teacher Education is offered as an online program only via Distance Education.

6) Under the bullet, Specialization courses Heading, add the following heading and text:

   American Sign Language Education
   ASL 421
   ASL 422
   ASL 435
   ASL 455
   ASL 545

   Art Education
   ARED 401
   ARED 510
   ARED 520
Rationale: To meet the demand for K-12 teachers in high-needs areas, TPTE has Tennessee State Department of Education approval to offer some of our programs “bundled” to lead to dual or even triple licensure, e.g., Elementary Education and Special Education. These dual and triple pathways are not separate degree programs from (i.e., not distinct from our Professional Internship concentrations; they merely include courses from other concentrations to meet licensure requirements in an additional one or two endorsement areas). These dual and triple pathways will continue to change to meet evolving state demands. Thus, it seems best to simply include a statement that we offer dual and triple licensure pathways but not list them or seek to have them approved as distinct degree programs. They are not intended as such; they are simply intended to lead to more than one license.

There is a growing need for the MS in Teacher Education, Practitioner Concentration, to be delivered online to meet demands associated with an increasing K-12 teacher shortage in Tennessee (and nationally) particularly in documented high-needs endorsement areas. Students enrolled in this program are teachers of record in high-need endorsement areas. Offering the program online meets their needs for flexibility in scheduling and allows UTK to offer the program to students in various parts of the state. The online option will allow us to recruit students across the state of Tennessee.

Impact on other units: The program has no anticipated impact on other units. No other units at UTK offer a similar program.

Financial Impact: None anticipated. Students in the Teacher Education EdS will enroll in the same courses as those enrolled in the M.S. in Teacher Education Practitioner concentration as an option for the Distance Education campus code.

Additional documentation: No additional approval is required. We have support letters for the addition of the Art Education and ASL Education Practitioner specializations. The changes are not substantive and do not need to be reported to SACSCOC.

**TEACHER EDUCATION MAJOR, EDS**

**ADD CONCENTRATION – TEACHER EDUCATION MAJOR, EDS**

Practitioner concentration

**REVISE TEACHER EDUCATION MAJOR, EDS**

In the 2020-2021 Graduate Catalog, revise the program description first paragraph, as shown below (adding the last two sentences to the program description).

The department offers a Specialist in Education (EdS) degree with a major in teacher education. This degree is designed for those students who already possess a master’s degree in education. The department offers a Distance Education option for individuals who hold a master’s degree in education and who are employed as a Job-Embedded practitioner. Program information can be found at the Theory and Practice in Teacher Education webpage: https://tpete.utk.edu/edsprograms/.

Under Campus Code – add the Practitioner concentration as an option for the Distance Education campus code.

Rationale: Coursework for those enrolled in the Job-Embedded licensure practitioner program is all online in order to meet the state’s need for more teachers. Students who already have a M.S. in Education can pursue the EdS while completing the Job-Embedded licensure courses. Impact on other units: The program has no anticipated impact on other units. No other units at UTK offer a similar program. Financial Impact: None anticipated. Students in the Teacher Education EdS will enroll in the same courses as those enrolled in the M.S. in Teacher Education Practitioner program. Additional documentation: No additional approval is needed. The changes are not substantive and do not need to be reported to SACSCOC.

**REVISE THE INFORMATION PAGE FOR THE DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION**

In the 2020-2021 Graduate Catalog, revise the department information page as follows:

**TEACHER EDUCATION** (revise the first paragraph as shown below)

The department offers programs for students seeking Tennessee Licensure in the following areas – art education (K-12); ASL education (PreK-12); education of the deaf and hard of hearing (PreK-12); elementary teaching (K-5); mathematics (6-8); mathematics education; science (6-8); science education; secondary content field teaching (6-12) in English education and English as a Second Language (PreK-12); sciences education; special education (K-12); World Language education (PreK-12); gifted education endorsement; reading endorsement. The program features a professional year...
internship with accompanying coursework, which may lead to a master’s degree with a major in teacher education. Specialized coursework leading to a certificate in Cultural Studies in Education, Rehabilitation Counseling for the Deaf and Urban Education (in the area of urban teaching) is also available. The department also offers a program designed for students interested in applied behavior analysis.

Add the following statement to the end of the Distance Education paragraph:

**Distance Education**

The department also offers a Distance Education option for a Specialist in Education degree with a major in Teacher Education with a concentration in Educational Technology and a Practitioner concentration for those employed as a Job-Embedded practitioner.

**Rationale:** To meet the demand for K-12 teachers in high-needs areas, TPTE has Tennessee State Department of Education approval to offer some of our programs “bundled” to lead to dual or even triple licensure, e.g., Elementary Education and Special Education. These dual and triple pathways are not separate degree programs from (i.e., not distinct from our Professional Internship concentrations; they merely include courses from other concentrations to meet licensure requirements in an additional one or two endorsement areas). These dual and triple pathways will continue to change to meet evolving state demands. Thus, it seems best to simply include a statement that we offer dual and triple licensure pathways but not list them or seek to have them approved as distinct degree programs. They are not intended as such; they are simply intended to lead to more than one license.

There is a growing need for the MS in Teacher Education, Practitioner Concentration, to be delivered online to meet demands associated with an increasing K-12 teacher shortage in Tennessee (and nationally) particularly in documented high-needs endorsement areas. Students enrolled in this program are teachers of record in high-need endorsement areas. Offering the program online meets their needs for flexibility in scheduling and allows UTK to offer the program to students in various parts of the state. The online option will allow us to recruit students across the state of Tennessee.

**Impact on other units:** The program has no anticipated impact on other units. No other units at UTK offer a similar program.

**Financial Impact:** None anticipated. Existing faculty in programs that participate in dual or triple licensure pathways will teach and supervise the coursework and clinical experiences. This change is not anticipated to negatively impact the department or college financially. Additionally, it is hoped that enrollment in the program will increase once the Practitioner Concentration goes online. As numbers in TPTE’s traditional teacher preparation pathways (primarily our MS, Professional Internship program, formerly the Track 2 program) have decreased over the last decade, consistent with national trends, the Practitioner concentration was developed to address state needs and to mitigate enrollment declines in traditional programs. Taking it online will allow us to do that better and will generate funds that can be used to support program needs (e.g., paying additional clinical supervisors, purchasing technology to support online supervision and communication with students in areas of the state too distant for routine travel).

**Additional documentation:** No additional approval is required. We have included support letters for the addition of the Art Education and ASL Education Practitioner specializations. The changes are not substantive and do not need to be reported to SACSCOC.
TICKLE COLLEGE OF ENGINEERING

All Changes Effective Fall 2020

I. COURSE CHANGES

DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING

(CBE) Chemical and Biomolecular Engineering

REVISE (DE) PREREQUISITE(S)

CBE 647  Advanced Topics in Transport Phenomena (3)
(DE) Prerequisite(s): 547.
Formerly: (DE) Prerequisite(s): 547 and 548.
Rationale: CBE 548 has been dropped from the catalog. The course descriptions for 547 and 647 already align such that 547 is the only necessary prerequisite. Impact on other units: None. Financial impact: None. Note: This is a minor, low-impact change and this course is typically taken by only a few students and only by CBE graduate students.

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

(CE) Civil Engineering

ADD

CE 586  Infrastructure Assessment, Evaluation, and Maintenance (3) Basic mechanisms of infrastructure damage and deterioration (external load induced as well as materials related), related assessment methods (e.g., non-destructive evaluation and testing (NDE/NDT)), strengthening strategies, and data analytics tool to arrive at informed decisions for infrastructure maintenance.
Recommended Background: CE 474 or equivalent.
Rationale: Current graduate courses in the department do not cover the material described in this course. This course will enable students to understand: (a) the mechanisms of failure of civil engineering structures and materials, (b) the methodologies used in evaluation of the damage type and severity using techniques from various fields of science and engineering, (c) the various types of damage mitigation and strengthening techniques and, and (d) the methodologies used in infrastructure reliability and resilience assessment. Impact on other units: None. Financial impact: None.

(RE) Prerequisite(s): 560 or equivalent; and CE 538 or CE 561.
Rationale: Current graduate courses in the department do not cover the material described in this course. Finite element modeling of “interesting” (doctoral level research) structural or material response typically requires some sort of nonlinear effects. Students from this course will be empowered to develop and implement material models for research and to launch forward to other topics of nonlinearity at the state of the art in knowledge (contact mechanics, friction, fracture, plasticity, damage, corrosion, etc). This course has been offered as a CE 691 (Special Topics) course. Impact on other units: None. Financial impact: None.

CE 663  Advance Concepts in Fiber Reinforced Composites (3) Review Lamina Mechanics; Experimental Methods and Composites Characterization; Elastic Behavior of Multidirectional Laminates; Hygrothermal Effects; Stress and Failure of Laminates; Interlaminar Stresses and Strength; Design Methodology for Structural Composite Materials; Invariant Based Approach to Stiffness and Strength.
(RE) Prerequisite(s): 563 or consent of instructor.
Rationale: The course is critical for students who are interested in composites from multiple engineering programs. Already offered under CE 691 (special topics) due to needs for an advance course in fiber reinforced composites. During Fall, it is offered as Adv. Concepts in Fiber Reinforced Composites - 50112 - CE 691 – 001. Impact on other units: None. Financial impact: None.

DROP

CE 584  Construction Conflicts, Claims, and Disputes (3)
Rationale: (1) The Contract/legal affairs certificate is proposed to be dropped. (2) Faculty members in the construction area do not have capacity to teach this course. Impact on Other Units: None. Financial Impact: None.
DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

(COSC) Computer Science

ADD

COSC 540 Advanced Software Engineering (3) Advanced coverage of software processes and technologies that can be used on large projects to help design, manage, maintain, and test software.

Rationale: There is a need for a graduate level software engineering course in the catalog. The course has previously been taught as COSC 494/594: Special Topics in Spring 2019 with enrollment of 28 students. There are currently two faculty that can rotate as instructors for the course. Impact on other units: None. Financial impact: None.

COSC 569 Human Factors in Cybersecurity (3) A broad introduction to human-computer interaction (HCI) and its impact on the theory and practice of cybersecurity. Topics include the research methods in HCI, ethics, authentication, usable secure communication, phishing, usable cryptographic libraries, inclusivity/diversity in system design, and human-aware policy creation. Coursework focuses on helping students adapt a human-aware mindset regarding the design, implementation, and use of cybersecurity tools and principles.

Credit Restriction: Students cannot receive credit for both 469 and 569.
Recommended Background: Computer Science 366.

Rationale: This course is primarily designed for students in the EES Cybersecurity Minor and will serve as one of the elective credit options in that Minor. This course will help students better understand how to design systems that elicit secure behavior from users as well as consider the individual and societal impacts of cybersecurity tools and techniques. The increasing focus on cybersecurity in software engineering positions means that conceptual skills developed by our students in this course will enhance their competitiveness on the job market. The topics covered by this course are specifically selected to directly relate to subjects graduates will need to understand in the workplace. It is also a useful elective for computer science students generally, as this is the only course in the current curriculum that covers research methods in human-computer interaction (HCI). These research methods are important tools for software developers and will provide a competitive edge to students as they enter the workplace. Additionally, these methods are a useful tool for graduate students in a range of disciplines including, but not limited to, software engineering, human-machine interfaces, visualization, robot-human interactions. COSC 366 provides sufficient background on cybersecurity for the topics covered in this course. Required mathematical concepts will be self-contained. Impact on other units: none. Financial impact: none. This is a medium impact change because it is new but is not seeking general education or experience learning approval and is not expected to be a required course for majors outside the host college.

REVISE RECOMMENDED BACKGROUND

COSC 534 Network Security (3)

Recommended Background: Computer Science 366 and Electrical and Computer Engineering 453.

Formerly: Recommended Background: Electrical and Computer Engineering 453, Electrical and Computer Engineering 461.

Rationale: Students in COSC 534 should have background covered in COSC 366 and ECE 453. Impact on other units: none. Financial impact: none. This is a low-impact change as it is routine maintenance of an existing course.

REVISE TITLE, DESCRIPTION, AND RECOMMENDED BACKGROUND

COSC 566 Software Security (3) An in-depth introduction to software security. The focus is on identifying vulnerabilities in software, exploiting vulnerabilities in software, and software development best practices for avoiding vulnerabilities during the design, implementation, testing, and deployment of software. Coursework involves hands on experience exploiting software vulnerabilities to increase understanding, awareness, and appreciation of software vulnerabilities.

Recommended Background: Computer Science 366.

Formerly: Web Security (3) In-depth introduction to core web technologies, related security concerns, and common vulnerabilities. Hands on experience with multi-tier web applications (HTML, JavaScript, HTTP, application frameworks, and databases), vulnerability analysis and exploitation (injection, authentication, access control, client-side and server-side issues), and building secure applications.

Recommended Background: Computer Science 302.

Rationale: It is important for students to understand how to secure software other than web applications. The course has been expanded to include more content on securing software generally. The course title, description, and prerequisites have been updated to reflect these changes. Impact on other units: none. Financial impact: none. This is a low-impact change as it is routine maintenance of an existing course.

REVISE RECOMMENDED BACKGROUND

COSC 583 Applied Cryptography (3)

Recommended Background: 311 or 317 and 366.

Formerly: Recommended Background: Mathematics 251, Computer Science 311.

Rationale: Students in COSC 583 require background in COSC 311/317 and COSC 366. Background in MATH 251 is not required. Impact on other units: none. Financial impact: none. This is a low-impact change as it is routine maintenance of an existing course.
(ECE) Electrical and Computer Engineering

REVISE TITLE

ECE 533 Introduction to VLSI Design (3)
Formerly: Advanced MOS Concepts and VLSI Design (3)
Rationale: The "Advanced MOS" part of the title speaks to more device coverage than is included in this course. This course focuses on VLSI circuit design. Impact on other units: None. Financial impact: None.

REVISE DESCRIPTION AND RECOMMENDED BACKGROUND

ECE 569 Mobile and Embedded Systems Security (3) In-depth study on vulnerabilities and threat vectors associated with mobile and embedded devices, such as smartphones, wearable devices, and IoT devices. Topics include security features and limitations of mobile operating systems, secure programming, mobile location & activity privacy, user/device authentication, IoT wireless security, side-channel attacks on mobile/wearable devices, and security & privacy breaches on smart home devices. Coursework focuses on improving knowledge and awareness of mobile and embedded systems' security issues, through individual homework assignments and an intensive group project involving hands-on research.
Recommended Background: COSC 360 or 367.
Formerly: Introduction to mobile device security with a specific emphasis on mobile phones. Focus on mobile security in payment systems, authentication (e.g., biometric), and mobile malware. Hands-on experience with vulnerabilities and exploits with mobile device systems. In-depth case studies of mobile devices in medical device systems and transportation systems.
Recommended Background: Computer Science 302.
Rationale: The course description has been updated to include the broader range of topics that are covered in this course. The recommended background has been updated because the course assignments and project require some experience with systems programming. Impact on other units: None. Financial impact: None.

REVISE DESCRIPTION AND REMOVE (RE) PREREQUISITES

ECE 625 Utility Applications of Power Electronics (3) Electric power quality, harmonics, voltage sag, reactive power compensation, transient stability. Structure and control of power converters, multilevel converters, active power filters, static series and shunt compensators, FACTS, HVDC, microgrids, interface with distributed energy resources.
Formerly: Electric power quality, harmonics, voltage sag, reactive power compensation, transient stability. Structure and control of power converters, multilevel converters, active power filters, static series and shunt compensators, FACTS, HVDC.
(RE) Prerequisite(s): 521 and 523 or consent of instructor.
Rationale: ECE 523 is no longer a course and ECE 521 no longer applies. Impact on other units: None. Financial impact: None.

REVISE (RE) PREREQUISITES

ECE 642 Wireless Communications (3)
(RE) Prerequisite(s): Satisfactory completion of 504.
Formerly: (RE) Prerequisite(s): Satisfactory completion of 441 and 504.
Rationale: There is no ECE 441 in the graduate or undergraduate catalog. Impact on other units: None. Financial impact: None.

DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING

(ENMG) Engineering Management

DROP ACADEMIC DISCIPLINE AND ALL COURSES

ENMG 500 Thesis (1-15)
ENMG 501 Capstone Project (3-6)
ENMG 502 Registration for Use of Facilities (1-15)
ENMG 532 Productivity and Quality Engineering (3)
ENMG 533 Theory and Practice of Engineering Management (3)
ENMG 534 Financial Management for Engineering Managers (3)
ENMG 536 Project Management (3)
ENMG 537 Analytical Methods for Engineering Managers (3)
ENMG 538 New Venture Formation (3)
ENMG 539  Strategic Management in Technical Organizations (3)
ENMG 541  Managing Change and Improvement in Technical Organizations (3)
ENMG 542  Design of Experiments for Engineering Managers (3)
ENMG 543  Legal and Ethical Aspects of Engineering Management (3)
ENMG 595  Special Topics in Engineering Management (3)
ENMG 600  Doctoral Research and Dissertation (3-15)
ENMG 601  Systems Theory and Engineering (3)
ENMG 602  Supply Chain and Logistics Systems Engineering (3)
ENMG 691  Advanced Topics in Engineering Management (3)

Rationale: Dropping 18 courses under the ENMG subject code. Six courses (500, 501, 502, 595, 600, 691) are true course drops. The other 12 courses are coming forward under the IE subject code as ADDs. Department is eliminating the distinction between engineering management courses and industrial engineering courses. Impact on other units: Enrollments in the corresponding IE courses will increase, but overall teaching load will not be affected. Financial Impact: None.

(IE) Industrial Engineering

ADD
IE 533  Theory and Practice of Engineering Management (3) Principles of engineering management, including: business and organization design, culture, leadership, marketing and competition in global economy, motivation and performance management, empowerment, organizational behavior, and diversity. Systems thinking, learning organizations, and systems dynamics modeling. Principle application to work settings and case studies.


IE 535  Productivity and Quality Engineering (3) Productivity and quality measures defined and used to analyze current competitive position of important sectors of American industry with respect to national and international competition. Study of management theories and systems which promote or inhibit productivity or quality improvements.

IE 536  Project Management (3) Development and management of engineering and technology projects. Project proposal preparation; resource and cost estimating; and project planning, organizing, and controlling: network diagrams and other techniques. Role of project manager: team building, conflict resolution, and contract negotiations. Discussion of typical problems and alternative solutions. Case studies and student projects.

Recommended Background: Graduate standing in Engineering or Business.

IE 537  Analytical Methods for Engineering Managers (3) Survey of management analysis and control systems through industrial engineering techniques. Qualitative and quantitative systems: methods analysis, work measurement, incentive systems, wage and salary development, production and inventory control, facility layout, linear programming, and applied operations research techniques.

IE 538  New Venture Formation (3) Factors other than mechanical or chemical which enter into successful establishment of manufacturing or service enterprise. Organizational and financial planning and evaluation. Cost and location studies and market analysis to determine commercial feasibility of new ventures.

Recommended Background: Graduate standing in Engineering or Business.

IE 539  Strategic Management in Technical Organizations (3) Strategic planning process and strategic management in practice; corporate vision and mission; product, market, organizational, and financial strategies; external factors; commercialization of new technologies; and competition and beyond.

Recommended Background: Graduate standing in Engineering or Business.


Recommended Background: Graduate standing in Engineering or Business.


(RE) Prerequisite(s): Industrial Engineering 516.
IE 543 Legal and Ethical Aspects of Engineering Management (3) Legal aspects imposed by government and ethical considerations in engineering practice. Selected readings, lecture, discussion, and student presentations. Current topics from government and industry.

IE 601 Systems Theory and Engineering (3) Technology course that will examine theoretical foundations of General System Theory applied to engineering and organizational enterprises addressing issues concerning systems, the effectiveness of organizations in the context of traditional management related issues, as well as incorporating the critical impact of systems thinking on the socio-technical environment. Among the topics to be covered in the course are: the meaning of General Systems Theory (GST); GST and the unity of science; the concept of Equifinality; the characteristics and modeling of open systems; the concepts of the Learning Organization; the principle of Leverage; building Learning Organizations; and issues related to Socio-Technical Systems. Systems Engineering focuses on defining customer needs and required functionality early in the development cycle, documenting requirements, then proceeding with design synthesis and system validation while considering the complete problem including operations, performance, test, manufacturing, cost, and schedule. This subject emphasizes the links of systems engineering to fundamentals of decision theory, statistics, and optimization.

(RE) Prerequisite(s): 533.
Registration Restriction(s): Minimum student level – graduate.

IE 605 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): Industrial Engineering 537.
Registration Restriction(s): Minimum student level – graduate.

COURSE EQUIVALENCY TABLE

<table>
<thead>
<tr>
<th>Current Prefix / Course Numbers</th>
<th>Equivalent New Courses, effective fall 2020</th>
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<tbody>
<tr>
<td>ENMG 532 Productivity and Quality Engineering</td>
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</tr>
</tbody>
</table>

Rationale: Six courses (500, 501, 502, 595, 600, 691) are true course drops. Twelve courses (533, 534, 535, 536, 537, 538, 539, 541, 542, 543, 601, 605) are coming forward under the IE subject code as ADDs. Department is eliminating the distinction between engineering management courses and industrial engineering courses. Impact on other units: Enrollments in the corresponding IE courses will increase, but overall teaching load will not be affected. Financial Impact: None.

ADD

IE 560 Introduction to Proofs for Engineers (3) An introduction to real and convex analysis for engineers providing groundwork for optimization and probability theory. Topics include convergence, completeness, compactness, and continuity.

Rationale: We have redesigned the Ph.D. program for Industrial Engineering. A set of core courses have been designed to better prepare students for research in ISE. These courses will be primarily for Ph.D. students or advanced master’s students. This course is part of a set of core courses included in a redesigned ISE Ph.D. curriculum to better prepare students for research in ISE. Impact on other units: Math could be affected; however, this course provides a basic background to aid in understanding proofs rather than the deep knowledge provided by MATH 545 and 546. Students needing such tools will still need to take MATH 545 and 546. Financial Impact: A tenure-track position for ISE was added at UTSI adding to the department’s research and teaching capabilities. We don’t expect the college to provide additional resources.
IE 561 Decision Support and Electronic Health Records (3) Examination of applications and systems to promote interoperability and decisions support among healthcare applications and systems including IMPACT and MARCA. Emphasis on evidence-based practice in clinical support systems. (DE) Prerequisite: Nursing 557 and Information Sciences 584.

Rationale: Course 561 is part of a proposed Health Informatics Certificate Program offered jointly with ISE, College of Nursing, and College of Communication and Information.

Impact on other units: Based on a review of programs, a similar certificate (or degree program) is non-existent on the UT Knoxville campus, although a healthcare informatics program through the College of Communications and Information Sciences at the Memphis campus was mentioned on dated web pages. No additional information was available. A follow up with all contact information and any related programs at the College of Communications and Information Sciences confirmed the information was outdated.

Financial impact: A proposal was submitted to Dr. Jennifer Gramling since the program will be an online program. This new program would be funded through the Distance Education funding model of 85% tuition return to the colleges. With this funding model, the Dean of the College of Nursing, Dr. Victoria Niederhouser, the Department Head of Industrial and Systems Engineering, Dr. John Kobza, and the Director of the School of Information Sciences, Dr. Diane Kelly, approve of the newly designed jointly offered Healthcare Informatics Program.

IE 565 Applied Data Science (3) An introduction to applied data science including machine learning and data mining tools. Topics include supervised and unsupervised algorithms, techniques for improving model performance, evaluation techniques and software packages for implementation. Emphasis will be put on real-world applications in various domains including healthcare, transportation systems, etc. (DE) Prerequisite: Programming course; statistics course.

Rationale: We have redesigned the Ph.D. program for Industrial Engineering. A set of core courses have been designed to better prepare students for research in ISE. These courses will be primarily for Ph.D. students or advanced master’s students. This course is part of a set of core courses included in a redesigned ISE Ph.D. curriculum to better prepare students for research in ISE.

Impact on other units: The Data Science and Engineering program should not be affected by this course. It focuses on the application of basic data science tools. Financial Impact: A tenure-track position for ISE was added at UTSI adding to the department’s research and teaching capabilities. We don’t expect the college to provide additional resources.

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

(MSE) Materials Science and Engineering

ADD

MSE 543 Quantum Mechanics for Engineers (3) Covers fundamentals of quantum mechanics using an approach suitable for engineering undergraduates and beginning graduate students. Topics will include mathematical preliminaries, Dirac notation, two-state systems, the Bloch sphere, the Schrödinger wave equation, operators and time evolution, the square well, the harmonic oscillator, the hydrogen atom, angular momentum, and approximation methods. Credit Restriction: Students cannot receive credit for both MSE 443 and MSE 543. Recommended Background: Calculus, linear algebra, and physics taught at the level of Engineering Fundamentals.

Rationale: A basic knowledge of quantum mechanics has become essential in many areas of engineering, including nanotechnology, materials science, photonics, and cutting edge information technologies such as quantum computing and cryptography. This course is designed to teach the concepts and techniques of quantum mechanics to students with a wide variety of scientific and engineering backgrounds. Impact on other units: none. Financial impact: none.

MSE 610 Fatigue and Fracture of Advanced Materials (3) Fatigue and fracture of materials: stress and strain-controlled fatigue, fatigue and fracture mechanisms, theoretical cohesive strength, mechanics of fracture, fatigue and fracture behavior of conventional as well as advanced materials. Recommended Background: MSE 512. Registration Restriction(s): Minimum student level – graduate.

Rationale: There has been a recent, rapid development in new and novel advanced materials (such as high-entropy alloys) for structural and advanced engineering applications. This said, this course will focus on the fundamentals of fatigue and fracture behavior, as well as their characteristics, in advanced materials. Impact on other units: none. Financial impact: none.

REVISE RECOMMENDED BACKGROUND

MSE 556 Materials for Energy (3) Formerly: Recommended Background: MSE 201.

Recommended Background: MSE 201.

Rationale: The Materials for Energy course is shifting from an exclusive emphasis on photovoltaic materials to a broader investigation of materials relevant to sustainability. Impact on other units: none. Financial impact: none.
DEPARTMENT OF MECHANICAL, AEROSPACE, AND BIOMEDICAL ENGINEERING

(BME) BIOMEDICAL ENGINEERING

REVISE TO SHOW BME IS NOW PRIMARY OWNER

BME 588 Cell and Tissue-Biomaterials Interaction (3) Study of the fundamental principles involved in materials / cell and tissue interactions. Students will learn the underlying cellular and molecular mechanisms in host response to biomaterials. Emphasis will be placed on the integration of biomaterials/neuronal cells and tissue interactions into the design of neural implants (sensors, scaffolds, and therapeutics delivery modalities, etc.). Additional research paper assignments will be given to graduate students registered for this course.

Recommended Background: BME 474.

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

Rationale: BME is now the primary owner of course. Materials Science and Engineering was previously primary owner but they dropped the cross-listed course in the Courses Not Taught in 4 or More Years Report. BME, as secondary, chose to retain the course and become the primary owner.

DEPARTMENT OF NUCLEAR ENGINEERING

(NE) Nuclear Engineering

ADD

NE 560 Introduction to Fusion Technology and Plasma Physics (3) An overview of the technologies associated with proposed fusion energy systems and derivation of fundamental parameters in plasma physics. This is the graduate version of NE 460 and will include additional requirements and assignments for graduate students.

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

Rationale: This course is a graduate version of NE 460 with additional requirements and assignments for graduate students. Impact on other units: none. Financial Impact: none.

NE 565 Medical Physics I Clinic (1) Hands on experience with machine calibrations, linear accelerator operations, medical physics equipment, quality assurance checks and other related medical physics activities. This course will be conducted offsite at a local medical facility.

Grading Restriction: Satisfactory/No Credit grading only.
(NE) Corequisite(s): NE 567.

Registration Restriction: Admission into the Medical Physics MS or Medical Physics graduate certificate.

Rationale: This course is part of the medical physics certificate (added last year). Clinical practice requirements being added. Impact on other units: none. Financial Impact: none.

NE 566 Medical Physics II Clinic (1) Hands on experience with treatment planning, immobilization devices, quality assurance equipment and checks for IGRT systems and CT scanners. This course will be conducted offsite at a local medical facility.

Grading Restriction: Satisfactory/No Credit grading only.
(NE) Corequisite(s): NE 568.

Registration Restrictions: Formal admission into the MS or graduate certificate Medical Physics program.

Rationale: This course is part of the medical physics certificate (added last year). Clinical practice requirements being added. Impact on other units: none. Financial Impact: none.

NE 569 Medical Physics Clinical Experience (3) This is a summer internship offered through local healthcare facilities. The student will rotate through oncology departments to gain experience in all aspects of clinical operations. The student will be required to demonstrate their educational learning at the end of the clinical rotation.

(NE) Prerequisite(s): NE 565 and NE 566 and NE 567, and NE 568.

Registration Restrictions: Formal admission into the MS or graduate certificate Medical Physics program.

Rationale: This course is part of the medical physics certificate (added last year). Clinical practice requirements being added. Impact on other units: none. Financial Impact: none.
NE 573 Nuclear Reactor Kinetics and Dynamics for Reactor Safety and Licensing (3)  An investigation of nuclear reactor kinetics and dynamics with an emphasis on the important reactor multi-physics phenomena and its impact on reactor safety performance. Will examine the outcomes of research projects and international scientific activities in the area of reactor dynamics. The emphasis of the course is to build the foundation necessary to understand the physics and reactor licensing implications of scenarios where reactor kinetics and dynamics are important for reactor and fuel safety. This includes Control Rod Ejection/Drop or Main Steam Line Break in Light Water Reactors, and Unprotected Transient Overpower or Loss of Forced Cooling in advanced reactors. Specific example multi-physics reactor dynamics problems will be discussed to varying degrees of detail, including SL-1, the EBR-II Shutdown Heat Removal Tests, the HTR-10 and HTTR Pressurized Loss-of-Forced Cooling tests, the Southwest Experimental Fast Reactor Tests, and the Oskarshamn-2 Anticipated Transient Without SCRAM stability events.

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

Rationale: This course is part of our evolving nuclear safety center of excellence being created with sponsorship from Bechtel. Being taught as a special topics course by new faculty member. Impact on other units: none. Financial Impact: none.

NE 586 Nuclear Licensing (3)  Covers the nuclear licensing rules and regulations for both commercial and government nuclear facilities that are administered by the Nuclear Regulatory Commission and the Department of Energy. This is the graduate version of NE 486 and will include additional requirements and assignments for graduate students.

Credit Restriction: Students cannot receive credit for both NE 486 and NE 586.

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

Rationale: This course is part of the newly added nuclear safety concentration and nuclear safety center of excellence being created with sponsorship from Bechtel. Being taught as a special topics course NE 494 currently. Impact on other units: none. Financial Impact: none.

DROP 400-LEVEL COURSE FOR GRADUATE CREDIT
NE 460 Introduction to Fusion Technology (3)

Rationale: This course is being replaced with NE 560 with additional requirements and assignments for graduate students. Impact on other units: none. Financial Impact: none.

REVISE TO DROP (RE) PREREQUISITE AND ADD REGISTRATION RESTRICTION
NE 571 Reactor Theory and Design (3)

Registration Restriction: Minimum student level – graduate.

Formerly: (RE) Prerequisite(s): 470 or consent of instructor.

Rationale: This change is useful to minimize overwhelming number of registration exception requests for students who enter our graduate program from other institutions. Impact on other units: None. Financial Impact: None.

REVISE DESCRIPTION, ADD CREDIT RESTRICTION, AND REMOVE REGISTRATION PERMISSION ON PRIMARY CROSS-LISTED COURSE
NE 585 Process System Reliability and Safety (3)  Qualitative and quantitative techniques for assessing and improving process systems reliability and safety. Probabilistic risk assessment, event tree analysis, fault tree analysis, statistical inference, and associated dependent failure analysis. This is the graduate version of NE 485 and requires additional assignments and expectations for graduate students.

Cross-listed: (Same as Chemical and Biomolecular Engineering 585 and Industrial Engineering 585.)

Credit Restriction: Students cannot receive credit for both NE 485 and NE / Industrial Engineering / Chemical and Biomolecular Engineering 585.

Formerly: Qualitative and quantitative techniques for assessing and improving process systems reliability and safety. Probabilistic risk assessment, event tree analysis, fault tree analysis, statistical inference, and associated dependent failure analysis.

Registration Permission: Consent of instructor.

Rationale: This course will be taught concurrently with newly-added NE 485 but with additional requirements for graduate students. Impact on other units: none. Financial Impact: none.
II. PROGRAM CHANGES
DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

+ ADD CONCENTRATION - CIVIL ENGINEERING MAJOR, MS

Transportation and Infrastructure Engineering

REVISE PROGRAM OPTIONS – CIVIL ENGINEERING MAJOR, MS

In the 2020-2021 Graduate Catalog, revise the program as follows:

1) Add new concentration and option/requirements for new concentration
2) Revise the Geotechnical / Materials Engineering concentration to also add as a Distance Education option
3) Revise the Transportation Engineering concentration as a “Knoxville Campus” only option
4) Revise to remove the Project option from all concentrations

Concentrations (Required) and Options Available

| Construction Engineering – Thesis, Coursework Only without Comprehensive Exams |
| Geotechnical/Materials Engineering – Thesis, Coursework Only without Comprehensive Exams |
| Geotechnical/Materials Engineering Distance Education – Thesis, Coursework Only without Comprehensive Exams |
| Structural Engineering – Thesis, Coursework Only without Comprehensive Exams |
| Transportation Engineering – Thesis, Coursework Only without Comprehensive Exams |
| Transportation and Infrastructure Engineering – Coursework Only without Comprehensive Exams |

Formerly:
Concentrations (Required) and Options Available

| Construction Engineering – Thesis, Project, Coursework Only without Comprehensive Exams |
| Geotechnical/Materials Engineering – Thesis, Project, Coursework Only without Comprehensive Exams |
| Structural Engineering – Thesis, Project, Coursework Only without Comprehensive Exams |
| Transportation Engineering – Thesis, Project, Coursework Only without Comprehensive Exams |

Rationale: Add one concentration: Transportation and Infrastructure Engineering (distance education option only), specifically distinguish Transportation Engineering as Knoxville Campus only, and add distant education option to the Geotechnical/Materials engineering concentration. Impact on other units: None. Financial impact: None.

REVISE THE CAMPUS CODE AS FOLLOWS:

In the 2020-2021 Graduate Catalog, revise campus code to show distance education options. Removing Transportation Engineering as a DE option.

Campus Code

- Knoxville Campus
- Distance Education
  - Geotechnical/Materials Engineering – Thesis and Course Only without Comprehensive Exam
  - Public Works Engineering — Course Only without Comprehensive Exam
  - Transportation and Infrastructure Engineering — Course Only without Comprehensive Exam

Formerly:

Campus Code

- Knoxville Campus — All concentrations
- Distance Education
  - Public Works Engineering — Course Only without Comprehensive Exam
  - Transportation Engineering — Course Only without Comprehensive Exam

Rationale: Add geotechnical engineering distance education as a second option or is this for only DE? and transportation and infrastructure engineering as distance education options, remove transportation engineering as a distance education option because of more prescriptive requirements that do not enable distance education. Impact on other units: None. Financial impact: None.

REVISE REQUIRED COURSES REQUIREMENTS

In the 2020-2021 Graduate Catalog, revise to add bullet under the Required Courses heading to show that at least 15 credit hours in Civil Engineering or Environmental Engineering courses is required, as shown below:
• A minimum of 15 credit hours in Civil Engineering or Environmental Engineering courses excluding CE 500 or ENVE 500 Thesis. For the Geotechnical/Materials Engineering concentration (for either Knoxville Campus or DE option) requires a minimum of 18 credit hours of CE or ENVE courses.

Rationale: Reintroduce a check that requires that at least half of MS requirements include coursework in the major. Impact on other units: None. Financial impact: None.

REVISE TO REMOVE THE PROJECT OPTION FROM THE OPTIONS AVAILABLE

In the 2020-2021 Graduate Catalog, under the Concentration Heading and the Required Courses Heading remove Project Option and text for Project Option. There will now be two options available – thesis or Course Only without Comprehensive Exams.

Required Courses
• Option Requirements
  o Thesis Option: CE 500 (6 credit hours)
  o Course Only without Comprehensive Exams

Formerly:
Required Courses
Option Requirements
Project Option: CE 590 (3 credit hours), completed under the direction of the student’s major professor

Rationale: Clarify there are two options available. Impact on other units: None. Financial impact: None.

REVISE REQUIREMENTS TO REMOVE PROJECT OPTION REQUIREMENTS

In the 2020-2021 Graduate Catalog, under the Additional Course Requirements remove project option requirements. Retain all information for the course work only without comprehensive exam information.

Additional Course Requirements
• 24 (thesis option) or 30 (coursework only without comprehensive exam) credit hours of courses selected in consultation with the major professor and/or committee.
• Within the coursework only option, students may include 3 credits of CE 590 (Special Problems in Civil Engineering), to pursue a project-oriented MS in consultation with the major professor
• Concentration Specific Courses (included in the above 24 or 30 credit hours). In consultation with the major professor, select courses from the following:

Formerly:
Additional Course Requirements
• 24 (thesis option) or 27 (project option) or 30 (course only without comprehensive exam) credit hours of courses selected in consultation with the major professor and/or committee.
• Concentration Specific Courses (included in the above 24 or 27 or 30 credit hours) students, in consultation with the major professor, select courses from the following

Rationale: Clarify the difference between coursework only (and subcategory of special projects) and thesis options. Impact on other units: None. Financial impact: None.

ADD HEADING AND REQUIREMENTS FOR NEW CONCENTRATION

In the 2020-2021 Graduate Catalog, add text and requirements for the Transportation and Infrastructure Engineering concentration as follows:

Transportation and Infrastructure Engineering
Students take 6 Civil Engineering (CE) and 4 elective courses related to the concentration.

Coursework only option without comprehensive exams:
• Required Courses:
  o Take 2 Transportation Engineering: CE 551, CE 553.
  o Take 3 Construction/Geotechnical/Structural Engineering courses from the following: CE 521 or CE 522, CE 581, and CE 573 or CE 574.
  o Take 1 Environmental Engineering course: ENVE 525.
• Elective Courses:
  o Take 4 additional elective courses based on interest and schedule availability from the following courses. CE 521, CE 522, CE 530, CE 531, CE 532, CE 535, CE 552, CE 554, CE 556, CE 558, CE 559, CE 561, CE 565, CE 571, CE 573, CE 574, CE 582, CE 595, ENVE 530, ENVE 533, ENVE 553, ENVE 558.

Rationale: The transportation concentration has been revised in this academic catalog that makes it incompatible with the multi-disciplinary nature of the past distance education concentration in transportation. This concentration allows more flexibility to take courses across civil engineering areas. Impact on other units: None. Financial impact: None.
ADD HEADING AND REQUIREMENTS FOR THE GEOTECHNICAL/MATERIALS ENGINEERING CONCENTRATION FOR THE DE OPTION

In the 2020-2021 Graduate Catalog, add requirements for the Distance Education Option for the Geotechnical/Materials Engineering concentration as follows:

**Geotechnical/Materials Engineering Concentration Distance Education Option**

- For coursework only students:
  - Required Courses:
    - Take a minimum 2 of the following courses: CE 530, CE 535, CE 538 (or ME 517)
    - In addition, students take a minimum of 3 of the following concentration courses: CE 521, CE 522, CE 531, CE 532, CE 529 (or STAT 537), CE 563, CE 565.
  - Recommended Courses:
    - Take 2 courses from one or two of the following technical focuses:
      - Structural Engineering: CE 571, CE 573, CE 574, CE 576
      - Construction Engineering: CE 581, CE 582
      - Environmental Engineering: ENVE 525, ENVE 530
  - Elective Courses:
    - Remaining courses can be satisfied with approval of their committee.

- For thesis-option students:
  - Required Courses:
    - Take a minimum 2 of the following courses: CE 530, CE 535, CE 538 (or ME 517)
    - In addition, students take a minimum of 3 of the following concentration courses: CE 521, CE 522, CE 531, CE 532, CE 529 (or STAT 537), CE 563, CE 565.
  - Recommended Courses:
    - Take 2 courses from one or two of the following technical focuses:
      - Structural Engineering: CE 571, CE 573, CE 574, CE 576
      - Construction Engineering: CE 581, CE 582
      - Environmental Engineering: ENVE 525, ENVE 530
  - Elective Courses:
    - Remaining courses can be satisfied with approval of their committee.
    - Students take 6 credits of CE 500.

Rationale: There is student demand for a distance education option in geotechnical engineering. There are already distance education offerings in other courses. The geotechnical courses have the capability to be offered (or are already offered) in a distance education format without additional cost. Impact on other units: None. Financial impact: None.

REVISE TEXT AND REQUIREMENTS FOR THE CONSTRUCTION ENGINEERING CONCENTRATION

In the 2020-2021 Graduate Catalog, revise construction engineering concentration required and elective courses. Harmonize language between concentrations as:

**Construction Engineering**

- For coursework only students:
  - Required Courses:
    - Take 3 from the following courses: CE 581, CE 582, CE 583, CE 584, CE 680, CE 681
    - Take 3 from the following courses: CE 581, CE 582, CE 583, CE 584, CE 680, CE 681
  - Elective Courses:
    - Take 4 elective courses related to the concentration with consent of the advisor and/or committee.

- For thesis-option students:
  - Required Courses:
    - Take 3 from the following courses: CE 581, CE 582, CE 583, CE 584, CE 680, CE 681
    - Take 3 from the following courses: CE 581, CE 582, CE 583, CE 584, CE 680, CE 681
  - Elective Courses:
    - Take 2 elective courses related to the concentration with consent of the advisor and/or committee.
    - Take 6 credits of CE 500.

Formerly:

**Construction Engineering**

Students take 4 of the following core courses:

CE 581, CE 582, CE 583, CE 584, CE 680, CE 681
In addition, students are recommended to take 2 courses from one or two of the following technical focuses:

- **Structural Engineering**: CE 560, CE 562, CE 565, CE 571, CE 574, CE 576, CE 671, CE 674
- **Geotechnical and Materials Engineering**: CE 521, CE 522, CE 525, CE 530, CE 535, CE 632
- **Transportation Engineering**: CE 548, CE 551, CE 552, CE 553, CE 554, CE 556, CE 557, CE 559, CE 574, CE 653

Two to four elective courses related to the concentration in consultation with the advisor and/or committee

**Rationale:** Clarify requirements to maintain consistency with other concentrations. Add several courses to reflect change in offerings. Impact on other units: None. Financial impact: None.

### REVISE TEXT AND REQUIREMENTS FOR THE STRUCTURAL ENGINEERING CONCENTRATION

In the 2020-2021 Graduate Catalog, revise structural engineering concentration required and elective courses. Harmonize language between concentrations as:

#### Structural Engineering

- **For coursework only students:**
  - **Required Courses:**
    - Take at least 6 courses from: CE 472, CE 474, CE 535, CE 560, CE 561, CE 562, CE 565, CE 571, CE 573, CE 574, CE 576, CE 671, CE 674, CE 590 (Special Problems in Civil Engineering), CE 595 (Special Topics in Structural Engineering)
  - **Elective Courses:**
    - Take up to 4 elective courses related to the concentration in consultation with the advisor and/or committee

- **For thesis-option students:**
  - **Required Courses:**
    - Take at least 4 courses from: CE 472, CE 474, CE 535, CE 560, CE 561, CE 562, CE 565, CE 571, CE 573, CE 574, CE 576, CE 671, CE 674, CE 595 (Special Topics in Structural Engineering)
  - **Elective Courses:**
    - Take up to 4 elective courses related to the concentration in consultation with the advisor and/or committee
  - Students take 6 credits of CE 500.

**Formerly:**
Concentration Specific Courses (students take 6 courses from the list below)
CE 472, CE 474, CE 535, CE 560, CE 561, CE 562, CE 565, CE 571, CE 573, CE 574, CE 576, CE 671, CE 674
CE 595 (special topics)

Two to four elective courses related to the concentration in consultation with the major professor and/or committee

**Rationale:** Provide more explicit requirements, update course list. Explicitly distinguish difference between thesis and non-thesis tracks. Impact on other units: None. Financial impact: None.

### REVISE TEXT AND REQUIREMENTS FOR THE TRANSPORTATION ENGINEERING CONCENTRATION

In the 2020-2021 Graduate Catalog, revise transportation engineering concentration required and elective courses. Harmonize language between concentrations as:

#### Transportation Engineering

- **For coursework only students:**
  - **Required Courses:**
    - Take 3 of the following courses: CE 551, CE 558, and CE 552 or CE 553
    - Take at least 3 additional Transportation Engineering courses from the following: CE 547, CE 548, CE 552, CE 553, CE 554, CE 556, CE 557, CE 559, CE 651, CE 652, CE 653, CE 590 (Special Problems in Civil Engineering), CE 595 (Special Topics in Transportation Engineering)
  - **Elective Courses:**
    - Take 4 elective courses related to the concentration with consent of the advisor and/or committee.

- **For thesis-option students:**
  - **Required Courses:**
    - Take 3 of the following courses: CE 551, CE 558, and CE 552 or CE 553
    - Take at least 3 additional Transportation Engineering courses from the following: CE 547, CE 548, CE 552, CE 553, CE 554, CE 556, CE 557, CE 559, CE 651, CE 652, CE 653, CE 590 (Special Problems in Civil Engineering), CE 595 (Special Topics in Transportation Engineering)
  - **Elective Courses:**
    - Take 2 elective courses related to the concentration with consent of the advisor and/or committee.
  - Take 6 credits of CE 500.

**Formerly:**
Students take 8 Civil Engineering (CE) and 2 elective courses related to the concentration.
CE 547, CE 548, CE 551, CE 552, CE 553, CE 554, CE 556, CE 557, CE 558, CE 559, CE 651, CE 652, CE 653
CE 595 (special topics)
Rationale: Provide more flexibility and explicit requirements, update course list. Explicitly distinguish difference between thesis and course only options. Give students more latitude to choose elective coursework. Impact on other units: None. Financial impact: None.

DROP CERTIFICATE
Contractual and Legal Affairs in Engineering and Construction Graduate Certificate
Rationale: After evaluation of teaching resources and student interest, we decided this certificate is not best suited for engineering students at this time. There is not sufficient student interest in the certificate and we do not have faculty that are interested in pursuing this certificate program. Impact on other units: The College of Law offers most courses in this certificate program. The College of Law is in agreement to drop the certificate and submitted a parallel proposal for the drop. Financial impact: None. There are no students in this certificate.

REVISE PROGRAM OPTIONS – ENVIRONMENTAL ENGINEERING MAJOR, MS
In the 2020-2021 Graduate Catalog, revise program description to reflect changes in course offerings and improve consistency with other graduate offerings from the department as:

1) Under the Options Available heading, revise to remove the Project option
Options Available
- Knoxville Campus
  - Thesis
  - Course only without comprehensive exams
- Distance Education
  - Course only without comprehensive exam

2) Under the Academic Standards heading, revise the 4th bullet and add a 5th bullet, as shown below:
Academic Standards
- The major professor must approve the student’s choice of option (Thesis, Course only without comprehensive exams).
- Within the Course Only option, students may include 3 credit hours of ENVE 590 (Special Problems in Environmental Engineering) for Independent research or study in consultation with the advisor.

3) Under the Required Courses heading, revise to remove the project option and revise to add program requirements.
Required Courses
- Option Requirements
  - Coursework Option: 30 graduate credit hours
  - Thesis Option: 24 graduate credit hours and 6 credit hours of ENVE 500 Thesis
- 24 (thesis option) or 30 (courses only without comprehensive exam) credit hours selected from the Environmental Engineering Core and Elective Courses selected in consultation with the advisor and/or committee
- For coursework only students:
  - Students take the following core courses: ENVE 511, ENVE 512, ENVE 513, ENVE 550, ENVE 558, ENVE 574
  - Elective courses should be chosen in consultation with the graduate advisor and may include the following courses, among others: CE 485 (or GEOL 485), ENVE 515, ENVE 530, ENVE 533, ENVE 576, ENVE 577, ENVE 586, ENVE 595 (Special topics in Environmental Engineering), ENVE 653, ENVE 655, ENVE 671, ENVE 672, ENVE 691 (Special topics in Environmental Engineering)
- For thesis-option students:
  - Students take the following core courses: ENVE 511, ENVE 512, ENVE 513, ENVE 550, ENVE 558, ENVE 574
  - Elective courses should be chosen in consultation with the graduate advisor and may include the following courses, among others: CE 485 (or GEOL 485), ENVE 515, ENVE 530, ENVE 533, ENVE 576, ENVE 577, ENVE 586, ENVE 595 (Special topics in Environmental Engineering), ENVE 653, ENVE 655, ENVE 671, ENVE 672, ENVE 691 (Special topics in Environmental Engineering)
  - Students take 6 credit hours of CE 500.
4) Revise the Water Resource Engineering Concentration as shown below:

Under the Required Courses Heading, revise to show requirements for the Coursework only option and remove Project Option

Required Courses
- Option Requirements
  - Coursework Option: 30 graduate credit hours
    - Minimum 15 credit hours in ENVE or CE courses, excluding ENVE 500.
  - Thesis Option: 24 graduate credit hours, ENVE 500 Thesis, 6 credit hours

- 24 (thesis option) or 30 (courses only without comprehensive exam) credit hours selected from the Water Resources Engineering concentration

- For coursework only students:
  - Required Courses:
    - Students take the following core courses: ENVE 512, ENVE 515, ENVE 531
  - Elective Courses:
    - Take 4 elective courses in consultation with the advisor and/or committee may include the following courses, among others: CE 485 (or GEOL 485), ENVE 513, ENVE 516, ENVE 525, ENVE 526, ENVE 527, ENVE 530, ENVE 533, ENVE 544, ENVE 595 (Special topics in Environmental Engineering), ENVE 615, ENVE 620, ENVE 653, ENVE 691 (Special topics in Environmental Engineering) BSE 555, ENVE 525 (BSE 525), BSE 543, GEOG 536, STAT 537, STAT 538, STAT 563, ME 536, ME 541, ME 542, ME 644, MATH 571

- For thesis-option students:
  - Required Courses:
    - Take the following core courses: ENVE 512, ENVE 515, ENVE 531
  - Elective Courses:
    - Take 2 elective courses in consultation with the advisor and/or committee may include the following courses, among others: CE 485 (or GEOL 485), ENVE 513, ENVE 516, ENVE 525, ENVE 526, ENVE 527, ENVE 530, ENVE 533, ENVE 544, ENVE 595 (Special topics in Environmental Engineering), ENVE 615, ENVE 620, ENVE 653, ENVE 691 (Special topics in Environmental Engineering) BSE 555, ENVE 525 (BSE 525), BSE 543, GEOG 536, STAT 537, STAT 538, STAT 563, ME 536, ME 541, ME 542, ME 644, MATH 571
  - Minimum 6 credit hours of ENVE 500.

Formerly:

Required Courses
Option Requirements
Thesis Option: ENVE 500 Thesis, 6 credit hours
Project Option: ENVE 590 Special Problem, 3 credit hours, completed under the direction of the student’s major professor
24 (thesis option) or 27 (project option) or 30 (courses only with or without comprehensive exam) credit hours selected from the Water Resources Engineering concentration requires the completion of the following core courses:
ENVE 512
ENVE 515
ENVE 531
CE 485 (GEOL 485)
STAT 532 or STAT 537

Elective courses selected in consultation with the major professor and/or committee
ENVE 513, ENVE 516, ENVE 525, ENVE 526, ENVE 527, ENVE 530, ENVE 533, ENVE 544
ENVE 595 (topics and availability vary each semester)
ENVE 615, ENVE 620, ENVE 653

Additional co-listed and external departmental courses commonly of interest include (but are not limited to):
BSE 555
ENVE 525, (BSE 525)
BSE 543
GEOG 536
STAT 537
STAT 538
ME 541
MATH 571

Rationale: Update course list and clarify major requirements to assure consistency with the requirements of other programs in the department. We have removed the “project option” across the department’s MS programs. Formerly, the “project option” was practically a course-work only option with an independent study course. This project option still exists in practice but is related to specific projects that faculty advisors and students can agree upon as an independent study course/project (ENVE 590). This streamlines the catalog and requires more deliberate faculty mentoring of a project to take this course. We added a bullet in the Academic Standards section to explicitly express that taking an independent study course is still an option, under the coursework only track. Impact on other units: None. Financial impact: None.
DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

COMPUTER SCIENCE MAJOR, MS: REVISE TO REMOVE ACADEMIC STANDARDS TEXT

In the 2020-21 Graduate Catalog, remove the Academic Standards heading and all text.

Formerly:

Academic Standards
All students must file a Master’s Program Plan with the departmental graduate committee specifying which option they have selected, a semester-by-semester schedule of the courses they intend to take, and the members of the student’s master’s committee.

Students may change between options one time by filing an amended Master’s Program Plan and with approval of the departmental graduate committee.

Rationale: It is not necessary for the graduate committee to receive or approve students’ Master’s Program Plans. Impact on other units: None. Financial impact: None.

REVISE TEXT – COMPUTER SCIENCE MAJOR, MS – FIVE-YEAR BS/MS PROGRAM

In the 2020-21 Graduate Catalog, revise the second sentence of the first paragraph from 6 credit hours to 9 credit hours.

Formerly:
The primary component of the program is that qualified students may take up to 6 credit hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor’s and master’s degrees at the University of Tennessee.

Rationale: Revising the 6 hours to 9 hours. This change has been approved by the graduate school, and needs to be reflected in our program description. Impact on other units: None. Financial impact: None.

COMPUTER ENGINEERING MAJOR, MS: REVISE TO REMOVE ACADEMIC STANDARDS TEXT

In the 2020-21 Graduate Catalog, remove the Academic Standards heading and all text.

Formerly:

Academic Standards
All students must file a Master’s Program Plan with the departmental graduate committee specifying which option they have selected, a semester-by-semester schedule of the courses they intend to take, and the members of the student’s master’s committee.

Students may change between options one time by filing an amended Master’s Program Plan and with approval of the departmental graduate committee.

Rationale: It is not necessary for the graduate committee to receive or approve students’ Master’s Program Plans. Impact on other units: None. Financial impact: None.

REVISE REQUIRED COURSES - COMPUTER ENGINEERING MAJOR, MS

In the 2020-21 Graduate Catalog, revise Required Courses section as follows:

- Required Courses
  - 24 (thesis option) or 27 (project option) or 30 (Courses only without comprehensive exams) credit hours of graduate course work
    - At least two-thirds of the total credit hours must be at the 500-level or above
    - At least 6 credit hours selected from the following courses: ECE 504, ECE 505, ECE 533, ECE 551, ECE 553, ECE 555, ECE 572, COSC 522, and COSC 530.

Formerly:

Required Courses
24 (thesis option) or 27 (project option) or 30 (Courses only without comprehensive exams) credit hours of graduate course work

At least two-thirds of the total credit hours must be at the 500-level or above

At least 6 credit hours selected from the following courses: ECE 551, ECE 553, ECE 554, ECE 555, COSC 530, ECE 571, ECE 572, ECE 651, ECE 653.

Rationale: ECE 504, ECE 505, and ECE 533 are foundational courses for concentrations in Computer Engineering, and should be included as one of the courses that meets the Computer Engineering MS requirement. ECE 571 has been replaced with COSC 522 because COSC 522 is broader and more foundational than ECE 571. ECE 554, ECE 651, and ECE 653 are being removed because they are not foundational and are not offered regularly. Impact on other units: None. Financial impact: None.
REVISE TEXT – COMPUTER ENGINEERING MAJOR, MS – FIVE-YEAR BS/MS PROGRAM
In the 2020-21 Graduate Catalog, revise the second sentence of the first paragraph from 6 credit hours to 9 credit hours.

Five-Year BS/MS Program – Computer Engineering Major (MS)
The primary component of the program is that qualified students may take up to 9 credit hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor’s and master’s degrees at the University of Tennessee.

Formerly: The primary component of the program is that qualified students may take up to 6 credit hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor’s and master’s degrees at UT.

Rationale: Revising the 6 hours to 9 hours. This change has been approved by the graduate school, and needs to be reflected in our program description. Impact on other units: None. Financial impact: None.

REVISE TEXT – ELECTRICAL ENGINEERING MAJOR, MS: REVISE TO REMOVE ACADEMIC STANDARDS HEADING AND ALL TEXT
In the 2020-21 Graduate Catalog, remove the Academic Standards heading and all text.

Formerly:
Academic Standards
All students must file a Master’s Program Plan with the departmental graduate committee specifying which option they have selected, a semester-by-semester schedule of the courses they intend to take, and the members of the student’s master’s committee.

Students may change between options one time by filing an amended Master’s Program Plan and with approval of the departmental graduate committee.

Rationale: It is not necessary for the graduate committee to receive or approve students’ Master’s Program Plans. Impact on other units: None. Financial impact: None.

REVISE TEXT – ELECTRICAL ENGINEERING MAJOR, MS – FIVE-YEAR BS/MS PROGRAM (FIRST PARAGRAPH)
In the 2020-21 Graduate Catalog, revise the second sentence of the first paragraph from 6 credit hours to 9 credit hours.

Five-Year BS/MS Program – Computer Engineering Major (MS)
The primary component of the program is that qualified students may take up to 9 credit hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor’s and master’s degrees at the University of Tennessee.

Formerly: The primary component of the program is that qualified students may take up to 6 credit hours of approved graduate courses for their senior undergraduate electives and have them count toward both their bachelor’s and master’s degrees at UT.

Rationale: Revising the 6 hours to 9 hours. This change has been approved by the graduate school, and needs to be reflected in our program description. Impact on other units: None. Financial impact: None.

DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING
INFORMATIONAL ITEM (PARALLEL PROPOSAL TO ADD CERTIFICATE) CERTIFICATE PROPOSAL COMING FROM COLLEGE OF NURSING
Health Informatics Certificate

In the 2020-21 Graduate Catalog, add requirements for the Health Informatics Graduate Certificate.

Rationale: This program adds a teaching dimension to the existing service and research activities that do not currently exist. The students currently enrolled in three colleges, nursing, information sciences and engineering, who have an interest in the research occurring in the HITS lab, currently lack the knowledge and skills, which can be obtained through this certificate program. Including both on-campus and online students increases the student credit hours generated by the courses. Adding this teaching component will help to deepen research and broaden engagement activities in this area.

The program aligns with and extends ongoing collaborations between the College of Nursing and the Department of Industrial and Systems Engineering. The units have a priority to advance the research in health information technology through their current collaborative relationship within the Health Innovation, Technology and Simulation (HITS) Lab. The inclusion of the College of Communication and Information Sciences is a natural extension given their current program in information sciences and database management. The development of a cadre of trained professionals with healthcare analytics will help provide outlets for research applications and potential research partners who can provide access to current problems and data. This mutual exchange will help create a sustainable environment for research in health information technology.
Impact on other colleges: Based on a review of programs, a similar certificate (or degree program) is non-existent on the UT Knoxville campus, although a healthcare informatics program through the College of Communications and Information Sciences at the Memphis campus was mentioned on dated web pages. No additional information was available. A follow-up with all contact information and any related programs at the College of Communications and Information Sciences confirmed the information was outdated.

Financial Impact: A proposal was submitted to Dr. Jennifer Gramling since the program will be an online program. This new program would be funded through the Distance Education funding model of 85% tuition return to the colleges. With this funding model, the Dean of the College of Nursing, Dr. Victoria Niederhauser, the Department Head of Industrial and Systems Engineering, Dr. John Kobza, and the Director of the School of Information Sciences, Dr. Diane Kelly, approve of the newly designed jointly offered Healthcare Informatics Program.

The cost of our program for an in-state, on-campus student is estimated at $10,200.
The cost of our program for an out of state, online student is estimated at $10,716.

Three of the four courses in the curriculum must be developed and it is expected the College of Nursing would teach one to two of the four courses. Dr. Tom Berg, new Assistant Professor, HITS Fellow and HITS Strategy Director has the expertise and knowledge necessary to teach.

DEPARTMENT OF NUCLEAR ENGINEERING

+ ADD CONCENTRATIONS – NUCLEAR ENGINEERING MAJOR, MS

  Nuclear Safety
  Radiological Engineering

+ ADD CONCENTRATION – NUCLEAR ENGINEERING MAJOR, PHD

  Nuclear Safety

Rationale: An equivalent outcome is achieved by using concentrations as that of certificates, while often requiring less paperwork. Certificates were more popular while our grad enrollment was low and we had a distance education program which is no longer supported. Enrollment for our criticality safety certificate has dwindled down to zero students today, thus its theme is being rolled into the nuclear safety concentration. Impact on other units: None. Financial Impact: None.

◊ DROP GRADUATE CERTIFICATE

  Nuclear Criticality Safety

Rationale: Enrollment in this certificate has dwindled to zero in recent years. Being rolled into the nuclear safety concentration. Impact on other units: None. Financial impact: None.

ADD PROGRAM INFORMATION AND REQUIREMENTS FOR NEW MS CONCENTRATIONS (NUCLEAR SAFETY AND RADIOLOGICAL)

Nuclear Engineering Major, MS

Nuclear Safety concentration

Options Available:
- Thesis Option: NE 500 Thesis, 6 credit hours
- Project Options:
  - Two engineering practice projects, NE 598 for 6 credit hours
  - One engineering practice project, NE 598 for 3 credit hours, plus 3 credit hours of additional nuclear engineering (NE) coursework as approved by the graduate committee.

Campus Code:
- Knoxville Campus

Admissions Standards/Procedures
- Students in the field of nuclear engineering desiring to study for the Master of Science must have a Bachelor of Science degree from an accredited university with a major in engineering, physics, chemistry, or mathematics.
- All entering students must have, as a minimum, competency in mathematics through ordinary differential equations.
- Students are required to take the GRE.
• Admitted applicants will be advised of any prerequisite undergraduate courses that may be required for their graduate studies.

Credit Hours Required
30 graduate credit hours

Required Courses (3):
• NE 421
• NE 585
• NE 586

Two electives from the list below:
• NE 483
• NE 542
• NE 543
• NE 573
• NE 582

Additional Course Requirements:
None.

Non-Course Requirements:
None.

Rationale: We are developing a nuclear safety center of excellence within our program, with encouragement and sponsorship from industrial partners. We believe that this will become a unique trademark of our program. Impact on other units: None. Financial impact: None.

Radiological Engineering Concentration

○ Thesis Option: NE 500 Thesis, 6 credit hours
○ Project Options:
  • Two engineering practice projects, NE 598 for 6 credit hours
  • One engineering practice project, NE 598 for 3 credit hours, plus 3 credit hours of additional nuclear engineering (NE) coursework as approved by the graduate committee.

Campus Code:
Knoxville Campus

Credit Hours Required
30 graduate credit hours

Required Courses (3):
• NE 490 Radiation Biology
• NE 551 Radiation Protection
• NE 552 Radiological Assessment and Dosimetry

Two elective courses from the list below:
• NE 512 Space Radiation
• NE 542 Management of Radioactive Materials
• NE 550 Radiation Measurements Laboratory
• NE 567 Medical Physics I
• NE 568 Medical Physics II
• NE 582 Monte Carlo Analysis

Additional Course Requirements:
None.

Non-Course Requirements:
None.

Rationale: We have this concentration available for PhD students, so we are also making it available to our MS students. Impact on other units: None. Financial impact: None.
ADD PROGRAM INFORMATION AND REQUIREMENTS FOR NEW PHD CONCENTRATION (NUCLEAR SAFETY)

Nuclear Engineering Major, PhD
Nuclear Safety concentration

Campus Code:
Knoxville Campus

Admissions Standards/Procedures
- Students in the field of nuclear engineering desiring to study for the Doctor of Philosophy degree must have a Bachelor of Science or Master of Science from an accredited university with a major in engineering, physics, chemistry, or mathematics.
- All entering students must have, as a minimum, competency in mathematics through ordinary differential equations.
- Students are required to take the GRE.
- Admitted applicants will be advised of any prerequisite undergraduate courses that may be required for their graduate studies.
- All candidates will be required to demonstrate general competence in a comprehensive examination in the areas of engineering science, mathematics, chemistry, physics, and nuclear engineering.

Credit Hours Required
- Students holding only a BS degree, as well as students who receive a concurrent MS degree in Nuclear Engineering while enrolled as a PhD student, must take a minimum of 72 total graduate credit hours, including a minimum of 39 graduate course credit hours.
- Students holding a non-concurrent MS degree in Nuclear Engineering from UT will be required to take a minimum of 48 total graduate credit hours, including at least 15 credit hours of graduate course work beyond those applied to their MS degree.
- 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.
- Course work requirements may not be fulfilled by research or dissertation credit or seminar courses.
- The student’s major professor, with the concurrence of the dissertation committee, will prepare a curriculum plan outlining precisely what courses will be taken.

Required Courses:
- NE 600 (minimum of 24 credit hours)
- A minimum of 39 credit hours in nuclear engineering (NE) courses numbered 500 and above (or the equivalent).
  - A minimum of 27 credit hours of graduate courses in nuclear engineering at or above the 500-level
  - Students must take NE 421, NE 585, and NE 586
  - Two electives from the list below:
    - NE 483 Introduction to Reliability Engineering
    - NE 542 Management of Radioactive Materials
    - NE 543 Selected Topics in Nuclear Criticality Safety
    - NE 573 Nuclear Reactor Kinetics and Dynamics for Reactor Safety and Licensing
    - NE 582 Monte Carlo Analysis
  - To include 3 credit hours (1+1+1) of NE 501
  - Excludes thesis, practice project, or dissertation credit
  - A minimum of 12 additional course work credit hours is required, subject to approval by the student's faculty committee
  - At least 6 credit hours of the above coursework must be at the 600-level, with at least 3 of these credit hours in nuclear engineering
  - At the discretion of the student’s dissertation committee and depending on the student’s background, more than 39 credit hours of courses may be required
  - A maximum of 24 credit hours from a master’s degree may be used to satisfy the course work requirements for the PhD
  - A minimum of 39 credit hours of graduate course work beyond the bachelor’s degree and 24-33 credit hours of dissertation (NE 600)

Additional Course Requirements:
None.

Non-Course Requirements
None.
Rationale: We are developing a nuclear safety center of excellence within our program, with encouragement and sponsorship from industrial partners. We believe that this will become a unique trademark of our program. Impact on other units: None. Financial impact: None.

REVISE REQUIREMENTS - MEDICAL PHYSICS MAJOR, MS

In the 2020-2021 Graduate Catalog, revise Credit Hours and Required Courses as shown below. We are increasing the required hours from 30 credit hours to 32 credit hours.

Credit Hours Required
- 32 graduate credit hours
- 9 undergraduate credit hours of required preparatory course work (no undergraduate credits hours may be applied towards the degree)

Required Courses
- A major consisting of 20 credit hours of graduate courses in engineering which must include each of the following core courses: BME 574, NE 490, NE 551, NE 565, NE 566, NE 567, NE 568, NE 569.
- An additional 2 graduate courses from the following list of electives: NE 406, NE 542, NE 550, NE 552, NE 582, NE 583, NE 588.
- Two foundational courses: BCMB 230 (5 credit hours) and EEB 240 (4 credit hours) (see the current undergraduate catalog for course descriptions). NOTE: These courses cannot be taken for graduate credit.

Option Requirements
- Thesis Option: NE 500 Thesis, 6 credit hours
- Project Options (NOTE: Research topic must be related to Medical Physics):
  - Two engineering practice projects, NE 598 for 6 credit hours
  - One engineering practice project, NE 598 for 3 credit hours, plus 3 credit hours of additional nuclear engineering (NE) coursework as approved by the graduate committee.

Formerly:
Credit Hours Required
- 30 graduate credit hours
- 9 undergraduate credit hours of required preparatory course work (no undergraduate credits hours may be applied towards the degree)

Required Courses
- A major consisting of 15 credit hours of graduate courses in engineering which must include each of the following core courses: BME 574, NE 490, NE 551, NE 567, NE 568.
- An additional 3 graduate courses, 2 of which are from the following list of electives: NE 406, NE 542, NE 550, NE 552, NE 582, NE 583, NE 588.
- Two foundational courses: BCMB 230 (5 credit hours) and EEB 240 (4 credit hours) (see the current undergraduate catalog for course descriptions). NOTE: These courses cannot be taken for graduate credit.

Option Requirements
- Thesis Option: NE 500 Thesis, 6 credit hours
- Project Options (NOTE: Research topic must be related to Medical Physics):
  - Two engineering practice projects, NE 598 for 6 credit hours
  - One engineering practice project, NE 598 for 3 credit hours, plus 3 credit hours of additional nuclear engineering (NE) coursework as approved by the graduate committee.

Rationale: Added courses to account for clinical experience labs. Impact on other units: None. Financial impact: none.

REVISE REQUIREMENTS – NUCLEAR ENGINEERING MAJOR, PHD

In the 2020-2021 Graduate Catalog, revise “Credit Hours Required” as shown below:

Credit Hours Required
- Students holding only a BS degree, as well as students who receive a concurrent MS degree in Nuclear Engineering while enrolled as a PhD student, must take a minimum of 72 total graduate credit hours, including a minimum of 39 graduate course credit hours.
- Students holding a non-concurrent MS degree in Nuclear Engineering from UT will be required to take a minimum of 48 total graduate credit hours, including at least 15 credit hours of graduate course work beyond those applied to their MS degree.
- 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.
- Course work requirements may not be fulfilled by research or dissertation credit or seminar courses.
- The student’s major professor, with the concurrence of the dissertation committee, will prepare a curriculum plan outlining precisely what courses will be taken.

Formerly:
Credit Hours Required
A minimum of 72 graduate credit hours (exclusive of master’s thesis credit hours)
A minimum of 48 credit hours of graduate course work beyond the bachelor’s degree
A minimum of 24 credit hours of graduate course work beyond all master’s degrees

Rationale: We want the Credit Hours Required in our PhD major concentrations to be consistent. Impact on other units: none. Financial impact: none.

REVISE REQUIREMENTS – NUCLEAR ENGINEERING MAJOR, PHD, RADIOLOGICAL ENGINEERING CONCENTRATION

In the 2020-2021 Graduate Catalog, revise “Credit Hours Required” as shown below:

Credit Hours Required
• Students holding only a BS degree, as well as students who receive a concurrent MS degree in Nuclear Engineering while enrolled as a PhD student, must take a minimum of 72 total graduate credit hours, including a minimum of 39 graduate course credit hours.
• Students holding a non-concurrent MS degree in Nuclear Engineering from UT will be required to take a minimum of 48 total graduate credit hours, including at least 15 credit hours of graduate course work beyond those applied to their MS degree.
• 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.
• Course work requirements may not be fulfilled by research or dissertation credit or seminar courses.
• The student’s major professor, with the concurrence of the dissertation committee, will prepare a curriculum plan outlining precisely what courses will be taken.

Formerly:
Credit Hours Required
A minimum of 72 graduate credit hours (exclusive of master’s thesis credit hours)
A minimum of 48 credit hours of graduate course work beyond the bachelor’s degree
A minimum of 24 credit hours of graduate course work beyond all master’s degrees

Rationale: We want the Credit Hours Required in our PhD major concentrations to be consistent. Impact on other units: none. Financial impact: none.

REVISE REQUIREMENTS – NUCLEAR ENGINEERING MAJOR, PHD, ENERGY SCIENCE AND ENGINEERING CONCENTRATION

In the 2020-2021 Graduate Catalog, revise “Credit Hours Required” as shown below:

Credit Hours Required
• Students holding only a BS degree, as well as students who receive a concurrent MS degree in Nuclear Engineering while enrolled as a PhD student, must take a minimum of 72 total graduate credit hours, including a minimum of 39 graduate course credit hours.
• Students holding a non-concurrent MS degree in Nuclear Engineering from UT will be required to take a minimum of 48 total graduate credit hours, including at least 15 credit hours of graduate course work beyond those applied to their MS degree.
• 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.
• Course work requirements may not be fulfilled by research or dissertation credit or seminar courses.
• The student’s major professor, with the concurrence of the dissertation committee, will prepare a curriculum plan outlining precisely what courses will be taken.

Formerly:
Credit Hours Required
A minimum of 72 graduate credit hours (exclusive of master’s thesis credit hours)
A minimum of 48 credit hours of graduate course work beyond the bachelor’s degree
A minimum of 24 credit hours of graduate course work beyond all master’s degrees

Rationale: We want the Credit Hours Required in our PhD major concentrations to be consistent. Impact on other units: none. Financial impact: none.
I. COURSE CHANGES

(LAW) Law

ADD

Law 984 Family and Privacy (2-3) Explores various topics related to family and privacy rights. Topics may include adoption, termination of parental rights, marriage and divorce, education (public school, private school, homeschool), reproductive rights, childrearing (including the right to make medical decisions and investigations of child abuse or neglect), poverty and government assistance.
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Repeatability: Not repeatable. May be taken once for 2 or 3 hours.
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 986 Introduction to Legal Reasoning and Communication (2-3) Introduces non-JD students to the process of legal reasoning and communication. Topics include: (1) critical reading and understanding of legal authorities; (2) synthesis of legal authorities; (3) recognition of legal issues; (4) legal research; (5) legal analysis; and (6) legal communication, including the drafting of memoranda and oral communication. May be offered in an online format.
Grading Restriction(s): Numeric grading (LLM students); A-F grading (other graduate students).
Repeatability: Not repeatable. May be taken once for 2 or 3 hours.
Registration Restriction(s): Limited to students enrolled in the LLM degree and master's level programs offered by or in conjunction with the College of Law. Not available to JD students.
Rationale: Expands curricular offerings in the area. Impact on other units: None expected. Financial impact: None expected.

REVISE HOURS, DESCRIPTION, GRADING RESTRICTION AND REGISTRATION RESTRICTION

Law 988 The Structure and Operation of the American Legal System (2-3) Introduces non-JD students to the structure of the American legal system and basics of U.S. law. Topics include (1) an introduction and comparison of both common and civil law legal systems; (2) an overview of basic United States constitutional structure on both the federal and state level, including instruction on the role of administrative agencies and rules and regulations as well as statutes and case law; (3) an introduction to the United States court structure; (4) a summary of first-year JD classes. May be offered in an online format.
Grading Restriction(s): Numeric grading (LLM students); A-F grading (other graduate students).
Repeatability: Not repeatable. May be taken once for 2 or 3 hours.
Registration Restriction(s): Limited to students enrolled in the LLM degree and master's level programs offered by or in conjunction with the College of Law. Not available to JD students.
Formerly: (2)
Introduces foreign-educated lawyers to the structure of the American legal system and basics of U.S. law. Topics include (1) an introduction and comparison of both common and civil law legal systems; (2) an overview of basic United States constitutional structure on both the federal and state level, including instruction on the role of administrative agencies and rules and regulations as well as statutes and case law; (3) legal research and writing; (4) exercises in case analysis and briefing; (5) drafting of briefs, legal opinions, contracts, and statutes; and (6) a summary of first-year JD classes, such as torts, contracts, civil procedure, and criminal law.
Registration Restriction(s): limited to students enrolled in the LLM degree program.
Rationale: Credit-hour change provides flexibility to offer a 3-credit hour version of the course based on student needs and interests in a given semester. Course description change: Better reflects course coverage. Registration restriction change: Recognizes that course is also available to master's level programs. Impact on other units: None expected. Financial impact: None expected.

REVISE GRADING OPTION (FROM NUMERIC TO NUMERIC AND A-F GRADING OPTION) AND REVISE REGISTRATION RESTRICTION (THE A-F GRADING WILL FOLLOW THE GRADUATE SCHOOL A-F GRADING POLICY)

Law 801 Civil Procedure I (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 802 Civil Procedure II (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.
Law 803  Contracts I (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 804  Contracts II (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 807  Torts I (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 808  Torts II (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 809  Criminal Law (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 810  Property (4)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 812  Constitutional Law (4)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 813  Evidence (4)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 814  Professional Responsibility (3)
Grading Restriction(s): Numeric grading (JD and LLM students); A-F grading (other graduate students).
Registration Restriction(s): JD and LLM students; other graduate students with instructor permission.

Law 816  Civil Procedure I (Experiential) (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 817  Torts I (Experiential) (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 818  Fundamental Concepts of Income Taxation (3)
Grading Restriction(s): Numeric grading (JD and LLM students); A-F grading (other graduate students).
Registration Restriction(s): JD and LLM students; other graduate students with instructor permission.

Law 819  Taxation of Real Property Interests (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Law 821  Administrative Law (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 822  Legislation (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 824  Advanced Legal Research (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 826  Introduction to Business Transactions (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 827  Business Associations (3)
Grading Restriction(s): Numeric grading (JD and LLM students); A-F grading (other graduate students).
Registration Restriction(s): JD and LLM students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 828  Corporate Finance (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 829  Advanced Business Associations (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 830  Securities Regulation (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 831  Mergers and Acquisitions (2-3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 832  Representing Enterprises (3-5)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 834  Antitrust (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 836  Advanced Wills and Trusts (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 837  Consumer Bankruptcy and Finance Seminar (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Law 839  Payment Systems (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 841  Secured Transactions (3)
Grading Restriction(s): Numeric grading (JD and LLM students); A-F grading (other graduate students).
Registration Restriction(s): JD and LLM students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 842  Contract Drafting (2)
Grading Restriction(s): Numeric grading (JD and LLM students); A-F grading (other graduate students).
Registration Restriction(s): JD and LLM students; other graduate students with instructor permission.

Law 843  Bankruptcy (3)
Grading Restriction(s): Numeric grading (JD and LLM students); A-F grading (other graduate students).
Registration Restriction(s): JD and LLM students; other graduate students with instructor permission.

Law 844  Business Reorganizations and Workouts (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 845  Commercial Leasing (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 846  Disability Law (2-3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 847  Constitutional Rights and Liberties (2-3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 848  Civil Rights Actions (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 849  Constitutional Law Seminar (1-3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 854  Investigatory Criminal Procedure (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 855  Adjudicatory Criminal Procedure (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Law 856  Advanced Criminal Law (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 859  Criminal Law Seminar (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 862  Family Law (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 863  Sex, Gender, and Justice (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 866  Environmental Law: Administrative Regulation and Policy (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 867  Environmental Law Seminar (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 873  American Legal History (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 875  The Jury System (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 877  Jurisprudence (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 878  Ownership and Justice (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 879  Law and Economics (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 880  Behavioral Economics (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 881  Law and Literature (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

**Law 883 Images of the Law (2)**  
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).  
Registration Restriction(s): JD students; other graduate students with instructor permission.

Formerly: Registration Restriction: Law students only.

**Law 886 International Law (3)**  
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).  
Registration Restriction(s): JD students; other graduate students with instructor permission.

Formerly: Registration Restriction: Law students only.

**Law 887 International Business Transactions (2-3)**  
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).  
Registration Restriction(s): JD students; other graduate students with instructor permission.

Formerly: Registration Restriction: Law students only.

**Law 888 International Religious Freedom (3)**  
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).  
Registration Restriction(s): JD students; other graduate students with instructor permission.

Formerly: Registration Restriction: Law students only.

**Law 889 International Intellectual Property Law (3)**  
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).  
Registration Restriction(s): JD students; other graduate students with instructor permission.

Formerly: Registration Restriction: Law students only.

**Law 890 European Union Law: Rights (3)**  
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).  
Registration Restriction(s): JD students; other graduate students with instructor permission.

Formerly: Registration Restriction: Law students only.

**Law 891 Global Constitutionalism (3)**  
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).  
Registration Restriction(s): JD students; other graduate students with instructor permission.

Formerly: Registration Restriction: Law students only.

**Law 892 International Human Rights Law (3)**  
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).  
Registration Restriction(s): JD students; other graduate students with instructor permission.

Formerly: Registration Restriction: Law students only.

**Law 894 Employment Law Seminar (2-3)**  
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).  
Registration Restriction(s): JD students; other graduate students with instructor permission.

Formerly: Registration Restriction: Law students only.

**Law 895 Labor Relations Law (3)**  
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).  
Registration Restriction(s): JD students; other graduate students with instructor permission.

Formerly: Registration Restriction: Law students only.

**Law 896 Employment Law (3)**  
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).  
Registration Restriction(s): JD students; other graduate students with instructor permission.

Formerly: Registration Restriction: Law students only.

**Law 897 Employment Discrimination Law (3)**  
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).  
Registration Restriction(s): JD students; other graduate students with instructor permission.

Formerly: Registration Restriction: Law students only.
Law 904  Construction Law: Cases and Studies (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 910  Non-Profit Corporations (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 914  Alternative Dispute Resolution (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 915  Conflict of Laws (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 916  Federal Courts (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 918  Remedies (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 920  Trial Practice (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 921  Civil Pretrial Litigation (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 922  Advanced Trial Practice (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 923  Complex Litigation (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 924  Criminal Pretrial Litigation (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 925  Advanced Appellate Advocacy (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 926  Negotiation (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 929 Interviewing and Counseling (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 930 Ediscovery (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 933 Elder Law (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 935 Wills and Trusts (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 937 Estate Planning Seminar (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 940 Real Estate Finance Law (3)
Grading Restriction(s): Numeric grading (JD and LLM students); A-F grading (other graduate students).
Registration Restriction(s): JD and LLM students; other graduate students with instructor permission.

Law 941 Real Estate Transactions Seminar (2 or 3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 942 Title Law (1)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 943 Land Use Law (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 944 Construction Law (2-3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 945 Environmental Practicum (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.

Law 954 Copyright Law (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Law 955 Patent Law (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 956 Entertainment Law (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 957 Law, Science and Technology (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 959 Intellectual Property (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 960 Internet and Information Privacy Law Seminar (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 961 Patent Prosecution (2)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 962 Bioethics and Public Health Law Seminar (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 963 Health Law Finance and Organization (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 964 Health Law Regulation and Quality (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 972 Income Taxation of Business Organizations (3)
Grading Restriction(s): Numeric grading (JD and LLM students); A-F grading (other graduate students).
Registration Restriction(s): JD and LLM students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 973 Wealth Transfer Taxation (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 975 Tax Theory (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
Formerly: Registration Restriction: Law students only.

Law 978 Transactional Tax Planning (3)
Grading Restriction(s): Numeric grading (JD students); A-F grading (other graduate students).
Registration Restriction(s): JD students; other graduate students with instructor permission.
**II. PROGRAM CHANGES**

**REVISE TEXT, COLLEGE OF LAW PAGE**

In the 2020-21 Graduate Catalog, on the College of Law page, under heading: Policy for Graduate Student Taking Law Courses, add the paragraph below as the first paragraph.

Graduate students pursuing the Graduate Certificate in Legal Studies [and the Master of Legal Studies, effective fall 2021] are subject to the grading policies and course registration procedures detailed for those programs in the Graduate Catalog.

Rationale: The addition of the graduate certificate in legal studies and masters of legal studies degrees will allow graduate students other than those currently described in this policy to take law school courses. The proposed language directs students to the grading and registration procedures described for each program rather than the grading and registration information currently listed in the policy. Impact on other units: None expected. Financial impact: None expected.

**INFORMATIONAL ITEM**

The College of Law is in support of dropping the Contractual and Legal Affairs in Engineering and Construction Graduate Certificate. The Tickle College of Engineering, Department of Civil and Environmental Engineering is where the certificate is housed and from where the official proposal to drop the certificate will be submitted.
+ ADD GRADUATE CERTIFICATE

Legal Studies

In the 2020-21 Graduate Catalog, add heading and requirements for new certificate.

Legal Studies Graduate Certificate
The Legal Studies Graduate Certificate is intended for working professionals and graduate/PhD students whose fields intersect with the law and who would benefit from legal studies but do not wish to pursue the JD or MLS degrees. The certificate is available to individuals who are 1) pursuing other academic programs at the master’s or doctoral levels, or 2) post-baccalaureate and enrolled solely in a graduate certificate program.

Campus Code
Knoxville Campus

Graduate Certificate Type
Stand-Alone (earned terminal degree required)
Add-On

Admissions Standards/Procedures
• Students seeking admission to the Graduate Certificate program must meet the admissions standards established by the Graduate Council.

Academic Standards
A cumulative grade point average of 3.0 is required on all graduate course work taken at the University of Tennessee, Knoxville, to remain in good standing and to receive any graduate degree or certificate from the university. Graduate Certificate students will be graded separately from JD students on a scale that correlates with the University’s grading policies for graduate students. The grades of any Graduate Certificate student in particular class will not be taken into account for purposes of determining any applicable required course mean or median.

Credit Hours Required
15 credit hours

Required Courses
Law 988 The Structure and Operation of the American Legal System (2-3 credit hours)
Law 986 Introduction to Legal Reasoning and Communication (2-3 credit hours)

Additional Course Requirements
Students must complete the remaining 9-11 credit hours from other Law courses. Students are not permitted to enroll in the following Law courses: 811, 820, 905, 906, 907, 908, 911, 945, 946, 947, 948, 949, 950, 951, 952, 953, 982, 983, 987, 991, 992, 995, 996, 997, 999. A student’s enrollment in upper-level Law courses (i.e., courses outside of the required curriculum for first year J.D. students) is subject to the approval of the relevant faculty member, who may also require completion of prerequisites that JD students would have completed prior to taking the class. Students pursuing the Graduate Certificate in Legal Studies will register for classes after the registration periods for JD students (and MLS students if applicable) have closed.

Non-Course Requirements
• Students may pursue the Graduate Certificate on a full-time or part-time basis.
• The course of study for the Graduate Certificate must be completed no earlier than 12 months and no later than 36 months after a student has commenced study at the College of Law. Any exception to these rules must be approved by the Dean or the Dean’s designee.
• Students must earn all 15 hours at the College of Law.
• Subject to final approval of and the College of Law offering the MLS degree, students enrolled in the Graduate Certificate may, subject to approval and other applicable procedures, transfer to the MLS program and may transfer up to 9 credit hours from the Graduate Certificate program toward the MLS degree.

Rationale: Satisfy the growing interest of graduate students and working professionals in taking law courses in their areas of interest. Impact on other units: None. Financial impact: None.
ADD NEW MAJOR AND DEGREE (EFFECTIVE FALL 2021)

Major: Law
Degree: Master of Legal Studies (MLSD)

In the 2020-21 Graduate Catalog, add program and program requirements (pending THEC approval)

Law, Master of Legal Studies (MLS) (NOT AVAILABLE FOR ADMISSION UNTIL FALL 2021)

The Master of Legal Studies degree is intended for working professionals and graduate/PhD students whose fields intersect with the law and who would benefit from legal studies but do not wish to pursue the JD.

Campus Code
Knoxville Campus

Admissions Standards/Procedures
- Students seeking admission to the MLS degree program must meet the admissions standards established by the Graduate Council.

Masters Options Available
Written Project in Lieu of Thesis

Academic Standards
A cumulative grade point average of 3.0 is required on all graduate course work taken at the University of Tennessee, Knoxville, to remain in good standing and to receive any graduate degree or certificate from the university. MLS students will be graded separately from JD students on a scale that correlates with the University's grading policies for graduate students. The grades of any MLS student in particular class will not be taken into account for purposes of determining any applicable required course mean or median.

Credit Hours Required
30 credit hours

Required Courses
- Law 988 The Structure and Operation of the American Legal System (3 credit hours)
- Law 986 Introduction to Legal Reasoning and Communication (3 credit hours)
- At least two courses (excluding Law 811 and Law 820) from the required first-year JD curriculum (minimum 5 credit hours)
- Written Project in Lieu of Thesis (satisfied by Law 993, Law 994, or another Law course that satisfies the expository writing requirement (if enrollment is approved by the professor) (minimum 1 credit hour).

Additional Course Requirements
Students must complete the remaining credit hours from other Law courses. Students are not permitted to enroll in the following Law courses: 805, 806, 811, 820, 905, 906, 907, 908, 911, 946, 947, 948, 949, 950, 951, 952, 953, 982, 983, 987, 989, 991, 992, 995, 996, 997, 999. A student’s enrollment in upper-level Law courses (i.e., courses outside of the required curriculum for first year JD students) is subject to the approval of the relevant faculty member, who may also require completion of prerequisites that JD students would have completed prior to taking the class. Students pursuing the MLS will register for classes after the registration periods for JD students have closed.

Non-Course Requirements
- Students may pursue the MLS on a full-time or part-time basis.
- The course of study for the MLS degree must be completed no earlier than 12 months and no later than 48 months after a student has commenced study at the College of Law. Any exception to these rules must be approved by the Dean or the Dean’s designee.
- Students must earn all 30 hours at the College of Law.
- Students enrolled in the JD program may, subject to approval and other applicable procedures, transfer from the JD program to the MLS program. No more than 15 JD credit hours may transfer toward the MLS degree.

Rationale: Satisfy the growing interest of graduate students and working professionals in earning a master degree by taking law courses in their areas of interest. Impact on other units: None. Financial impact: None. THEC paperwork has been submitted.
COLLEGE OF NURSING

All changes effective Fall 2020

COURSE CHANGES

(NURS) Nursing

ADD

NURS 557 Introduction to Health Informatics (3) Examines the design, development, adoption and application of information technology-based innovations in healthcare delivery, management and planning. Provides overview of electronic medical records, order and documentation entry, telemedicine, decisions support systems, and mHealth consumer applications.

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

NURS 558 Healthcare Information Architecture and Security (3) Introduction to data formats, system architecture, hardware, vendor products and healthcare security standards. Prerequisite: Introduction to Health Informatics; Foundations of Information Management Systems.

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

Rationale: These courses in the proposed graduate certificate program add a teaching dimension to the existing service and research activities that do not currently exist. The students currently enrolled in three colleges, nursing, information sciences and engineering, who have an interest in the research occurring in the HITS lab, currently lack the knowledge and skills in this application area, which can be obtained through this certificate program. Adding this teaching component will help to deepen research and broaden engagement activities in this area. Course experiences will foster the examination and application of current health systems information management, analytics processing, and data mining techniques.

Impact on other units: Faculty from Tickle College of Engineering and College of Communication have approved the proposed certificate program. One of the required courses, IE562 Decision Support & Electronic Health Records (3 credits), already exists in School of Information Science curriculum.

Financial impact: including both on-campus and online students increases the student credit hours generated by the courses. The cost of the program for an in-state, on-campus student is estimated at $10,200. The cost of the program for an out of state, online student is estimated at $10,716. This new program would be funded through the Distance Education funding model of 85% tuition return to the colleges. College of Nursing faculty Dr. Tom Berg, Assistant Professor, HITS Fellow and HITS Strategy Director has the expertise and knowledge necessary to teach NURS 557, 558.

NURS 599 Statistical Methods for Health Care Research (3) Develop the foundational descriptive and inferential statistical skills required to analyze health-related data and report results.

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

NURS 628 Evidence Acquisition, Appraisal and Synthesis (3) Focuses on the search, critical appraisal, and synthesis of various sources of evidence to develop recommendations for a practice change.

(RE) Prerequisite(s): NURS 620.

Registration Restriction(s): Doctor of Nursing Practice. Minimum student level - graduate.

NURS 639 Advanced Health/Physical Assessment and Diagnostic Reasoning (3) Development of advanced assessment skills and diagnostic reasoning to determine health status and needs. Application of physiological, pathophysiological, and psychosocial concepts with implications for advanced practice nursing.

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

NURS 648 Advanced Clinical Pharmacology (3) Focus on pharmacodynamics, pharmacokinetics, and pharmacotherapeutics for advanced nursing practice.

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

NURS 649 Advanced Pathophysiology for Nursing Practice (3) Advanced physiologic and pathophysiologic concepts, principles, and theories applied to deviations of human systems.

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

NURS 663 Psychopharmacology in Advanced Practice (3) Analyze the neurobiological basis of mental health disorders and the use of psychopharmacological agents to modify symptoms and outcomes across the life span.

Registration Restriction(s): Doctor of Nursing Practice or Psychiatric Mental Health Nurse Practitioner Graduate Certificate. Minimum student level - graduate.


Registration Restriction(s): Doctor of Nursing Practice or Nurse Executive Practice Graduate Certificate. Minimum student level - graduate.
NURS 665 Nurse Executive Practice I (2) Exploration and analysis of selected management and leadership theories for executive nursing practice. 
Registration Restriction(s): Doctor of Nursing Practice or Nurse Executive Practice Graduate Certificate. Minimum student level – graduate.

NURS 666 Nurse Executive Practice II (2) Exploration and analysis of organizational and financial principles and theories related to executive nursing practice. 
(RE) Prerequisite(s): NURS 665. 
Registration Restriction(s): Doctor of Nursing Practice or Nurse Executive Practice Graduate Certificate. Minimum student level – graduate.

NURS 667 Health System Quality Management (2) Exploration and analysis of healthcare quality management related to creating/sustaining accountable/high-reliability organizations. 
Registration Restriction(s): Doctor of Nursing Practice or Nurse Executive Practice Graduate Certificate. Minimum student level – graduate.

NURS 668 Healthcare Financial Management (2) Exploration and analysis of concepts and principles in healthcare financial planning essential to nurse executive practice. 
Registration Restriction(s): Doctor of Nursing Practice or Nurse Executive Practice Graduate Certificate. Minimum student level – graduate.

NURS 669 Clinical Practice: Nurse Executive (1-5) Clinical practice examining the role of the Nurse Executive in a variety of health care settings. 
Repeatability: May be repeated. Maximum 15 credit hours. 
Registration Restriction(s): Doctor of Nursing Practice or Nurse Executive Practice Graduate Certificate. Minimum student level – graduate.

NURS 670 Acute Care Pediatric Nurse Practitioner I (3) Pathophysiology, diagnosis, and management of complex acute and chronic illnesses in pediatric patients. 
(RE) Corequisite: NURS 671. 
Registration Restriction(s): Doctor of Nursing Practice or Pediatric Acute Care Nurse Practitioner Graduate Certificate. Minimum student level – graduate.

NURS 671 Acute Care Pediatric Nurse Practitioner II (4) Pathophysiology, diagnosis, and management of complex acute and critical illness in pediatric patients. 
(RE) Prerequisite(s): NURS 669. 
(RE) Corequisite: NURS 672. 
Registration Restriction(s): Doctor of Nursing Practice or Pediatric Acute Care Nurse Practitioner Graduate Certificate. Minimum student level – graduate.

NURS 672 Clinical Practice: Pediatric Acute Care (1-5) Credit hours Clinical experience in a variety of pediatric acute and critical care settings. 
Repeatability: May be repeated. Maximum 15 credit hours. 
(RE) Corequisite(s): NURS 669 or NURS 670. 
Registration Restriction(s): Doctor of Nursing Practice or Pediatric Acute Care Nurse Practitioner Graduate Certificate. Minimum student level – graduate.

NURS 673 Practice Issues - Nurse Practitioner (1) Collaborative deliberation on issues related to the advance practice role. 
Registration Restriction(s): Doctor of Nursing Practice. Minimum student level – graduate. 
Rationale: Continuation of transition of Advanced Practice Nurse educational preparation from MSN to DNP degree to align with AACN Essentials of Doctoral Education standards. Impact on other units: None. Financial impact: None.

DROP COURSES
NURS 501 Advanced Nursing Research
NURS 504 Advanced Health/Physical Assessment and Diagnostic Reasoning
NURS 505 Advanced Clinical Pharmacology
NURS 507 Leadership and Change in Dynamic Systems
NURS 510 Theoretical Foundations of Nursing
NURS 511 Statistical Methods for Health Care Research
NURS 512 Practice Issues: Nurse Practitioner
NURS 515 Advanced Pathophysiology for Nursing Practice
NURS 519 Psychopharmacology in Advanced Practice
NURS 527 Clinical Experience in Pediatric Health
NURS 528 Development and Behavior of the Pediatric Population
NURS 541 Care of Child with Complex Acute, Chronic, and Critical Illness
NURS 550 Pediatric Nurse Practitioner I
NURS 551 Pediatric Nurse Practitioner II
NURS 560 Advanced Practice of Mental Health Nursing I
NURS 561 Advanced Practice Mental Health II
NURS 562 Care of the Pediatric Patient with an Acute Illness
NURS 563 Care of the Pediatric Patient with Chronic Conditions
NURS 570 Family Nurse Practitioner I
NURS 571 Family Nurse Practitioner II
NURS 572 Family Nurse Practitioner III
NURS 573 Family Nurse Practitioner IV
NURS 574 Practice Issues: Clinical Nurse Specialist
NURS 579 Epidemiology for Clinical Practice
NURS 582 Scholarly Inquiry
NURS 584 Directed Clinical Practice
NURS 654 Physiology and Pathophysiology (Peds)

Rationale: Continuation of transition of Advanced Practice Nurse educational preparation from MSN to DNP degree to align with AACN Essentials of Doctoral Education standards. Impact on other units: None. Financial impact: N/A. Anesthesia courses still available.

REVISE TITLES
NURS 603 Foundations of Nursing Science
Formerly: Nursing Inquiry and Research Design

NURS 606 Grant Writing in Nursing Science
Formerly: Nursing Research Seminar

Rationale: To more accurately reflect course content and objectives. Impact on other units: None. Financial impact: None.

REVISE DESCRIPTION
NURS 601 Philosophy and Knowledge Development for Nursing Science (3) Philosophy of science related to nursing knowledge development with an introduction to ontological and epistemic paradigms. Introduction to theory construction via concept analysis.

Formerly: Philosophy of science related to nursing science; theory analysis and evaluation; and theory construction based on concept development.

Rationale: To more accurately reflect course content and objectives. Contributes to PhD SLO #2, 3, 5. Impact on other units: None. Financial impact: None.

NURS 620 Philosophical and Theoretical Foundations for Practice (3) A critical examination of the scientific underpinnings of nursing knowledge. Emphasis on application of middle-range, change theories and implementation models for advanced nursing practice.

Formerly: A critical examination of the philosophical, historical, and theoretical context of knowledge.

Rationale: To align with AACN Essentials of Doctoral Education standards and to more accurately reflect course content and objectives. Contributes to DNP SLO #1, 6, 7. Impact on other units: None. Financial impact: None.

REVISE TITLE AND DESCRIPTION
NURS 605 Middle-Range Theory Development and Evaluation (3) Examination of the hierarchy of nursing knowledge and strategies for theory development with a focus on extant and emerging middle-range theories.

Formerly: Middle-Range Theory Formulations for Nursing Science Development (3) Extant and emerging middle-range theories instrumental in nursing science development.
Rationale: To more accurately reflect course content and objectives. Contributes to PhD SLO #1, 2, 4. Impact on other units: None. Financial impact: None.

NURS 624 Evidence-based Practice Improvement II (3) Focuses on the development of the implementation and evaluation plan for the DNP Scholarly project.

Formerly: Evidence-based Practice II (3) Examination of current practices in project design, management, implementation, evaluation and sustainability.

Rationale: To align with AACN Essentials of Doctoral Education standards and to more accurately reflect course content and objectives. Contributes to DNP SLO #1, 4, 6, 8. Impact on other units: None. Financial impact: None.

REVISE TITLE AND REGISTRATION RESTRICTION
NURS 610 State of the Science (3)
Registration Restriction(s): Doctor of Philosophy – nursing major.

Formerly: Review and Critique of Scientific Literature
Registration Restriction(s): Doctor of Nursing Practice or Doctor of Philosophy – nursing major.

Rationale: To more accurately reflect course content and objectives. Contributes to PhD SLO #1, 2, 4, 6. Impact on other units: None. Financial impact: None.

REVISE PREREQUISITES
NURS 633 DNP Practice Immersion (1-12)
(RE) Prerequisite(s): NURS 622.

Formerly: (RE) Prerequisite(s): NURS 613.

NURS 650 Wellness, Development, and Behavior of the Pediatric Population
(DE) Prerequisite(s): NURS 639 and NURS 648 and NURS 649.
Registration Restriction(s): Doctor of Nursing Practice or Pediatric Nurse Practitioner Graduate Certificate. Minimum student level – graduate.

Formerly: (DE) Prerequisite(s): NURS 504, 505, 515.
Registration Restriction(s): For Doctorate of Nursing Practice students or admitted to Pediatric Nurse Practitioner certificate. Minimum student level – graduate.

REVISE CREDIT HOURS
NURS 652 Pediatric Nurse Practitioner II: Care of the Pediatric Patient with Chronic Conditions (3)

Formerly: (2)

Rationale: Continuation of transition of Advanced Practice Nurse educational preparation from MSN to DNP degree to align with AACN Essentials of Doctoral Education standards. To correct title of degree program. Contributes to DNP SLO #3, 4, 6, 7, 8. Impact on other units: None. Financial impact: None.

REVISE CREDIT HOURS AND GRADING RESTRICTION (FROM S/NC GRADING TO A-F GRADING)
NURS 630 DNP Scholarly Project Proposal (3)

Formerly: DNP Scholarly Project Proposal (2)
Grading Restriction: Satisfactory/No Credit grading only.

REVISE CREDIT HOURS
NURS 634 DNP Scholarly Project (1)

Formerly: (3)

Rationale: To align with AACN Essentials of Doctoral Education standards and to more accurately reflect course content and objectives. Contributes to DNP SLO #3, 4, 6, 7, 8. Impact on other units: None. Financial impact: None.
REVISE TITLE, DESCRIPTION AND REGISTRATION RESTRICTION; ADD (DE)PREREQUISITES AND (RE)COREQUISITES

NURS 622 Evidence-based Practice Improvement I (3) Introduces blended paradigms of evidence-based practice [EBP] and quality improvement [QI]. Focus on identification of problem/issue for Scholarly Project.  
(DE) Prerequisite(s): NURS 620.  
(Re)Corequisite(s): NURS 628.  
Registration Restriction(s): Doctor of Nursing Practice – nursing major. Minimum student level – graduate.  
Formerly: NURS 622 Evidence-based Practice I

Identification, critique, and evaluation of existing evidence related to clinical problem of interest to determine best practices.  
Registration Restriction(s): Doctor of Nursing Practice – nursing major; Doctor of Philosophy – nursing major. Minimum student level- GR.  
Rationale: To align with AACN Essentials of Doctoral Education standards and to more accurately reflect course content and objectives. Contributes to DNP SLO #1, 4, 6, 8. Impact on other units: None. Financial impact: None.

REVISE TITLE, DESCRIPTION AND (DE)PREREQUISITES

NURS 655 Psychiatric Mental Health Nurse Practitioner I (4) Application of advanced assessment, treatment, and management of mental health disorders across the life span. The role of the psychiatric health advanced practice nurse is emphasized.  
(DE) Prerequisite(s): NURS 639 and 648 and 649 and 663.  
Formerly: Psychiatric Mental Health Nurse Practitioner

Etiologies of mental health, dysregulation and person-centered recovery including evidence-based treatments. Skills in therapeutic relationship development, advanced holistic assessment, diagnostic reasoning and therapeutic modalities are emphasized.  
(DE) Prerequisite(s): NURS 504, 505, 515, 519.

REVISE TITLE AND DESCRIPTION

NURS 656 Clinical Practice: PMHNP I (5) Clinical practice in the role of the Psychiatric Mental Health Nurse Practitioner in a variety of settings across the life span.  
Formerly: Clinical Practice: PMHNP

Clinical experience in adult mental health, dysregulation and person-centered recovery including evidence-based treatments across the lifespan. Skills in therapeutic relationship development, advanced holistic assessment, diagnostic reasoning and therapeutic modalities are emphasized.

REVISE DESCRIPTIONS

NURS 657 Psychiatric Mental Health Nurse Practitioner II (4) Application of advanced assessment, treatment, and management of complex mental disorders across the life span. Psychotherapeutic theories and associated therapeutic techniques for individual, group, and family therapy are emphasized.  
Formerly: Advanced practice nursing in community settings for families and groups with actual and potential mental health problems.

NURS 658 Clinical Practice: PMHNP II (1-5) Clinical practice in the role of the Psychiatric Mental Health Nurse Practitioner of complex mental health disorders and the practice of individual, group, and family therapy across the life span.  
Formerly: Clinical experience in advanced practice nursing in community settings for families and groups with actual and potential mental health problems.

REVISE (DE) PREREQUISITES

NURS 659 Family Nurse Practitioner I (3)  
(DE) Prerequisite(s): NURS 639 and 648 and 649.  
Formerly: (DE) Prerequisite(s): NURS 504, 505, 515.
II. PROGRAM CHANGES

DROP FOUR (4) CONCENTRATIONS – NURSING MAJOR, MSN

- Family Nurse Practitioner concentration
- Nursing Administration concentration
- Pediatric Nurse Practitioner concentration
- Psychiatric Mental Health Nurse Practitioner concentration

Rationale: In 2018 all of the MSN concentrations were elevated to the DNP. In the four dropped concentrations, all of the MSN students graduated in December 2019. No students remaining in the above dropped concentrations.

REVISE INTRODUCTORY PARAGRAPH – NURSING MAJOR, MSN

In the 2020-2021 Graduate Catalog, revise introductory text as follows:

The purpose of the master’s program in nursing is to prepare leaders, managers, and practitioners who facilitate achievement of optimal health in the dynamic health care system. The program offers role preparation as nurse anesthetists. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

Rationale: Removes language from the four dropped concentrations.

REVISE REQUIREMENTS – NURSING MAJOR, MSN

In the 2020-2021 Graduate Catalog, under the Concentrations heading remove the four dropped concentrations. The Nurse Anesthesia concentration is the only concentration offered for the MSN.

Nurse Anesthesia – Thesis, Course Only with Comprehensive Exam

Under the Required Courses heading, delete text (for the dropped concentrations) and revise required courses for the Nurse Anesthesia concentration as follows:

Program Core Requirements (6 credit hours)
- NURS 507
- NURS 510

Advanced Practice Core (9 credit hours)
- NURS 504
- NURS 505

Research (6-9 credit hours)
- NURS 501
  - Course Only with Comprehensive Exams Option Only: NURS 582
  - Thesis Option Only: NURS 500

Concentration Courses
- Nurse Anesthesia (40 credit hours)
  - NURS 544
  - NURS 545
  - NURS 546
  - NURS 547
  - NURS 548
  - NURS 549 Practicum/Seminar I, II, III, IV, V, VI
  - NURS 506
  - NURS 516
  - NURS 517
  - NURS 518
  - NURS 523
  - NURS 524
  - NURS 525
  - NURS 526
REVISE TEXT AND REQUIREMENTS – NURSING MAJOR, PHD
In the 2020-2021 Graduate Catalog, under the Admissions Standards/Procedures heading, revise as follows:

1) Delete the last bullet that reads, “Prior to enrollment in the PhD program, each student must successfully complete a criminal background check.”

Under the Academic Standards heading, revise bullets as follows:

1) Revise the third bullet that reads: A minimum grade of B in all nursing doctoral courses and a 3.0 cumulative GPA are required for continuation in the program” and replace with the following bullet:

- A minimum grade of B in all nursing PhD courses is required; however, the College of Nursing will allow one grade of C in any nursing PhD course. A second grade of C or below will result in dismissal from the program. A 3.0 cumulative GPA is required for continuation in the program.

2) Revise the fourth bullet that reads: “The College of Nursing prohibits students from repeating graduate coursework with two exceptions: NURS 505 (Advanced Clinical Pharmacology) and NURS 515 (Advanced Pathophysiology for Nursing Practice). Students may only repeat these courses after earning a D or F; original and repeat grade will be included in the GPA” and replace with the following bullet:

- The College of Nursing prohibits students from repeating graduate coursework with two exceptions: NURS 648 (Advanced Clinical Pharmacology) and NURS 649 (Advanced Pathophysiology for Nursing Practice). Students may only repeat these courses after earning a D or F; original and repeat grade will be included in the GPA.

3) Add a fifth bullet at the end of the list as follows:

- For the PhD degree, students must meet the residence requirement as specified by the Graduate School. 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.

Under the Required Courses heading, revise as follows:

1) Drop NURS 511 and replace with NURS 599.

DROP CONCENTRATION – NURSING MAJOR, DNP
Pediatric Nurse Practitioner Concentration

ADD CONCENTRATIONS – NURSING MAJOR, DNP
Pediatric Primary Care Nurse Practitioner
Pediatric Primary/Acute Care Dual Nurse Practitioner

Rationale: To have the name of the concentrations match what is required for Board Certification.

REVISE TEXT AND REQUIREMENTS – NURSING MAJOR, DNP
In the 2020-2021 Graduate Catalog, under the Concentrations heading, the DNP concentrations are now as follows:

- Family Nurse Practitioner Concentration
- Nurse Anesthesia Concentration
- Nurse Executive Practice Concentration
- Pediatric Primary Care Nurse Practitioner Concentration
- Pediatric Primary/Acute Care Dual Nurse Practitioner Concentration
- Psychiatric Mental Health Nurse Practitioner Concentration

In the 2020-2021 Graduate Catalog, under the Academic Standards heading, revise as follows:

1) Revise the first bullet, “Prior to enrollment in the DNP program, each student must successfully complete a criminal background check” and replace with:
• Prior to enrollment in the DNP program, each student must successfully complete a criminal background check and drug screen.

2) Revise the seventh bullet, “A minimum grade of B in all DNP and other graduate-level nursing courses and a 3.0 cumulative GPA is required for continuation in the program” and replace with:

• A minimum grade of B in all nursing DNP courses is required; however, the College of Nursing will allow one grade of C in any nursing DNP core course. A second grade of C or below will result in dismissal from the program. A minimum grade of B is required in N630 DNP Scholarly Project Proposal and all concentration-specific coursework (Family Nurse Practitioner Concentration, Nurse Anesthesia Concentration, Nurse Executive Practice Concentration, Pediatric Primary Care Nurse Practitioner Concentration, Pediatric Primary/Acute Care Dual Nurse Practitioner Concentration, Psychiatric Mental Health Nurse Practitioner Concentration). A 3.0 cumulative GPA is required for continuation in the program.

3) Revise the eighth bullet, “The College of Nursing prohibits students from repeating graduate coursework with two exceptions: NURS 505 (Advanced Clinical Pharmacology) and NURS 515 (Advanced Pathophysiology for Nursing Practice). Students may only repeat these courses after earning a D or F; original and repeat grade will be included in the GPA” and replace with:

• The College of Nursing prohibits students from repeating graduate coursework with two exceptions: NURS 648 (Advanced Clinical Pharmacology) and NURS 649 (Advanced Pathophysiology for Nursing Practice). Students may only repeat these courses after earning a D or F; original and repeat grade will be included in the GPA.

4) Revise the ninth bullet, “Residence Requirement: For the doctoral degree, a minimum of two consecutive semesters of full-time registration 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” and replace with:

• For the doctoral degree, students must meet the residence requirement as specified by the Graduate School. 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.

Under the Required Courses heading, revise as follows: This change pertains to all concentrations.

1) Drop NURS 610
2) Add NURS 628

Under the Required Courses heading, this change pertains to Family Nurse Practitioner Concentration, Pediatric Primary Care Nurse Practitioner Concentration, Pediatric Primary/Acute Care Dual Nurse Practitioner Concentration, and Psychiatric Mental Health Nurse Practitioner Concentration.

Add NURS 673

Under the Required Courses heading, Nurse Anesthesia Requirements revise as follows:

1) Drop NURS 504, NURS 505
2) Add NURS 639, NURS 648

Under the Family Nurse Practitioner Concentration heading, Required Courses, Family Nurse Practitioner Requirements revise as follows:

1) Drop NURS 504, NURS 505, NURS 515
2) Add NURS 639, NURS 648, NURS 649

Under the Nurse Executive Practice Concentration heading, Required Courses, Nurse Executive Practice Requirements revise as follows:

1) Drop NURS 589, NURS 590, NURS 591, NURS 594, NURS 595
2) Add NURS 664, NURS 665, NURS 666, NURS 667, NURS 668, NURS 669

Under the Pediatric Primary Care Nurse Practitioner Concentration heading, add text as follows:

1) Credit Hours Required: Minimum 62 to maximum 73 graduate credit hours.
2) **Required Courses, Nursing Requirements (33-44 credit hours)** NURS 604, NURS 628, NURS 612, NURS 613, NURS 620, NURS 622, NURS 623, NURS 624, NURS 626, NURS 630, NURS 633, NURS 634, NURS 673.

3) **Required Courses, Pediatric Primary Care Nurse Practitioner Requirements**: NURS 639, NURS 648, NURS 649, NURS 650, NURS 651, NURS 652, NURS 653.

4) **Additional Course Requirements**: A maximum of 6 graduate credit hours taken before acceptance in the DNP program may be applied toward the degree.

Under the Pediatric Primary/Acute Care Dual Nurse Practitioner Concentration heading, add text as follows:

1) Students cannot get a stand-alone DNP as a Pediatric Acute Care Nurse Practitioner. They can earn a dual DNP as a Pediatric Primary and Acute Care Nurse Practitioner by completing the full Pediatric Primary Care Nurse Practitioner program and then adding additional coursework as listed below.

2) **Credit Hours Required**: Minimum 70 to maximum 80 graduate credit hours.

3) **Required Courses, Nursing Requirements (33-44 credit hours)** NURS 604, NURS 628, NURS 612, NURS 613, NURS 620, NURS 622, NURS 623, NURS 624, NURS 626, NURS 630, NURS 633, NURS 634, NURS 673.

4) **Required Courses, Pediatric Primary/Acute Care Dual Nurse Practitioner Requirements**: NURS 639, NURS 648, NURS 649, NURS 650, NURS 651, NURS 652, NURS 653. **Pediatric Acute Care Requirements**: NURS 670, NURS 671, NURS 672.

Under the Psychiatric Mental Health Nurse Practitioner Concentration heading, Required Courses, Psychiatric Mental Health Nurse Practitioner Requirements revise as follows:

Drop: NURS 504, NURS 505, NURS 515

Add: NURS 639, NURS 648, NURS 649

Under the Non-Course Requirements heading, revise as follows. This change pertains to all concentrations.

1) Revise the third bullet, “The DNP Scholarly Project committee is composed of a minimum of two doctoral-prepared (DNP or PhD) faculty” and replace with:

   - The DNP Scholarly Project committee is composed of a minimum of one doctorally-prepared (DNP or PhD) faculty and a second committee member who holds special expertise relative to the specific project. The second member may be a faculty member from another academic unit, or external to the university.

2) Revise the bullet, “When appropriate, a third committee member may be selected, who holds special expertise relative to the specific project. The third member may be a faculty member from another academic unit, or external to the university” and replace with,

   - When appropriate, a third committee member may be selected, who holds special expertise relative to the specific project. The third member may be a faculty member from another academic unit, or external to the university.

**DROP CERTIFICATE**

Nurse Anesthesia Graduate Certificate

**ADD CERTIFICATE**

Healthcare Informatics Graduate Certificate

Rationale: For the dropping of the Nurse Anesthesia Graduate Certificate, the students admitted to the certificate were taking the same hours as those earning the DNP. No students enrolled in the Nurse Anesthesia Graduate Certificate.

In the 2020-2021 Graduate Catalog, add heading, text and requirements for new certificate:

**Healthcare Informatics Graduate Certificate**

The [Distance Education online](#) inter-professional graduate certificate in Health Informatics is for those from all disciplines with an interest in issues related to health and healthcare informatics and who meet the UTK Graduate School criteria for admission to graduate certificate programs. Course experiences will foster the examination and application of current health systems information management, analytics processing, and data mining techniques.
Program Learning Outcomes: Students enrolled in the healthcare informatics graduate certificate program will:

1. Gain specialized knowledge of health information technology systems and processes;
2. Analyze and synthesize data related to patient health information to improve outcomes; and
3. Advance effective use of healthcare information systems to ensure high-quality outcomes.

Campus Code: Knoxville Campus; Distance Education

Graduate Certificate Type: Stand-Alone (earned graduate degree required); Add-On

Admissions Standards/Procedures: Certificate candidates must currently be admitted to a graduate program at the university or hold a graduate degree and be admitted to the graduate school.

Academic Standards:
The College of Nursing will observe the following grading scale:

- A = 92 – 100
- B+ = 88 – 91
- B = 83 – 87
- C+ = 78 – 82
- C = 75 – 77
- D = 67 – 74
- F = 66 or below

Credit Hours Required: Minimum of 12 graduate credit hours.

Required Courses:
- NURS 557
- INSC 584
- NURS 558
- IE 561

Rationale: These courses in the proposed graduate certificate program add a teaching dimension to the existing service and research activities that do not currently exist. The students currently enrolled in three colleges, nursing, information sciences and engineering, who have an interest in the research occurring in the HITS lab, currently lack the knowledge and skills in this application area, which can be obtained through this certificate program. Adding this teaching component will help to deepen research and broaden engagement activities in this area. Course experiences will foster the examination and application of current health systems information management, analytics processing, and data mining techniques.

Impact on other units: Faculty from Tickle College of Engineering and College of Communication have approved the proposed certificate program. One of the required courses, IE561 Decision Support & Electronic Health Records (3 credit hours), already exists in School of Information Science curriculum.

Financial impact: Including both on-campus and online students increases the student credit hours generated by the courses. The cost of the program for an in-state, on-campus student is estimated at $10,200. The cost of the program for an out of state, online student is estimated at $10,716. This new certificate funded through the Distance Education funding model of 85% tuition return to the colleges. College of Nursing faculty Dr. Tom Berg, Assistant Professor, HITS Fellow and HITS Strategy Director has the expertise and knowledge necessary to teach NURS 557, 558.

REVISE CERTIFICATE TEXT – NURSING EDUCATION GRADUATE CERTIFICATE

In the 2020-2021 Graduate Catalog, revise the introductory paragraph as follows:

This graduate certificate prepares nurses for a career as nurse educators in both academic and nursing service settings. Nursing education involves curriculum design and development, resource management, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

Formerly: This post-MSN certificate prepares nurses for a career as nurse educators in both academic and nursing service settings. Nursing education practice involves the management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.
DROP CERTIFICATE
Nursing Administration Graduate Certificate

ADD CERTIFICATE
Nurse Executive Practice Graduate Certificate

In the 2020-21 Graduate Catalog, revise certificate description for the dropped Nursing Administration Graduate Certificate to make accurate for the new Nurse Executive Practice Graduate Certificate.

Nurse Executive Practice Graduate Certificate
1) Revise introductory paragraph as follows:
This graduate certificate prepares nurses for a nurse executive role. Nurse executive practice involves managing the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

2) Under the Required Courses, delete current courses and replace with the following courses:
- NURS 664
- NURS 665
- NURS 666
- NURS 667
- NURS 668
- NURS 669

Rationale: These changes align with the elimination of the MSN courses for nursing administration and the curricular changes associated with the DNP for nurse executive practice.

REVISE CERTIFICATE TEXT AND REQUIREMENTS – PEDIATRIC ACUTE CARE NURSE PRACTITIONER GRADUATE CERTIFICATE
In the 2020-2021 Graduate Catalog, revise certificate text and requirements as follows:

1) Revise first paragraph of description text as follows:
The College of Nursing offers certificates for nurses who need additional training. A master’s degree in nursing is required for admission. This graduate certificate prepares the advanced practice nurse for a career as a pediatric acute care nurse practitioner. Students enrolling in the PNP Acute Care graduate certificate must have completed a primary care PNP program and must have demonstrated experience working in an acute care setting before beginning course work in the acute care courses.

Formerly: The College of Nursing offers certificates for nurses who need additional training. A master’s degree in nursing is required for admission. This graduate certificate prepares the advanced practice nurse for a career as a pediatric nurse practitioner (PNP) in the acute care role. Students enrolling in the PNP Acute Care track must have completed a primary care PNP program and must have a minimum of one year of work in an acute care setting before beginning course work in the acute care courses.

2) Under the Required Courses heading, drop the two courses listed NURS 653 and NURS 654 and replace with 3 courses: NURS 670, NURS 671, NURS 672.

REVISE CERTIFICATE TEXT AND REQUIREMENTS: PSYCHIATRIC MENTAL HEALTH NURSE PRACTITIONER GRADUATE CERTIFICATE
In the 2020-2021 Graduate Catalog, revise the certificate text and requirements as follows:

1) Revise description text as follows:
The PMH nurse practitioner graduate certificate program is designed for MSN and DNP-prepared nurses who desire an additional certification as a psychiatric mental health nurse practitioner. Graduates are prepared to care for people with both acute and chronic mental health problems. Students examine mental health theories in the classroom and work with preceptors in the clinical setting to develop reasoning, patient assessment, and patient management skills.
Formerly: This post-MSN certificate prepares advanced practice nurses for a career as a Psychiatric Mental Health Nurse Practitioner. Advanced practice nursing involves the delivery of care, management of resources, interdisciplinary collaboration, and application of technology, information systems, knowledge, and critical thinking.

2) Under the Required Courses heading, drop NURS 519 and replace with NURS 663.
Rationale: These changes align with the elimination of the MSN courses and the curricular changes associated with the DNP for the psychiatric mental health nurse practitioner concentration.

DROP MINOR
Nursing Education Minor

In the 2020-2021 Graduate Catalog, drop the Nursing Education, Minor.

Rationale: No students requesting the minor. No enrollment for minor.
COLLEGE OF SOCIAL WORK

All changes effective Fall 2020

I. COURSE CHANGES

(905) (SOWK) Social Work

DROP

SOWK 546 Evidence-based Social and Economic Development Practice Across Systems (3)
SOWK 556 Social Policy of North America (3)
SOWK 558 Legislative Advocacy and Political Social Work (3)
SOWK 559 Community Based Practice in Mexico and the United States (3)
SOWK 631 Research Practicum II (1)
SOWK 632 Research Practicum III (1)

Rationale: Faculty who taught these MSSW electives are no longer with the University and/or the course was tied to a grant that is no longer funded. PhD students obtain individual research experience through assistantships or other collaborative research with faculty through noncredit-bearing opportunities. Financial Impact: None. Impact on other units: None.

ADD

SOWK 577 Veterinary Social Work Capstone (3) The Veterinary Social Work Capstone Course provides a consolidated experience and cumulative evidence for VSW graduate certificate students to demonstrate the attainment of certificate program competencies.

(RE) Prerequisite(s): 510, 512, 513, 519, 522, 537, 538, 539 and 543 or 544.
Comment(s): Advanced Standing satisfies prerequisites. SW 557 and SW 567 can be taken in the same semester as the capstone course.
Registration Restriction(s): Graduate students only. Minimum student level graduate.
Registration Permission: Non-MSSW students may register with consent of instructor.

Rationale: The goals of this Capstone Course are for students to 1) integrate and synthesize their VSW-CP didactic and experiential learning in veterinary social work over the course of their education at CSW, 2) engage in VSW related experiential learning in their communities, and 3) create an ePortfolio project that VSW-CP students can use to highlight the knowledge and skills they can bring to the workforce. Financial Impact: None. Impact on other units: None.

SOWK 608 Qualitative Research Methods (3) Qualitative research methods and their philosophical underpinnings are explored, including ethnography, grounded theory, case study, narrative, and phenomenology. The importance of reflexivity and critical awareness of one’s own worldview will be discussed. Qualitative data collection, analysis, and dissemination skills will be developed. The special topics of mixed methods and community-based participatory research are also covered.

Registration Restriction: Graduate students only. Minimum student level graduate.
Registration Permission: Students who are not College of Social Work PhD students may register with consent of instructor.

Rationale: New required course for students to develop qualitative research methods skills, thus ensuring that the PhD program’s foundation coursework provides both quantitative and qualitative training for students. Financial Impact: None. Impact on other units: None.

II. PROGRAM CHANGES

REVISE REQUIREMENTS - VETERINARY SOCIAL WORK CERTIFICATE

In the 2020-21 Graduate Catalog, under the Required Courses Heading, delete the 3rd bullet and replace with the following bullet:

SOWK 577 (3 credit hours)

Formerly: 3 credit hours graduate SOWK elective (in consultation and with approval of the director of the VSW Graduate Certificate).
REVISE REQUIREMENTS - TRAUMA TREATMENT CERTIFICATE

In the 2020-21 Graduate Catalog, under the Required Courses Heading, add course SOWK 535 as a fifth course to the list from which students choose. List will now appear as shown below:

- SOWK 529 (3 credit hours)
- SOWK 533 (3 credit hours)
- SOWK 534 (3 credit hours)
- SOWK 535 (3 credit hours)
- SOWK 540 (3 credit hours)

Rationale: Change requirement to add SOWK 535 as an elective option for certificate requirements. Course content has been revised to meet certificate requirements. Impact: None. Impact on other units: None.

REVISE REQUIREMENTS - SOCIAL WORK MAJOR, PHD

In the 2020-21 Graduate Catalog, revise Academic Standards, Credit Hours Required, and Required Courses as shown below:

Academic Standards
- Typically, the 34 credit hours of foundation curriculum and 9 credit hours of elective course work are completed during the first two years of study.
- Dissertation research usually begins in the third year and is continued in the fourth year of study.
- While it is generally expected that the course work will be completed on a full-time basis, dissertation research can be completed on a planned part-time basis.

Formerly:
- Typically, the 33 credit hours of foundation curriculum and 9 credit hours of elective course work are completed during the first two years of study.
- Dissertation research usually begins in the second year and is continued in the third year of study.
- While it is generally expected that the course work will be completed on a full-time basis, dissertation research can be completed on a planned part-time basis.

Credit Hours Required
- 67 graduate credit hours beyond the master’s degree

Formerly: 66 graduate credit hours beyond the master’s degree

Required Courses
Under the Required Courses heading,

3) Revise foundation course work from 33 hours to 34 hours as shown below.
   - Completion of foundation course work (34 credit hours).

4) From courses listed, delete courses SOWK 631 and 632. Add course SOWK 608 (3 hours). List will now show as:
   - SOWK 601 (3 credit hours)
   - SOWK 602 (3 credit hours)
   - SOWK 603 (3 credit hours)
   - SOWK 605 (3 credit hours)
   - SOWK 606 (3 credit hours)
   - SOWK 608 (3 credit hours)
   - SOWK 626 (3 credit hours)
   - SOWK 628 (3 credit hours)
   - SOWK 630 (1 credit hour)
   - SOWK 665 or an approved graduate statistics course (3 credit hours)
   - SOWK 675 (3 credit hours)
   - SOWK 677 (1 credit hour) (repeatable, maximum of 4 credit hours)
   - SOWK 678 (1 credit hour)
   - SOWK 680 (1 credit hour)
   - SOWK 600 (24 credit hours)

Rationale: Revisions made to reflect elimination of research practica and addition of required qualitative course, which results in a net increase of 1 credit hour to foundation coursework and the total credit hours required. Financial Impact: None. Impact on other units: None.
I. COURSE CHANGES

(VMP) VETERINARY MEDICINE – Pre-Clinical

DROP

VMP 893 Small Animal Ultrasound Elective (1)

Rationale: With the rollout of the previously approved new curriculum, the need for this elective will be eliminated. Three core courses in radiology will absorb this elective content. Impact on other units: None. Financial impact: None.

REVISE TITLE AND DESCRIPTION

VMP 812 Professional Skills, Wellness, and Ethics I (1)  Development of essential non-technical skills needed for veterinary professional competence. Some of the areas covered include leadership, personal finance management, ethical decision-making, and wellbeing.

Formerly: One Health, Wellness, and Ethics I (1). Develop essential non-technical skills needed for veterinary professional competence. Areas covered include: communication, leadership, business management, ethical decision-making, and health-related behavior skills. Students learn skills in medical academic achievement, personal and business finance, stress management, career paths in veterinary medicine, communication and leadership needed in effective teamwork, the basics of mental health in the veterinary setting, and thoughts on wide spectrum of current veterinary ethical issues.

VMP 822 Professional Skills, Wellness, and Ethics II (1)  Development of essential non-technical skills needed for veterinary professional competence. Some of the areas covered include leadership, personal finance management, ethical decision-making, and wellbeing. A continuation of VMP 812.

Formerly: One Health, Wellness, and Ethics II (1)  Develop essential non-technical skills needed for veterinary professional competence. Communication, leadership, business management, ethical decision-making skills, and health-related behavior skills. Students learn skills in medical academic achievement, personal and business finance, stress management, career paths in veterinary medicine, communication and leadership needed in effective teamwork, the basics of mental health in the veterinary setting, and thoughts on wide spectrum of current veterinary ethical issues. Student-led discussions follow faculty presentations. Successive courses in this series teach advanced skills. A continuation of VMP 812.

VMP 832 Professional Skills, Wellness, and Ethics III (0.5)  Development of essential non-technical skills needed for veterinary professional competence. Some of the areas covered include leadership, personal finance management, ethical decision-making, and wellbeing. A continuation of VMP 822.

Formerly: One Health, Wellness, and Ethics III (0.5)  Develop essential non-technical skills needed for veterinary professional competence. Advanced training in communication, leadership, business management, ethical decision-making, and health-related behavior skills. A continuation of VMP 822.

VMP 842 Professional Skills, Wellness, and Ethics IV (0.5)  Development of essential non-technical skills needed for veterinary professional competence. Some of the areas covered include leadership, personal finance management, ethical decision-making, and wellbeing. A continuation of VMP 832.

Formerly: One Health, Wellness, and Ethics IV (0.5)  Develop essential non-technical skills needed for veterinary professional competence. Advanced training in communication, leadership, business management, ethical decision-making, and health-related behavior skills. A continuation of VMP 832.

Rationale: When the above courses were named initially, the term “One Health” was meant to reflect the intersection between human and animal health; however, the term is now more widely understood among veterinary students and veterinarians as the connection of the health of people to the health of animals and the environment. Additionally, based on instructor and student feedback, the college Curriculum Committee recently revised this series of courses to better meet our accreditor’s expectations and to better ensure alignment across the curriculum. Impact on other units: None. Financial impact: None.

VMP 878 Small Animal Preventive Medicine Elective (1)  Elective provides students with a knowledge base and access to resource materials that will allow students to prepare and implement public education programs on various aspects of responsible pet ownership. Course objectives are to prepare students to provide the community with high-quality responsible pet ownership programs and 2) to provide an opportunity for veterinary students to further develop their communication skills.

Formerly: Responsible Pet Ownership Elective (1)  Elective provides students with a knowledge base and access to resource materials that will allow students to prepare and implement public education programs on various aspects of responsible pet ownership. Course objectives are to prepare students to provide the community with high-quality responsible pet ownership programs and 2) to provide an opportunity for veterinary students to further develop their communication skills. Course will be taught from noon – 12:50 pm on a mutually convenient day.
Rationale: The instructors of this course felt that the title was being misunderstood by students to mean their own responsible ownership of pets. They feel that the new title better reflects the intention of the course. The change in the description is only to remove the information about the time the course is offered. Impact on other units: None. Financial impact: None.

**VMP 891 Basic Small Animal Surgical Principles (1)** Elective course presents the basics of aseptic technique, including pack preparation, gowning, gloving, and waterless hand scrubs; instrument handling; knot tying; suture placement; and ligation. More advanced practice and near-peer instruction opportunities available to upperclassmen.

Formerly: Advanced Small Animal Soft Tissue Surgery Elective (1) Elective course presents a variety of soft tissue surgery topics and procedures commonly performed on dogs and cats by private practitioners. Foci are perineal, head, neck, and skin procedures, including urethrostomies, ear canal resections, skin flaps, anal saccullectomies, esophageal feeding tubes, and perineal hernia repair.

Rationale: Because of a previously approved curriculum change and altered placement of this course within the lock-step veterinary curriculum, the course’s coordinator felt that the content of this course needed to be adjusted to focus on more basics rather than advanced methods. This change is necessary because most students who enroll in this elective will not yet have taken the required VMP 835 Principles & Practices of Surgery course, which provides the foundation for advanced surgery. Upperclassmen who enroll in this new course will still have the opportunity to get more advanced practice in this elective as well as provide near-peer instruction to underclassmen. Impact on other units: None. Financial impact: None.

**REVISE GRADING [FROM LETTER GRADE (A–F) TO S/NC GRADING ONLY]**

**VMP 846 Business Management (0.5)**
Grading Restriction: Satisfactory/No Credit grading only.

Rationale: The coordinators of this course felt that its content and student assessment better lend themselves to S/NC grading rather than A–F. Examples of content include professional goals, financial planning, and contract negotiation. Students are assessed based on attendance and participation. Impact on other units: None. Financial impact: None.

**REVISE GRADING [FROM S/NC OR LETTER GRADE TO LETTER GRADE (A–F) ONLY]**

**VMP 872 Special Problems in Pathology (1–8)**

**VMP 873 Special Problems in Small Animal Clinical Sciences (1–8)**

**VMP 874 Special Problems in Large Animal Clinical Sciences (1–8)**

Formerly: Grading Restriction(s): Satisfactory/No Credit or letter grade.

Rationale: Because some special problems instructors prefer A–F grading and others prefer S/NC grading, the college wishes to adjust VMP 872, 873, and 874 to A–F grading, leaving the VMP 870 Special Studies in Veterinary Medicine course with S/NC grading. Impact on other units: None. Financial impact: None.

**(VMC) VETERINARY MEDICINE – Clinical**

**REVISE COURSE DESCRIPTION**

**VMC 864 Zoological Medicine (2–4)** Clinical training in husbandry, preventive medicine, and medical treatment of zoological species. This rotation is for students with an interest in pursuing zoological medicine as a career.

Formerly: Clinical training in husbandry, preventive medicine, and medical treatment of zoological species.

Rationale: This course is an elective clinical rotation with limited student placement opportunities. The rotation instructors have noted that students often select this elective because it is more interesting than other available elective choices. However, this prevents selection by students with a genuine interest in zoo medicine as a career. Because rotation scheduling is conducted within the college and does not require the student to register through Banner (student registration is done by central administration), this change does not need an additional registration restriction. Impact on other units: None. Financial impact: None.

**REVISE GRADING [FROM LETTER GRADE (A–F) TO HONORS OR S/NC GRADING ONLY]**

**VMC 800 Clinical Rotation in Pathology (1–2)**
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

**VMC 801 Diagnostic Skills (2)**
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

**VMC 802 Clinical Rotation in Diagnostic Imaging (1–4)**
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

**VMC 803 Clinical Rotation in Anesthesiology (2–4)**
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.
VMC 810  Clinical Rotations in Small Animal Clinical Sciences I (1–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 811  Clinical Rotations in Small Animal Clinical Sciences II (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 812  Clinical Rotation in Shelter Medicine-Spay/Neuter (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 813  Clinical Rotations in Small Animal Clinical Sciences III (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 814  Small Animal Emergency Medicine (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 820  Clinical Rotations in Large Animal Clinical Sciences I (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 821  Clinical Rotations in Large Animal Clinical Sciences II (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 823  Equine Surgery (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 824  Large Animal Emergency Medicine & Critical Care (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 825  Clinical Rotation in Farm Animal Field Services (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 826  Clinical Rotation in Equine Field Services (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 830  Veterinary Dermatology (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 831  Veterinary Ophthalmology (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 832  Veterinary Neurology (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 840  Small Animal Orthopedic Surgery (1–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 841  Small Animal Physical Rehabilitation (1–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 842  Veterinary Cardiology (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 843  Veterinary Oncology (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 844  Avian and Zoological Medicine and Surgery (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 850  Advanced Pathology (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 852  Clinical Rotation in Laboratory Animal Medicine (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 853  Advanced Veterinary Anesthesiology (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 860  Advanced Veterinary Dermatology (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.
VMC 861  Advanced Small Animal Medicine (2–4)  
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 862  Shelter Medicine (2–4)  
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 863  Small Animal Nutrition and Animal Behavior (2–4)  
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 864  Zoological Medicine (2–4)  
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 865  Small Animal Dentistry (2–4)  
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 871  Clinical Rotation in Swine Medicine Production (2–8)  
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 872  Clinical Rotation in Bovine Production Medicine (2)  
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 873  Clinical Rotation in Theriogenology (2–4)  
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 880  Elective Clinical Rotation I (1–4)  
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 881  Elective Clinical Rotation II (1–4)  
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 890  Externship I (2–8)  
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

VMC 891  Externship II (2–16)  
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

Rationale: These changes are to reflect the revision in clinical course grading. Because some of the 30 veterinary schools in the United States already use this type of grading, we do not anticipate it will affect our students’ competitiveness for internships, residencies, or other general practice jobs. Additionally, clinical instructors will be asked to ensure that only the top 10% of all students will receive the grade of Honors. The Honors grading standard recognizes students with exceptional clinical performance, generally the top 10%. Such a designation will be valuable in highlighting students competing for internship and residency selection. We request the option of Satisfactory Incomplete (SI) for instances in which students cannot complete several days of a clinical rotation due to illness or other reasons preventing them from being present to complete their required duties. We currently use the Incomplete option in such instances, and this practice would not change. We discussed this revised grading option with Kathy Abbott (Associate Registrar) in the Registrar’s Office to make sure and confirm the capability of Banner to be able to add the Honors grade designation. We have been assured that this can be accomplished before these changes would take effect. All affected courses are listed in the Course Changes section of this Veterinary Medicine request. Impact on other units: None. Financial impact: None.

The college faculty voted in August 2019 to move to non-graded clinical rotation courses. The final result was 61/71 (85.9%) of voting faculty in favor of replacing the current A–F grading model to a three-tier model with the options of Honors, Satisfactory, No Credit, and Satisfactory Incomplete. Faculty and veterinary student discussions took place over 8 months to come to this decision. There are four main reasons why this change is preferred:

1. Veterinary medical education is moving toward a competency-based focus that does not emphasize grades but instead emphasizes first-day readiness (competence) to practice veterinary medicine upon graduating with the DVM degree.

2. Grading of clinical rotations is inherently subjective and suffers from inter-rater reliability issues. For example, what is the difference between a grade of A and a B+ on a surgery rotation, especially since clinical instructors struggle to explain the difference? The proposed type of grading would allow for more consistency between graders and would remove some (but not all) of the subjectivity.

3. Students currently compete with each other for grades while on clinical rotations together. This change would encourage more teamwork and increase the focus on intrinsic learning.

4. We examined 4 years’ of data and found that grade inflation was occurring during the clinical year. This change would essentially “freeze” students’ GPAs at the end of their pre-clinical veterinary education.
II. PROGRAM CHANGES

+ ADD ACCELERATED COMBINED PROGRAM – DUAL DVM-MS

In the 2020-21 Graduate Catalog, add headings and program requirements for accelerated dual program.

Dual DVM-MS Program, Veterinary Medicine – Comparative and Experimental Medicine
The College of Veterinary Medicine and the Comparative and Experimental Medicine (CEM) graduate program offer a coordinated accelerated dual program leading to the conferral of both the Doctor of Veterinary Medicine and the Master of Science degrees.

Options Available
Comparative and Experimental Medicine – Thesis
Comparative and Experimental Medicine – Course only with comprehensive exam

Campus Code
Knoxville Campus

Admissions Standards/Procedures
- Students entering the dual degree program must meet minimum admission requirements for both the MS and DVM programs.
- Applicants for the MS-DVM program must make separate application to, and be competitively and independently accepted by, the CEM program for the MS and the College of Veterinary Medicine for the DVM.
- Students who have been accepted by the College of Veterinary Medicine may apply for approval to pursue the dual program any time prior to or after matriculation. Such approval will be granted, provided that dual program studies are started prior to entry into the fourth semester of DVM course work.

Credit Hours Required
- A dual program candidate must satisfy the graduation requirements of each program.
- The CEM program will award up to 8 credit hours toward the MS for acceptable performance (a grade of at least a "B" in A–F-graded courses) in approved courses offered for dual credit by the College of Veterinary Medicine.
- Courses eligible for dual credit will be at the recommendation of the student’s CEM major professor in consultation with the student’s master’s committee.
- A minimum of 30 credit hours of coursework are required for the MS degree (22 CEM course credit hours plus 8 credit hours accepted from the DVM program).

Required Courses
- For students who pursue a thesis, CEM 500 (6 credit hours)
- For students who elect the Course Only with Comprehensive Exams option, CEM 501 or CEM 515 (6 credit hours), in which they prepare an analytic research paper
- CEM 504 (3 credit hours), CEM 541 (3 credit hours), and CEM 616 (1 credit hour)
- 4 credit hours of 500- or 600-level journal clubs
- 3 credit hours of 500- or 600-level statistics
- 2 credit hours of electives

Non-Course Requirements
- Students enrolled in the dual DVM-MS program will be officially classified as primarily veterinary (DVM-seeking) students until the DVM coursework is completed, with the following exception: dual program students will typically enroll as primarily MS students during the two summer semesters following completion of their first and second years in the veterinary curriculum. After the DVM is conferred, the dual student’s primary major will be CEM.
- Degrees do not need to be awarded simultaneously; if a student has not completed the requirements for the MS, the student may still receive the DVM. If a dual student completes the MS requirements, but does not complete the DVM, the student may still be awarded the MS.
- Students who have been in the CEM program for at least two semesters must complete an annual progress report.
- The MS thesis or project will be presented as a seminar, followed by an oral comprehensive examination by the student’s committee.

Rationale: A dual MS-DVM option is requested for the MS degree in Comparative and Experimental Medicine. This option would be elected by students who wish to obtain advanced research training to complement their veterinary knowledge and clinical skills.

The College of Veterinary Medicine encourages research scholarship activities of their admitted students. This approach goes toward providing additional opportunities to enhance quality of research experiences of certain veterinary students while also allowing for earning a research-based degree in a shorter timeframe. Advanced research degrees benefit veterinarians interested in careers in academia, industry, and government service. Impact on other units: College of Veterinary Medicine and Comparative and Experimental Medicine faculty interact with other units such as Genome Science and Technology and the Graduate School of Medicine. This will not require additional faculty or facilities, but will more fully use the talents of the faculty within our programs. Financial impact: None.
I. COURSE CHANGES

(CEM) COMPARTIVE AND EXPERIMENTAL MEDICINE

ADD

CEM 603 Advanced Veterinary Hematology (1-2)  Topics related to veterinary hematology at an in-depth level.  
Repeatability: May be repeated. Maximum 4 hours.  
Recommended Background: Professional degree.  
Registration Restrictions: Minimum student level – graduate.  
Registration Permission: Consent of instructor.  
Rationale: Course is currently being taught as an advanced topics course. It is targeted to veterinary clinical pathology residents and others who have a specific interest in hematology. The one-credit-hour class will consist of weekly discussions on a specific hematology topic. The two-credit-hour class will consist of the same weekly topic discussions but will also include a second weekly session for microscopic evaluations of blood smears and bone marrow slides. Impact on Other Units: None. Financial Impact: None.

CEM 604 Principles of Comparative Pharmacokinetics (3)  Addresses the fundamental principles of absorption, distribution, metabolism, and elimination of xenobiotics (drugs, poisons, environmental chemicals, etc.) in animals and humans. Quantitative aspects will include basic study design as well as mathematical modeling of plasma concentration vs time data. Hands-on sessions will include basics of pharmacokinetics modeling, case studies in clinical patients, bioequivalence studies, pharmacokinetic linearity, and the effect of factors on the fate of chemicals in the body of animals and humans.  
Contact Hour Distribution:  2 hours and 1 lab.  
Recommended Background: Previous academic exposure in physiology, biostatistics, or mathematical modeling.  
Registration Restrictions: Minimum student level – graduate or permission of instructor.  
Rationale: Currently there is not a course on pharmacokinetics in the UTK graduate program. The toxic and therapeutic effects of chemicals on body systems depend on their chemical and physical properties. These properties dictate not only their interactions with body receptors but also their sojourn in the body. The latter is the subject of study of pharmacokinetics. Because the intensity and duration of exposure of body systems to chemicals depend on their rates of absorption, distribution and elimination, an understanding of these processes is key to comprehend and predict the effects that may result from a given level of exposure to a certain chemical. Impact on Other Units: None. Financial Impact: None.

CEM 605 Resident Systems Seminars (1)  Topics related to the various body systems or to medical information systems, including Oncologic, Cardiovascular, Musculoskeletal, Dermatologic, Endocrine, Digestive, Urinary, Ophthalmologic, Infectious, Respiratory, Nutritional, Neurologic, Reproductive, and Statistics and Writing.  
Repeatability: May be repeated. Maximum 12 hours.  
Recommended Background: Professional degree.  
Registration Restrictions: Minimum student level – graduate or permission of instructor.  
Rationale: Course is currently being taught as an advanced topics course. It is targeted to veterinary residents, graduate students, and others who have a specific interest in advanced training in anatomy, physiology, diagnostics, and medical and surgical treatments of various conditions seen in animals. The course will consist of weekly presentations on a specific topic. The course is offered year round, with 5 to 10 lectures focused on each of the various systems, with all systems covered within a 3-year period. Impact on Other Units: None. Financial Impact: None.

CEM 606 Advanced Large Animal Internal Medicine (2)  Topics related to large animal internal medicine, including basic physiology, pathophysiology, and systems-based coursework.  
Repeatability: May be repeated. Maximum 8 hours.  
Recommended Background: Professional degree.  
Registration Permission: Consent of instructor.  
Rationale: This course is targeted for students with a background in clinical medicine. The unique material covered during this course advances students' knowledge of the principles of clinical medicine with an emphasis on veterinary medicine and aids in their preparation toward specialty board certification. Impact on Other Units: None. Financial Impact: None.
REVISE HOURS AND REMOVE GRADING RESTRICTION  (FROM S/NC GRADING TO A-F GRADING)

CEM 510 Graduate Research Participation (1-6)

Formerly: (1-3). Grading Restriction: Satisfactory/No Credit grading only.

Rationale: Students in the CEM non-thesis master’s program who elect the Course Only with Comprehensive Exams option are required to complete a minimum of 6 credit hours in a research project. Increasing the maximum credit hours to 6 will allow students to register for and complete a required research project in one semester. Removing the grading restriction will increase the number of graded credit hours offered by the department. Impact on Other Units: None. Financial Impact: None.

II. PROGRAM CHANGES

+ ADD ACCELERATED COMBINED PROGRAM – DUAL MS-DVM

In the 2020-21 Graduate Catalog, add heading and program requirements for accelerated dual program.

Dual MS-DVM Program, Comparative and Experimental Medicine – Veterinary Medicine

The Comparative and Experimental Medicine (CEM) graduate program and the College of Veterinary Medicine offer a coordinated accelerated dual program leading to the conferral of both the Master of Science and the Doctor of Veterinary Medicine degrees.

Options Available
Comparative and Experimental Medicine (general) – Thesis
Comparative and Experimental Medicine (general) – Course Only with Comprehensive Exams

Campus Code
Knoxville Campus

Admissions Standards/Procedures
- Students entering the dual degree program must meet minimum admission requirements for both the MS and DVM programs.
- Applicants for the MS-DVM program must make separate application to, and be competitively and independently accepted by, the CEM program for the MS and the College of Veterinary Medicine for the DVM.
- Students who have been accepted by the College of Veterinary Medicine may apply for approval to pursue the dual program any time prior to or after matriculation. Such approval will be granted, provided that dual program studies are started prior to entry into the fourth semester of DVM course work.

Credit Hours Required
- A dual program candidate must satisfy the graduation requirements of each program.
- The CEM program will award up to 8 credit hours toward the MS for acceptable performance (a grade of at least a “B” in A–F-graded courses) in approved courses offered for dual credit by the College of Veterinary Medicine.
- Courses eligible for dual credit will be at the recommendation of the student’s CEM major professor in consultation with the student’s master’s committee.
- A minimum of 30 credit hours of course work are required for the MS degree (22 CEM course credit hours plus 8 credit hours accepted from the DVM program).

Required Courses
- For students who pursue a thesis, CEM 500 (6 credit hours)
- For students who elect the Course Only with Comprehensive Exams option, CEM 501, or CEM 510, or CEM 515 (6 credit hours), in which they prepare an analytic research paper
- CEM 504 (3 credit hours), CEM 541 (3 credit hours), and CEM 616 (1 credit hour)
- 4 credit hours of 500- or 600-level journal clubs
- 3 credit hours of 500- or 600-level statistics
- 2 credit hours of electives

Non-Course Requirements
- Students enrolled in the dual MS-DVM program will be officially classified as primarily veterinary (DVM-seeking) students until the DVM coursework is completed, with the following exception: dual program students will typically enroll as primarily MS students during the two summer semesters following completion of their first and second years in the veterinary curriculum. After the DVM is conferred, the dual student’s primary major will be CEM.
- Degrees do not need to be awarded simultaneously; if a student has not completed the requirements for the MS, the student may still receive the DVM. If a dual student completes the MS requirements, but does not complete the DVM, the student may still be awarded the MS.
- Students who have been in the CEM program for at least two semesters must complete an annual progress report.
- The MS thesis or project will be presented as a seminar, followed by an oral comprehensive examination by the student’s committee.
Rationale: A dual MS-DVM option is requested for the MS degree in Comparative and Experimental Medicine. This option would be elected by students who wish to obtain advanced research training to complement their veterinary knowledge and clinical skills.

The College of Veterinary Medicine encourages research scholarship activities of their admitted students. This approach goes toward providing additional opportunities to enhance quality of research experiences of certain veterinary students while also allowing for earning a research-based degree in a shorter timeframe. Advanced research degrees benefit veterinarians interested in careers in academia, industry, and government service.

Impact on other units: College of Veterinary Medicine and Comparative and Experimental Medicine faculty interact with other units such as Genome Science and Technology and the Graduate School of Medicine. This will not require additional faculty or facilities, but will more fully use the talents of the faculty within our programs. Financial impact: None.
I. COURSE CHANGES

(ESE) Energy Science and Engineering

REVISE HOURS
ESE 520 Commercialization Support Team 1 (3)

Formerly (2)

Rationale: When ESE 520/521 was initially created, ESE 520 was for 2 credit hours and ESE 521 was for 3 credit hours. We have changed this format to eliminate the team leader option. We are asking for more effort from all team members as they work to support the startup company to which they are assigned. This will now allow both ESE and DSE students to meet their Bredesen Center 6-hour knowledge breath requirement by taking ESE 520 in the fall semester and ESE 530 in the spring semester.